SAVE THIS BOOK

The requirements cited in this catalog are valid for six years.

If your general education or major requirements change during that time, you may still choose to graduate under the curricular requirements in this catalog. In the case of licensure programs, changes in licensure requirements may lead to changes in curricular requirements.

The Minnesota State Mankato, Undergraduate Catalog is a general catalog of information regarding curricula, fees, and related policies and procedures. Every effort has been made to make the catalog accurate as of the date of publication; however, all policies, procedures, and fees are subject to change at any time by appropriate action of the faculty, the university administration, the Minnesota State Colleges and Universities Board, or the Minnesota Legislature. The provisions of this Catalog DO NOT constitute a contract between the student and university.

The university calendar is subject to modification or interruption due to occurrences such as fire, flood, labor disputes, interruption of utility services, acts of nature, civil disorder and war. In the event of any such occurrences, Minnesota State Mankato will attempt to accommodate its students. It does not, however, guarantee that courses of instruction, extracurricular activities or other university programs or events will be completed or rescheduled. Refunds will be made to eligible students in accordance with Minnesota State Colleges and Universities Board policy.

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Minnesota State University, Mankato is a member of Minnesota State system and an Affirmative Action/Equal Opportunity employer and educator.

List of academic programs is available online at www.mnsu.edu/programs/

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Higher Learning Commission
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(800) 621-7440
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UNIVERSITY VISION, VALUES & MISSION

Mission
Minnesota State University, Mankato promotes learning through effective undergraduate and graduate teaching, scholarship, and research in service to the state, the region and the global community.

Vision
Minnesota State Mankato will be known as a university where people expect to go further than they thought possible by combining knowledge and the passion to achieve great things.

Our foundation for this vision is our heritage of both dedicated teaching and the direct application of knowledge to improve a diverse community and world. We will achieve it by actively nurturing the passion within students, faculty and staff to push beyond possibility on the way to realizing dreams.

Core Values
Minnesota State University, Mankato is an innovative, student-centered learning community that values:
- Integrity and respect in the way we conduct ourselves;
- Diversity in who we are and what we do;
- Access to our programs and services that create opportunities for all to pursue their dreams;
- Responsibility to those we serve by providing an education that inspires solutions to society's challenges; and
- Excellence in our academic and non-academic pursuits.
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<td>Geography</td>
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<td>Geography: Professional</td>
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<td>Geology</td>
<td>BS</td>
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<tr>
<td>German</td>
<td>BA, BS</td>
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<tr>
<td>German Teaching</td>
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<tr>
<td>Health and Physical Education</td>
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<td>History</td>
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<tr>
<td>Humanities</td>
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<tr>
<td>Integrated Engineering</td>
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Directory of Programs
<table>
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<tr>
<th>Program</th>
<th>Degree</th>
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<tr>
<td>Interdisciplinary Studies</td>
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<td>International Business</td>
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<td>International Relations</td>
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<td>Law Enforcement</td>
<td>BA</td>
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<tr>
<td>Liberal Arts and Sciences</td>
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<tr>
<td>Life Science Teaching (5-12)</td>
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<tr>
<td>Management</td>
<td>BS</td>
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<tr>
<td>Business Management Emphasis</td>
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<td>Human Resource Management Emphasis</td>
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<tr>
<td>Management Information Systems</td>
<td>BS</td>
</tr>
<tr>
<td>Manufacturing Engineering Technology</td>
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<td>Marketing</td>
<td>BS</td>
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<td>Mass Media</td>
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<td>Mathematics</td>
<td>BA, BS</td>
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<td>Mathematics Teaching</td>
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<tr>
<td>Mechanical Engineering</td>
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<td>Medical Laboratory Science</td>
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<td>Music</td>
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<td>Performance Emphasis</td>
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<tr>
<td>Music Leadership Emphasis</td>
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<td>Entrepreneurship Emphasis</td>
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<tr>
<td>Music Education</td>
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<td>Instrumental/General Music [K-12] Emphasis</td>
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<td>Vocal/General Music [K-12] Emphasis</td>
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<td>Music Industry</td>
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<td>Music Industry, Audio Production</td>
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<td>Nursing</td>
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<td>Performance (suspended)</td>
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<tr>
<td>Philosophy</td>
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<tr>
<td>Philosophy, Politics, and Economics [PPE]</td>
<td>BA, BS</td>
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<td>Economics Emphasis</td>
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<td>Philosophy Emphasis</td>
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<td>Physics</td>
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<td>Physics Teaching</td>
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<td>Political Science</td>
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<td>Psychology</td>
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<td>Recreation, Parks &amp; Leisure Services</td>
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<tr>
<td>Leisure Planning and Management Emphasis</td>
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<tr>
<td>Therapeutic Recreation Emphasis</td>
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<tr>
<td>Resource Management Emphasis</td>
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<td>RN Baccalaureate Completion</td>
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<tr>
<td>Scandinavian Studies</td>
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<tr>
<td>School Health Education</td>
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<td>Social Studies</td>
<td>BS</td>
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<tr>
<td>Anthropology Emphasis</td>
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<td>Ethnic Studies Emphasis</td>
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<td>History Emphasis</td>
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<td>Sociology</td>
<td>BA, BS</td>
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<td>Applied Emphasis</td>
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<tr>
<td>General Emphasis</td>
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<td>Sociology: Globalization Studies</td>
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<td>Spanish</td>
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<td>Spanish for the Professions</td>
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<td>Special Education: Academic and Behavioral Strategist</td>
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<td>Sport Management</td>
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<td>Statistics</td>
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<td>Actuarial Track Emphasis</td>
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<td>Technical Communication</td>
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<td>Theatre Arts</td>
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<td>Theatre Arts</td>
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<td>Acting Emphasis</td>
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<tr>
<td>Design/Technology Emphasis</td>
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<td>Musical Theatre Emphasis</td>
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<tr>
<td>Urban and Regional Studies</td>
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</tbody>
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**CERTIFICATES**

- American Indigenous Studies
- Business Analytics
- Critical Thinking
- Database Technologies
- Elementary Education STEM
- Environmental Geology
- Experimental Psychology
- Geoarcheology
- Geographic Information Science (GISc)
- Geomorphology and Earth Surface Processes
- Information Security
- Internet of Things
- Long-Term Care Administration
- Museum Studies
- Networking Technologies
- Non-Profit Leadership
- Professional Pilot
- Project Based Engineering
- Renewable Energy
- Software Development
- Technical Communication
- Technical Integration & Design
MINORS

Accounting
Actuarial Science
Aging Studies
Aging Studies for Nursing
Alcohol & Drug Studies
American Indigenous Studies
Anthropology
Art History
Art Studio
Astronomy
Astronomy
Astrophysics
Automotive Engineering Technology
Aviation
  Aviation Management
  Aeronautics
  Private Flight
  Professional Flight
Biology
Business Administration
Business Law
Chemistry
Communication Sciences and Disorders
Communication Studies
Computer Information Science
Computer Technology
Corporate and Community Fitness/Wellness
Corrections
Creative Writing
Critical Thinking
Dance
Database Technologies
Developmental Adapted Physical Education and Teaching
Earth Science
Economics
English
English Writing Studies
Electronic Engineering Technology
Entrepreneurship and Innovation
Environmental Studies
Ethics
Ethnic Studies
Family Consumer Science
Film Studies
Financial Planning
French
Gender and Women's Studies
Geography
Geology
German
Graphic Design
Health Science
History
Human-Animal Studies
Humanities
Human Resource Management
Information Technology
Interdisciplinary Communications
International Business
International Relations
Latin American Studies
Law Enforcement
Linguistics
Management
Manufacturing Engineering Technology
Marketing
Mass Media
Mathematics
Middle School Communication Arts & Literature
Military Science
Music
Networking and Information Security
Nonprofit Leadership
Philosophy
Physics
Political Science
Psychology
Public Administration
Recreation
Scandinavian Studies
Sexuality Studies
Social Welfare
Sociology
Software Development
Spanish
Sports Medicine
Statistics
Teaching English as a Second Language (non-licensure)
Technical Communication
Technical Integration & Design
Theatre Arts
Urban and Regional Studies
INFORMATION FOR STUDENTS

Academic Standing
Satisfactory Academic Progress for undergraduate students is defined as:
- Achieving a Minnesota State University, Mankato ("local") cumulative grade point average (GPA) of 2.0 or higher. (Transfer credits are not included in calculating satisfactory GPA).
- Maintaining a cumulative satisfactory credit completion rate of at least 67%. (Transfer credits are included in calculating satisfactory credit completion rate).

Questions concerning DARS should be directed to DARS-Questions@mnsu.edu

Admission to the University
Applicants who have previously not attended any post-secondary institution (exclusive of courses taken through a Post-Secondary Enrollment Options (PSEO) program) are considered for admission to Minnesota State University, Mankato based on the University’s admission requirements for new entering first year students, new entering non-traditional students, and new entering international students. Applicants who have previously attended any post-secondary institution after graduating from high school (exclusive of courses taken through a PSEO program) are considered for admission to Minnesota State Mankato based on the University’s admission requirements for transfer students. To view the complete Undergraduate Admissions policy, see http://www.mnsu.edu/atoz/policies/

Degree Audit (DARS)
DARS is an acronym for Degree Audit Reporting System. It is a computer program that produces advising information illustrating a student’s progress in fulfilling the graduation requirements of their chosen degree program for undergraduate students.

DARS accomplishes its task by using a student’s degree program information (degree, major, minor, catalog year), on file in the student records system, to create a generic “template” of that degree program. DARS then feeds all of a student’s courses through this template to fill in the blanks. When the process is complete a document (called an audit) is produced showing where the student’s courses fit in, which requirements are completed, and which are left to be done. The audit can then be used to monitor a student’s progress and give a detailed assessment of what University requirements are yet to be satisfied.

DARS is not a replacement for the advising process whereby students are in communication with their department and assigned advisor. DARS should also not be considered a replacement for the University catalog, although the DARS program is based very heavily upon that document. The DARS program is a tool to assist students and advisors. Though DARS produces an accurate report of a student’s graduation progress, infrequently some items cannot be checked for or taken into account. For example, audits do display the results of nearly all departmental substitutions and waivers, but there are some situations that cannot be dealt with via DARS. Many of these items are handled via the advising process and are done manually within the graduation process.

DARS Questions should be directed to DARS-Questions@mnsu.edu

Ordering an Audit:
There are three ways that students can obtain audits:
- request their own via e-Services
- request an audit at the Campus Hub
- request an audit at their department or advising center

Courses
This catalog lists course offerings for the academic year beginning with fall semester 2017. This listing is as accurate as possible when the catalog is compiled. Students are advised, however, that all information regarding course offerings is subject to change, and it is recommended that students check the course schedules prior to each term. The University reserves the right to withdraw or modify any course or to change instructors.

Contact Hour.
One 50-minute period (minimum) of class group activity under supervision.

Writing Intensive “W” Designator. In certain cases, the 3-digit number may be followed by the letter “W”, which indicates that the course satisfies the writing intensive graduation requirement, whereas the other course with the same designator (and no “W”) does not. Credit will not be given for two courses with the same designator, regardless of GE writing intensive satisfaction.

Sections.
Individual course sections differentiated in the course schedules, but are not indicated in this catalog.

Number of Credits.
The number of credits is listed in parentheses after the course number. If the course is offered for variable credits, e.g., (1-4), the student will need to work with an advisor to determine the appropriate number of credits for which a certain course should be taken, and should register for the course accordingly. Permission is required for variable credit courses.

Prerequisites.
Students can be dropped from a course for which they are not found to have met the prerequisites. Some courses require prerequisites and/or corequisite courses. These are listed at the end of the course descriptions in this catalog. In some cases, prerequisites are “enforced.” If so, you would be unable to register without first verifying that you have completed the required prerequisite course. It is the student’s responsibility to review prerequisite requirements, and register for the appropriate level course. Questions about prerequisite course requirements should be directed to your academic advisor, the College Advising Center, or the department offering the course.

General Education and Diverse Cultures Satisfaction.
Courses approved as satisfying General Education requirements are symbolized after the course description. For example, a course satisfying Goal Area 4 will be denoted as GE-4. Similarly, courses approved as satisfying the Diverse Cultures Graduation Requirement will be denoted as Diverse Cultures-Purple and Diverse Cultures-Gold after the description. If a course satisfies both a General Education and a Purple course requirement, for example, in Goal Area 5, it will be denoted as Diverse Cultures-Purple and under this, GE-5. If a course satisfies both a General Education and a Gold course requirement in Goal Area 5, it will be denoted as Diverse Cultures-Gold, followed by GE-5.
Course Designator and Numbering System

Each course is identified by a 2-4 alpha character code called a course designator that indicates the program or department housing the course. The listing of course designators used at Minnesota State Mankato are below.

A course designator is followed by a 3-digit numeric code indicating course level. Undergraduate courses are numbered 001-499. 001-299 indicate lower division courses and 300-499 indicate upper division courses. To be eligible to graduate with a bachelor's degree from Minnesota State Mankato a student must have completed at least 40 semester hours of upper division courses. Students must be admitted to their major first to be able to take 300-400 level classes.

COURSE DESIGNATORS

- ACCT  Accounting
- AIS  American Indian Studies
- ANTH  Anthropology
- AOS  Applied Organizational Studies
- ART  Art
- AET  Automotive Engineering Technology
- AST  Astronomy
- AVIA  Aviation
- BIOL  Biology
- BLAW  Business Law
- BUS  College of Business
- CAHN  College of Allied Health & Nursing
- CHEM  Chemistry
- CIVE  Civil Engineering
- CDIS  Communication Disorders
- CMST  Communication Studies
- CS  Computer Science
- CM  Construction Management
- CORR  Corrections
- CSP  Counseling and Student Personnel
- DAK  Dakota
- DANC  Dance
- DHYG  Dental Hygiene
- ECON  Economics
- ED  Education
- EE  Electrical Engineering
- EEC  Elementary Education
- EET  Electronic Engineering Technology
- ENG  English
- ESL  English As A Second Language
- ENGR  Integrated Engineering
- ENVR  Environmental Sciences
- ETHN  Ethnic Studies
- FCS  Family Consumer Science
- FILM  Film Studies
- FINA  Finance
- FYEX  First Year Experience
- FREN  French
- GWS  Gender and Women’s Studies
- GEOG  Geography
- GEOL  Geology
- GER  German
- GERO  Aging Studies
- HLTH  Health Science
- HIST  History
- Honors
- HP  Human Performance
- HUM  Humanities
- IDST  Interdisciplinary Studies
- IT  Computer Information Technology
- IBUS  International Business
- KSP  Secondary 5-12 & K-12 Professional Education
- LAWE  Law Enforcement
- MGMT  Management
- MET  Manufacturing Engineering Technology
- MRKT  Marketing
- MASS  Mass Media
- MATH  Mathematics
- ME  Mechanical Engineering
- MEDT  Medical Technology
- MSL  Military Science and Leadership
- MUSC  Music, General
- MUSP  Music Performance
- MUSE  Museum Studies [See Anthropology]
- NPL  Nonprofit Leadership
- NURS  Nursing
- PHIL  Philosophy
- PHYS  Physics
- POL  Political Science
- PSYC  Psychology
- RPLS  Recreation, Parks & Leisure Services
- REHB  Rehabilitation Counseling
- SCAN  Scandinavian Studies
- SOST  Social Studies
- SOWK  Social Work
- SOC  Sociology
- SPAN  Spanish
- SPED  Special Education (Academic and Behavioral Strategist)
- STAT  Statistics
- THEA  Theatre Arts
- URBS  Urban & Regional Studies
- WLC  World Languages & Cultures (formally Modern Languages)

Deans List

An undergraduate student who carries 12 or more credits for a grade (not including P/N) during fall or spring semester and achieves a grade-point average of 3.5, with all grades reported without incomplete grades or a grade in-progress when the report is run 6 weeks after the end of each term, will be included on the Academic Honors List [Dean’s List] for that semester. The words “Dean’s List” will appear on the transcript. If a 4.0 grade-point average is achieved, the student will also be on the Academic High Honors List.
Email: Official Means of Communication
University assigned student email accounts shall be the University’s official means of communication with all students. Students are responsible for all information sent to them via the University assigned email account. If a student chooses to forward the University email account, she or he is still responsible for all information, including attachments, that is sent to the University email account.

Equal Opportunity and Nondiscrimination in Employment and Education Policy Minnesota State 1B.1
Minnesota State Mankato is committed to a policy of nondiscrimination in employment and education opportunity. No person shall be discriminated against in the terms and conditions of employment, personnel practices, or access to and participation in programs, services and activities with regard to race, sex, color, creed, religion, age, national origin, disability, marital status, status with regard to public assistance, sexual orientation, gender identity, gender expression or familial status (protected class).

Discrimination means conduct that is directed at an individual because of his or her protected class and that subjects the individual to different treatment by agents or employees so as to interfere with or limit the ability of the individual to participate in, or benefit from, the services, activities, or privileges provided by the university or otherwise adversely affects the individual’s employment or education.

Harassment on the basis of protected class is prohibited. Harassment is defined as verbal or physical conduct that is directed at an individual because of his or her protected class that is sufficiently severe, pervasive or persistent so as to have the purpose or effect of creating a hostile work or educational environment. Harassment may occur in a variety of relationships, including faculty and student, supervisor and employee, student and student, staff and student, employee and employee, and other relationships with other persons having business at or visiting the educational environment.

Sexual harassment includes unwelcome sexual advances, requests for sexual favors, sexually motivated physical conduct and other verbal or physical conduct of a sexual nature. Sexual harassment may occur when it is directed at members of the opposite sex or when it is directed at members of the same sex.

The 1B.1 Policy can be found at: http://www.minnstate.edu/board/policy/1b01.html. Inquiries regarding compliance or to file a report for a neutral investigation, contact the Office of Equal Opportunity and Title IX, 112 Armstrong Hall, or at 507-389-2825 (V) or 1-800-627-3529 or 711 (MRS/TTY).

Equity In Athletics Disclosure Federal Act 1994
Updated reports are released by October 15 of each subsequent year. Included is data on the amount of money spent on men's and women's teams and recruiting efforts, participation rates, personnel and operating expenses, revenues generated, and sports related financial aid allocations. The report is readily accessible to students, prospective students and the public. Contact Finance and Administration, 238 Wigley Administration Center, 507-389-6621.

Family Education Rights and Federal Act (FERPA)
Affords students certain rights with respect to their education records. For more information, see “Student Education Records” policy: http://www.mnsu.edu/atoz/policies/studenteducationrecords2017.pdf

Grading
A student's work in any course will be evaluated in accordance with the following system of letter grades: A, B, C, D, F, NC and P. To view the complete Grading policy, see https://www.mnsu.edu/atoz/policies/1b01.html.

Last Date of Attendance (LDA)
The University is obliged to provide attendance information to various stakeholders about certain student populations, e.g. student athletes, international students on student visas, and students who receive Financial Aid or funding as veterans.

This information is collected from instructors for each course twice each term: during Mid-Term Reporting for advising purposes, and at the end of the term when grades are submitted. End-of-term Last Date of Attendance (LDA) information is only collected if a student receives a grade of “F” or “NC” for a particular course.

Instructors define what attendance means for each course. In general, the “last day of attendance” is considered to be:
• the last day the student attended class in courses in which attendance is taken by the instructor,
• the last day on which a student submitted an assignment, quiz, or test,
• or the last day on which a student actively participated in a group or online activity in classes in which attendance is not regularly taken.

To view the complete Last Day of Attendance policy, see http://www.mnsu.edu/atoz/policies/1b02.html.

Pre-Professional Programs
Pre-Professional Programs. The purpose of the pre-professional program is to provide students with the intellectual and academic background they will need before continuing their education at other institutions. Acceptance to professional educational institutions is usually contingent upon academic performance; therefore, students enrolling in pre-professional programs should be highly motivated and realize they are expected to maintain high standards of excellence.

Rights for Students with Disabilities
Minnesota State University, Mankato, is committed to achieving equal educational opportunity and full participation for qualified persons with disabilities. See http://www.mnsu.edu/atoz/policies/accessforstudentswithdisabilities2015.pdf. Achieving full participation and integration of people with disabilities requires the cooperative efforts of all the departments, offices, and personnel. Assurance of equal educational opportunity rests upon legal foundations established by federal law, specifically the Rehabilitation Act of 1973 including Section 504, and the Americans with Disabilities Act of 1990. All students with a disability may request accommodation through Accessibility Resources (132 Memorial Library, 507-389-2825).

Sexual Violence Policy Minnesota State 1B.3 Acts of sexual violence are criminal behaviors and create an environment contrary to the goals and missions of Minnesota State Mankato. Acts include sexual assault, non-forcible sex acts, dating, intimate partner, and relationship violence, stalking, as well as aiding acts of sexual violence. These acts will be investigated and may subject an individual to disciplinary sanctions as well as possible referral to appropriate law enforcement agencies.
The 1B.3 Policy can be found at: http://www.mnsu.edu/board/policy/1b-03.pdf. Inquiries regarding compliance or to file a report for a neutral investigation, contact the Office of Equal Opportunity and Title IX, 112 Armstrong Hall, or at 507-389-2986 (V) or 1-800-627-3529 or 711 (MRS/TTY).

Required Comprehensive Training. The State of Minnesota and Minnesota State Mankato requires that all students complete training on sexual harassment and violence awareness and prevention as detailed in Minnesota's Statute 135A.15 Sexual Harassment and Violence Policy, Subdivision 8. Minnesota State Mankato fully supports the reduction of sexual harassment and sexual violence on our campus. Student participation in this required training is an investment in the safety of our campus.

Student Complaints
Minnesota State University, Mankato has a commitment to a respectful learning environment. Students have the right to seek a remedy for when they believe a campus office/department or a Minnesota State employee treated them in an improper, unfair or arbitrary manner. Students are encouraged to resolve the matter informally before initiating this process. Students seeking advice may contact the Minnesota State Student Association or an academic advisor. To view the complete Student Complaints and Grievances policy, see http://www.mnsu.edu/atoz/policies/

Student Right-to-Know and Campus Security Act 1995
The Student Right-to-Know and Campus Security Act increased the level of information universities must collect and provide to current and prospective students and employees and to the Department of Education. The first part of the act, entitled the Student Right-to-Know Act, requires colleges and universities to compile and release institution-wide graduation rates for all students, with more detailed statistical information submitted on the graduation rates of athletes. The graduation rate for Minnesota State Mankato new entering first year students, fall term 2009 cohort, is 49 percent. This percentage reflects the number of first time, full-time four-year degree seeking students either who received a baccalaureate degree within six years or an associate degree within three years. The 2009 cohort is the most recent one for which a six year graduation rate is available.

Part II of the act, entitled the Campus Crime Awareness and Campus Security Act of 1990, requires colleges and universities to annually make available to all current employees and students as well as to applicants for enrollment or employment an Annual Security and Fire Safety Report. This report contains policy statements and crime statistics for the University. The policy statements address the school's policies, procedures and programs concerning safety and security. Three years’ worth of statistics are included for certain types of crimes that were reported to have occurred on-campus, or in other University affiliated locations. This report is available online at www.mnsu.edu/safety. You may also request a paper copy from University Security at 507-389-2111 or by emailing security@mnsu.edu.

Transfer
Minnesota State University, Mankato complies with the Minnesota State system policy and procedures including Undergraduate Course Credit Transfer Policy and Procedure, the Minnesota Transfer Curriculum, and Transfer Rights and Responsibilities. To view the complete Acceptance and Evaluation of Transfer Credits policy, see http://www.mnsu.edu/atoz/policies/

Tuition and Fees
Minnesota Statute 136F.06, Powers and Duties, and Minnesota Statutes § 136F.70, Tuition; Fees; Activities Funds provide that the board shall set tuition and fees and adopt suitable policies for the colleges and universities it governs. All colleges and universities shall charge tuition and fees consistent with Minnesota Statutes, board policies, and system procedures. The Board shall approve the tuition and fee structure for all colleges and universities. The chancellor or designee is authorized to make any necessary technical adjustments to the tuition rates and fees. Technical adjustments are defined as changes in tuition and fee rates which are deemed a correction or the addition of a program rate for a new program established in the interim.

To view the complete Minnesota State Colleges & Universities Tuition and Fees policy, see http://www.mnstate.edu/board/policy/511.html
To view Minnesota State Mankato’s tuition and fees schedule for the current term, see http://www.mnsu.edu/tuition/

Tuition Refund Appeal
https://www.mnsu.edu/campushub/payments/tuitionrefundappeal/
Appeals are granted only in cases of rare and extreme circumstances and are not granted for failure to cancel or non-attendance.

Undergraduate Awards
Minnesota State Mankato offers programs leading to undergraduate certificates, associate of arts degree, baccalaureate degrees, master’s degrees, graduate certificates, education specialist degrees and doctoral degrees. (The Graduate Studies Catalog contains complete information regarding graduate degree programs.)

Majors. A standard major has a minimum of 32 semester credits and requires a minor. A broad major has a minimum of 48 semester credit hours and requires no minor. Students may earn more than one major.

Minor. Students completing a standard major of 32 to 47 credits must complete a minor (which is a minimum of 16 credit hours). At the department’s recommendation a required minor may be waived for a student completing a double major within the same degree. Required minors may also be waived at the department’s recommendation for a student adding a major to a previous baccalaureate degree. In either case, students must complete a total of 120 semester hours of credit (or up to 128 for certain programs).

Minor for Teaching Majors. A minor will not be required for Teaching majors. Unless they have more than 48 credits in addition to the 30 professional education credits, teaching majors are not considered broad majors. This does not prohibit a teaching major from requiring a minor. All teaching majors must have a minimum of 32 required credits outside of the required 30 credits in professional education.

Major and Minor in Same Discipline. Please note that for any degree program, completion of a major and a minor in the same discipline is not permitted. Usually a minor is not required if two or more majors are completed on the same degree. Some majors do require specific minors to be completed.

Baccalaureate Degrees
The baccalaureate degrees available are Bachelor of Applied Science (BAS), Bachelor of Arts (BA), Bachelor of Fine Arts (BFA), Bachelor of Science (BS), Bachelor of Science in Civil Engineering (BSCE), Bachelor of Science in Computer Engineering (BSEC), Bachelor of Science in Electrical Engineering (BSEE), Bachelor of
Science in Engineering (BSE), Bachelor of Science in Mechanical Engineering (BSME), and Bachelor of Science in Social Work (BSSW). Students seeking teacher licensure pursue a Bachelor of Science degree. These degrees are generally based upon four years of study and require satisfactory completion of 120 credits (or up to 128 for certain programs).

Bachelor of Arts (BA). The Bachelor of Arts degree emphasizes both breadth and depth in its curriculum.

BA candidates usually complete a major not exceeding 40 semester credits and a minor not exceeding 20 semester credits, plus general education and elective credits. Certain broad majors which exceed 47 semester credits do not require the completion of a minor.

BA degrees require completion of one full sequence (minimum 8 credits) of a single modern language (including American Sign Language) at the elementary or intermediate level. Please consult the Department of World Languages & Cultures for acceptable sequences.

BA candidates who wish to qualify as secondary school teachers may do so by completing the requirements for the Bachelor of Science (teaching) plus the professional education and other secondary teaching requirements described in the Bachelor of Science program for licensure. Students will then earn a Bachelor of Science program in addition to, or instead of the Bachelor of Arts. They may alternatively choose to complete the Master of Arts in Teaching degree described in the Minnesota State Mankato Graduate Catalog.

Bachelor of Fine Arts (BFA). The Bachelor of Fine Arts degree program is designed for students who desire a professional career in the Fine Arts, Creative Writing and Theatre.

Bachelor of Science (BS). The Bachelor of Science degree emphasizes professional or technical preparation. BS candidates usually complete a major not exceeding 40 semester credits and a minor not exceeding 20 semester credits, plus general education and elective credits. Certain broad majors which exceed 47 semester credits do not require the completion of a minor.

Bachelor of Science in Electrical Engineering (BSEE). This degree is a professional degree designed for students planning a career in Electrical Engineering.

Bachelor of Science in Civil Engineering (BSCE). This degree is a professional degree designed for students planning a career in Civil Engineering.

Bachelor of Science in Computer Engineering (BSEC). This degree is a professional degree designed for students planning a career in Computer Engineering.

Bachelor of Applied Science (BAS). This degree is designed for students with an appropriate 2-year degree and who participate in an extended internship program. Currently offered is a BAS in Computer Application Development.

Bachelor of Science in Engineering (BSE). This degree is a professional degree designed for students planning a career in Engineering. Students can choose a technical focus area within the project-based programs.

Bachelor of Science in Mechanical Engineering (BSME). This degree is a professional degree designed for students planning a career in Mechanical Engineering.

Bachelor of Science in Social Work (BSSW). This degree is designed for students preparing for a professional career in the social work field.

Associate Degree

Associate of Arts (AA). The Associate of Arts (AA) degree can only be earned through the Liberal Studies program. Students must complete the general education requirements plus 16 credits of lower division electives for a total of 60 semester credits. This Associate of Arts (AA) degree is intended for those students who wish to pursue a two-year balanced program of liberal education.

Certificate

These programs provide evidence of specialized study and expertise in given fields.

A certificate is awarded to students who satisfactorily complete a prescribed course of study and/or a qualifying examination. Program descriptions, with specific requirements, are given under departmental headings.

University Policies

www.mnsu.edu/atoz/policies/

University policies are statements of institutional positions on issues. They both reflect and support the University’s mission and values. While developed primarily to guide institutional decisions or actions, they also may articulate the institution’s compliance with external mandates, encourage efficient use of resources or promote consistency by those acting for the institution. University policies impact the entire institution and their applicability is not limited to a single institutional unit. The implementation of University policies requires the approval of the President.

University Procedures

www.mnsu.edu/policies/procedures.html

University procedures are written statements of specific processes initiated to implement a University Policy. Procedures are subject to regular change to improve the manner in which a policy is administered.

Withdrawal from the University

https://www.mnsu.edu/campus/hub/payments/withdrawalinfo/

Official Withdrawal is defined as terminating enrollment in all registered courses for an academic semester at Minnesota State University, Mankato. Refunds/credits of tuition and fees for withdrawal are based on the Minnesota State Colleges and University’s refund policy, http://www.minnstate.edu/board/policy/S12.html
ADVISING

Academic and Program Planning
Academic planning should begin early in your first year at Minnesota State Mankato, and your academic advisor will be the individual to help you assess your individual needs and plan an academic program based on your interests and career goals. As you progress through your program, your academic advisor, in conjunction with other advising staff, can assist you in a variety of ways: selecting courses each semester; changing or choosing a major; satisfying general education requirements; exploring career interests and opportunities; identifying campus resources to assist you; referring you to opportunities for scholarships, internships, and undergraduate research; and assisting you with any academic difficulties you may encounter.

As a new student at Minnesota State Mankato you are assigned an academic advisor based on your major choice during orientation. If you are unsure about your major when you first enroll, you will be assigned to one of the academic advisors in New Student & Family Programs who work especially with students who have not decided on a major. We encourage you to work closely with an academic advisor throughout your Minnesota State Mankato career.

Advising Resources
Major Advising. Once you have selected a major or general area of study you wish to pursue, your advising services will be provided by your major College. Each College within the University has a Student Relations Coordinator (SRC) who serves as a primary resource and advising contact for those interested in any of the College majors or departments. The Student Relations Coordinators provide general academic and program assistance to prospective, current, and returning Minnesota State Mankato students. Some Colleges also offer “Advising Centers,” which provide additional advising services and staff.

COLLEGE ADVISING RESOURCES

ALLIED HEALTH
Shirley Murray, Student Relations Coordinator
124 Myers Field House, 507-389-6315

ARTS & HUMANITIES
Gina Maahs-Zurbey, Student Relations Coordinator
226B Armstrong Hall, 507-389-1712

BUSINESS
Linda Meidl, Student Relations Coordinator, College Advising Center
151 Morris Hall, 507-389-2963

EDUCATION
Mymique Baxter, Student Relations Coordinator, College Advising Center
117 Armstrong Hall, 507-389-1215

NEW STUDENT AND FAMILY PROGRAMS
Sara Granberg-Rademacker, Student Relations Coordinator
New Student & Family Programs
103 Preska Residence Community, 507-389-5498

If you have not yet selected a major, or are considering a variety of options, you may choose to be an Interdisciplinary Studies major. If this is your situation, your initial academic advisor will be assigned through the New Student & Family Programs Office.

SCHOOL OF NURSING
Kasi Johnson, Student Relations Coordinator
360 Wissink Hall, 507-389-6022

SCIENCE, ENGINEERING AND TECHNOLOGY
Ken Adams, Student Relations Coordinator, College Advising Center
125 Trafton Science Center N, 507-389-1521

SOCIAL AND BEHAVIORAL SCIENCE
Melissa Iverson, Student Relations Coordinator, College Advising Center
114 Armstrong Hall, 507-389-2416

UNIVERSITY EXTENDED EDUCATION
Sara Leigh, Student Relations Coordinator
PO822 Partnership Center at Normandale Community College,
952-412-1755

If you are participating one of our exclusively online or bachelor’s degree programs at our Edina or Normandale campus, you will work with the SRC for University Extended Education.

ADDITIONAL SUPPORT RESOURCES

Career Development Center,
209 Wigley Administration Center, 507-389-6061
Center for Academic Success,
125 Memorial Library, 507-389-1791
Counseling Center,
245 Centennial Student Union, 507-389-1455
Accessibility Resources,
132 Memorial Library, 507-389-2825
Multicultural Affairs,
269 Centennial Student Union, 507-389-6300
Student Support Services,
355 Wiecking Center, 507-389-2797
UNDERGRADUATE GRADUATION REQUIREMENT: GENERAL EDUCATION

General Education courses that also satisfy the Diverse Cultures Graduation Requirement as either a Purple or Gold course are identified in the Goal Areas by a P for Purple and a G for Gold. (Example = ENG211 WP)

GENERAL EDUCATION MINNESOTA TRANSFER CURRICULUM.
Completion of the Minnesota Transfer Curriculum fulfills the General Education requirement for any Minnesota public institution. Students transferring with a completed Minnesota Transfer Curriculum will satisfy Minnesota State Mankato’s General Education requirement. Completion of goal areas within the Minnesota Transfer Curriculum will be accepted as completion of that same goal area at Minnesota State Mankato. Individual competencies will be evaluated and transferred on a course-by-course basis. Students transferring from Minnesota State Mankato to another Minnesota public institution of higher education will have fulfilled the Minnesota Transfer Curriculum if they have completed 40 credits of required courses in the following ten goal areas: Communication, Critical Thinking, Natural Science, Mathematical/Logical Reasoning, History and the Social and Behavioral Sciences, Humanities and the Arts, Human Diversity, Global Perspective, Ethical and Civic Responsibility, and People and the Environment. Goal areas 11-13 are part of the General Education curriculum at Minnesota State Mankato but not goal areas in the Minnesota Transfer Curriculum.

Why General Education?
The General Education program integrates a broad foundation of knowledge and skills with the study of contemporary concerns. The goals and competencies within the curriculum are reflective of those capabilities essential for all college-educated adults facing the twenty-first century, including:

1. Skills needed for effective understanding and communication if ideas through reading, listening, critical and integrative thinking, writing, speaking, and technological literacy.
2. Exploration of various ways of knowing through study of the content, methods of inquiry and creative modes of a broad spectrum of disciplines.
3. Our common membership in the human community, coupled with awareness that we live in a diverse world.
4. The interrelatedness of human society and the natural environment and the ethical dimensions of political, social, and personal life; and

GENERAL EDUCATION GUIDELINES

1. A total of 44 credits must be completed to satisfy the General Education program at Minnesota State Mankato.
2. Students transferring with the Minnesota Transfer Curriculum completed will be considered to have completed the Minnesota State Mankato General Education requirements.
3. While included in General Education at Minnesota State Mankato, goal areas 11, 12, and 13 are not part of the Minnesota Transfer Curriculum.
4. A single course may be placed in more than one goal area. Each credit in any of these courses, however, may be counted only once in meeting the 44 credits requirement.
5. The Critical Thinking Goal Area 2 may be satisfied either by taking a course by the satisfactory completion of the other General Education goal areas.
6. In each goal area where two courses are required (i.e., 3, 5, and 6), students are required to take courses from different disciplines.
7. To count as General Education credit, students may take no more than two courses or eight (8) credits, whichever is greater, from the same discipline. The only exception to this policy is for English Composition (ENG 101, CMST 100, CMST 102).
8. For Bachelor of Science degrees in Electrical, Civil, Computer, Integrated or Mechanical Engineering, and the Nursing degree, general education requirements differ. See the program requirements for a detailed explanation of general education coursework for these degree programs.
9. The General Education requirements of the Associate of Arts degree are the same as for the Bachelor’s degree.
10. General Education courses that also satisfy the Diverse Cultures graduation requirement as either a Purple or Gold course are identified by a “P” for Purple and a “G” for Gold.
11. General Education courses that also satisfy the Writing Intensive graduation requirement are identified by a “W” for Writing Intensive.
12. Some general education courses may also be required courses for your major. Please consult your advisor for information about the general education courses you may need to take specifically for your major degree.

GOAL AREA 1: COMMUNICATION
Goal: To develop writers and speakers who use the English language effectively and who read, write, speak, and listen critically. At a base, all students should complete introductory communication requirements early in their college studies. Writing competency is an ongoing process to be reinforced through writing intensive courses and writing across the curriculum. Speaking and listening skills need reinforcement. There are multiple opportunities for interpersonal communication, public speaking and discussion.

Part A: English Composition
Requires one course, 3 credits or more, with a grade of at least “P” or “C” (2.0). A grade of “C-” does not satisfy this goal area.

Goal: The goal is to provide students with:
1. a rich understanding of how writing works
2. guided opportunities to apply this understanding in specific writing situations
3. experience analyzing, researching, and writing for academic writing situations
4. opportunities to reflect on the development of their writing knowledge and skills

Students will be able to:
(a) draw upon strategies for idea generation, drafting, revision, design, and editing;
(b) analyze and produce texts guided by basic rhetorical concepts;
(c) practice critical reading skills, including the ability to identify genre conventions and evaluate the claims, evidence, and reasoning in a text;
(d) demonstrate effective research processes, including the ability to gather academic and nonacademic sources and assess their quality and suitability for the writing situation;
(e) integrate sources in their writing to achieve specific aims, making appropriate use of summary, paraphrase, quotation, and citation conventions;
(f) explain their writing choices, using concrete examples to support their claims;
(g) employ syntax and usage appropriate to academic disciplines and the professional world.

Courses which satisfies this goal area are:
ENG 101 Composition 1A (4)
ENG 104 Stretch Composition ll 1A (4)

English Composition General Education Goal Area 1A Placement Table (note: for international students who do not have English as their first language, please see International Students Placement Table)

<table>
<thead>
<tr>
<th>Course</th>
<th>Minimum ACT English Score</th>
<th>Minimum SAT Writing Score</th>
<th>Minimum Accuplacer Reading Comprehension Score</th>
<th>Course Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>18 OR 440 OR 78 OR</td>
<td></td>
<td></td>
<td>Successful completion of ENG 100 or EAP 135 or EAP 136</td>
</tr>
<tr>
<td>ENG 103</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>ENG 104</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Successful completion of ENG 103</td>
</tr>
<tr>
<td>ENG 100</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

International Students English Composition General Education Goal Area 1A Placement Table

<table>
<thead>
<tr>
<th>Course</th>
<th>Minimum ACT English Score</th>
<th>Minimum SAT Writing Score</th>
<th>Minimum Accuplacer Reading Comprehension Score</th>
<th>Course Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>89 (internet-based) or 575 (paper-based) OR 6.5 OR N/A OR 6 OR</td>
<td></td>
<td></td>
<td>Successful completion of EAP 136</td>
</tr>
<tr>
<td>ENG 101</td>
<td>89 (internet-based) or 575 (paper-based) OR 6.5 OR 110 AND 5 OR</td>
<td></td>
<td></td>
<td>Successful completion of EAP 136</td>
</tr>
<tr>
<td>EAP 136</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Students with an SAT Evidence-Based Reading and Writing score of 480 or higher are eligible for ENG 101.

All test scores (includes ACT, SAT, and MCA) are valid for 5 years. ENG 101 [4] Composition, and ENG 104 [4] Stretch Composition II fulfill goal 1A.
UNDERGRADUATE GRADUATION REQUIREMENT: GENERAL EDUCATION CONTINUED

Part B: Speech and Oral Reasoning
(Requires one course, 3 credits or more)

Goal: To develop skills necessary for reasoned communication. Courses in this goal area will require individual public speaking which is critiqued by the instructor. Speaking and reasoning competency is an ongoing process which needs to be reinforced throughout the curriculum.

Students will be able to:
(a) understand/demonstrate communication processes through invention, organization, drafting, revision, editing and presentation;
(b) participate effectively in groups with emphasis on listening, critical and reflective thinking, and responding;
(c) analyze, evaluate, and synthesize in a responsible manner material from diverse sources and points of view;
(d) select appropriate communication choices for specific audiences;
(e) construct logical and coherent arguments;
(f) use authority, point of view, and individual voice and style in communications;
(g) employ syntax, usage and analytical techniques appropriate to academic disciplines and the professional world.

Course(s) which satisfy this goal area include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Title/Goal Area(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDIS 201</td>
<td>3</td>
<td>Observation of Human Communication 1B</td>
</tr>
<tr>
<td>CMST 100</td>
<td>3</td>
<td>Fund of Communication 1B</td>
</tr>
<tr>
<td>CMST 102</td>
<td>3</td>
<td>Public Speaking 1B</td>
</tr>
<tr>
<td>CMST 312</td>
<td>4</td>
<td>Prof Communication &amp; Interviewing 1B</td>
</tr>
<tr>
<td>HIST 250</td>
<td>4</td>
<td>Riot and Revolution in History 1B, 9</td>
</tr>
<tr>
<td>HIST 268</td>
<td>4</td>
<td>American Legal History 1B, 9</td>
</tr>
<tr>
<td>POL 234</td>
<td>3</td>
<td>Model United Nations 1B, 8</td>
</tr>
</tbody>
</table>

GOAL AREA 2: CRITICAL THINKING
(Requires completion of the rest of the General Education Program or one course)

Goal: To develop critical thinking, communication, and problem solving skills.

Courses in this goal area must focus on skill development and throughout the course will provide opportunities to exercise skills although the exercise of skills requires a subject matter, the emphasis in this goal area will be on skill development. The skills will not be ones that are specific to the practice of a particular discipline or area of inquiry but rather will be skills that are common to different disciplines and different areas of inquiry.

Students will be able to:
(a) gather and analyze information of various kinds, employing formal or informal tools to represent information in ways useful for solving problems;
(b) weigh evidence for and against hypotheses;
(c) recognize, construct, and evaluate arguments;
(d) apply appropriate critical and evaluative principles to texts, documents, or works-one’s own or others’—in oral, visual, or written mediums.

Course(s) which satisfy this goal area include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Title/Goal Area(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AST 115</td>
<td>5</td>
<td>Life in the Universe 2, 3</td>
</tr>
<tr>
<td>CHEM 111-L</td>
<td>4</td>
<td>Chemistry of Life Processes 2, 3</td>
</tr>
<tr>
<td>CHEM 191</td>
<td>3</td>
<td>Chemistry Applications 2, 3</td>
</tr>
<tr>
<td>CHEM 201-L</td>
<td>4</td>
<td>General Chemistry 1, 2, 3</td>
</tr>
<tr>
<td>CMST 101W</td>
<td>4</td>
<td>Interpersonal Communication 2</td>
</tr>
<tr>
<td>CSP 110</td>
<td>3</td>
<td>Decision Making for Career and Life 2</td>
</tr>
<tr>
<td>ECON 203WP</td>
<td>3</td>
<td>Economics of Women’s Issues &amp; Public Policy in the United States</td>
</tr>
<tr>
<td>ECON 207</td>
<td>3</td>
<td>Business Statistics 2, 4</td>
</tr>
<tr>
<td>ENG 201W</td>
<td>4</td>
<td>Intermediate Writing 2</td>
</tr>
<tr>
<td>ENG 271W</td>
<td>4</td>
<td>Technical Communication 2, 13</td>
</tr>
<tr>
<td>ENG 272W</td>
<td>4</td>
<td>Business Communication 2, 13</td>
</tr>
<tr>
<td>ENG 301W</td>
<td>4</td>
<td>Advanced Writing 2</td>
</tr>
<tr>
<td>GEOG 313</td>
<td>4</td>
<td>Natural Disasters 2, 10</td>
</tr>
<tr>
<td>GERO 200G</td>
<td>4</td>
<td>Family Dynamics of Aging 2, 7</td>
</tr>
<tr>
<td>GERO 200WG</td>
<td>4</td>
<td>Family Dynamics of Aging 2, 7</td>
</tr>
<tr>
<td>GWVS 230P</td>
<td>4</td>
<td>Gender, Race &amp; Pop Culture 2, 6</td>
</tr>
<tr>
<td>HIST 212</td>
<td>3</td>
<td>Consumer Health 2</td>
</tr>
<tr>
<td>KSP 150</td>
<td>3</td>
<td>Exploring Careers in Education 2</td>
</tr>
<tr>
<td>KSP 200G</td>
<td>3</td>
<td>Critical Issues in Public Ed Today 2, 9</td>
</tr>
<tr>
<td>MATH 290</td>
<td>4</td>
<td>Foundations of Mathematics 2</td>
</tr>
<tr>
<td>MUSC 301W</td>
<td>3</td>
<td>Music History 1, 2</td>
</tr>
<tr>
<td>MUSC 302W</td>
<td>3</td>
<td>Music History 2, 2</td>
</tr>
<tr>
<td>PHIL 110</td>
<td>3</td>
<td>Logic and Critical Thinking 2, 4</td>
</tr>
<tr>
<td>PHIL 112W</td>
<td>3</td>
<td>Scientific Reasoning 2, 4</td>
</tr>
<tr>
<td>PHIL 311</td>
<td>3</td>
<td>Symbolic Logic 2, 4</td>
</tr>
<tr>
<td>PHYS 211-L</td>
<td>4</td>
<td>Principles of Physics 1, 2</td>
</tr>
<tr>
<td>PHYS 221-L</td>
<td>5</td>
<td>Principles of Physics 1, 2, 3</td>
</tr>
</tbody>
</table>

GOAL AREA 3: NATURAL SCIENCE
(Requires two courses from different disciplines, 6 credits or more. At least one course must have a laboratory)

Goal: To improve students’ understanding of natural science principles and of the methods of scientific inquiry, i.e., the ways in which scientists investigate natural science phenomena. Students should be encouraged to study both the biological and physical sciences.

Students will be able to:
(a) develop understanding of scientific theories;
(b) formulate and test hypotheses in either laboratory, simulation, or field experiences;
(c) communicate his/her experimental findings and interpretations both orally and in writing;
(d) apply the natural science perspective to society issues.

Course(s) which satisfy this goal area include: ("L" indicates a laboratory course

<table>
<thead>
<tr>
<th>Course Credits</th>
<th>Title/Goal Area(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 120L</td>
<td>Forensic Science: An Anthropological Approach 3</td>
</tr>
<tr>
<td>ANTH 210L</td>
<td>Introduction to Archaeology 3, 10</td>
</tr>
<tr>
<td>ANTH 220L</td>
<td>Introduction to Anthropology 3</td>
</tr>
<tr>
<td>AST 101</td>
<td>Introduction to Astronomy 3</td>
</tr>
<tr>
<td>AST 107</td>
<td>Introduction to the Planets 3</td>
</tr>
<tr>
<td>AST 104L</td>
<td>Introduction to Experimental Astronomy 3</td>
</tr>
<tr>
<td>AST 115</td>
<td>Life in the Universe 2, 3</td>
</tr>
<tr>
<td>AST 125L</td>
<td>Observational Astronomy 3</td>
</tr>
<tr>
<td>BIOL 100L</td>
<td>Our Natural World 3, 8</td>
</tr>
<tr>
<td>BIOL 102</td>
<td>Biology of Women 3</td>
</tr>
<tr>
<td>BIOL 103WL</td>
<td>Introduction to Biotechnology 3</td>
</tr>
<tr>
<td>BIOL 105L</td>
<td>General Biology 1, 3</td>
</tr>
<tr>
<td>BIOL 105WL</td>
<td>General Biology 1, 3</td>
</tr>
<tr>
<td>BIOL 270L</td>
<td>Microbiology 3</td>
</tr>
<tr>
<td>CHEM 100L</td>
<td>Chemistry in Society 3</td>
</tr>
<tr>
<td>CHEM 104</td>
<td>Introduction to Chemistry 3</td>
</tr>
<tr>
<td>CHEM 106</td>
<td>Chemistry of Life Processes 1, 3</td>
</tr>
<tr>
<td>CHEM 111L</td>
<td>Chemistry of Life Processes II 2, 3</td>
</tr>
<tr>
<td>CHEM 131</td>
<td>Forensic Science 3, 9</td>
</tr>
<tr>
<td>CHEM 134</td>
<td>Mind Altering Substances 3</td>
</tr>
<tr>
<td>CHEM 135</td>
<td>Science of Sport 3</td>
</tr>
<tr>
<td>CHEM 191</td>
<td>Chemistry Applications 2, 3</td>
</tr>
<tr>
<td>CHEM 201L</td>
<td>General Chemistry 1, 2, 3</td>
</tr>
<tr>
<td>EET 112L</td>
<td>Elementary Electricity and Electronics 3</td>
</tr>
<tr>
<td>EET 118</td>
<td>Electricity - Generation, Usage &amp; Green Alternatives 3, 8</td>
</tr>
<tr>
<td>FCS 140</td>
<td>Introduction to Nutrition 3</td>
</tr>
<tr>
<td>GEOG 101L</td>
<td>Introductory Physical Geography 3, 10</td>
</tr>
<tr>
<td>GEOG 100L</td>
<td>Our Geologic Environment 3, 10</td>
</tr>
<tr>
<td>GEOG 121L</td>
<td>Oceans of the World 3, 10</td>
</tr>
<tr>
<td>GEOG 121L</td>
<td>Physical Geology 3, 10</td>
</tr>
<tr>
<td>GEOG 122L</td>
<td>Earth History 3</td>
</tr>
<tr>
<td>PHYS 100L</td>
<td>Cultural Physics 3</td>
</tr>
<tr>
<td>PHYS 101L</td>
<td>Introductory Physics 3</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>Physics in the World Around Us 3</td>
</tr>
<tr>
<td>PHYS 105</td>
<td>Time, Atomic Clocks, and Relativity 3</td>
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<td>PHYS 211L</td>
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<td>PHYS 221L</td>
<td>Principles of Physics 1, 2, 3</td>
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</table>

GOAL AREA 4: MATHEMATICAL/LOGICAL REASONING
Requires one course, 3 credits or more, with a grade of at least "P" or "C", i.e. 2.0. A grade of "C" does not satisfy this goal area.

Goal: To increase students’ knowledge about mathematical and logical modes of thinking. This will enable students to appreciate the breadth of applications of mathematics, evaluate arguments, and detect fallacious reasoning. Students will learn to apply mathematics, logic, and/or statistics to help them make decisions in their lives and careers. Students will be able to:
(a) illustrate historical and contemporary applications of mathematical/logical systems;
(b) clearly express mathematical/logical ideas in writing;
(c) explain what constitutes a valid mathematical/logical argument (proof); and
(d) apply higher-order problem-solving and/or modeling strategies.

Students seeking enrollment in MATH 112 College Algebra, MATH 113 Trigonometry, MATH 115 Precalculus, MATH 121 Calculus 1, MATH 130 Finite Mathematics and Introductory Calculus, MATH 201Elements of Mathematics I, or STAT 154 Elementary Statistics must demonstrate readiness to succeed by satisfying the placement table below.
GOAL AREA 5: HISTORY AND THE SOCIAL AND BEHAVIORAL SCIENCES

**Goal:** To increase students' knowledge of how historians and social and behavioral scientists discover, describe, and explain the behaviors and interactions among individuals, groups, institutions, events and ideas and to challenge students to think critically about the role of social and behavioral scientists in shaping and understanding the human condition.

**Course(s) which satisfy this goal area include:**

- **Course Credits Title/Goal Area(s)**
  - **ECON 207** (4) Business Statistics 2, 4
  - **MATH 110** (3) Perspectives in Mathematics 4
  - **MATH 112** (4) College Algebra 4
  - **MATH 113** (3) Trigonometry 4
  - **MATH 115** (4) Precalculus Mathematics 4
  - **MATH 121** (4) Calculus I 4
  - **MATH 130** (4) Finite Mathematics and Introductory Calculus 4
  - **MATH 180** (4) Mathematics for Computer Science 4
  - **MATH 181** (3) Introductory Calculus 4
  - **PHIL 201** (3) Elements of Mathematics I 4
  - **PHIL 110** (3) Logic and Critical Thinking 2, 4
  - **PHIL 112W** (3) Scientific Reasoning 2, 4
  - **PHIL 311** (3) Symbolic Logic 2, 4
  - **SOC 202** (3) Introductory Social Statistics 4
  - **STAT 154** (4) Elementary Statistics 4

**GOAL AREA 5: HISTORY AND THE SOCIAL AND BEHAVIORAL SCIENCES**

**Goal:** To increase students' knowledge of how historians and social and behavioral scientists discover, describe, and explain the behaviors and interactions among individuals, groups, institutions, events and ideas and to challenge students to think critically about the role of social and behavioral scientists in shaping and understanding the human condition.

**Course(s) which satisfy this goal area include:**

- **Course Credits Title/Goal Area(s)**
  - **ECON 207** (4) Business Statistics 2, 4
  - **MATH 110** (3) Perspectives in Mathematics 4
  - **MATH 112** (4) College Algebra 4
  - **MATH 113** (3) Trigonometry 4
  - **MATH 115** (4) Precalculus Mathematics 4
  - **MATH 121** (4) Calculus I 4
  - **MATH 130** (4) Finite Mathematics and Introductory Calculus 4
  - **MATH 180** (4) Mathematics for Computer Science 4
  - **MATH 181** (3) Introductory Calculus 4
  - **PHIL 201** (3) Elements of Mathematics I 4
  - **PHIL 110** (3) Logic and Critical Thinking 2, 4
  - **PHIL 112W** (3) Scientific Reasoning 2, 4
  - **PHIL 311** (3) Symbolic Logic 2, 4
  - **SOC 202** (3) Introductory Social Statistics 4
  - **STAT 154** (4) Elementary Statistics 4

**GOAL AREA 5: HISTORY AND THE SOCIAL AND BEHAVIORAL SCIENCES**

**Goal:** To increase students' knowledge of how historians and social and behavioral scientists discover, describe, and explain the behaviors and interactions among individuals, groups, institutions, events and ideas and to challenge students to think critically about the role of social and behavioral scientists in shaping and understanding the human condition.

**Course(s) which satisfy this goal area include:**

- **Course Credits Title/Goal Area(s)**
  - **ECON 207** (4) Business Statistics 2, 4
  - **MATH 110** (3) Perspectives in Mathematics 4
  - **MATH 112** (4) College Algebra 4
  - **MATH 113** (3) Trigonometry 4
  - **MATH 115** (4) Precalculus Mathematics 4
  - **MATH 121** (4) Calculus I 4
  - **MATH 130** (4) Finite Mathematics and Introductory Calculus 4
  - **MATH 180** (4) Mathematics for Computer Science 4
  - **MATH 181** (3) Introductory Calculus 4
  - **PHIL 201** (3) Elements of Mathematics I 4
  - **PHIL 110** (3) Logic and Critical Thinking 2, 4
  - **PHIL 112W** (3) Scientific Reasoning 2, 4
  - **PHIL 311** (3) Symbolic Logic 2, 4
  - **SOC 202** (3) Introductory Social Statistics 4
  - **STAT 154** (4) Elementary Statistics 4

**GOAL AREA 5: HISTORY AND THE SOCIAL AND BEHAVIORAL SCIENCES**

**Goal:** To increase students' knowledge of how historians and social and behavioral scientists discover, describe, and explain the behaviors and interactions among individuals, groups, institutions, events and ideas and to challenge students to think critically about the role of social and behavioral scientists in shaping and understanding the human condition.

**Course(s) which satisfy this goal area include:**

- **Course Credits Title/Goal Area(s)**
  - **ECON 207** (4) Business Statistics 2, 4
  - **MATH 110** (3) Perspectives in Mathematics 4
  - **MATH 112** (4) College Algebra 4
  - **MATH 113** (3) Trigonometry 4
  - **MATH 115** (4) Precalculus Mathematics 4
  - **MATH 121** (4) Calculus I 4
  - **MATH 130** (4) Finite Mathematics and Introductory Calculus 4
  - **MATH 180** (4) Mathematics for Computer Science 4
  - **MATH 181** (3) Introductory Calculus 4
  - **PHIL 201** (3) Elements of Mathematics I 4
  - **PHIL 110** (3) Logic and Critical Thinking 2, 4
  - **PHIL 112W** (3) Scientific Reasoning 2, 4
  - **PHIL 311** (3) Symbolic Logic 2, 4
  - **SOC 202** (3) Introductory Social Statistics 4
  - **STAT 154** (4) Elementary Statistics 4
GOAL AREA 6: HUMANITIES AND THE ARTS

(Requires two courses from different disciplines, 6 credits or more)

Goal: To expand students' knowledge of the human condition and human cultures, especially in relation to behavior, ideas, and values expressed in works of human imagination and thought. Through study in disciplines such as literature, philosophy, and the fine arts, students will engage in critical analysis, form aesthetic judgments, and develop an appreciation of the arts and humanities as fundamental to the health and survival of any society. Students should have experiences in both the arts and humanities.

Students will be able to:
(a) demonstrate awareness of the scope and variety of works in the arts and humanities;
(b) understand those works as expressions of individual and human values within an historical and social context;
(c) respond critically to works in the arts and humanities;
(d) engage in the creative process or interpretive performance;
(e) articulate an informed personal reaction to works in the arts and humanities.

Course(s) which satisfy this goal area include:

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<td>URBS 110</td>
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<td>The City: Design and Architecture 6</td>
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GOAL AREA 7: HUMAN DIVERSITY

(Requires one course, 3 credits or more)

Goal: To increase students' understanding of individual and group differences, emphasizing the dynamics of race, gender, sexual orientation, age, class, and/or disabilities in the history and culture of diverse groups in the United States; the contributions of pluralism to United States society and culture, and issues—economic, political, social, cultural, artistic, humanistic, and education traditions—that surround such diversity. Students should be able to evaluate the United States' historical and contemporary responses to group differences. Students will be able to:
(a) understand the development of and the changing meanings of group identities in the United States' history and cultures;
(b) demonstrate an awareness of the individual and institutional dynamics of unequal power relations between groups in contemporary society;
(c) analyze and evaluate their own attitudes, behaviors, concepts, and beliefs regarding diversity, racism, and bigotry;
(d) describe and discuss the experience and contributions (political, social, economic, artistic, humanistic, etc.) of the many groups that shape American society and culture, in particular those groups which have suffered discrimination and exclusion;
(e) demonstrate communication skills necessary for living and working effectively in a society with great population diversity.

Course(s) which satisfy this goal area include:

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<th>Title/Goal Area(s)</th>
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Introduction to Multicultural & Ethnic Studies 5, 7  
Global Perspectives & Humanities Traditions 6, 8  
Perspective on Technology 6, 8

Course Credits Title/Goal Area(s)  
Course(s) which satisfy this goal area include:

GOAL AREA 8: GLOBAL PERSPECTIVES
(Requires one course, 3 credits or more)  
Goal: To increase students’ understanding of the growing interdependence of nations, traditions and peoples and develop their ability to apply a comparative perspective to cross-cultural social, economic, and political experiences. Students will be able to:

(a) describe, analyze, and evaluate political, economic, humanistic, artistic, social and cultural elements which influence relations of nations and peoples in their historical and contemporary dimensions;

(b) demonstrate knowledge of cultural, social, religious and linguistic differences;

(c) analyze specific international problems illustrating cultural, economic, artistic, humanistic, social, and political differences which affect their solution;

(d) understand the role of a world citizen and the responsibility world citizens share for their common global future.

Course(s) which satisfy this goal area include:

ART  225  (3)  Developing Creativity: Approaches and Techniques  6, 7
CDIS  290P  (3)  Introduction to Communication Disorders  7
CMST  203P  (3)  Intercultural Communication  7
ED  101P  (3)  Introduction to Critical Race Theory in Education  7, 9
EEC  222WVG  (3)  Human Relations in a Multicultural Society  7, 11
ENG  118P  (4)  Diverse Culture in Literature and Film  6, 7
ENG  211WP  (4)  Perspectives in Literature and Human Diversity  6, 7
ETHN  100P  (3)  American Racial Minorities  5, 7
ETHN  101P  (3)  Introduction to Multicultural & Ethnic Studies  5, 7
ETHN  150G  (3)  Multicultural/Ethnic Experience  7
ETHN  200  (4)  Intercultural/Interracial Dating/Marriage
ETHN  201WP  (3)  Perspectives on African Americans  5, 7
ETHN  202W  (3)  Perspectives on American Indians in Ethnic Studies  5, 7
ETHN  203WP  (3)  Perspectives on Asian Americans  5, 7
ETHN  204WP  (3)  Perspectives on Latinos/Hispanics  5, 7
ERO  200G  (3)  Family Dynamics of Aging  2, 7
ERO  200VG  (3)  Family Dynamics of Aging  2, 7
GWS  110P  (4)  Introduction to Gender  5, 7
GWS  110WP  (4)  Introduction to Gender  5, 7
GWS  225G  (4)  Introduction to Lesbian, Gay, Bisexual & Transgender Studies  5, 7
GWS  225VG  (4)  Introduction to Lesbian, Gay, Bisexual & Transgender Studies  5, 7
GWS  251P  (4)  Coming of Age: Gender & Culture  6, 7
GWS  251WP  (4)  Coming of Age: Gender & Culture  6, 7
HIST  159P  (3)  History of the Family in America  5, 7
HIST  190P  (4)  United States Since 1877  5, 7
HIST  190WP  (4)  United States Since 1877  5, 7
HIST  191P  (4)  United States Since 1877  5, 7
HIST  191WP  (4)  United States Since 1877  5, 7
HIST  232G  (4)  Islamic Civilizations  7, 8
HIST  211G  (3)  Human Sexuality in a World of Diversity  7
HUM  281WP  (4)  Introduction to Gender Studies  5, 7
IT  113P  (4)  Synergy between Health Humanities, Healthcare Informatics and Outcome Measures 6, 7
KSP  220WP  (3)  Human Relations in a Multicultural Society  7, 11
KSP  251  (4)  Coming of Age: Gender and Culture  6, 7
KSP  260G  (3)  Creating Global Awareness through Studying Abroad 7, 8
MASS  260P  (4)  Principles of Visual Mass Media  6, 7
MUSIC  102P  (3)  Pop Music USA: Jazz to Country to Blues  6, 7
MUSIC  103P  (3)  Pop Music USA: R & B to MTV  6, 7
PHIL  115W  (3)  Phil. of Race, Class & Gender  6, 7
REHE  110VG  (3)  Sensitivity to Disability  7
SOC  150P  (3)  Sociology of Human Sexuality  5, 7
SOC  208P  (3)  Families in Society  5, 7
SOC  209P  (3)  Sociology of Human Sexuality  5, 7
SPED  108P  (3)  Human Services and Disabilities  7, 9
THEA  285VP  (3)  Theatre of Diversity  6, 7

GOAL AREA 9: ETHICAL AND CIVIC RESPONSIBILITY
(Requires one course, 3 credits or more)  
Goal: To develop students’ capacity to identify, discuss and reflect upon the ethical dimensions of political, social, moral and personal life and to understand the ways in which they can exercise responsible and productive citizenship. While there are diverse views of social justice or the common good in a pluralistic society, students should learn that responsible citizenship requires them to develop skills to understand their own and others positions, be part of the free exchange of ideas, and function as public minded citizens.

Course Credits Title/Goal Area(s)  
ART  265W  (3)  Art as Politics  6, 8
BIOL  100L  (4)  Our Natural World  3, 8
CDIS  206  (3)  Intermediate Sign Language  8
CDIS  207  (3)  Intermediate Sign Language  8
CMST  203P  (3)  Intercultural Communication  7, 8
DAK  101  (4)  Elementary Dakota I 8
DAK  102  (4)  Elementary Dakota II 8
DAK  201  (4)  Intermediate Dakota I 8
DAK  202  (4)  Intermediate Dakota II 8
DANC  200  (3)  Introduction to Dance  6, 8
DANC  120W  (3)  Introduction to Dance  6, 8
DANC  225P  (3)  Worlds of Dance  8, 11
ECON  314W  (3)  Current Economic Issues  5, 8
EET  118  (4)  Electricity - Generation, Usage & Green Alternatives 3, 8
EET  125P  (3)  Perspective on Technology  6, 8
ENG  125P  (4)  International Children’s Literature  6, 8
ENG  146  (4)  Introduction to Shakespeare  6, 8
ENV  212W  (4)  Perspectives in World Literature  6, 8
FILM  334WP  (4)  Perspectives in Environmental Science  8, 10
FREN  101  (5)  Elementary French I 8
FREN  102  (5)  Elementary French II 8
FREN  201  (5)  Intermediate French I 8
FREN  202  (5)  Intermediate French II 8
GEOG  100P  (3)  Elements of Geography  8, 10
GEOG  103P  (3)  Introductory Cultural Geography  5, 8
GER  101  (4)  Elementary German I 8
GER  102  (4)  Elementary German II 8
GER  150WP  (4)  The German-Speaking Countries:
GER  201  (4)  Intermediate German I 8
GER  202  (4)  Intermediate German II 8
GWS  220P  (4)  Sex and Gender Worldwide  8, 9
GWS  220WP  (4)  Sex and Gender Worldwide  8, 9
HIST  170  (4)  Ancient World Civilization to 1500 5, 8
HIST  170W  (4)  Ancient World Civilization to 1500 5, 8
HIST  171P  (4)  World Civilization, 1500-Present 5, 8
HIST  171W  (4)  World Civilization 1500-Present 5, 8
HUM  101W  (4)  Introduction to the Humanities and the Search for Meanings 6, 8
HUM  155  (4)  Global Humanities I 6, 8
HUM  156P  (4)  Global Humanities II 6, 8
HUM  182WP  (4)  Introduction to Humanities & Traditions 6, 8
KSP  260G  (3)  Creating Global Awareness through Studying Abroad 7, 8
MUSIC  307G  (3)  Music of the World 6, 8
MUSE  200W  (3)  Introduction to Museum Studies  5, 8
PHIL  122WP  (3)  Introduction to Asian Philosophy  6, 8
PHIL  205W  (3)  Culture, Identity, & Diversity  6, 8
PHIL  358WP  (3)  Topics in Asian Philosophy  6, 8
POL  106  (3)  Politics in the World Community  8
POL  234  (3)  Model United Nations  18, 8
SCAN  101  (4)  Elementary Swedish I 8
SCAN  111  (4)  Elementary Swedish II 8
SCAN  112  (4)  Elementary Swedish II 8
SCAN  150WP  (4)  The Nordic Countries: Interdisciplinary Introduction 6, 8
SCAN  251WP  (4)  Scandinavian Cultures: The Sami 6, 8
SCAN  350  (4)  Vikings & Norse Mythology  6, 8
SOC  101P  (3)  Introduction to Sociology  5, 8
SOWK  253P  (3)  Global Responses to Human Need 5, 8
SPAN  101  (4)  Elementary Spanish I 8
SPAN  102  (4)  Elementary Spanish II 8
SPAN  201  (4)  Intermediate Spanish I 8
SPAN  202  (4)  Intermediate Spanish II 8
SPAN  210W  (4)  Composition and Conversation 8
URBS  100  (3)  Introduction to the City 5, 8

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Students will be able to:
(a) examine, articulate, and apply their own ethical views;
(b) understand and apply core concepts (e.g. politics, rights and obligations, justice, liberty) to specific issues;
(c) articulate and defend the ethical dimensions of legal, social, and scientific issues;
(d) recognize the diversity of political motivations and interests of others;
(e) identify ways to exercise the rights and responsibilities of citizenship.

Course(s) which satisfy this goal area include:

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<th>Course</th>
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<th>Title/Goal Area(s)</th>
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<tr>
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<td>Community Leadership 9, 11</td>
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</table>

GOAL AREA 10: PEOPLE AND THE ENVIRONMENT

(Requires one course, 3 credits or more)

**Goal**: To increase students' understanding of today's complex environmental challenges. Students will examine the interrelatedness of human society and the natural environment. Knowledge of both biophysical principles and psychosocial cultural systems is the foundation for integrative and critical thinking about environmental issues.

Students will be able to:
(a) explain the basic structure and function of various natural ecosystems and of human adaptive strategies within those systems;
(b) discern and analyze patterns and interrelationships of the biophysical and psychosocial cultural systems;
(c) critically discern and analyze individual, social, and ecological dimensions of health;
(d) describe the basic institutional arrangements (social, legal, political, economic, health, ethical, religious) that are evolving to deal with environmental and natural resource challenges;
(e) evaluate critically environmental and natural resource issues in light of understandings about interrelation ships, ecosystems, and institutions;
(f) propose and assess alternative solutions to environmental problems;
(g) articulate and defend the actions they would take on various environmental issues.

Course(s) which satisfy this goal area include:

<table>
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<tr>
<th>Course</th>
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<th>Title/Goal Area(s)</th>
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<td>PRLS 282</td>
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<td>Wildlife as a Recreational Resource 10</td>
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<td>URBS 150</td>
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<td>Sustainable Communities 5, 10</td>
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</table>

**NOTE**: Goal areas 11-13 are part of the General Education curriculum at Minnesota State Mankato but not goal areas in the Minnesota Transfer Curriculum.

GOAL AREA 11: PERFORMANCE AND PARTICIPATION

(Requires 2-3 credits)

**Goal**: To prepare students for responsible and effective participation in groups and communities.

Students will be able to:
(a) participate effectively in a variety of artistic, education, political, recreational, health and public service, or social service settings;
(b) interact with others of another culture in its indigenous setting through a structured experience;
(c) participate cooperatively in group athletic activity or artistic performance.

Course(s) which satisfy this goal area include:

<table>
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<th>Title/Goal Area(s)</th>
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### GOAL AREA 12: FIRST YEAR EXPERIENCE  
(Requires 0-1 credits)  
**Goal:** To promote further development of student success skills, such as reading, writing and speaking; help students gain intellectual confidence; build in the expectation of academic success; and to provide assistance in making the transition to the University.  
**Students will be able to:**  
(a) experience higher personal expectations of his/her ability to meaningfully participate in academic life;  
(b) define and give examples of critical thinking;  
(c) interact with other students regarding academic matters;  
(d) affirm that careful thinking is an important aspect of the educational process;  
(e) make a comfortable transition to college life.

Course(s) which satisfy this goal area include:  
**Course** | **Credits** | **Title** | **Goal Area(s)**  
--- | --- | --- | ---  
IT 202W | 4 | Computers in Society | 9, 13  
IT 100 | 4 | Introduction to Computing & Applications | 9, 13  
ENG 271W | 4 | Technical Communication | 2, 13  
EET | 116 | Communications-Past, Present & Future | 13  
ENG | 271W | Technical Communication | 2, 13  
ENG | 272W | Business Communication | 2, 13  
IT | 100 | Introduction to Computing & Applications | 9, 13  
IT | 202W | Computers in Society | 9, 13  
MUSP | 211W | Music Productions for the Stage and Screen | 9, 13  
MUSP | 214 | Vocal Ensemble | 9, 13  
MUSP | 221 | Wind Ensemble | 9, 13  
MUSP | 222 | Symphonic Band | 9, 13  
MUSP | 223 | University Orchestra | 9, 13  
MUSP | 225 | Jazz Mavericks | 9, 13  
MUSP | 226 | Contemporary Instrumental Ensemble | 9, 13  
MUSP | 233 | Percussion Ensemble | 9, 13  
MUSP | 235 | Theatre Orchestra | 9, 13  
MUSP | 239 | Instrumental Ensemble | 9, 13  
MUSP | 303 | Chamber Singers | 9, 13  
MUSP | 308 | Contemporary Vocal Ensemble | 9, 13  
MUSP | 314 | Vocal Ensemble | 9, 13  
MUSP | 321 | Wind Ensemble | 9, 13  
MUSP | 322 | Symphonic Band | 9, 13  
MUSP | 323 | University Orchestra | 9, 13  
MUSP | 325 | Jazz Mavericks | 9, 13  
MUSP | 326 | Contemporary Instrumental Ensemble | 9, 13  
MUSP | 331 | Maverick Machine Athletic Band 11 | 9, 13  
MUSP | 333 | Percussion Ensemble | 9, 13  
NURS | 101W | Courage, Caring, and Team Building | 9, 11  
PCO | 101 | Introduction to Public Life | 9, 11  
RPLS | 278 | Leisure and Lifestyle | 9, 11  
THEA | 102 | Theatre Activity: Acting | 9, 11  
THEA | 103 | Theatre Activity: Management | 9, 11  
THEA | 105 | Theatre Activity: Stagecraft | 9, 11  
THEA | 107 | Theatre Activity: Costume | 9, 11  
THEA | 108 | Theatre Activity: Lighting | 9, 11  
THEA | 109 | Theatre Activity: Sound | 9, 11  
THEA | 115 | Experiencing Theatre | 9, 11  
URBS | 230 | Community Leadership | 9, 11  
URBS | 230W | Community Leadership | 9, 11  

### GOAL AREA 13: INFORMATION TECHNOLOGY  
(Requires 0-2 credits)  
**Goals:** To familiarize students with the tools, concepts and societal impact of information technology and to develop the skills necessary to use this technology critically and effectively.  
**Students will be able to:**  
(a) use electronic information technology ethically and responsibly;  
(b) access and retrieve information through electronic media, evaluating the accuracy and authenticity of that information;  
(c) create, manage, and communicate information through electronic media;  
(d) demonstrate a working knowledge of information technology terms and concepts;  
(e) understand how computers function and the limits of computation and information technology;  
(f) recognize changing technologies and make informed choices in their use.

Course(s) which satisfy this goal area include:  
**Course** | **Credits** | **Title** | **Goal Area(s)**  
--- | --- | --- | ---  
EET | 115 | Understanding Computers | 13  
EET | 116 | Communications-Past, Present & Future | 13  
ENG | 271W | Technical Communication | 2, 13  
ENG | 272W | Business Communication | 2, 13  
IT | 100 | Introduction to Computing & Applications | 9, 13  
IT | 202W | Computers in Society | 9, 13  
MUSP | 211 | Music Productions for the Stage and Screen | 9, 13  
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### UNDERGRADUATE GRADUATION REQUIREMENT: DIVERSE CULTURES  
Note. Students graduating under the 2018-2019 catalog will satisfy DCGR by taking 1 Purple and 1 Gold course or 2 Purple courses.

**Goals and Outcomes.** Minnesota State Mankato has adopted the following policy on the role of diversity in education:

Diversity at Minnesota State Mankato is a commitment to create an understanding and appreciation of diverse peoples and diverse perspectives; a commitment to create an academic, cultural, and workplace environment and community that develops mutual respect for all and celebrates our differences.

In keeping with the spirit of this commitment, all Minnesota State Mankato undergraduate students must satisfy the DCGR for graduation. For purposes of further clarifying the DCGR, diversity is defined in comprehensive terms as the many faceted ways in which human beings differ from one another. Often overlapping, these differences can include: age, gender, national origin, sexual orientation, mental/physical ability, race/ethnicity.

**GRADUATION REQUIREMENTS:**

Diverse Cultures Graduation Requirement – Purple and Gold Courses  
1. Students pursuing a baccalaureate degree must take either:  
   a. at least one (1) course for a minimum of 3 credits from the list of courses designated as Purple (Content) and at least one (1) course for a minimum of 3 credits from the list of courses designated as Gold (Experiential and Reflective), OR  
   b. at least two (2) courses for a minimum of 6 credits from the list of courses designated as Purple (Content).  
2. One Purple course for a minimum of 3 credits satisfies the Diverse Cultures requirement for the AA or AS degree issued by Minnesota State Mankato.
UNDERGRADUATE GRADUATION REQUIREMENT: DIVERSE CULTURES CONTINUED

3. Transfer students who have taken between 30 and 59 credits will be granted 3 credits toward the Purple course requirement.
4. Transfer students who have taken 60 or more credits or have already received an AA degree will be granted 3 Purple course credits and 3 Gold course credits, thus satisfying their entire Diverse Cultures Graduation Requirement.
5. Students must take courses from at least two different disciplines to satisfy the Diverse Cultures Graduation Requirement.
6. Students are encouraged to complete the Purple course requirement prior to completion of the Gold course requirement.

DIVERSE CULTURES - PURPLE (Content-Based)
To prepare students with course content and the analytical and reflective skills to better understand diversity in the United States and in other societies across the world.

Learning Outcomes
Students will be able to:
1. Master an understanding of diversity as defined by Minnesota State Mankato.
2. Acquire a substantive knowledge base to identify the impression of oppression for individuals from diverse populations.
3. Obtain the analytical skills necessary to make links between historical practices and contemporary U.S. societal issues of diversity.
4. Apply the same method for interpreting diversity issues in the United States to understanding issues of diversity in other societies across the world.
5. Develop an understanding of historical and contemporary social relations in specific societies across the world.

Satisfying Purple Courses
1. Purple courses are primarily aimed at helping students learn content. Purple courses allow students to explore basic concepts such as oppression, prejudice, discrimination, racism and ethnocentrism and responses to each; civil liberties in the context of economic, political, social, religious and educational issues of race, gender, sexual orientation, age, class and disabilities in a pluralistic society.
2. Although Purple courses may focus primarily on one diverse group of people, the course content should relate the basic concepts and issues discussed to a variety of groups.
3. Courses must meet Purple learning outcome 1 and at least two of the other Purple learning outcomes.
4. Purple courses may have experiential and reflective components, but the primary focus is on content.

DIVERSE CULTURES - PURPLE COURSES

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DIVERSE CULTURES - GOLD (Experiential & Reflective)
To give students learning opportunities to experience diversity with reflection supervised by a faculty member, to assist them in recognizing and responding to conditions of marginalized populations. Marginalized populations refer to specific groups of peoples or individuals that are relegated to the outer edges of society or social standing, both in this country and abroad. Such people are often denied access to resources and privileges available to mainstream society.

Learning Outcomes
Students will be able to:
1. Interact with individuals from diverse populations outside the classroom and to have the opportunity to reflect on such interactions.
2. Demonstrate an acquisition of the basic knowledge and understanding of diversity related concepts so that the student's experience will have meaning and context.
3. Integrate classroom knowledge with experiential learning in analyzing and responding to conditions of marginalized populations.

Satisfying Gold Courses
1. Gold courses require students have experiential encounters with diverse cultures and reflect on those experiences as part of the course requirements.
2. Gold courses must contain sufficient content regarding interactions with diverse populations to establish a context and conceptual base for the student to effectively reflect on the experiences.
3. Gold courses should present content that allows students to explore basic concepts such as oppression, prejudice, discrimination, racism and ethnocentrism and responses to each; civil liberties in the context of economic, political, social, religious and educational issues of race, gender, sexual orientation, age, class and disabilities in a pluralistic society.
4. Courses must meet all three Gold learning outcomes.

DIVERSE CULTURES - GOLD COURSES

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Curricular Procedures. The Diverse Cultures Graduation Requirement was made effective beginning with the 2009-2010 academic year. Courses that met the university’s previous Cultural Diversity requirement will not automatically be included in the list of Purple and Gold courses that meet the new requirement.

Departments will need to submit course proposals through the Curriculum Design System (CDS) to include these courses in the new requirement all course submissions for consideration as either Purple or Gold courses will be reviewed in a manner consistent with all other curricular proposals.

An individual course may be either a Purple course or a Gold course, but not both. Any 100-400 level undergraduate course that meets the relevant goals and
outcomes may be included among the Purple and Gold courses. No consideration will be given to proposals that limit participation to specific sections of a course.

Only courses in their entirety, not specific sections of courses, are eligible for designation as Purple or Gold courses.

Courses without specific content (e.g., independent study, individual studies, directed readings, topics, internships, practicums, and field experience courses) will generally not be considered Purple or Gold courses. Exceptions may be made for specific cases if potential for achievement of the Purple or Gold course outcomes can be clearly demonstrated prior to registration for the course in question.

All Purple and Gold courses will undergo systematic assessment as established by the university’s curricular committees all departments and programs with Purple or Gold courses are expected to fully participate in the DCGR assessment process.

UNDERGRADUATE GRADUATION REQUIREMENT: WRITING INTENSIVE

Minnesota State Mankato has adopted the following requirement to support undergraduate students’ writing development through college.

Goal: The writing-intensive requirement enables students to develop their writing skills in courses taught across the disciplines. Writing is integrated into courses to deepen students’ learning and strengthen students’ communication skills. In writing-intensive courses, students are coached through the writing process, receive ongoing writing instruction, and gain experience writing for a range of audiences and purposes.

Students will be able to:
(a) Engage in effective writing processes, including the ability to generate ideas, draft, revise, format, and edit their work.
(b) Use writing to grapple with course content and reflect on their learning.
(c) Produce texts appropriate for an intended audience, purpose, and context.
(d) Display strong technical skills in areas such as grammar, mechanics, and source documentation.

In addition to demonstrating these competencies, students enrolled in upper-division writing-intensive courses will be able to:
(e) Write in academic, professional, or public genres related to the discipline, displaying an understanding of the genres’ communicative functions and contexts.
(f) Locate, evaluate, analyze, and use source material or data in their writing.

Writing-Intensive Requirement:

1. Students pursuing a baccalaureate degree must take two (2) courses for a minimum of six (6) credits from the list of courses designated as writing intensive.
2. Students pursuing an associate degree must take one (1) course for a minimum of three (3) credits from the list of courses designated as writing intensive.
3. Transfer students who have taken thirty (30) or more credits or have already received an associate degree will be granted a minimum of three (3) Writing Intensive credits.

Writing-Intensive Designation: Courses designated “writing intensive” share the following features:

Writing-intensive courses:
- Are designed around the writing-intensive learning outcomes.
- Assign 20 pages (250 words per page) of evaluated written work, spread across a course.
- Provide written instructor feedback on at least 10 pages of student writing.
- Dedicate a portion of class time to writing instruction.
- Allocate a significant portion of the course grade to student writing.

Faculty are encouraged to solicit a draft or other preliminary work, provide written feedback on this writing-supplemented, whenever possible, with feedback from other students—and allow students time for revision and editing.

The 20 pages of writing might include a combination of informal, exploratory writing and formal, polished writing.
(a) Informal writing assignments allow students to clarify their understanding of and reaction to course material. This writing might include learning logs, response papers, lab notebooks, reflections, discussion board posts, and the like.
(b) Formal writing assignments require students to use writing to communicate to an audience for a specific purpose. This writing might be broken into stages, with instructor support and feedback provided in the development of the final product.

Topics discussed in a writing-intensive course might include techniques for getting started on a writing assignment, strategies for revising and editing, approaches to organizing content, features of particular written genres, practices that support the research writing process, ways to meet audience expectations, and tools for identifying sentence-level errors.

Course(s) which satisfy this goal area include:

- AET 488W
- AET 489W
- AIS 210WP
- AIS 220WP
- AIS 230WP
- AIS 240WP
- AIS 300W
- ANTH 250W
- ANTH 421WP
- ANTH 425W
- ANTH 436WP
- ANTH 438W
- ANTH 443WP
- ART 265W
- ART 477WP
- BIOL 105W
- CAHN 101W
- CDIS 409W
- CDIS 457W
- CHEM 381W
- CHEM 466W
- CIVE 370W
- CIVE 401W
- CIVE 402W
- CMST 101W
- CMST 458W
- CORR 447W
- CS 210W
- CS 490W
- CS 498W
- DANC 120W
- DANC 484W
- DHYG 425W
- DHYG 444W
- ECON 103WP
- ECON 314W
- ECON 320W
- ECON 485W
- EE 476W
- EE 477W
- EEC 222W
- EEC 422W
- ENG 112W
- ENG 113W
- ENG 201W
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- ENG 433WP
- ENG 436WP
- ENG 437WP
- ENG 438WP
- ENG 474W
- ENG 477W
- ENGR 311W
- ENGR 312W
- ETHN 201W
- ETHN 202W
- ETHN 203WP
- ETHN 220WP
- ETHN 300W
- ETHN 402WG
- FCS 414W
- FILM 210W
- FILM 216W
- FILM 334WP
- FREN 302W
- GEOG 210W
- GEOG 416W
- GEOI 320W
- GER 150WP
- GERO 200W
- GWS 110W
- GWS 120W
- GWS 220WP
- GWS 225WG
- GWS 251WP
- GWS 300W
- HIST 170W
- HIST 171W
- HIST 180W
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- HP 403W
- HP 466W
- HUM 101W
- HUM 250W
- HUM 280W
- HUM 281WP
- HUM 282WP
- HUM 450W
- IT 202W
- KSP 220W
- LAWE 243W
- LAWE 337W
- LAWE 343W
- MASS 221W
- MASS 325W
- MASS 330W
- MASS 431W
- MASS 434W
- MASS 436W
- MATH 492W
- ME 436W
- ME 438W
- ME 466W
- MET 488W
- MUSC 301W
- MUSC 302W
- MUSC 309W
- MUSE 200W
- NURS 101W
- NURS 320W
- NURS 582W
- PHIL 100W
- PHIL 101W
- PHIL 115W
- PHIL 120W
- PHIL 112W
- PHIL 122WP
- PHIL 205W
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- PHIL 334W
- PHIL 358WP
- PHYS 475W
- POL 103W
- PSYC 103W
- PSYC 211W
- PSYC 425W
- PSYC 460WP
- REHB 110W
- RIPS 447W
- RIPS 471W
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- SCAN 251WP
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- SOC 285W
- SOC 301W
- SOC 495W
- SPAN 210W
- SPAN 311W
- SPED 448W
- THEA 285W
- THEA 381W
- THEA 417W
- THEA 485W
- THEA 487W
A program map can be found at [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All) and used in place of, or in conjunction with, the planning form below to ensure that you complete all requirements for your degree and graduate on time!

### ACADEMIC PLANNING GUIDE

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PRE-PROFESSIONAL PROGRAMS

The purpose of preprofessional programs is to provide students with the intellectual and academic backgrounds they will need before continuing their education in degrees not offered at Minnesota State Mankato. Acceptance to professional educational institutions is contingent upon academic performance, so students enrolling in preprofessional programs should be highly motivated and realize they are expected to maintain standards of excellence. Advisors play an important role in guiding the students enrolled in such programs so students are urged to contact the advisor before enrolling.

PRE-ATHLETIC TRAINING

College of Allied Health & Nursing
Advisors: Patrick Sexton, Ed.D., and Theresa Mackey, Ed.D.

The professional entry-level degree for athletic training is moving to a master’s degree. All professional programs in athletic training must be at the master’s level by 2022. Undergraduate students should consider the general prerequisite coursework necessary for their eventual application to a master’s program. The Commission on Accreditation of Athletic Training Education (CAATE) has set prerequisite knowledge in biology, chemistry, physics, psychology, anatomy, and physiology. Students must complete coursework in these areas prior to admission into a professional graduate program in athletic training. Some institutions may have additional requirement waivers. This Pre-Athletic Training program encompasses the requirements required by CAATE beginning February 2018. Students are encouraged to identify the specific admission prerequisites at institutions for which they are interested in applying. This program is similar to those of other allied health professions such as Pre-Physical Therapy and Pre-Occupational Therapy. This program allows students to prepare for professional programs in athletic training, including the Master of Science in Athletic Training program at Minnesota State University, Mankato.

The Pre-Athletic Training curriculum is a science-based curriculum which meets the requirements for the Commission on Accreditation of Athletic Training Education (CAATE) accreditation standards for “prerequisite knowledge.” This coursework serves as the foundation for study in the professional program of athletic training. The student must complete coursework in these areas prior to admission into the professional program. This coursework, along with a bachelor’s degree should qualify a student to apply to the majority of professional athletic training programs at the master’s degree level. It is important that students check the requirements for their professional school(s) of choice as some require courses in addition to those contained in this concentration. In addition, some programs also require that the student take the Graduate Record Examination (GRE) and score at a certain level in order to be considered for admission.

Undergraduate Majors to Consider with Pre-Athletic Training

Pre-Athletic Training is not a major. You are required to select a major to complete for your degree. Most institutions do not require a specific undergraduate major. The following majors are related to pre-athletic training with joint coursework. We recommend the following undergraduate majors: exercise science, biology, health science/community health, physical education/health education teaching, or psychology.

While graduate programs generally do not require a specific undergraduate major, they are concerned with your performance in undergraduate coursework, specifically your GPA, and expect you have successfully complete all prerequisite coursework.

Required Track

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 220</td>
<td>Human Anatomy (4 credits)</td>
</tr>
<tr>
<td>BIOL 330</td>
<td>Principles of Human Physiology (4 credits)</td>
</tr>
<tr>
<td>HP 265</td>
<td>Introduction to PT, OT, and AT (2 credits)</td>
</tr>
<tr>
<td>HP 348</td>
<td>Structural Kinesiology and Biomechanics (3 credits) OR General Physics I or higher may substitute for a biomechanics course</td>
</tr>
<tr>
<td>PHYS 211</td>
<td>Physiology of Exercise (3 credits)</td>
</tr>
<tr>
<td>STAT 154</td>
<td>Elementary Statistics (4) OR HP 403 Research Methods and Statistics in Exercise Science (3 credits)</td>
</tr>
<tr>
<td>FCS 242</td>
<td>Nutrition for Healthcare Professionals (3 credits)</td>
</tr>
<tr>
<td>PSYCH 101</td>
<td>Introduction to Psychological Science, OR First Aid and CPR (3 credits) OR current CPR for the Professional Rescuer</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>Chemistry of Life Processes Part II, OR a higher chemistry course (5 credits)</td>
</tr>
<tr>
<td>HITH 101</td>
<td>Health and the Environment (3 credits) OR a higher public/community health course</td>
</tr>
</tbody>
</table>

Total: 41-60 credits

Note: International applicants should visit the specific program/institution for which they are interested in applying since they may have varying internet TOEFL or IELTS scores. Second, students should check their professional schools of choice for specific admission requirements.

Students should check the Commission on Accreditation of Athletic Training Education (CAATE) web site (www.caate.net) for information on pre-professional preparation as well as for professional programs of study.

PRE-CHIROPRACTIC

College of Science, Engineering & Technology
Advisor: Rebecca Moen, Ph.D.

Required General Education (33 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 102</td>
<td>Public Speaking (3)</td>
</tr>
<tr>
<td>ENG 101</td>
<td>Composition (4)</td>
</tr>
<tr>
<td>MATH 113</td>
<td>College Algebra (4)*</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>Trigonometry (3)*</td>
</tr>
</tbody>
</table>

Required for Major (Core, 34-35 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 105</td>
<td>General Biology I (4)</td>
</tr>
<tr>
<td>BIOL 106</td>
<td>General Biology II (4)</td>
</tr>
<tr>
<td>CHEM 201</td>
<td>General Chemistry I (5)</td>
</tr>
<tr>
<td>CHEM 202</td>
<td>General Chemistry II (5)</td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Organic Chemistry (4)</td>
</tr>
<tr>
<td>PHYS 211</td>
<td>Principles of Physics I (4)</td>
</tr>
<tr>
<td>PHYS 212</td>
<td>Principles of Physics II (4) OR HP 348 Structural Kinesiology and Biomechanics (3)</td>
</tr>
</tbody>
</table>

Required Electives (16 credits)

A minimum of 90 hours are required to complete this program. The student should consult with the pre-chiropractic advisor in selecting the remaining 20 elective credits.

*There are no requirements for mathematics in this program; however, the student needs prerequisites in mathematics to take the courses in chemistry and physics.

This program meets the requirements for admission to most chiropractic schools. Students in the pre-chiropractic program should similarly consult with the pre-chiropractic advisor, since admissions requirements are subject to change.

PRE-DENTAL

College of Science, Engineering & Technology
Advisory Team: M. Bentley, Ph.D., (for biology majors) M. Pomije, Ph.D. (for chemistry majors)

Required Prerequisite Courses

[Not required, but may assist in application admission decisions as individual programs may require the courses as additional foundational requirements]

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 105</td>
<td>General Biology I (4 credits)</td>
</tr>
<tr>
<td>PHYS Any 200 level or higher Physics course</td>
<td></td>
</tr>
<tr>
<td>HP 340</td>
<td>Prevention and Care of Athletic Injuries (2 credits)</td>
</tr>
<tr>
<td>HITH 460</td>
<td>Introduction to Epidemiology (3 credits)</td>
</tr>
<tr>
<td>HP 403</td>
<td>Research Methods and Statistics in Exercise Science (3 credits) OR another Research Methods course</td>
</tr>
</tbody>
</table>

Total: 41-60 credits

Note: International applicants should visit the specific program/institution for which they are interested in applying since they may have differing minimal internet TOEFL or IELTS scores. Second, students should check their professional schools of choice for specific admission requirements.

Specific course requirements for admission to dental school vary somewhat among the different dental schools in the United States. To be eligible for admission at a particular dental school, the student must fulfill the requirements of that school. Students are encouraged to keep themselves apprised of requirements for specific schools by consulting appropriate websites.

* The following list of courses is consistent with the courses required for admission to the University of Minnesota Dental School.

English, ENG 101, CMST 100 and an additional 4 credits of writing intensive course work in English. [Students are encouraged to take ENG 271W and PHIL 222W as electives]
PRE-PROFESSIONAL PROGRAMS CONTINUED

**Eng 101 Composition (4)**
**CMST 102 Public Speaking (3)**

AND particularly with the university (or universities) to which they plan to apply. Students should discuss their plans with the CSET Advising Center.

**Physics:** PHYS 211, PHYS 212 or PHYS 221, PHYS 222

**Chemistry:** CHEM 201, CHEM 202, CHEM 322, CHEM 324, CHEM 325, CHEM 360. [Students are encouraged to take CHEM 305 as an elective].

**Mathematics:** MATH 112 and MATH 113 or MATH 115

**Psychology:** PSYC 101

Although a minimum of 87 semester credits are required for admission to the D.D.S. program at the University of Minnesota, most students enrolled have completed four or more years of college. To receive a baccalaureate degree from Minnesota State Mankato, the student must complete the requirements for general education, a major and possibly a minor. Dental schools look most favorably upon the academically well-rounded student who has a strong scholastic record and unique life experiences that engender a commitment to a career in dentistry. Students should pursue majors and minors in subjects of their own choosing, as dental schools accept applicants from all academic majors, provided admission prerequisites are met. Majoring in one of the sciences—biology, biochemistry, chemistry, physics, etc.—has the advantage of incorporating many or all of the courses listed above. Furthermore, the technical language of dental school is derived primarily from the disciplines of biology, chemistry, physics, mathematics and psychology. Sciences must include both lecture and laboratory instruction. Courses in biology, chemistry, and physics may be considered outdated by dental schools if taken more than five years before the time of application. Elective courses should be selected to achieve as broad and liberal an education as possible. Students who plan to enter dental school must take the Dental Admission Test (DAT). Typically, students begin the application process to dental school during the summer following their junior year. For their application to be complete, they must report their DAT scores. Consult the website of the American Dental Education Association for more information on the DAT and the application process.

**PRE-ENGINEERING**

**College of Science, Engineering & Technology**

**Advisor:** CSET Advising Center

(choose one of the following options)

**Minnesota State Mankato OPTION**

These course guidelines are intended for those students who are uncertain of a specific engineering major, but plan to enter one of the Minnesota State Mankato engineering programs after their first academic year.

**CMST 102** Public Speaking (3)
**CHEM 201** General Chemistry I (5)
**ECON 201** Principles of Macroeconomics (3) OR **ECON 202** Principles of Microeconomics (3)
**ENG 101** Composition (4)
**MATH 121** Calculus I (4)
**MATH 122** Calculus II (4)
**MATH 223** Calculus III (4)
**PHYS 221** General Physics I (4)
**PHYS 222** General Physics II (4)

Student should explore their primary engineering interests at Minnesota State Mankato by enrolling in an introductory engineering course, such as EE 106 (3), ME 101 (2), or CIVE 101 (2). In addition, they should discuss their interests with their Pre-Engineering advisor and department chairpersons.

**TRANSFER OPTION**

These course guidelines are intended for students who plan to begin at Minnesota State Mankato and later transfer to another college or university engineering program. Engineering fields and institutions differ in their requirements, and students should contact programs they wish to enter for guidance. Courses recommended below are "fairly" standard, but are not guaranteed to provide required preparation for any specific program. Students should discuss their plans with the CSET Advising Center AND particularly with the university (or universities) to which they plan to apply.

**CHEM 201** General Chemistry I (5)
**CMST 102** Public Speaking (3)
**ENG 101** Composition (4)
**ENG 271W** Technical Communications (4)

**PRE-MEDICINE**

**College of Science, Engineering & Technology**

**Advisory Team:** M. Bentley, Ph.D., G. Goeller, Ph.D., Marilyn Hart, Ph.D., R. Cohen, Ph.D.; D. Shalrin, Ph.D.; Toma, Ph.D. [for biology majors]; M. Pomije, Ph.D. [for chemistry and biochemistry majors]

Specific course requirements for admission to medical school vary somewhat among the different medical schools in the United States. To be eligible for admission at a particular medical school, the student must fulfill the requirements of that school. Students are encouraged to keep themselves informed of requirements for specific schools by consulting appropriate websites. A typical set of requirements are:

**General Biology:** (8 credits minimum)
BIOI 105 and BIOI 106

Students are encouraged to take additional electives from the following list to enhance their knowledge in basic biology: BIOI 211, BIOI 220, BIOI 270, BIOI 316, BIOI 320, BIOI 330, BIOI 435, BIOI 475

**Chemistry with laboratory** (general, inorganic and organic chemistry, 14 credits minimum)
**CHEM 201** and **CHEM 202**

**Organic chemistry:** CHEM 322 and CHEM 323 OR CHEM 322 and CHEM 324

**Biochemistry:** CHEM 360 OR CHEM 460

Students are encouraged to take CHEM 305 as an elective.

**Physics with laboratory** (8 credits minimum)
**PHYS 211** and **PHYS 212** OR **PHYS 221** and **PHYS 222**

**Mathematics** (introductory course in calculus and upper level statistics)
**MATH 121 and MATH 122**

**English or literature** (one year)
**ENG 101**, and an additional 4 credits of writing intensive coursework in English. Students are encouraged to take ENG 271W as an elective.

**Social and Behavioral Sciences and Humanities** (18 credits minimum)
Students are encouraged to include PSYC 101, SOC 101 and PHIL 222W among these electives.

**PRE-LAW**

Advisor: Josh Berkenpas

A student's grade-point average and score on the law School Admission Test are the primary factors on which law schools base their admission decisions. Law schools generally do not require a particular major field or any particular prescribed courses as prerequisites for admission. Most law schools merely require a bachelor's degree.

Students should select a major field which interests them to increase the likelihood of a high GPA, and to allow them to specialize in a field of law that most interests them. Even though no particular pre-law major is best for all students, there must be substantial academic content in the pre-law education. Students should supplement their major field by taking intellectually demanding courses that will develop broad educational foundations and mental skills required of the successful law student or lawyer. The ability to analyze, reason, read carefully, think abstractly, and speak and write precisely. Elective courses might include U.S. government, U.S. history, philosophy, economics, communication, accounting, statistics, corporate finance, constitutional law, jurisprudence, logic, political theory, and at least one course in English composition beyond the first year level.

Students should contact the pre-law advisor for more detailed assistance on the manner in which their particular needs and interests may best be shaped into a suitable pre-law program.

The Pre-Law Association, a student-sponsored organization, is available for the purpose of encouraging communication and interaction among pre-law students on campus.

**PRE-MEDICINE**

**College of Science, Engineering & Technology**

**Advisory Team:** M. Bentley, Ph.D., G. Goeller, Ph.D., Marilyn Hart, Ph.D., R. Cohen, Ph.D.; D. Shalrin, Ph.D.; Toma, Ph.D. (for biology majors);
M. Pomije, Ph.D. (for chemistry and biochemistry majors)

Specific course requirements for admission to medical school vary somewhat among the different medical schools in the United States. To be eligible for admission at a particular medical school, the student must fulfill the requirements of that school. Students are encouraged to keep themselves informed of requirements for specific schools by consulting appropriate websites. A typical set of requirements are:

**General Biology:** (8 credits minimum)
BIOI 105 and BIOI 106

Students are encouraged to take additional electives from the following list to enhance their knowledge in basic biology: BIOI 211, BIOI 220, BIOI 270, BIOI 316, BIOI 320, BIOI 330, BIOI 435, BIOI 475

**Chemistry with laboratory** (general, inorganic and organic chemistry, 14 credits minimum)
**CHEM 201** and **CHEM 202**

**Organic chemistry:** CHEM 322 and CHEM 323 OR CHEM 322 and CHEM 324

**Biochemistry:** CHEM 360 OR CHEM 460

Students are encouraged to take CHEM 305 as an elective.

**Physics with laboratory** (8 credits minimum)
**PHYS 211** and **PHYS 212** OR **PHYS 221** and **PHYS 222**

**Mathematics** (introductory course in calculus and upper level statistics)
**MATH 121 and MATH 122**

**English or literature** (one year)
**ENG 101**, and an additional 4 credits of writing intensive coursework in English. Students are encouraged to take ENG 271W as an elective.

**Social and Behavioral Sciences and Humanities** (18 credits minimum)
Students are encouraged to include PSYC 101, SOC 101 and PHIL 222W among these electives.
The completion of a baccalaureate degree is required for admittance to a medical school in most cases. Medical schools look most favorably upon the academically well-rounded student who has a strong scholastic record and unique life experiences that engender a commitment to a career in medicine. Students should pursue majors in subjects of their own choosing, as medical schools accept applicants from all academic majors, provided admission prerequisites are met. Majoring in one of the sciences—biology, biochemistry, chemistry, physics, etc.—has the advantage of incorporating many or all of the courses listed above. Furthermore, the technical language of medical science is derived primarily from the disciplines of biology, chemistry, physics, mathematics, and psychology. Students who plan to enter medical school must take the Medical College Admission Test (MCAT). Typically, students begin the application process to medical school during the summer following their junior year. For their application to be complete, they must report their MCAT scores. MCATs are offered on various dates throughout the year. Contact the website of the American Association of Medical Colleges for specifics. If you have questions, please contact your pre-medical advisor.

PRE-MORTUARY SCIENCE
College of Science, Engineering & Technology
Advisor: Marie Slotemaker

Required for Pre-requisites:
MATH 112 College Algebra (4)
IT 101 Introduction to Information Systems (3)

Required for Program
ACCT 200 Financial Accounting (3)
BIOL 220 Human Anatomy (4)
ENG 101 Composition (4)
BIOL 100 Our Natural World (4) OR
BIOL 105 General Biology I (4)
CHEM 100 Chemistry in Society (4) OR
CHEM 111 Chemistry of Life Process Part II (Organic & Biochemistry) (5) OR
CHEM 201 General Chemistry I (5) OR
STAT 154 Elementary Statistics (4) OR
PSYC 201 Statistics for Psychology (4) OR
SOC 101 Introduction to Sociology (3) OR
CMST 100 Fundamentals of Communication (3) OR
CMST 101W Interpersonal Communication (4)

Recommended for Program
HLTH 101 Health & the Environment (3)
HLTH 321 Medical Terminology (3)

Additional electives to meet the 60 credit transfer requirement.

This program has been designed to meet the transfer requirements of the University of Minnesota’s Mortuary Science Program. Completion of the Mn Transfer Curriculum at the Associate of Arts Degree is recommended before students enroll in the Mortuary Science B.S. program. The transfer program requires a total of 60 semester credits completed while maintaining a minimum GPA of 2.5 on a 4.0 scale. The courses listed above are specified by the University of Minnesota; additional courses should be selected with the help of an advisor. The American Board of Funeral Service Education (ABFSE) accredits Mortuary Science Programs throughout the United States. Accredited programs are found on their website: www.abfse.org. Students interested in Mortuary Science are strongly encouraged to consult the website to locate programs in their geographic area of interest and then to consult with an advisor at that institution in their first year.

PRE-OCCUPATIONAL THERAPY
Advisor: Mary Visser, Ph.D.
Phone: 507-389-2672

Student Relations Coordinator: Shirley Murray
shirley.murray@mnsu.edu
Phone: 507-389-5194

The Pre-Occupational Therapy curriculum is a natural and social science-oriented curriculum which meets the standard requirements for admission to most occupational therapy programs. The majority of schools require a Bachelor’s degree prior to application for admission, although some still accept students following two or three years of college preparation. It is important that students check requirements for their professional school of choice as some require classes in addition to those contained in this concentration. Most programs also require that the student take the Graduate Record Examination and score at a certain level.

Pre-Occupational Therapy Concentration Courses at Minnesota State Mankato

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 220</td>
<td>Human Anatomy (4)</td>
</tr>
<tr>
<td>BIOL 330</td>
<td>Principles of Human Physiology (4)</td>
</tr>
<tr>
<td>ENG 101</td>
<td>Composition (4)</td>
</tr>
<tr>
<td>CHEM 100</td>
<td>Chemistry of Life Process Part I (General) (3) OR</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>Chemistry of Life Process Part II (Organic &amp; Biochemistry) (5)</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>Introduction to Psychological Science (4)</td>
</tr>
<tr>
<td>PSYC 433</td>
<td>Child Psychology (4) AND</td>
</tr>
<tr>
<td>PSYC 436</td>
<td>Adolescent Psychology (4) AND</td>
</tr>
<tr>
<td>PSYC 466</td>
<td>Psychology of Aging (4) OR</td>
</tr>
<tr>
<td>KSP 235</td>
<td>Human Development (3)</td>
</tr>
<tr>
<td>PSYC 455</td>
<td>Abnormal Psychology (4)</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology (3) OR</td>
</tr>
<tr>
<td>HLTH 321</td>
<td>Medical Terminology (3)</td>
</tr>
<tr>
<td>HP 265</td>
<td>Orientation to Occupational and Physical Therapy (2)</td>
</tr>
</tbody>
</table>

TOTAL: 32-39 credits

* Be sure to check the specific prerequisite courses of programs you plan to apply to and tailor the above list to meet those requirements.

 Majors to Consider with Occupational Therapy Concentration:
- Exercise Science
- Health Science: Community Health
- Psychology
- Child Development and Family Studies
- Biology

* Graduate programs generally do not specify what undergraduate major must be completed. They are concerned about your performance within the major (including GPA) and that you have successfully completed all prerequisite coursework.

PRE-OPTOMETRY
College of Science, Engineering & Technology
Advisor: Mike Lusch, Ph.D.

The following courses satisfy requirements for admission to most colleges and schools of optometry. By the end of their first year at Minnesota State Mankato however, students should check the specific requirements of the college or school of optometry they plan to attend to ascertain exactly what is required for admission. Completion of a bachelor’s degree may be needed to be admitted to optometry schools and colleges.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 220</td>
<td>Human Anatomy (4)</td>
</tr>
<tr>
<td>BIOL 270</td>
<td>Microbiology (4)</td>
</tr>
<tr>
<td>BIOL 330</td>
<td>Principles of Human Physiology (4)</td>
</tr>
<tr>
<td>CHEM 201</td>
<td>General Chemistry I (5)</td>
</tr>
<tr>
<td>CHEM 202</td>
<td>General Chemistry II (5)</td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Organic Chemistry I (4)</td>
</tr>
<tr>
<td>CHEM 323</td>
<td>Supplemental Organic Functional Group Chemistry (1)</td>
</tr>
<tr>
<td>CHEM 360</td>
<td>Principles of Biochemistry (4)</td>
</tr>
<tr>
<td>ENG 101</td>
<td>Composition (4)</td>
</tr>
<tr>
<td>ENG 271W</td>
<td>Technical Communication (4)</td>
</tr>
<tr>
<td>MATH 112</td>
<td>College Algebra (4) AND</td>
</tr>
<tr>
<td>MATH 113</td>
<td>Trigonometry (3) OR</td>
</tr>
<tr>
<td>MATH 115</td>
<td>Precalculus Mathematics (4)</td>
</tr>
<tr>
<td>MATH 121</td>
<td>Calculus I (4)</td>
</tr>
<tr>
<td>PHYS 211</td>
<td>Principles of Physics I (4)</td>
</tr>
<tr>
<td>PHYS 212</td>
<td>Principles of Physics II (4)</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>Introduction to Psychological Science (4)</td>
</tr>
<tr>
<td>STAT 154</td>
<td>Elementary Statistics (4)</td>
</tr>
</tbody>
</table>

TOTAL: 32-39 credits

AOTA Website for Accredited OT Programs: http://www.aota.org/Educate/Schools/EntryLevelOT/238119.aspx

* Be sure to check the specific prerequisite courses of programs you plan to apply to and tailor the above list to meet those requirements.

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PRE-PROFESSIONAL PROGRAMS CONTINUED

PRE-OSTEOPATHIC MEDICINE AND SURGERY
College of Science, Engineering & Technology
Advisor: Marie Pomije Ph.D.

Required General Education (12-15 credits)
ENG 101 Composition (4)
ENG 201W Intermediate Writing (4)
MATH 112 College Algebra (4) AND MATH 113 Trigonometry (3) OR MATH 115 Precalculus (4)
PSYC 101 Introduction to Psychological Science (4)
SOC 101 Introduction to Sociology (3)

Required for Major (34 credits)
BIOL 105 General Biology I (4)
BIOL 106 General Biology II (4)
CHEM 201 General Chemistry I (5)
CHEM 202 General Chemistry II (5)
CHEM 322 Organic Chemistry I (4)
CHEM 324 Organic Chemistry II (3)
CHEM 325 Organic Chemistry II Lab (1)
CHEM 360 Principles of Biochemistry (4) OR CHEM 460 Biochemistry II (3)
PHYS 211 Principles of Physics I (4)
PHYS 212 Principles of Physics II (4)

Required Electives (40-43 credits)
Electives to yield a total of 90 semester credits are required.

Colleges of osteopathic medicine and surgery require a minimum of 90 semester hours for admission. Students admitted to a college of osteopathic medicine and surgery have completed undergraduate degrees. Students interested in osteopathic medicine will find that majoring in Biomedical Sciences (BS), or Biochemistry (BA or BS) will provide them with appropriate undergraduate training. The Medical College Admissions Test (MCAT) is required for all applicants to colleges of osteopathic medicine and surgery. Since admissions requirements vary, students should consult the advisor.

PRE-PHARMACY
College of Science, Engineering & Technology
Advising Team: Rebecca Moen, Ph.D. (for biochemistry majors) M. Hadley, Ph.D., D. Quirk Dorr, Ph.D.; D. Swart, Ph.D.; T. Vorlicek, Ph.D.

The majority of students admitted to a college of pharmacy have completed an undergraduate degree. Students interested in pharmacy often major in Biomedical Sciences (BS), Biochemistry (BA or BS), or Chemistry (BA or BS) because these majors include many of the same courses that are required prerequisites to pharmacy programs. The pre-pharmacy curriculum is designed to meet the prerequisites for admission to many pre-pharmacy schools, however the curriculum is not all inclusive as prerequisites vary between colleges of pharmacy. Therefore, requirements for particular pharmacy schools still need to be taken into consideration before substitutions for these courses are made. The Pharmacy College Admission Test (PCAT) is required for all applicants to colleges of pharmacy.

Required for Program
BIOL 105 General Biology I (4)
BIOL 220 Human Anatomy (4)
BIOL 270 Microbiology (4)
BIOL 330 Principles of Human Physiology (4)
CHEM 201 General Chemistry I (5)
CHEM 202 General Chemistry II (5)
CHEM 360 Principles of Biochemistry (4) OR CHEM 311 Genetics (4) OR CHEM 320 Cell Biology (4) OR CHEM 479 Molecular Biology (4)
CMST 102 Public Speaking (3) OR CMST 101W Interpersonal Communications (4)
ECON 202 Principles of Microeconomics (3)
ENG 201W Intermediate Writing (4) OR ENG 271W Technical Communication (4) OR ENG 301W Advanced Writing (4)
MATH 121 Calculus I (4)
PHYS 221 General Physics I (4) OR PHYS 211 Principles of Physics I (4) AND PHYS 212 Principles of Physics II (4) PSYC 101 Introduction to Psychological Science (4) STAT 154 Elementary Statistics (4) OR STAT 254 Concepts of Probability & Statistics (4) OR MATH 354 Concepts of Probability & Statistics (4)

Sixty to 64 credits of coursework including the above are typically required by pharmacy programs. Substitutions for both science and non-science courses should be chosen after studying the requirements of particular pharmacy schools. Please contact a pre-pharmacy advisor.

PRE-PHYSICAL THERAPY
Advisor: Mary Visser, Ph.D.
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Phone: 507-389-2672

Student Relations Coordinator: Shirley Murray
Email: shirley.murray@mnsu.edu
Phone: 507-389-5194

The Pre-Physical Therapy curriculum is primarily a science-oriented curriculum which meets the standard requirements for admission to most physical therapy programs. The majority of schools require a Bachelor's degree prior to application for admission, although some still accept students following two or three years of college preparation. It is important that students check requirements for their professional school of choice as some require classes in addition to those contained in this concentration. Most programs also require that the student take the Graduate Record Examination and score at a certain level.

Pre-Physical Therapy Concentration Courses at Minnesota State Mankato
BIOL 105 General Biology I (4)
BIOL 106 General Biology II (4)
BIOL 220 Human Anatomy (4)
BIOL 330 Principles of Human Physiology (4)
PHYS 211 Principles of Physics I (4)
PHYS 212 Principles of Physics II (4)
MATH 112 College Algebra (4)
MATH 113 Trigonometry (3) OR MATH 115 Precalculus Mathematics (4)
(Must meet PHYS 211 math requirement (4-8)
STAT 154 Elementary Statistics (4)
CHEM 201 General Chemistry I (5)
CHEM 202 General Chemistry II (5)
PSYC 101 Introduction to Psychological Science (4)
PSYC 433 Child Psychology AND PSYC 436 Adolescent Psychology AND PSYC 466 Psychology of Aging (4) OR KSP 235 Human Development (3)
PSYC 455 Abnormal Psychology (4)
SOC 101 Introduction to Sociology (3)

(Recommendation only; see graduate program requirements)
HLTH 321 Medical Terminology (3)
(Recommendation only; see graduate program requirements)
HP 265 Orientation to Occupational and Physical Therapy (2)

TOTAL: 53-68 credits

APTA Website for Accredited Physical Therapy Programs: http://www.apta.org/ProspectiveStudents/

*Be sure to check the specific prerequisite courses of programs you plan to apply to and tailor the above list to meet those requirements.

 Majors to Consider with Physical Therapy Concentration:
Exercise Science
Biology
Health Science: Community Health

*Graduate programs generally do not specify what undergraduate major must be completed. They are concerned about your performance within the major (including GPA) and that you have successfully completed all prerequisite coursework.
The minimum requirements for admission to a college of podiatric medicine and surgery are the same as for osteopathic medicine and surgery. A minimum of 90 semester hours are required for admission; however, most students admitted to a college of podiatric medicine and surgery have completed undergraduate degrees. Students interested in podiatric medicine will find that majoring in Biomedical Sciences (BS), or Biochemistry (BA or BS) will provide them with appropriate undergraduate training. The Medical College Admissions Test is required for all applicants to colleges of podiatric medicine and surgery. Students in this program should regularly consult with the advisor.

Required General Education (78 credits)

- ENG 101 Composition (4)
- ENG 201W Intermediate Writing (4)
- PSYC 101 Introduction to Psychological Science (4)
- SOC 101 Introduction to Sociology (3)

Recommended Support Courses (4-7 credits)*

- MATH 112 College Algebra (4) AND MATH 113 Trigonometry (3) OR MATH 115 Precalculus Mathematics (4)

Required for Major (35 credits)

- BIOL 105 General Biology I (4)
- BIOL 106 General Biology II (4)
- CHEM 201 General Chemistry I (5)
- CHEM 202 General Chemistry II (5)
- CHEM 322 Organic Chemistry I (4)
- CHEM 323 Supplemental Organic Functional Group Chemistry (1)
- CHEM 360 Principles of Biochemistry (4)
- PHYS 211 Principles of Physics I (4)
- PHYS 212 Principles of Physics II (4)

*There are no requirements for MATH in this program; however, the student needs prerequisites in math to take courses in chemistry and physics.

Required Electives (40-43 credits)

Electives to yield a total of 90 semester credits are required.

Specific course requirements for admission to veterinary schools vary somewhat. The following requirements are designed for application to the University of Minnesota Veterinary School. Students should use these requirements as a general guide and check specific requirements for other Veterinary Schools.

Required for Major (Core, 49-53 credits)

- ENG 101 Composition (4)
- PLUS: one additional course, such as speech, literature, advanced writing, technical writing, etc.
- BIOL 105 General Biology I (4)
- BIOL 106 General Biology II (4)
- BIOL 211 Genetics (4)
- BIOL 270 Microbiology (4)
- CHEM 201 General Chemistry I (5)
- CHEM 202 General Chemistry II (5)
- CHEM 322 Organic Chemistry I (4)
- CHEM 323 Supplemental Organic Functional Group Chemistry (1)
- CHEM 360 Principles of Biochemistry (4)
- PHYS 211 Principles of Physics I (4)
- PHYS 212 Principles of Physics II (4)

(choose one of the following options)

- MATH 112 College Algebra (4) AND MATH 113 Trigonometry (3)*
- MATH 115 Precalculus Mathematics (4) OR MATH 121 Calculus I (4)

*Although the University of Minnesota specifically requires only MATH 112, Minnesota State Mankato PHYS 111 requires either both MATH 112 and MATH 113, or MATH 115 or higher as prerequisites.

Required Electives: Liberal Education Courses (9-12 credits; 3 courses: Choose 3 courses from:

- Social Science
- Arts and Humanities
- History

Recommended Electives:

- BIOL 220 Human Anatomy (4) AND BIOL 330 Principles of Human Physiology (4) OR BIOL 431 Comparative Animal Physiology (3)

Graduate Record Exam (GRE) must be taken.

Students are strongly encouraged to declare a major and work toward a Bachelor’s degree while completing the pre-veterinary coursework. Because of the extensive overlap of required courses with major’s courses, student commonly major in one of the biology or chemistry options.
ACCOUNTING BS AND MINOR

Accounting
College of Business
Department of Accounting & Business Law
150 Morris Hall • 507-389-2965
Chair: Paul Brennan, Ph.D.
Faculty: P. Brennan; A. Habib; S. Johnson; O. Kim; B. Pike; K. Rosacker; F. Siagian

The accounting major is a professional program designed to prepare the student for work in one or more of three areas: public, industrial, or governmental/not for profit accounting.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

Accreditation. The Accounting program is accredited by the Association to Advance Collegiate Schools of Business (AACSB)

POLICIES/INFORMATION
Admission to a Major in the College of Business. Admission to a major in the College of Business typically occurs at the beginning of the student's sophomore year. Once admitted, students may choose to pursue a degree in one or more of the following majors: Accounting, Finance, International Business, Management, or Marketing. Multiple criteria will be considered for admission to a major in the College of Business. Admission is competitive; meeting minimum requirements does not guarantee admission. Deadlines for application are: October 1 for Spring Semester and March 1 for Fall Semester.

Criteria Considered for Admission to the Accounting Major

1. Minimum cumulative (including Transfer) Grade Point Average of 2.5
2. Completion of the following courses with a minimum grade of C (2.0): IT 101, MATH 130, ACCT 200, BUS 295, ECON 201.

Requirements for the Accounting Minor

1. Students must be admitted to a major at Minnesota State Mankato, and
2. Students must have a cumulative GPA of 2.5 or higher when starting to take 300 level courses for the Accounting Minor.

Academic Advising. Students will initially receive their advising from the professional advisors in the College of Business Student Center. When a student applies to the College of Business (which is done during BUS 295), he/she will be assigned a faculty advisor in the major area of study. Questions regarding the assignment of advisors can be answered in the College of Business Advising Center, 151 Morris Hall, 389-2963.

College of Business Policies. Students who are business minors, non-business majors or those who are not seeking a four-year degree may take up to 24 credits in the College of Business.

Students must be admitted to a major to take upper division (300/400) courses in the College of Business.

Students must be admitted to the College of Business major to be granted a Bachelor of Science degree in any College of Business majors.

Residency. Transfer students must complete a minimum of 30 resident credits at the upper division (300-400) level in the College of Business at Minnesota State Mankato.

Transfer students pursuing a major or minor in the College of Business must complete at least 50% (one-half) of their major or minor coursework at Minnesota State Mankato.

GPA Policy. Students must earn a minimum grade point average of 2.0 ("C") on the total courses taken in the College of Business and a 2.25 overall GPA to meet graduation requirements.

Accounting majors or minors must earn a grade of a "C" or better in required accounting and business law classes.

P/N Grading Policy. No more than one-fourth of a student’s major shall consist of P/N grades.

Assessment Policy. The College of Business believes that the ongoing assessment of its programs makes a vital contribution to the quality of those programs and to student learning. Student Participation is an important and expected part of the assessment process.

Interests. Students are strongly encouraged to participate in one or more internship programs related to their field of study before graduation. Qualifying internships may receive academic credit counting towards a student's major, but are not required to be taken for credit. To receive academic credit, students must be registered during the semester the internship takes place. Registration instructions and other business internship resources can be found at: cob.mnsu.edu/internship/

ACCOUNTING BS
Degree completion = 120 credits

Required General Education
ECON 201 and MATH 130 must be completed for admission to the major.
ECON 201 Principles of Macroeconomics (3)
MATH 130 Finite Mathematics and Introductory Calculus (4)

Choose 3 Credits
PHIL 120W Introduction to Ethics (3)
PHIL 205W Culture, Identity, and Diversity (3)
PHIL 222W Medical Ethics (3)
PHIL 224W Business Ethics (3)
PHIL 226W Environmental Ethics (3)
PHIL 240W Law, Justice & Society (3)

Prerequisites to the Major
ACCT 200 Financial Accounting (3)
BUS 295 Professional Preparation for Business Careers (2)
IT 101 Introduction to Information Systems (3)

Major Common Core
Required of all College of Business Majors (34 credits)
ACCT 210 Managerial Accounting (3)
BLAVV 200 Legal Environment of Business (3)
ECON 202 Principles of Microeconomics (3)
ECON 207 Business Statistics (4)
FINA 362 Business Finance (3)
IBUS 380 Principles of International Business (3)
MGMT 300 Principles of Management (3)
MGMT 306 Introduction to MIS (3)
MGMT 346 Production & Operations Management (3)
MGMT 481 Business Policy & Strategy (3)
MRKT 210 Principles of Marketing (3)

Major Accounting Required Courses: "C" or better required
Choose 28 Credits
ACCT 220 Accounting Cycle Applications (1)
ACCT 300 Intermediate Financial Accounting I (3)
ACCT 301 Intermediate Financial Accounting II (3)
ACCT 310 Management Accounting I (3)
ACCT 320 Accounting Information Systems (3)
ACCT 330 Individual Income Tax (3)
ACCT 400 Advanced Financial Accounting (3)
ACCT 410 Business Income Tax (3)
ACCT 421 Assurance Services I (3)
BLAVV 450 Contracts, Sales, and Professional Responsibility (3)

Major Unrestricted Electives
Optional Applied Experience
Choose 0 - 3 Credits
BUS 397 IBE Practicum (3)

Required Minor: None

ACCOUNTING MINOR

Required General Education
ECON 201 Principles of Macroeconomics (3)

Required General Education Electives
Choose 9 credits from the following
ACCT 301 Intermediate Financial Accounting II (3)
ACCT 310 Management Accounting I (3)
ACCT 311 Management Accounting II (3)
ACCT 320 Accounting Information Systems (3)
ACCT 330 Individual Income Tax (3)
ACCT 400 Advanced Financial Accounting (3)
ACCOUNTING CONTINUED

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 410</td>
<td>Business Income Tax (3)</td>
<td>ACCT 301</td>
<td>This course provides an in-depth analysis of financial accounting concepts and procedures, and includes coverage of the income statement, balance sheet, time value of money, receivables, and inventories.</td>
</tr>
<tr>
<td>ACCT 421</td>
<td>Assurance Services I (3)</td>
<td>ACCT 410</td>
<td>A continuation of ACCT 300. An in-depth analysis of long-term liabilities, stockholders' equity, leases, pensions, deferred taxes and the statement of cash flows.</td>
</tr>
<tr>
<td>ACCT 470</td>
<td>Advanced Topics (3)</td>
<td>ACCT 421</td>
<td>Emphasizes product and service costing, including job order and process costing systems. Other related topics are budgeting, pricing, cost-volume-profit analysis, standards and variance analysis.</td>
</tr>
<tr>
<td>ACCT 493 (1-4)</td>
<td>Honors Reading in Accounting</td>
<td></td>
<td>Variable</td>
</tr>
<tr>
<td>ACCT 497 (1-6)</td>
<td>Internship</td>
<td></td>
<td>Variable</td>
</tr>
<tr>
<td>BUS 100 (3)</td>
<td>Introduction to Business and Business Careers</td>
<td></td>
<td>Variable</td>
</tr>
<tr>
<td>BUS 295 (2)</td>
<td>Professional Preparation for Business Careers</td>
<td></td>
<td>Variable</td>
</tr>
<tr>
<td>BUS 300 (3)</td>
<td>Intermediate Financial Accounting I</td>
<td></td>
<td>Variable</td>
</tr>
<tr>
<td>BUS 301 (3)</td>
<td>Intermediate Financial Accounting II</td>
<td></td>
<td>Variable</td>
</tr>
<tr>
<td>BUS 397 (3)</td>
<td>IBE Practicum</td>
<td>BUS 397</td>
<td>BUS 397 is an applied course that entails developing, launching, managing, and closing a business with the cohort of students enrolled in the class. Students write and present a business plan as they seek financing for their start-up company. The business start-up experience creates a real-world context in which students can practice the concepts introduced in MGMT 230, MKRT 210, and FINA 362. BUS 397 is part of the United Prairie Bank Integrated Business Experience, and students must enroll concurrently in BUS 397 and sections of FINA 362, MGMT 230, and MKRT 210 that are designated for IBE students. Prerequisite: Must be admitted to a major. Co-requisite: FINA 362, MGMT 230, MKRT 210</td>
</tr>
<tr>
<td>ACCT 200 (3)</td>
<td>Financial Accounting</td>
<td>MATH 112, MATH 115, MATH 121, MATH 130, MATH 181</td>
<td>The accounting process, financial statement preparation, and analysis. Includes the accounting cycle, asset, liability and equity accounting. Emphasis on use of accounting data. Prerequisite: MATH 112, MATH 115, MATH 121, MATH 130, MATH 181</td>
</tr>
<tr>
<td>ACCT 210 (3)</td>
<td>Managerial Accounting</td>
<td></td>
<td>Preparation and analysis of cost-based management reports: use of cost information to make short-term operating decisions and long-term capital decisions. Prerequisite: ACCT 200</td>
</tr>
<tr>
<td>ACCT 220 (1)</td>
<td>Accounting Cycle Applications</td>
<td></td>
<td>This course provides extensive hands-on practice applying all steps in the accounting cycle. Emphasis will be placed on completion of journal entries, adjusting entries, closing entries, and preparation of financial statements. Prerequisite: ACCT 200</td>
</tr>
<tr>
<td>ACCT 300 (3)</td>
<td>Accounting Information Systems</td>
<td></td>
<td>An in-depth analysis of financial accounting concepts and procedures, and includes coverage of the income statement, balance sheet, time value of money, receivables, and inventories. Prerequisite: ACCT 200</td>
</tr>
<tr>
<td>ACCT 301 (3)</td>
<td>Accounting Information Systems</td>
<td></td>
<td>Emphasizes product and service costing, including job order and process costing systems. Other related topics are budgeting, pricing, cost-volume-profit analysis, standards and variance analysis. Prerequisite: ACCT 200 or ACCT 210</td>
</tr>
<tr>
<td>ACCT 311 (3)</td>
<td>Management Accounting</td>
<td></td>
<td>Contemporary managerial accounting and control systems including activity-based costing, strategic cost management, life cycle costing, Just-In-Time, inventory management, quality control, responsibility accounting. Other managerial issues include cost allocation, decentralization performance and productivity evaluation, theory of constraints, transfer pricing, capital budgeting and international issues in cost management. Prerequisite: ACCT 310</td>
</tr>
<tr>
<td>ACCT 320 (3)</td>
<td>Accounting Information Systems</td>
<td></td>
<td>A discussion of various accounting information systems. Topics include documentation, internal control, system design, knowledge structures, database design, software evaluation, systems applications and current developments. Prerequisite: ACCT 300 or ACCT 210</td>
</tr>
<tr>
<td>ACCT 398 (0)</td>
<td>CPT: Co-Operative Experience</td>
<td></td>
<td>Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information. Prerequisite: At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.</td>
</tr>
<tr>
<td>ACCT 400 (3)</td>
<td>Advanced Financial Accounting</td>
<td></td>
<td>A study of accounting principles and concepts for mergers, acquisitions, consolidated statements, foreign currency translation, partnerships, and governmental/not-for-profit. Prerequisite: ACCT 301</td>
</tr>
<tr>
<td>ACCT 401 (3)</td>
<td>Business Income Tax</td>
<td>ACCT 410</td>
<td>Designed for students interested in financial statement auditing. Topics include substantive audit testing, auditing governmental/not-for-profit entities, accounting and review services, and other advanced auditing topics. Prerequisite: ACCT 421</td>
</tr>
<tr>
<td>ACCT 410 (3)</td>
<td>Business Income Tax</td>
<td>ACCT 401</td>
<td>This course provides an in-depth analysis of financial accounting concepts and procedures, and includes coverage of the income statement, balance sheet, time value of money, receivables, and inventories. Prerequisite: ACCT 401</td>
</tr>
<tr>
<td>ACCT 420 (3)</td>
<td>Assurance Services II</td>
<td>ACCT 410</td>
<td>An overview of the external audit process, the issues facing the auditing profession today, and assurance services. Includes detailed coverage of the AICPA Code of Conduct, audit planning, substantive testing, auditors' responsibilities for detecting fraud, and audit reports. Prerequisite: ACCT 420</td>
</tr>
<tr>
<td>ACCT 421 (3)</td>
<td>Assurance Services I</td>
<td>ACCT 420</td>
<td>This course will utilize case analysis to examine current issues in accounting and business. Cases will involve an integration of management accounting, accounting information systems, financial accounting, tax and auditing issues. Prerequisite: ACCT 301, ACCT 310, ACCT 420, ACCT 410 or ACCT 411</td>
</tr>
<tr>
<td>ACCT 424 (3)</td>
<td>Assurance Services II</td>
<td>ACCT 421</td>
<td>This course utilizes case analysis to examine current issues in accounting and business. Cases will involve an integration of management accounting, accounting information systems, financial accounting, tax and auditing issues. Prerequisite: ACCT 301, ACCT 310, ACCT 420, ACCT 410 or ACCT 411</td>
</tr>
<tr>
<td>ACCT 470 (3)</td>
<td>Advanced Topics in Accounting</td>
<td>ACCT 424</td>
<td>Study tours are led by Minnesota State University, Mankato faculty and provide students with opportunities to visit companies and attend lectures by renowned experts from key sectors of economy, government, and business. Prerequisite: ACCT 301, ACCT 310, ACCT 420, ACCT 410 or ACCT 411</td>
</tr>
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<td>Honors Reading in Accounting</td>
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<td>ACCT 499 (1-4)</td>
<td>Individual Study of Accounting</td>
<td></td>
<td>Variable</td>
</tr>
</tbody>
</table>
AGING STUDIES CERTIFICATE AND MINOR

Aging Studies (Previously Gerontology)

College of Social & Behavioral Sciences
Aging Studies Program
113 Armstrong Hall • 507-389-1561
Website: sbs.mnsu.edu/soccorr/

Chair: Luis A. Posas

Faculty: Michael Bentley (Biological Sciences), Jeffrey Buchanan (Psychology), Kofi Danso (Social Work), Donald Ebel (Sociology), Kathryn Elliott (Anthropology), Carol Glasser (Sociology), Saiful Islam (Sociology), Norma Krumwiede (Nursing), Andrea Lassiter (Psychology), Mark Windschill (Health Science), Jim Wise (Recreation, Parks and Leisure Services), Diane Witt (Nursing)

The study of aging has from its founding included the biological, psychological and social perspectives. The Minor in Aging Studies provides undergraduate students with the opportunity to explore these varied perspectives while gaining foundational knowledge of aging. Within the next two decades, elders over the age of 65 will make up 25% of the population in the United States. Understanding aging processes and issues will support work in any discipline which makes the Minor in Aging Studies an appropriate addition to any major. The University is a member of the Association for Gerontology in Higher Education.

Academic Map/ Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

All Aging Studies students must register with the Aging Studies Program director at the beginning of their program.

GPA Policy. Aging Studies minors are urged to maintain a 3.0 or better GPA to maximize their options for professional employment and graduate study.

P/N Grading Policy. All coursework for the minor, with the exception of the internship and the practicum, must be taken for a letter grade.

AGING STUDIES MINOR

Core (choose 3 credits)
GERO 200 Family Dynamics of Aging (3)
GERO 200W Family Dynamics of Aging (3)

Health Core (choose 3 credits)
ANTH 421W Health, Culture and Disease (3)
BIOL 417 Biology of Aging and Chronic Diseases (3)
HLTH 455 Health and Aging (3)

Social and Behavioral Science Core (choose 6 credits)
ANTH 436W Anthropology of Aging (3)
PSYC 466 Psychology of Aging (4)
SOC 404 Sociology of Aging (3)
SOC 405 Sociology of Death (3)
SOVK 419 Social Work and Aging (3)

Required Internship (choose 3 credits)
GERO 497 Internship (1-6)
GERO 498 Practicum: Nursing Home Administration (1-6)

Elective

Please note that students may not take both SOC 405: Sociology of Death and HLTH 441: Death Education for credit toward this Minor.

Elective Credits (choose 6 credits)
FCS 474 Community Resources and Family Support (3)
GERO 450 Innovations in Aging Policy (3)
GERO 480 Nursing Home Administration (3)
GERO 485 Topics in Gerontology (1-3)
GERO 499 Individual Study in Gerontology (1-4)
HLTH 441 Death Education (3)
RPLS 482 Leisure and Older Adults (3)

UNDERGRADUATE CERTIFICATE IN LONG-TERM CARE ADMINISTRATION

The Undergraduate Certificate in Long-Term Care Administration provides multidisciplinary perspectives and coursework which culminates in a professional practicum experience. Students engaging with this certificate typically expect to enter careers in long-term care administration in skilled nursing facilities, nursing homes or rehabilitation facilities. Most students will also take both the Minnesota and federal nursing home administrator license exams once all coursework is completed.

Major Common Core
ACCT 210 Managerial Accounting (3)
GERO 480 Nursing Home Administration (3)
GERO 498 Practicum: Nursing Home Administration (1-6)
HLTH 455 Health and Aging (3)
MGMT 230 Principles of Management (3)
MGMT 301 Introduction to MIS (3)
MGMT 341 Human Resource Management (3)

Major Restricted Electives

Gerontology Electives
(choose 3-4 credits from the following)
GERO 200 Aging: Interdisciplinary Perspectives (3)
GERO 200W Family Dynamics of Aging (3)
SOC 404 Sociology of Aging (3)

AGING STUDIES MINOR FOR NURSING STUDENTS

The Minor in Aging Studies for Nursing Students provides undergraduate nursing students with the opportunity to explore the biological, psychological and social perspectives on aging while enhancing their specific knowledge of nursing in relation to older persons. Within the next two decades elders over the age of 65 will comprise 25% of the population in the United States leading to a shortage of over one million nurses to serve the aging population, making this minor particularly beneficial in supporting this career choice for nursing students. The University is a member of the Association for Gerontology in Higher Education.

POLICIES/INFORMATION

All Aging Studies students must register with the Aging Studies Program director at the beginning of their program.

GPA Policy. Aging Studies minors are urged to maintain a 3.0 or better GPA to maximize their options for professional employment and graduate study.

P/N Grading Policy. All coursework for the minor, with the exception of the internship and the practicum, must be taken for a letter grade.

Note: These policies are related to the Aging Studies Program only. Students choosing to minor in Aging Studies must still adhere to any and all policies set forward by the School of Nursing. Students are advised to meet with their Nursing advisor prior to registering for the minor with the Aging Studies Program director.

Minor Core

Nursing Core
NURS 334 Physiologic Integrity I (4)
NURS 335 Family and Societal Nursing Inquiry (3)
NURS 336 Assessment and Nursing Procedures (5)
NURS 366 Quality, Safety, and Informatics in Nursing Practice (2)
NURS 434 Physiologic Integrity II (4)
NURS 435 Nursing Care of Families in Transition II (3)

Required Core (choose 3 credits)
GERO 200 Aging: Interdisciplinary Perspectives (3)
GERO 200W Family Dynamics of Aging (3)

Social and Behavioral Science Core (choose 6 credits)
ANTH 436 Anthropology of Aging (3)
PSYC 466 Psychology of Aging (4)
SOC 404 Sociology of Aging (3)
SOVK 419 Social Work and Aging (3)

Minnesota State Mankato’s Nursing Home Administration Track for Licensure in the State of Minnesota. A license is required to administer a nursing home in each of the 50 states.
In order to complete all academic course work for licensure, students must complete one class from each subpart (of which there are eight) and a practicum. Program consists of 24-25 credits.

- **Subpart 1** - Organizational Management: HLTH 659, Health Care Administration or MGMT 230, Principles of Management
- **Subpart 2** - Managerial Accounting: ACCT 210, Managerial Accounting
- **Subpart 3** - Gerontology: GERO 200, Aging: Interdisciplinary Perspectives or SOC 404 / SOC 504, Sociology of Aging
- **Subpart 4** - Health Care and Medical Needs: HLTH 455 / HLTH 555, Health and Aging or NURS 340, Gerontological Nursing
- **Subpart 5** - Nursing Facility Services, Programs and Issues, Subpart 7 - Regulatory Management: GERO 480 / GERO 580, Nursing Home Administration
- **Subpart 8** - Information Uses: MGMT 300, Introduction to MIS

Practicum: GERO 498 / GERO 698, Practicum: Nursing Home Administration

Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

**Prerequisites:** At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

**Fall, Spring, Summer**

**GERO 450 (3) Innovations in Aging Policy**
Engaging with the practice of policy development, understanding critical policies impacting the experience of aging, and learning how to become a policy entrepreneur will be the focus for this course. The course will also explore innovations in aging policy globally.

**Spring**

**GERO 480 (3) Nursing Home Administration**
Issues and trends, programs and services, funding mechanisms and regulations. Meets state educational requirements for specific content areas.

**Spring**

**GERO 485 (1-3) Topics in Gerontology**
Topics vary as announced in class schedule. May be retaken for credit if topic is different.

**Fall, Spring, Summer**

**GERO 490 (1-3) Workshop**
Workshop topics vary as announced in class schedule. May be retaken for credit.

**Fall, Spring, Summer**

**GERO 491 (1-6) In-Service**

**GERO 497 (1-6) Internship**
Prerequisite: Consent

**Fall, Spring**

**GERO 498 (1-6) Practicum: Nursing Home Administration**
For students following plan of study for nursing home administration licensure only.

Prerequisite: by application and consent only

**Fall, Spring**

**GERO 499 (1-4) Individual Study in Gerontology**
The School and Community Health programs prepare health professionals with expertise in health promotion and disease prevention for employment in public health and community health agencies, health care facilities, business, industry and schools.
The college does not offer a degree entitled Allied Health and Nursing, but it does include six academic departments and one school: Dental Education; Family Consumer Science; Health Science; Human Performance; Recreation, Parks and Leisure Services; Speech, Hearing and Rehabilitation Services; and the School of Nursing which offer a number of undergraduate academic majors and minors. These include athletic coaching; alcohol and drug studies; child development and family studies; communication disorders; community health; consumer studies; corporate and community fitness/wellness; dental hygiene; developmental/adapted physical education; dietetics; exercise science; family consumer science education; foods and nutrition; health and physical education; nursing, recreation, parks and leisure services; therapeutic recreation, leisure planning and management; resource management; sport management; sport medicine. Post-baccalaureate work, leading to a Master's degree is available in many of the programs, along with a collaborative doctoral program in the School of Nursing. In addition, the college coordinates Pre-Physical Therapy and Pre-Occupational Therapy pre-professional programs.

COURSE DESCRIPTION

CAHN 101W (3) The Health Care Professions
This interdisciplinary course is designed to introduce students to health careers and related professions. It is a writing intensive course preparing students to become effective communicators within the context of health care settings.
Fall, Spring
W
American Indigenous Studies

College of Social & Behavioral Sciences
Department of Anthropology
American Indigenous Studies Program
358 Trafton Science Center • 507-389-6318
Email: rhonda.dass@mnsu.edu

Director: Rhonda Dass
Faculty: Rhonda Dass, Chelsea Mead

American Indigenous Studies (AIS) provides a broad and interdisciplinary understanding of Indigenous Americans, especially the Dakota peoples, and their respective ways of life in the past, present, and future. AIS welcomes all students, Native and non-Native, to pursue knowledge of Indigenous cultures, languages, ways of knowing, histories, politics, media, and other topics. The AIS program prepares students to pursue careers in ethnically diverse settings and tribal communities or graduate work. AIS facilitates a space where Indigenous American worldviews are an enduring and integral part of the diverse intellectual atmosphere at the University.

American Indigenous Studies BA, BS, Certificate and Minor

<table>
<thead>
<tr>
<th>Degree completion:</th>
<th>120 credits</th>
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### Prerequisites to the Major

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>AIS 101</td>
<td>Introduction to American Indian Studies (3)</td>
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### Major Common Core

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<td>AIS 210W</td>
<td>Oral Traditions (3)</td>
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<tr>
<td>AIS 220W</td>
<td>Introduction to Tribal Sovereignty (3)</td>
</tr>
<tr>
<td>AIS 230W</td>
<td>American Indians of Minnesota (3)</td>
</tr>
<tr>
<td>AIS 460</td>
<td>Behaving Like Relatives (3)</td>
</tr>
</tbody>
</table>

### Major Restricted Electives

**Language**

- Choose one 8 credit series to fulfill language series requirement for BA
- AIS 110: Elementary Dakota I (4)
- AIS 111: Elementary Dakota II (4)
- AIS 112: Elementary Ojibwe I (4)
- AIS 113: Elementary Ojibwe II (4)
- AIS 201: Intermediate Dakota I (4)
- AIS 202: Intermediate Dakota II (4)

**Major Unrestricted Electives**

- Choose 4 courses for a minimum of 12 credits
- AIS 211: The Story of American Indian Country to 1900 (3)
- AIS 212: The Story of American Indian Country from 1900 to Present (3)
- AIS 240W: American Indian Women (3)
- AIS 275: Selected Topics (3)
- AIS 300W: American Indian Leaders (3)
- AIS 330: Indigenous Education (3)
- AIS 340: American Indians in Film (3)
- AIS 360: Indigenous Peoples and Environmental Struggles (3)
- AIS 380: The Sacred Landscape (3)
- AIS 410: American Indian Folklore (3)
- AIS 455: Museum Science and Representation (3)
- AIS 475: Selected Topics (3)
- AIS 497: Internship (1-12)
- AIS 499: Individual Study (1-6)

### Outside Electives

- Choose 9 credits
- ANTH 331: Environmental Anthropology (3)
- ANTH 410: Archaeology of Minnesota (3)
- ANTH 411: Archaeology of Native North America (3)
- ANTH 412: Archaeology of Latin America (3)
- ANTH 440: Native American Cultures of North America (3)
- ENG 318: Multicultural Literature (2-4)
- ENG 436W: Native American Literature (4)
- LAW 234: Policing in a Diverse Society (3)
- PHIL 115W: Philosophy of Race, Class and Gender (3)
- POL 426: Racial and Ethnic Politics (3)

### Required Minor: Yes. Any.

### American Indigenous Studies BS

- Major Common Core
  - AIS 101: Introduction to American Indian Studies (3)
- Major Unrestricted Electives
  - Choose 12 credits - 4 courses for a minimum of 12 credits
- Outside Electives (choose 9 credits)
  - ANTH 331: Environmental Anthropology (3)
  - ANTH 410: Archaeology of Minnesota (3)
  - ANTH 411: Archaeology of Native North America (3)
  - ANTH 412: Archaeology of Latin America (3)
  - ANTH 440: Native American Cultures of North America (3)
  - ENG 318: Multicultural Literature (2-4)
  - ENG 436W: Native American Literature (4)
  - LAW 234: Policing in a Diverse Society (3)
  - PHIL 115W: Philosophy of Race, Class and Gender (3)
  - POL 426: Racial and Ethnic Politics (3)

### Required Minor: Yes. Any.

### American Indigenous Studies Minor

- Minor Core
  - AIS 210W: Oral Traditions (3)
  - AIS 220W: Introduction to Tribal Sovereignty (3)
  - AIS 230W: American Indians of Minnesota (3)
  - AIS 460: Behaving Like Relatives (3)
- Minor Electives (choose 9 credits)
  - AIS 211: The Story of American Indian Country to 1900 (3)
  - AIS 212: The Story of American Indian Country from 1900 to Present (3)
  - AIS 240W: American Indian Women (3)
  - AIS 275: Selected Topics (3)
  - AIS 300W: American Indian Leaders (3)
  - AIS 340: American Indians in Film (3)
AMERICAN INDIGENOUS STUDIES CERTIFICATE

Students obtain an understanding of the Indigenous American experience in the United States. Students begin to comprehend the vast history of native cultures and the scope of contemporary issues facing Indigenous Americans today. The certificate is designed to enhance any major.

Major Restricted Electives

Foundation Courses (choose 6 credits)

<table>
<thead>
<tr>
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<th>WI</th>
<th>Variable</th>
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<td>Introduction to American Indigenous Studies</td>
<td>GE-5, GE-7</td>
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<td>AIS 210W</td>
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<td>AIS 230W</td>
<td>American Indians of Minnesota</td>
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<td>AIS 275</td>
<td>Selected Topics</td>
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Major Unrestricted Electives

Expanded courses (choose 9 credits)

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<td>AIS 380</td>
<td>The Sacred Landscape</td>
<td>GE-5, GE-7</td>
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<td>American Indian Folklife</td>
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<td>AIS 455</td>
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<td>Native American Literature</td>
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<td>SOC 360</td>
<td>Indigenous Peoples and Environmental Struggles</td>
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COURSE DESCRIPTIONS

AIS 101 (3) Introduction to American Indigenous Studies
Class introduces students to history of the discipline and surveys both historic and contemporary topics of importance to American Indian Studies including gender roles, education, sovereignty, treaties, and oral tradition.
Fall (On Demand), Spring (On Demand), Summer (On Demand)

AIS 110 (4) Dakota Culture I
An introduction, within cultural context, to the basic skills of listening, speaking, reading and writing in the Dakota language
Prerequisite: AIS 101
Fall, Spring, Summer
G-7, GE-8

AIS 111 (4) Dakota Culture II
An introduction, within a cultural context, to the basic skills of listening, speaking, reading, and writing in the Dakota language
Prerequisite: AIS 101, AIS 110
Fall, Spring, Summer
G-7, GE-8

AIS 112 (4) Elementary Ojibwe I
An introduction to the basic skills of listening, speaking, reading and writing in the Ojibwe language as well as non-linguistic aspects of cultural background and history.
Fall, Spring, Summer
G-7, GE-8

AIS 113 (4) Elementary Ojibwe II
An introduction to the basic skills of listening, speaking, reading and writing in the Ojibwe language as well as non-linguistic aspects of cultural background and history.
Fall, Spring, Summer
G-7, GE-8

AIS 201 (4) Intermediate Dakota I
Grammar review, oral practice, written composition, and development of reading and listening skills within a cultural context
Fall
GE-8

AIS 202 (4) Intermediate Dakota II
Grammar review, oral practice, written composition, and development of reading and listening skills within a cultural context
Spring
GE-8

AIS 210W (3) Oral Traditions
Oral traditions are at the base of all American Indian cultures. This class will provide students with the necessary tools for a better understanding of traditional knowledge and its importance within diverse traditional cultures.
Variable
GE-5, GE-7
Diverse Cultures - Purple

AIS 211 (3) The Story of American Indian Country to 1900
The story of American Indian Country has often been told from the perspective of others instead of from the community. This class re-examines the narrative and shifts the perspective of the story. Topics of cross-cultural interactions, policy formations, cultural evolution, survival and negotiation are examined.
Variable
GE-5, GE-7
Diverse Cultures - Purple

AIS 212 (3) The Story of American Indian Country 1900 to Present
The story of American Indian Country has often been told from the perspective of others instead of from the community. This class re-examines the narrative and shifts the perspective of the story. Topics of cross-cultural interactions, policy formations, cultural evolution, survival and negotiation are examined.
Fall (On Demand), Spring (On Demand), Summer (On Demand)
GE-5, GE-7

AIS 220W (3) Introduction to Tribal Sovereignty
Course introduces students to the legal side of being American Indian. Politics and policies will be examined to show how a contemporary native experience is shaped through American courts, Presidential chambers, and Native activist movements.
Prerequisite: AIS 101
Variable
GE-5, GE-7
Diverse Cultures - Purple

AIS 230W (3) American Indians of Minnesota
This course will provide an overview of Minnesota Indian nations and their relations to each other and the effects of European incursion. Subsequent relations will focus on the US-Dakota war and its aftermath.
Variable
GE-5, GE-7
Diverse Cultures - Purple

AIS 240W (3) American Indian Women
Being American Indian and being woman creates a unique situation for women who have been directly influenced by the differences of gender roles from two intersecting cultures. This course will focus on how those differences have affected American Indian Women.
Variable
GE-5, GE-7
Diverse Cultures - Purple

AIS 244W (3) American Indian Leaders
Studies leadership prior to European colonization, the overlap of Indian and colonial leadership, contemporary governmental leadership, and contemporary tribal leadership. Defines what is and is not leadership and examine characteristics of individuals deserving the title of leader among American Indians.
Variable
WI

AIS 275 (3) Selected Topics: Varies
The course is offered according to student demand and instructor availability/expertise. A variety of topics related to ethnic and cultural areas will provide curriculum enrichment on an ongoing basis.
Variable

AIS 300W (3) American Indian Leaders
Studies leadership prior to European colonization, the overlap of Indian and colonial leadership, contemporary governmental leadership, and contemporary tribal leadership. Defines what is and is not leadership and examine characteristics of individuals deserving the title of leader among American Indians.
Variable
WI

AIS 360 (3) Indigenous People and Environmental Struggles

AIS 380 (3) The Sacred Landscape

AIS 410 (3) American Indian Folklife

AIS 455 (3) Museum Science and Representation

AIS 475 (3) Selected Topics

AIS 497 (1-12) Internship

AIS 499 (1-6) Individual Study

SOC 360 Indigenous People and Environmental Struggles

EXPANDED COURSES

Major Restricted Electives

Foundation Courses (choose 6 credits)

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AIS 330 (3) Indigenous Education
This class introduces students to Indigenous perspectives of education, knowledge, and learning. Students will explore the historical relationships between educational institutions, policies, practices, and Indigenous communities. Through an engagement with present-day efforts of educators, programs, and institutions that incorporate and engage traditional knowledges, students will develop a deeper understanding of Indigenous education and ways to promote teaching practices and pedagogies that value and support a diverse educational community.
Fall, Spring, Summer
GE-5, GE-9
Diverse Cultures - Purple

AIS 340 (3) American Indians in Film
This course examines American Indian identity as it relates to Hollywood film industry history. Underlying issues of contemporary Indians are also addressed through an introduction to Native Cinema and the effects of current technologies and globalization.
Variable
Diverse Cultures - Purple

AIS 360 (3) Indigenous Peoples and Environmental Struggles
Introduces students to the differences between indigenous and Western views of the environment. Analyzes the impact of invasion and encroachment on indigenous societies’ interactions with nature. Compares historical and contemporary environmental issues in indigenous societies.
Variable
GE-10
Diverse Cultures - Purple

AIS 380 (3) The Sacred Landscape
Course introduces students to the various ways that land is used by American Indians. We will explore traditional land use, contemporary land use, and land issues that impact American Indians and cultural activities that are tied to the land.
Variable
Diverse Cultures - Purple

AIS 398 (0) CPT: Co-Operative Experience
Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.
Prerequisite: At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.
Fall, Spring, Summer

AIS 410 (3) American Indian Folklife
This course will provide students with a greater understanding of the social structure of American Indian nations through the production, reproduction and revival of traditions. This will include looking at oral, musical, kinetic, ideological, and material traditions.
Variable

AIS 455 (3) Museum Science and Representation
Introduces students to museum science and how historic constructs, practices, and contemporary issues of the museum as an institution relates to the representation of American Indians. Focus will be on translating Western practices to an Indigenous aesthetic.
Variable
Diverse Cultures - Gold

AIS 460 (3) Behaving Like Relatives
Students gain practical knowledge of fieldwork techniques and experience through experiential learning. Students learn to approach elders appropriately with regards to age, social status, and gender, in order to build a cross-cultural kinship relationship i.e., to behave like relatives.
Prerequisite: AIS 101 or AIS 102
Variable
Diverse Cultures - Gold

AIS 473 (3) Selected Topics: Varies
This course is offered according to student demand and instructor availability/expertise. A variety of topics related to ethnic and cultural areas will provide curriculum enrichment on an ongoing basis.
Variable

AIS 485 (1-6) Workshop
A brief, intensive or hands on experience based in Indigenous knowledge and methods. Variable topics
On Demand: Fall, Spring, Summer

AIS 497 (1-12) Internship
Field experience in a setting appropriate to the discipline of American Indian Studies. Requires advanced standing in American Indian Studies and consent of supervising faculty.
Diverse Cultures - Gold

AIS 499 (1-6) Individual Study
Allows for an advanced level pursuit of special projects of research on an independent basis. Requires coordination with a faculty member.
On Demand

ANTHROPOLOGY BA, BS, CERTIFICATE AND MINOR

Anthropology

College of Social & Behavioral Sciences
Department of Anthropology
358 Trafton Science Center N • 507-389-6318
sbs.mnsu.edu/anthropology/
Chair: Kathleen Blue
Graduate Coordinator: Chelsea Mead
Faculty: J. Heath Anderson, Rhonda Dass, Kathryn “Jay” Elliott, Susan L. Schalge, Ronald Schirmer

Anthropology is the study of the origins and diversity of human biology and culture. Anthropologists study the evolution and adaptations of the human species through the four major subdivisions of the discipline: archaeology, biological anthropology, linguistics, and cultural anthropology. The major provides training in all areas of anthropology for the liberal arts major with an interest in global awareness, cultural diversity, human evolution and adaptation, prehistory, and an understanding of human behavior. For those interested in pursuing Anthropology as a career, the anthropology major is also designed to prepare students for graduate training.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
Admission to Major. Admission to major is granted by the department.
Accelerated Combined Degree (BA/BS and MS). Students interested in receiving both their undergraduate and graduate degrees in Anthropology at Minnesota State Mankato, may apply to the Department for admission into the Accelerated Graduate Program. Interested majors may apply upon the completion of 60 credits if they have a minimum GPA of 3.0. If accepted, students will work with an advisor to design an accelerated program in which up to 12 credits of 500-level courses can be applied to both their undergraduate and graduate programs. If accepted, students must maintain a minimum of 3.0 GPA overall and a 3.0 in the major to continue in the program. Interested students should contact the Department for more information.
P/N Grading Policy. Up to 1/4 of the credits for the major may be taken P/N, but caution in using this option in the major is urged.

GPA Policy. Anthropology majors are urged to maintain a 3.0 or better GPA to maximize their options for graduate study and professional employment.

Students majoring in Anthropology have an advisor from their area of interest assigned to them. Questions and concerns pertaining to advising can be answered by the College Advising Center, 114 Armstrong Hall, telephone 507-389-2416, or by the department chair.
ANTHROPOLOGY BA
Degree completion = 120 credits

Prerequisites to the Major
ANTH 101 Introduction to Anthropology (4)

Major Common Core
ANTH 210 Introduction to Archaeology (4)
ANTH 220 Human Origins (4)
ANTH 230 Peoples and Cultures of the World (4)
ANTH 240 Language and Culture (4)
ANTH 300 Anthropology Methods (3)
ANTH 438W Anthropological Theory (4)
ANTH 475 Senior Thesis (3)

Major Unrestricted Electives
Choose 6-10 credits from range of courses listed below with exclusion of courses taken under the guidance of the student’s advisor.

ANTH 102 - 499
AIS 101 - 499

Required Minor: Yes. Any.

ANTHROPOLOGY BS
Degree completion = 120 credits

Prerequisites to the Major
ANTH 101 Introduction to Anthropology (4)

Major Common Core
ANTH 210 Introduction to Archaeology (4)
ANTH 220 Human Origins (4)
ANTH 230 Peoples and Cultures of the World (4)
ANTH 240 Language and Culture (4)
ANTH 300 Introduction to Anthropology Methods (3)
ANTH 438W Anthropological Theory (4)
ANTH 475 Senior Thesis (3)
ANTH 300 must be taken prior to ANTH 475. ANTH 475 Senior Thesis must be taken under the guidance of the student’s advisor.

Major Restricted Electives
Choose 9 Credits
ANTH 102 - 499
AIS 101 - 499

Courses may or may not be double-counted in the program.

Required Minor: Yes. Any.

ANTHROPOLOGY MINOR

Required for Minor
Choose 6-10 credits from range of courses listed below with exclusion of courses taken in Required Core.
ANTH 102-499
AIS 101-499

Required Care
Choose a minimum of 8 credits from the following
ANTH 210 Introduction to Archaeology (4)
ANTH 220 Human Origins (4)
ANTH 230 Peoples and Cultures of the World (4)
ANTH 240 Language and Culture (4)
ANTH 300 Anthropology Methods (3)
ANTH 438W Anthropological Theory (4)

Required Electives for Minor
Choose 6-10 credits from range of courses listed below with exclusion of courses taken in Required Core.

ANTH 102 - 499

GEOARCHEOLOGY CERTIFICATE
This certificate cross-trains students in archaeology, geography, and geology to emphasize the necessity of understanding physical processes in places and regions as important vectors in shaping human habitation and resource use over time. The certificate prepares students to be highly competitive in either further education or the job market.

Major Common Core
Archeology Foundation
ANTH 210 Introduction to Archaeology (4)

Major Restricted Electives
Earth Science Foundation (choose 3-4 credits)
GEOG 101 Introductory Physical Geography (3)
GEOG 222 Earth History (4)
Archeology Electives (choose 3 credits)
ANTH 410 Archaeology of Minnesota (3)
ANTH 411 Archaeology of Native North America (3)
ANTH 412 Archaeology of Latin America (3)
ANTH 416 Archeological Methods (3)
Earth Science Electives (choose 6-8 credits)
GEOG 315 Geomorphology (3)
GEOG 411 Soils Geomorphology (3)
GEOG 415 Earth Surface Processes (4)
GEOG 416 Fluvial Geomorphology and Hydrology (4)
GEOG 201 Elements of Mineralogy (4)
GEOG 320W Sedimentology and Stratigraphy (4)

MUSEUM STUDIES CERTIFICATE
The aim of this program is to provide a perspective on the theory and practice of museums in an expanding global environment of technological, social, and political change for current and future museum professionals. It emphasizes the role of technology as a pervasive aspect in today’s museum, examines new models of education, exhibition, and business strategies, and explores the role of the museum as an agent of social change.

We welcome students interested in all types of museums including history, technology, science, art, special topic or themed museums, historic sites, national parks, and zoos, and those interested in exhibitions for corporations, government agencies, and private organizations.

Required for Certificate
ART 265W Art As Politics (3)
MUSE 200W Introduction to Museum Studies (3)
NPL 273 Introduction to the Nonprofit Sector (3)

Major Required Electives (choose 6 credits)
AIS 455 Museum Science and Representation (3)
ANTH 414 Museology (3)
ANTH 415 Cultural Resource Management (3)
ART 434 Arts Administration (3)
ART 464 Art Museum and Exhibition Studies (3)
MUSE 497 Internship (1-6)
MUSE 499 Individual Study (1-6)
NPL 473 Advanced Workshop in Nonprofit Leadership (3)
PHIL 460 Philosophy of the Arts (3)
RPLS 465 Event Management (3)
URBS 453 Grants Administration (3)

COURSE DESCRIPTIONS

ANTH 101 (4) Introduction to Anthropology
This course surveys human biological and cultural diversity through time and space. You will learn about questions like: “How did humans evolve?” and “How do anthropologists collect and interpret information about human beings and their ancestors?” Fall, Spring
GE-5, GE-B
Diverse Cultures - Purple

ANTH 102 (4) Ancient Peoples
A general survey of the evolution of human society from the earliest times to the development of written languages. Topics include the evolution of tools, the agricultural revolution, and the origins of urban life.
GE-5, GE-10

ANTH 120 (3) Forensic Science: An Anthropological Approach
This anthropology course explores the areas of anatomical forensic science. Students will learn the techniques and methodology involved in collection, preservation, and analysis of evidence pertaining to human remains. The course will include such subjects as analysis of skeletal trauma, victim identification, bite-mark analysis, and crime scene recovery methods. Ethics and standards in medico-legal investigations will also be stressed.
GE-3

ANTH 210 (4) Introduction to Archaeology
A comprehensive examination of modern archaeological theory, methods, and activities focusing on American archaeology. Emphasis will be given to data collection, data analysis, and museology. Lab included.
GE-3, GE-10, Variable
ANTH 220 (4) Human Origins
An introduction to the study of human biological evolution and variation. This course focuses on evolutionary theory, mechanisms of evolutionary change, and the fossil record of human evolution. Lab included.
Fall
GE-3

ANTH 230 (4) Peoples and Cultures of the World
This introduction to cultural anthropology covers cultural diversity and organization by examining several examples in detail. Both anthropological methodology and theory will be important parts of this course.
Fall, Spring
GE-8
Diverse Cultures - Purple

ANTH 240 (4) Language and Culture
Language provides not only communication but identification of oneself and one’s group. Humans are extremely sensitive to language, dialect, jargon, and slang. An understanding of language and its relationship to culture is basic to any understanding of human beings.
Spring
GE-5, GE-8
Diverse Cultures - Gold

ANTH 245 (3) The Social Life of Swearing
What qualifies a word as “bad”? How does profanity, cursing, and swearing evolve across time and vary across cultures? Where does the power of these “bad” words come from? What relationship do these words have to issues of gender, race, and class? This course examines the historical evolution and modern usage of obscenities to answer these questions.
GE-7, GE-9
Fall (On Demand), Spring (On Demand), Summer (On Demand)
Diverse Cultures - Purple

ANTH 250W (4) Portraits of Culture
Survey of human cultures through a variety of classic and contemporary anthropological writing and film. Students write weekly reflections. Written work is shared, discussed, and revised.
Spring, Summer
WI, GE-5
Diverse Cultures - Purple

ANTH 260 (3) Vampires, Werewolves, and Zombies: Folklore of Fear
Fear and how we depict it in popular culture. Course examines folklore traditions and how they translate in contemporary storytelling formats.
Variable
GE-5, GE-8
Diverse Cultures - Purple

ANTH 261 (3) Taboos, Tattoos, and T-shirts: Culture and Body Art
People all around the world use tattoos, piercing, makeup and dress codes as symbolic tools to represent their ideas of self, or as a means of gender, ethnicity, and class control and domination. This course looks at how people express connection to and disconnection from culture through body art practices.
All-Fall
GE-5, GE-8
Diverse Cultures - Purple

ANTH 269 (3) Anthropology of Sex
Sex and our relationship with it. This course examines the topics of sex, sexuality, and gender by exploring the diverse range of sexual cultures of the world in the past and the present. Attention is given to the role of language, biology, culture, and the archeological record of societies’s fascination with sex.
Fall (On Demand), Spring (On Demand), Summer (On Demand)
GE-5, GE-7
Diverse Cultures - Purple

ANTH 280 (3) Engaged Anthropology
Engaged Anthropology is a multidimensional service-learning course designed to facilitate real-world learning experiences for students on broad social issues; practice a variety of anthropological concepts, theories, and methods; and provide service to the local community.
Prerequisite: ANTH 101, ANTH 230, or instructor Permission.
GE-7, GE-11
Diverse Cultures - Gold

ANTH 285 (1-3) Special Topics
Courses to be offered just one time or on an irregular basis according to topic demand for a general interest, sophomore level course.
Variable

ANTH 290 (1-3) Exploratory Studies
Individual study at an introductory level on the topic of student’s choice. Designed for students who wish to pursue independent study at the first year/sophomore level rather than the more advanced level of the ANTH 499 individual study.
Prerequisite: Consent
Variable

ANTH 300 (3) Introduction to Anthropology Methods
This course examines the methodologies of all four fields of Anthropology. Students will gain practical experience in various methods that professionals utilize on a regular basis within the discipline. Discussions of the issues surrounding various anthropological methods will be part of this course.
Prerequisite: ANTH 101
Fall

ANTH 311 (3) Ancient Egypt
An in-depth study of ancient Egypt, focusing on the relationship between cultural development and the unique Egyptian environment of the time. Emphasis will be placed on the interpretation of archaeological discoveries in the area.
Variable

ANTH 323 (3) Primate Behavior
An examination of the ecology, behavior, and biology of living primates.
Prerequisite: ANTH 101 or ANTH 220 or consent
Variable

ANTH 331 (3) Environmental Anthropology
This course focuses on studying the diversity of human societies using environmental approaches such as evolutionary/ecological perspectives and systems modeling. Case studies will be drawn from Native American cultures.

ANTH 332 (3) Anthropology of Religion
The variability and universality of human religious expression are explored in specific cross-cultural contexts.
Fall
Diverse Cultures - Purple

ANTH 333 (3) Ethnographic Film
This course emphasizes the wealth of ethnographic information which may be captured by visual media. Students will learn how to interpret the final product and how to recognize the limitations of visual presentations.
Variable

ANTH 335 (3) People and Cultures of Sub-Saharan Africa
A survey of the people and cultures of Sub-Saharan Africa examining the rich sociocultural diversity of the continent over time.
Even Years: Fall; On Demand: Spring, Summer

ANTH 340 (4) Language and Power
Language is powerful. What we say, how we say it, where we say it, and to whom we say it matters. This course explores the connection between power, language, performance, and identity. The relationships between language, gender, sexuality, race, ethnicity, and socioeconomic class are explored by investigating historical and present day sources of language practices and events.
GE-5, GE-7
On Demand: Fall, Spring, Summer
Diverse Cultures - Purple

ANTH 360 (3) Business Anthropology
This class focuses on the application of anthropology in the business and organizational domains using a cultural lens. It will provide students with a clearer view of the culture of the business world as well as tools to aid in understanding the business culture and that of their clientele.
On Demand: Fall, Spring, Summer

ANTH 361 (3) Foodways
Exploring culture through the foods we eat, preparation practices, and historic implications of food in daily life. We will examine a sampling from hunter-gatherers, agricultural practices and animal husbandry, mass production, and the food industry to better understand cultural practices from around the globe.
On Demand: Spring
Diverse Cultures - Purple
ANTH 410 (3) Archaeology of Minnesota
A detailed study of Minnesota archaeology from ca. 12,000 years ago to ca. 1900, with a focus on diverse and changing Native American populations.

ANTH 411 (3) Archaeology of Native North America
A survey of current knowledge about the prehistoric Native American inhabitants of North America from ca. 15,000 years ago until ca. 1900. Topics will focus on the processes of cultural development, change, and disruption by Euro-American influences.

ANTH 412 (3) Archaeology of Latin America
A detailed study of Latin American archaeology from ca. 12,000 years ago to ca. 1900, with a focus on diverse and changing Native American populations.

ANTH 414 (3) Museology
A review of the history and philosophy of museums, the legal and ethical issues impacting museums, the nature and treatment of collections, creation, exhibition and exhibit design, the role of museums in education, museum personnel and financial management, and museums in the technological/electronic age. Prerequisite: ANTH 101, ANTH 210, or consent Variable

ANTH 415 (3) Cultural Resource Management
Review of how cultural resources are being preserved and managed under current laws and regulations. Emphasis on examination of conservation, preservation and rescue methods in modern archaeology, and problems and issues in historic preservation and resource management. Prerequisite: ANTH 101, ANTH 210 or consent Variable

ANTH 416 (3) Archeological Methods
An intensive exploration of how to identify, catalogue, and curate archeological materials in a laboratory setting. Topics will include lithics, pottery, faunal, floral, metal, and other materials as well as data structure and recordation. Fall (On Demand)

ANTH 417 (5) Quaternary Environments and Climatic Change
An interdisciplinary investigation into Quaternary environmental/climatic change and the impact of change on the behavior and evolution of humans. This course has three segments: 1) an examination of natural systems responsible for climatic change, the impact climatic fluctuations have on Earth systems, timing of Quaternary changes, evidence of climatic/environmental change from spatially distant, climatically distinct environments; 2) investigation into worldwide evidence of human evolution, global dispersion, and adaptation to environmental systems; introduction to various methodological approaches in Quaternary archeology, geomorphic, and climatic studies. Focus is on proxy records used for climate/environmental reconstruction, archaelogic/geomorphologic field methods, geochronologic dating methods. On Demand: Fall, Spring
Prerequisite: GEOG 101, ANTH 210; Students are strongly encouraged to take Geog 315 or 4/515 before enrolling. Geol 121 can be substituted for Geog 101 with instructor permission.

ANTH 418 (4) Agricultural Systems and Environmental Change
This course examines the history of agricultural systems in world wide perspective, with an emphasis on understanding their social and environmental contexts and the effects on them of climate change. Case examples will highlight the conditions under which agricultural systems emerge, thrive, and fail, and the impacts of these processes on human populations. On Demand: Fall, Spring

ANTH 420 (3) Human Osteology
An advanced examination of the human skeletal system and the application of this information in the fields of bioarchaeology, paleoanthropology, and forensic anthropology. This course features hands-on identification and analysis of human skeletal material, with an emphasis on laboratory techniques. Variable

ANTH 421W (3) Health, Culture, and Disease
Cross-cultural examination of the healing traditions, health beliefs and the impact of social, economic and political factors on the health of peoples in different cultures around the world and among diverse ethnic groups within culturally plural societies, including the United States. Variable WI Diverse Cultures - Purple

ANTH 422 (3) Forensic Anthropology
This course will acquaint students with the application of human osteological techniques in civil and criminal investigations, including assessment of the recovery scene, determination of identity, and analysis of evidence relating to cause and manner of death. Prerequisite: ANTH 420

ANTH 423 (3) Evolution and Behavior
An examination of the biological basis of human behavior and organization from an evolutionary perspective. Prerequisite: ANTH 101 or ANTH 220 or consent Variable

ANTH 424 (3) Bioarchaeology
Bioarchaeology focuses on the diet, health, and occupations of past populations through the analysis of their skeletal remains. Readings and lab work will promote a practical understanding of the methods used in the discipline. Variable

ANTH 425W (3) Anthropology of Death
The biological and cultural aspects of death, as seen anthropologically, are the focus of this course. Mortuary behavior, ritual, and treatment of the human body will be addressed both temporally and cross-culturally. Variable WI

ANTH 430 (3) Peoples and Cultures of Latin America
The contemporary peoples and cultures of Mexico and Central and South America. Emphasis is on cultural patterns and contemporary issues of the region. Prerequisite: ANTH 101, ANTH 230, or consent Spring

ANTH 431 (3) Applied Cultural Research
This course introduces concepts and methods of applying socio-cultural understand- ing to contemporary problems to bring about the empowerment of affected people. Case/field studies and other research methods in social sciences will change with special attention to its affect on disadvantaged groups of people. Students will also design their own applied projects. Prerequisite: ANTH 101, ANTH 230, or consent; ETHN 100, ETHN 101, or ETHN 150 or consent. Variable

ANTH 432 (3) Kinship, Marriage and Family
Kinship is the basic principle of organization for all human societies. This course analyzes the major theories and methods of studying social organization, and explores cross-cultural variations in kinship, marriage and family systems.

ANTH 433 (3) Anthropology of Gender
Major anthropological theories of gender relations are read, discussed, and applied to a variety of contemporary ethnographic case studies. Prerequisite: ANTH 101, ANTH 230, or consent Spring

ANTH 435 (3) The Rise of City-States and Nations
A pivotal moment in cultural development is when city-states and nations arrive to change the structure of a cultural group. This course has varying topics to present each cultural area in its unique context. May be repeated with different topic. Variable

ANTH 436W (3) Anthropology of Aging
A cross-cultural examination of the aging process, status, and treatment of elders around the world. Prerequisite: ANTH 101, ANTH 230, or ANTH 220, or consent Variable WI Diverse Cultures - Purple
ANTH 437 (3) Applied Anthropology
Examines the practical applications of anthropological knowledge to problem-orient-ed research and the problems of directed sociocultural change among contemporary populations. Selected projects and case studies are used to illustrate the complexity of applied sociocultural change.
Prerequisite: ANTH 101, ANTH 230 or consent
Variable

ANTH 438W (4) Anthropological Theory
Examination of the intellectual history of anthropology from its nineteenth century roots to today's current theoretical trends. Students will learn about the major schools of thought in anthropological theory and practice critical examination of their applications.
Fall

ANTH 439 (3) Qualitative Research Methods
The aim of this course is to make students methodologically literate. Students will learn how to develop research designs that rely on qualitative research methods such as participant observation. They will learn how to apply these methods by participating in small-scale studies of human behavior. Some quantitative methods will also be discussed. Students will learn critical examination of published data and conclusions.
Prerequisite: ANTH 101, ANTH 220 or consent
Variable

ANTH 440 (3) Native American Cultures of North America
American Indians adapted to environmental systems in North America with cultures ranging from small groups of foragers to cities supported by intensive agriculture. This course presents a variety of perspectives of this cultural diversity from the Ice Age to the 20th century.
Variable

ANTH 443W (3) People and Cultures of East Asia
Survey of East Asian cultural region. Cultural diversity, change, and continuity examined in China, Japan and Korea through institutions and cultural settings. Focus includes how modern East Asian societies face internal social changes and their changing international status.
Variable

ANTH 444W (3) Diverse Cultures - Purple

ANTH 470 (2) Senior Project
Nature and topic of the senior project is jointly determined by the student and faculty members. It may involve writing, laboratory work, fieldwork or various combinations. Planning for this project should begin early in the senior year. Students will present completed projects in a public forum. Must be taken twice/different semesters.
Prerequisite: ANTH 491 or ANTH 492 or ANTH 493 or ANTH 494
Fall, Spring

ANTH 475 (3) Senior Thesis
A faculty-supervised, student-designed capstone project for the major. Students will take ANTH 475 after completing ANTH 300. The nature of the student’s thesis will be determined jointly by the student and their advisor. The capstone project is a written thesis involving writing, laboratory work, fieldwork or various combinations. Students must present completed thesis in a public forum.
Prerequisite: ANTH 300
Fall, Spring

ANTH 480 (3-6) Fieldwork: Archaeology/Ethnology
Field experience in which method and theory are learned through participation in an ongoing field project.
Prerequisite: Consent, or one of: ANTH 101, ANTH 102, or ANTH 220
Variable

ANTH 485 (1-3) Topics in Anthropology
This course allows faculty the flexibility to consider the challenges of new developments in anthropology. Content will vary from one course to the next. Students may take the course, with the permission of the instructor, more than one time.
Variable

ANTH 486 (1-3) Workshop
A brief intensive hands-on introduction to an anthropological topic usually as it applies to a particular issue or skill. Topics vary but might include: Understanding that race is not a scientific concept; combating racism and ethnocentrism; participant observation methods; culture shock; cultural diversity and communication; forensics; cultural resource conservation.
Prerequisite: Depends on topic and instructor
Variable

ANTH 491 (1-3) Archaeology Laboratory
An introduction to archaeological laboratory techniques and museological practice, through participation in the various processes involved.
Variable

ANTH 492 (1-3) Biological Anthropology Lab
Guided advanced laboratory work in biological/physical anthropology.
Prerequisite: Consent
Variable

ANTH 493 (1-3) Ethnology Lab
Individual projects are done in close coordination with faculty member.
Prerequisite: Consent
Variable

ANTH 494 (1-3) Linguistic Lab
Individual projects are done in close coordination with faculty member.
Variable

ANTH 496 (1-3) Senior Seminar
A special capstone course on current anthropological theory and method to be offered on demand to interested groups of senior majors and minors. The course will emphasize the integration, synthesis, and summary of the core course material and students' electives.
Prerequisite: ANTH core courses and/or consent
Variable

ANTH 497 (1-12) Internship
Positions may vary considerably, but all involve actual working conditions in various field positions such as museums, state parks, archaeological excavations and agencies.
Prerequisite: Consent
Fall, Spring

ANTH 498 (1-3) Internship: Teaching Anthropology
Students will work with faculty in the preparation and delivery of course materials in lower division undergraduate courses. Lecture/lab prep, delivery, use of multimedia, leading discussions and exercises. Open to senior majors and minors in good standing.
On Demand

ANTH 499 (1-6) Individual Study
A specialized topic of the students' choices. Coordination with a faculty member is necessary.
Prerequisite: Consent
Fall, Spring

MUSE 200W (3) Introduction to Museum Studies
Introduces history of museums and philosophical nature of museums, covering types and definitions of museums, discusses contemporary practice in museums, and examines current issues in the profession as we face the future of museums in the twenty-first century.
Variable

MUSE 486 (1-6) Workshop
A brief, intensive or hands on experience based in museum best practices, theories, and methods. Variable topics.
On Demand

MUSE 497 (1-6) Internship
Arranged internship allows students to have a hands on experience applying theories and methodology from course work in the field to area of interest. Requires coordination with a faculty member.
On Demand

MUSE 499 (1-6) Individual Study
This course allows pursuit of individual avenues of study that may not be offered in the curriculum and for advanced level pursuit of special projects of research on an independent basis. Requires coordination with a faculty member.
On Demand
APPLIED ORGANIZATIONAL STUDIES BS

Applied Organizational Studies

College of Social & Behavioral Sciences
Department of Sociology & Corrections
113 Armstrong Hall
Phone: 507-389-2257
Website: www.mnsu.edu/programs/aos.html

Program Director: Dr. Christine Mollenkopf-Pigsey

The B.S. in Applied Organizational (AOS) Studies is a degree completion program designed primarily for working adults that will provide them the qualifications needed to advance in their careers or to change professions. It provides students with education in communication, in critical analysis, and in organizational leadership. These are skills that have been repeatedly identified as highly important in contemporary society and a shifting economy. This degree is designed for individuals who want to develop knowledge and skills that will allow them to serve and contribute to transforming the organizations of which they are a part, be it their community, church, work, nonprofit or voluntary organization, city, or state.

POLICIES/INFORMATION
Completion of Minnesota Transfer Curriculum and completion of AOS 301.

APPLIED ORGANIZATIONAL STUDIES BS
Degree completion = 120 credits

Major Common Core
AOS 301 Introduction to Applied Organizational Studies
AOS 488 Portfolio in Professional Leadership

Major Unrestricted Electives
Communications in Organizations (choose 12 credits)
Any discipline 300-499 Specific courses arranged with student’s advisor.
Critical Thinking and Decision-Making in Organizations (choose 12 credits)
Any discipline 300-499 Specific courses arranged with student’s advisor.
Leadership in Organizations (choose 12 credits)
Any discipline 300-499 Specific courses arranged with student’s advisor.

Major Emphasis
Area of Concentration (choose 7-8 credits)
Any discipline 300-499 Specific courses are in a single discipline arranged with the student’s advisor.

Required Minor: None.

COURSE DESCRIPTIONS

AOS 301 (3) Introduction to Applied Organizational Studies
Topics include world economics and their implications for the labor force, critical and creative thinking, leadership, and portfolio assessment. Required for admission to the Applied Organizational Studies program.
Fall, Spring, Summer

AOS 320 (3) Workshop 1 - Applied Organizational Studies
The focus in this course is on communication within organizations (including virtual environments), workplace engagement in virtual teamwork and the application of critical and creative thinking resulting in organizational innovation. The course also engages students in an exploration of the role of social organizing and the impact of networking on organizational growth and sustainability.
Fall, Spring

AOS 380 (3) Workshop 2 - Applied Organizational Studies
The focus in this course is on critical thinking, decision-making, and leadership in contemporary organizational environments. The course also explores the concept of followership and power distribution, and organizational adaptation due to technological and global economic change. Students will also participate in an applied quantitative research project in an approved organization of choice.
Fall, Spring

AOS 420 (1-3) Advanced Workshop - Applied Organizational Studies
The course focuses on contemporary organizational issues and the concept of change in organizational design and development. Subject matter includes the use of causal thinking and econometric measurement, effectuation and entrepreneurial thinking, and the role of mission and vision. Students will complete a project-based exploration of the financial and resource aspects of return on investment comparing the effectual and causal perspectives on an organizational change.
Fall, Spring

AOS 488 (1-2) Professional Studies Portfolio
Capstone project in which the student creates a portfolio that demonstrates the student’s achievement in the core competencies of the program. Portfolio to be presented to a committee. Prerequisite: AOS 301
Fall, Spring

AOS 492 (3) Selected Topics
Topics vary as announced in class schedule. May be retaken for credit if topic varies. On Demand: Fall, Spring, Summer

AOS 499 (1-6) Individual Study
A specialized topic of the students’ choice. Coordination with a faculty member is necessary. On Demand: Fall, Spring, Summer

ART BA, BFA AND MINOR

ART

College of Arts & Humanities
Department of Art
136 Nelson Hall • 507-389-6412
Website: mnsu.edu/artdept/

Chair: Brian Frink

Faculty: Alisa Eimen Dr.; Brian Frink, Curt Germundson Dr.; Mika Laidlaw, Liz Miller, David Rogers, Areca Rowe, Todd Shanafelt, Amy Toscani, Gina Wenger Dr.; Matt Willemsen, Josh Winkler

Accreditation: Art
The National Association of Schools of Art and Design (NASAD) The National Council for Accreditation of Teacher Education (NCATE)

The Department of Art program is devoted to the development of concepts, attitudes and skills in the visual arts within a broad university curriculum of liberal arts orientation. There are four objectives: professional training of artists and scholars in chosen areas of specialization, preparation of art educators, elective study for students in all areas of the university, and service to the local communities as a source of cultural enrichment. The Department of Art is accredited by the National Association of Schools of Art and Design.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All
Policies/Information
A program planning guide for each major is available in the Department of Art office. Students should obtain one to aid in the planning of their program. Advisory services are available.

Drawing and design courses in the art core should be taken during the first year.

Admission to Major is granted by the department. Minimum University admission requirements are:
- A minimum of 32 earned semester credit hours;
- A minimum cumulative GPA of 2.00 ("C")

In addition to minimum University admission requirements students requesting admission to the art and art education majors must complete the following:
- ART 101 (3) (Preferred) or ART 100 (3)
- ART 260 or ART 261

Students for all majors may be admitted provisionally while these requirements are being satisfied.

Contact the department for application procedures.

P/N Grading Policy. A student majoring in art may take a maximum of one-fourth of the art credits for P/N grades and must comply with the University P/N requirements.

GPA Policy. A 2.0 GPA is required. For admission to and graduation from the BFA program students must have a minimum cumulative GPA of 2.5. Students on academic probation should refer to the College of Arts and Humanities policy regarding required advising.

Studio courses require two scheduled hours of class meeting time under the direct guidance of the instructor and a minimum of one additional hour of work at the discretion of the student for each credit hour earned.

The frequency of course offerings should be verified with your advisor or the art department office, since some changes caused by unanticipated circumstances may occur.

Art majors and minors must meet with the Art Department chairperson two semesters prior to their anticipated graduation date so that their graduation credits can be evaluated.

All students should check with the central art office concerning the future availability of courses needed for graduation. ART 421 Art Methods Elementary School, should be taken no sooner than the junior year and is required by state licensure before student teaching. The prerequisite for ART 421 is ART 100 or ART 101.

The total number of transfer credits accepted for each major/minor is as follows: BFA (24), BS (18), BA (15), and Minor (6).

The Department of Art may request the retention of student work for its permanent instructional and exhibition collection. It reserves the right to photograph students and their work. In addition, the department cannot insure student work, material and equipment or take responsibility for its loss or damage.

Art students with junior or senior standing are encouraged to seek internship opportunities in career-related settings that may include museums, production studios, design firms, and other approved venues. Arrangements are made on an individualized basis. A maximum of 6 credits may be applied toward specializations within BA, BS, or BFA degree programs.

Notations showing the costs of individual courses are included in the schedule of classes. In some cases, student fees are charged for materials used. Verifying such information with the individual instructor is suggested.

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required Professional Education courses. The Bachelor of Science in Art Education major must pass all content area coursework with a grade of "C" or higher.

Art BA
Degree completion = 120 credits

The Bachelor of Arts degree in art is a broad-based liberal arts degree that provides a cultural perspective with a strong foundation in studio training.

Required General Education
ART 260 Art History Survey I (3)
ART 261 Art History Survey II (3)

Major Common Core
ART 103 Three Dimensional Design (3)
ART 110 Drawing Foundations (3)
ART 466 Realism to Postmodernism (3)
ART 495 Senior Exhibit (0-1)

Design Foundations (choose 3 credits)
ART 100 Elements and Principles of Art (3)
ART 101 Design Foundations (3)

Major Restricted Electives
Advanced Art History (choose 3 credits)
ART 413 Scandinavian Art (3)
ART 416 Art of Africa, the Americas, and the South Pacific (3)
ART 417 Medieval Art and Architecture (3)
ART 419 Gender in Art (3)
ART 460 Ancient Art (3)
ART 462 Renaissance Art (3)
ART 463 Mannerism to Romanticism (3)
ART 467 Art of the Islamic World (3)
ART 468 Design: History and Theory (3)
ART 469 Asian Art (3)
ART 492 Art History Seminar (1-6)
ART 494 Topics (3)

Intermediate/Advanced Studio (choose 9 credits)
Select 300-400 level courses with the advisor
ART 302 Interactive Design Survey (3)
ART 304 Typography I (3)
ART 320 Graphic Design II (3)
ART 340 Painting (3)
ART 345 Watercolor (3)
ART 350 Intermediate Ceramics (3)
ART 370 Printmaking: Intermediate Studio (3)
ART 372 Digital Printmaking (3)
ART 375 Black and White Photography (3)
ART 377 Digital Photography (3)
ART 380 Sculpture (3)
ART 402 Motion Graphics (3)
ART 404 Typography II (3)
ART 406 Web Design (3)
ART 410 Drawing Workshop (3-6)
ART 412 Life Drawing (3)
ART 420 Graphic Design III (3-6)
ART 440 Painting (3-6)
ART 445 Watercolor (3-6)
ART 450 Advanced Ceramics (3-6)
ART 470 Printmaking: Advanced Studio (3-6)
ART 475 Photography (3-6)
ART 480 Sculpture (3-6)

Studio Electives: Students must complete six 200-level studio courses from five different areas.

Graphic Design
ART 202 Introduction to Digital Media (3)
ART 220 Graphic Design I (3)

Drawing
ART 210 Drawing (3)
ART 212 Life Drawing (3)

Mixed Media
ART 231 Mixed Media (3)

Painting
ART 240 Painting (3)
ART 245 Watercolor (3)

Ceramics
ART 250 Ceramics: Beginning Wheel (3)
ART 251 Ceramics: Beginning Handbuilding (3)

Printmaking
ART 270 Printmaking: Beginning Silkscreen and Lithography (3)
ART 271 Printmaking: Beginning Intaglio/Relief (3)

Photography
ART 275 Photography (3)

Sculpture
ART 280 Sculpture (3)

Installation
ART 285 Introduction to Installation (3)
Other Graduation Requirements
Required for Bachelor of Arts (BA) degree ONLY - Language (8 credits)

Required Minor: Yes. Any.  

ART BFA

For admission to the BFA programs students must have a minimum GPA of 2.5 and pass ART 391 Portfolio Review. The Bachelor of Fine Arts degree is a program for those students with professional art aspirations.

Required General Education
ART 260 Art History Survey I (3)
ART 261 Art History Survey II (3)

The courses count toward General Education Goal Areas 6 and/or 8.

Major Common Core
ART 101 Design Foundations (3)
ART 103 Three-Dimensional Design (3)
ART 110 Drawing Foundations (3)
ART 466 Realism to Postmodernism (3)

Major Restricted Electives

Foundation Courses
Select six (6) courses from at least five (5) areas for a total of 18 credits.

Area One: Graphic Design (choose 0 - 6 credits)
ART 202 Introduction to Digital Media (3)
ART 220 Graphic Design I (3)

Area Two: Drawing (choose 0 - 6 credits)
ART 210 Drawing (3)
ART 212 Life Drawing (3)

Area Three: Mixed Media (choose 0 - 3 credits)
ART 231 Mixed Media (3)

Area Four: Painting (choose 0 - 6 credits)
ART 240 Painting (3)
ART 245 Watercolor (3)

Area Five: Ceramics (choose 0 - 6 credits)
ART 250 Ceramics: Beginning Wheel (3)
ART 251 Ceramics: Beginning Handbuilding (3)

Area Six: Printmaking (choose 0 - 6 credits)
ART 270 Printmaking: Beginning Silkscreen and Lithography (3)
ART 271 Printmaking: Beginning Intaglio/Relief (3)

Area Seven: Photography (choose 0 - 3 credits)
ART 275 Photography (3)

Area Eight: Sculpture (choose 0 - 3 credits)
ART 280 Sculpture (3)

Area Nine: Installation (choose 0 - 3 credits)
ART 285 Introduction to Installation (3)

Advanced Courses

Advanced Drawing (choose 3 - 6 credits)
Courses may not be repeated if taken as a Foundation Course.
ART 210 Drawing (3)
ART 212 Life Drawing (3)
ART 310 Drawing (3)
ART 410 Drawing Workshop (3-6)
ART 412 Life Drawing (3)

Intermediate Studio I (choose 6 credits)
Students must take two intermediate-level studio courses within their primary studio area. Graphic Design students are required to take Art 302 and 304. Students in other studio areas must consult with an advisor. The studio areas are: ceramics, drawing, graphic design, installation, painting, photography, printmaking, and sculpture. All intermediate-level studio courses must be at the 300 level.

Intermediate Studio II (choose 6 credits)
Students must take two intermediate-level studio courses within their secondary studio area. The studio areas are: ceramics, drawing, graphic design, installation, painting, photography, printmaking, and sculpture. All intermediate-level studio courses must be at the 300 level.
ART 300 - 399
ART 391 Portfolio Review (0)

Art/Design History

Advanced Courses (choose 6 - 9 credits)
ART 417 Medieval Art and Architecture (3)
ART 419 Gender in Art (3)
ART 460 Ancient Art (3)
ART 462 Renaissance Art (3)
ART 463 Mannerism to Romanticism (3)
ART 467 Art of the Islamic World (3)
ART 468 Design: History and Theory (3)
ART 469 Asian Art (3)
ART 477V Modern Islamic Art (3)

Capstone

Senior Exhibit (choose 1 credit)
Students are required to participate in an exhibit the semester they intend to graduate. The course includes the planning, installation, and de-installation of a group exhibition.
ART 495 Senior Exhibit (0-1)

Major Emphasis: Graphic Design

ART 202 Introduction to Digital Media (3)
ART 220 Graphic Design I (3)
ART 230 Graphic Design II (3)
ART 402 Motion Graphics (3)
ART 404 Typography II (3)
ART 406 Web Design (3)
ART 420 Graphic Design III (3-6)

Graphic Design Electives (choose 6 credits)
ART 324 Concept and Image (3)
ART 400 Graphic Design Special Topics (3-6)
ART 436 Web Design II (3)
ART 444 Typography III (3)
ART 497 Internship (1-6)
ART 499 Individual Study (1-6)

ART BFA - GRAPHIC DESIGN
Degree completion = 120 credits

Required General Education
ART 260 Art History Survey I (3)
ART 261 Art History Survey II (3)

Major Common Core
ART 103 Three-Dimensional Design (3)
ART 202 Introduction to Digital Media (3)
ART 220 Graphic Design I (3)
ART 302 Interactive Design Survey (3)
ART 304 Typography I (3)
ART 320 Graphic Design II (3)
ART 391 Portfolio Review (0)
ART 402 Motion Graphics (3)
ART 404 Typography II (3)
ART 406 Web Design (3)
ART 420 Graphic Design III (3)
ART 466 Realism to Postmodernism (3)
ART 495 Senior Exhibit (0-1)

Major Restricted Electives

Design Foundations (choose 3 credits)
ART 100 Elements and Principles (3)
ART 101 Design Foundations (3)
Advanced Art History (choose 3 credits)
ART 417 Medieval Art and Architecture (3)
ART 457 Art of the Islamic World (3)
Graphic Design (choose 3 credits)
ART 420 Graphic Design III (3-6)
ART 497 Internship (1-6)
ART 499 Individual Study (1-6)
Drawing (choose 3 credits from courses not taken)
ART 210 Drawing (3)
ART 212 Life Drawing (3)
ART 310 Drawing (3)
ART 410 Drawing Workshop (3-6)
ART 412 Life Drawing (3)
Advanced Art History (choose 3 credits from courses not taken)
ART 413 Scandinavian Art (3)
ART 416 Art of Africa, the Americas, and the South Pacific (3)
ART 417 Medieval Art and Architecture (3)
ART 419 Gender in Art (3)
ART 460 Ancient Art (3)
ART 462 Renaissance Art (3)
ART 463 Mannerism to Romanticism (3)
ART 467 Art of the Islamic World (3)
ART 468 Design: History and Theory (3)
ART 469 Asian Art (3)
ART 492 Art History Seminar (1-6)
ART 494 Topics (3)

Advanced Art History/Drawing (choose 3 credit from courses not taken)
ART 210 Drawing (3)
ART 212 Life Drawing (3)
ART 310 Drawing (3)
ART 410 Drawing Workshop (3-6)
ART 412 Life Drawing (3)
ART 413 Scandinavian Art (3)
ART 416 Art of Africa, the Americas, and the South Pacific (3)
ART 417 Medieval Art and Architecture (3)
ART 419 Gender in Art (3)
ART 460 Ancient Art (3)
ART 462 Renaissance Art (3)
ART 463 Mannerism to Romanticism (3)
ART 467 Art of the Islamic World (3)
ART 468 Design: History and Theory (3)
ART 469 Asian Art (3)
ART 492 Art History Seminar (1-6)
ART 494 Topics (3)

Studio Electives
Students must complete four courses from four different areas.
Drawing
ART 210 Drawing (3)
ART 212 Life Drawing (3)
Mixed Media
ART 231 Mixed Media (3)
Painting
ART 240 Painting (3)
ART 245 Watercolor (3)
Ceramics
ART 250 Ceramics: Beginning Wheel (3)
ART 251 Ceramics: Beginning Handbuilding (3)
Printmaking
ART 270 Printmaking: Beginning Relief/Silkscreen (3)
ART 271 Printmaking: Beginning Intaglio/Lithography (3)
Photography
ART 275 Photography (3)
Sculpture
ART 280 Sculpture (3)

Second Concentration (choose six credits from one area)
Drawing
ART 310 Drawing (3)
ART 410 Drawing Workshop (3-6)
ART 412 Life Drawing (3)
Painting [ART 340 may be taken twice]
ART 340 Painting (3)
ART 345 Watercolor (3)
Ceramics [ART 350 must be taken twice to produce 6 credits]
ART 350 Intermediate Ceramics (3)
Printmaking [ART 370 may be taken twice]
ART 370 Printmaking: Intermediate Studio (3)
ART 372 Digital Printmaking (3)
Photography
ART 375 Black and White Photography (3)
ART 377 Digital Photography (3)
Sculpture [ART 380 must be taken twice to produce 6 credits]
ART 380 Sculpture (3)

Required Minor: None.

ART STUDIO MINOR

Core
ART 110 Drawing Foundations (3)

Restricted Electives (choose 3 credits)
ART 100 Elements and Principles of Art (3)
ART 101 Design Foundations (3)

Unrestricted Electives (choose 12 credit)
Select 12 credits of Art Studio courses in consultation with an art advisor.
ART 103 - 499 Must select from Art Studio courses.

GRAPHIC DESIGN MINOR

The minor in graphic design is intended to provide a beginning to intermediate level experience in the theory and methods of print-based and screen-based forms of visual communication.

Students will:
1. apply a basic proficiency with the digital tools used for producing print and digital forms of communication;
2. apply understanding of typographic structures and hierarchies;
3. develop ability to create icons, symbols, and logos;
4. apply understanding of visual systems used in brand identity;
5. understand how to design for screen-based forms of communication and interactions;
6. create intermediate level work in:
   a. print based production techniques and brand identity systems (Art 320);
   b. motion graphics (Art 402);
   c. typographic hierarchy, structure, and editorial design fundamentals (Art 404);
   d. screen-based forms of communication and interactions (Art 406);
   e. visual concepts and digital illustration techniques (Art 324).

Course
ART 202 Introduction to Digital Media (3)
ART 220 Graphic Design I (3)
ART 302 Interactive Design Survey (3)
ART 304 Typography I (3)

Restricted Electives (choose 6 credits)
ART 320 Graphic Design II (3)
ART 324 Concept and Image (3)
ART 402 Motion Graphics (3)
ART 404 Typography II (3)
ART 406 Web Design (3)

COURSE DESCRIPTIONS

ART 100 (3) Elements and Principles of Art
2-D visual problem solving and art-making strategies using the elements and principles of design. For elementary education majors and general education.
Fall, Spring
GE-6

ART 101 (3) Design Foundations
For art, art history and art education majors.
Fall, Spring

ART 103 (3) Three-Dimensional Design
An introduction to concepts and processes related to the visual and physical organization of three-dimensional form and space.
Fall, Spring

ART 110 (3) Drawing Foundations
Introduction to traditional drawing techniques and concepts.
Fall, Spring

ART 160 (3) Introduction to Visual Culture
Introduction to Western and non-Western visual arts and the variety of methods by which art is understood. These may include art appreciation, art criticism, the history of art, popular culture, and aesthetic awareness.
Fall, Spring
GE-6, GE-8
Diverse Cultures - Purple

GE-6

GE-8
ART 202 (3) Introduction to Digital Media
This graphic design course is an introduction to digital media technology as a creative tool for the development of visual expression. The course is taught using the Mac OS and explores vector and bitmap image making.
Prerequisite: ART 100 or ART 101, ART 110

ART 210 (3) Drawing
Continued exploration of drawing techniques and concepts.
Prerequisite: ART 110
Fall, Spring

ART 212 (3) Life Drawing
Experience in drawing the human figure.
Prerequisite: ART 110
Fall, Spring

ART 220 (3) Graphic Design I
This course explores the basic principles of graphic design. Emphasis is placed on developing an awareness and effective use of type, image, and symbol. Students focus on the design process as a way to develop and refine design solutions.
Prerequisite: ART 103, ART 202
Fall, Spring

ART 225 (3) Developing Creativity: Approaches and Techniques
Art 225 offers art experiences with a focus on working with children. The class will be introduced to methods and materials that work best with these populations. The course includes an introduction to a broad scope of artists and artworks that reflect our culturally diverse country, as well as the global nature of our world. Visual culture, work of fine art, museum analysis, installations, performances, video art, and graffiti will be discussed. Students will participate in hands-on art making activities through studio experiences, they will write and reflect on the outcomes, and they will participate in critiques and discussions.
Fall, Spring
GE-6, GE-7

ART 231 (3) Mixed Media
Multimedia art exploration is a problem-solving art studio experience involving the use of a variety of traditional and non-traditional art materials.
Fall, Spring
GE-6

ART 240 (3) Painting
Beginning experience with oil and/or acrylic paint. Emphasis upon technical and conceptual development.
Prerequisite: ART 100 or ART 101, ART 110 or consent
Fall, Spring

ART 245 (3) Watercolor
Introduction to basic techniques in watercolor.
Prerequisite: ART 100 or ART 101, ART 110 or consent
Fall, Spring

ART 250 (3) Ceramics: Beginning Wheel
An introduction to basic wheel throwing techniques exploring the potential of clay as a creative and expressive material.
Prerequisite: ART 100 or ART 101, ART 103 or consent
Fall, Spring

ART 251 (3) Ceramics: Beginning Handbuilding
An introduction to basic sculptural hand building techniques exploring the nature of clay as a creative-expressive medium.
Prerequisite: ART 100 or ART 101, ART 103 or consent
Fall, Spring

ART 260 (3) Art History Survey I
Introduction to art history from prehistoric and ancient cultures through the Middle Ages. Includes representative examples and styles of art and architecture of Western (Europe and the Near East) and non-Western cultures (China, India, Japan, Southeast Asia, Africa, Mesoamerica, South America, North America, Australia). Fall
GE-6, GE-8

Diverse Cultures - Purple

ART 261 (3) Art History Survey II
Lecture-based survey of the Art and Architecture of both Western and non-Western countries from the thirteenth through twentieth centuries. Spring
GE-6, GE-8

ART 265W (3) Art As Politics
This course analyzes relationships between art and politics from ancient times through today, exploring uses of art from persuasion to overt propaganda in visual arts and architecture. It will deal with diverse cultures, covering material from a global perspective. Summer
WI, GE-6, GE-8

ART 270 (3) Printmaking: Beginning Silkscreen and Lithography
Introduction to silkscreen and lithography printmaking processes including silkscreen, monotype, and plate lithography.
Prerequisite: ART 101, ART 110 or consent
Fall

ART 271 (3) Printmaking: Beginning Intaglio/Relief
Introduction to intaglio and relief printmaking processes including collagraph, etching, relief carving, and engraving.
Prerequisite: ART 101, ART 110 or consent
Spring

ART 275 (3) Photography
Introduction to the techniques and expressive potential of B/W photography.
Fall, Spring
GE-6

ART 280 (3) Sculpture
Exploration of the visual and physical organization of three-dimensional form and space through problems employing various media and processes.
Prerequisite: ART 103 or consent
Fall, Spring

ART 285 (3) Introduction to Installation
This studio course familiarizes students with the basic concerns of installation art, including relationship to site and audience. A variety of materials and approaches will be explored. Environmental impact, health, and safety will be addressed. In addition to studio work, historical and contemporary examples will be discussed to provide context and encourage awareness of the discipline's past and present potential.
Fall, Spring
Prerequisite: ART 103 or consent

ART 294 (3) Topics
Lecture/discussion/studio course on a selected area of discourse relating to the study of Art History, Art Criticism, Art Education or Art Studio. May focus on a specific artist, style period, cultural group or technical or methodological problem.
Fall, Spring, Summer

ART 302 (3) Interactive Design Survey
This course explores the foundations of screen-based design. The course emphasizes the application of design sensibilities to both motion and web design production.
Prerequisite: ART 103, ART 202

ART 304 (3) Typography I
This course investigates the use of letterforms in the message making process. Topics include historical overview of letter development, type terminology, type and image relationships, and technical and aesthetic applications of type.
Prerequisite: ART 103, ART 202

ART 310 (3) Drawing
This course encourages experimental approaches that build on drawing skills developed in ART 110 and ART 210. Formal and conceptual issues will be addressed as students pursue individualized subject matter. Course may be repeated.
Prerequisite: ART 210

ART 320 (3) Graphic Design II
This course expands upon the beginning and intermediate design experience. Emphasis is placed on concept development and the exploration of meaningful solutions applied across a variety of media. The technical skills of preparing work for production will be strengthened.
Prerequisite: ART 220, ART 302, ART 304

ART 324 (3) Concept and Image
This course strengthens students' conceptual skills within the context of graphic design. The course emphasizes various techniques for generating imagery to more effectively communicate ideas.
Prerequisite: ART 220, ART 302, ART 304
Spring
ART 340 (3) Painting
Intermediate painting. Emphasizing individual creative development. Must be taken twice before advancing to ART 440.
Prerequisite: ART 240 or consent
Fall, Spring

ART 345 (3) Watercolor
Experience in advanced watercolor techniques and concepts. Must be taken twice before advancing to ART 445.
Prerequisite: ART 245 or consent
Fall, Spring

ART 350 (3) Intermediate Ceramics
An intermediate course emphasizing personal exploration and creative research relating to hand building, molding processes and/or the potters wheel. Must be taken twice before advancing to ART 450.
Prerequisite: ART 250 or ART 251
Fall, Spring

ART 370 (3) Printmaking: Intermediate Studio
Continued exploration of intaglio, lithographic, relief and silk-screen processes. Must be taken twice before advancing to ART 470.
Prerequisite: ART 270 or ART 271
Fall, Spring

ART 372 (3) Digital Printmaking
This is an intermediate course focusing exclusively on materials, technique, process, equipment, and safety in contemporary digital printmaking processes.
Prerequisite: ART 202, ART 271
ART 375 (3) Black and White Photography
Intermediate level material on camera work, processing, and calibration. In rotation with ART 377.
Prerequisite: ART 275 Variable

ART 376 (3) Color Photography
Processing, color theory, color correction, and other considerations in color photography.
Prerequisite: ART 275 Variable

ART 377 (3) Digital Photography
Covers the making, manipulation and use of electronically produced photographic images. Topics include Kodak Photo CD, digital camera use, electronic photo retouching, computer image enhancement and combination, and incorporation of traditional techniques for creative solutions of fine and commercial art problems. In rotation with ART 375.
Prerequisite: ART 275 Variable

ART 380 (3) Sculpture
Investigation of three-dimensional form, space and media in search of a personal aesthetic statement. Must be taken twice before advancing to ART 480.
Prerequisite: ART 280
Fall, Spring

ART 385 (3) Intermediate Installation
This studio course explores a wide range of material and conceptual strategies to site-specific work. Personal approaches will be stressed as students develop and implement their own installations. Environmental impact, health, and safety will be addressed. In addition to studio work, the course will cover a variety of installation artists and related readings. Must be taken twice before advancing to ART 485.
Prerequisite: ART 285 or consent
Fall, Spring

ART 391 (0) Portfolio Review
Required of all B.F.A. majors before taking 4XX advanced studio specialization sequence to continue in program.
Fall, Spring

ART 400 (3-6) Graphic Design Special Topics
This advanced course investigates design related topics in greater depth.
Prerequisite: ART 302 and ART 320

ART 402 (3) Motion Graphics
This course is an advanced study of motion design. The study and exploration of digital narrative and non-linear storytelling are key components. Students build on existing motion design skills to create conceptually and technically advanced time-based solutions. This course is repeatable.
Prerequisite: ART 220, ART 302, ART 304

ART 404 (3) Typography II
This course is an advanced study of typography. Students build on existing type sensibilities while exploring traditional and non-traditional applications of type.
Prerequisite: ART 220, ART 302, ART 304

ART 406 (3) Web Design
This course is an advanced study of front-end web design that focuses on current web standards and aesthetic trends.
Prerequisite: ART 220, ART 302, ART 304

ART 410 (3-6) Drawing Workshop
Continued in-depth exploration of drawing techniques and concepts. May be repeated.
Prerequisite: ART 310
Fall, Spring

ART 412 (3) Life Drawing
Advanced experience in drawing from the human figure. May be repeated.
Prerequisite: ART 212 or ART 310
Fall, Spring

ART 413 (3) Scandinavian Art
Overview of representative examples of the history of Scandinavian art from pre-Viking to modern times, concentrating on elements typical of each country or period and on developments that were particularly influential in the broader history of Western art.
Prerequisite: ART 260, ART 261 or consent
Variable

ART 416 (3) Art of Africa, the Americas, and the South Pacific
Introduction to the art and architecture of indigenous peoples. Examination of representative works of art and major styles and cultures of preliterate societies in Africa, the Americas, Oceania, and of Pre-Columbian civilizations in the Americas.
Variable
Diverse Cultures - Purple

ART 417 (3) Medieval Art and Architecture
Introduction to art and architecture of Western Europe, the Byzantine Empire, and the Islamic world, from the second to the fifteenth centuries. Examination of representative works of art and major styles of Christian, Jewish, and Islamic cultures, including the Romanesque and Gothic periods.
Spring
Prerequisite: ART 260 or consent

ART 419 (3) Gender in Art
Historical survey of the representation of gender with comparison of the artistic efforts of males and females and examination of art used to present gender-based issues including homosexuality, feminism, censorship and pornography.
Prerequisite: ART 261 or consent
Variable

ART 420 (3-6) Graphic Design III
This course is split between engagement in advanced design problems and preparation for entry into the graphic design field. This course is repeatable.
Prerequisite: ART 320, ART 404, ART 406

ART 421 (2) Art Methods Elementary School
Art expression related to child growth, development and teaching strategies. (Required for student teaching and certification.)
Prerequisite: ART 100 or ART 101, Jr. status or consent
Fall, Spring

ART 424 (3) Art Education for the Exceptional Child
Current theory and practice of teaching art to students with physical, emotional, and developmental exceptionalities. Includes experiences in elementary classrooms.
Prerequisite: ART 421
Variable

ART 426 (3) Art Methods Secondary School
The characteristics of art expression and evaluation at the junior and senior high school level: the status, curricula and strategies of teaching. (Required for student teaching.)
Prerequisite: ART 421
Fall
ART 428 (3) Teaching Art: Historical and Contemporary Topics
Application of instruction in art history as well as contemporary art to elementary and secondary schools. Includes experiences in elementary classrooms. Prerequisite: ART 260, ART 261, ART 421 or consent Variable

ART 429 (1) Art Education Seminar
Capstone experience for students preparing to teach art. Explores and emphasizes information and skills appropriate for teaching art. Variable

ART 434 (3) Arts Administration
Theoretical and practical aspects of administering arts organizations. Examines the management, budgeting, marketing and administration of arts programs and organizations in the postmodern era. Fall, Spring

ART 436 (3) Web Design II
This course continues students’ advanced study of front-end web design. Emphasis is placed on designing for multiple screen devices. Prerequisite: ART 404, ART 406 Fall, Spring

ART 440 (3-6) Painting
Advanced painting. Continued development of a focused individual expression. May be repeated. Prerequisite: ART 340 Fall, Spring

ART 444 (3) Typography III
This course continues students’ advanced study of typography. Emphasis is placed on designing complex typographic systems, multiple page publications, and expressive type-based solutions. Prerequisite: ART 320, ART 404, ART 406 Fall, Spring

ART 445 (3-6) Watercolor
Advanced experience in watercolor. May be repeated. Prerequisite: ART 345 Fall, Spring

ART 450 (3-6) Advanced Ceramics
An advanced course which emphasizes individual research in technical, aesthetic and conceptual considerations. May be repeated. Prerequisite: ART 350 Fall, Spring

ART 460 (3) Ancient Art
Introduction to the art and architecture of the ancient era in its historical and cultural frameworks. Examination of representative works of art and major styles of ancient Mesopotamian, Egyptian, Aegean, Greek, Etruscan, and Roman cultures. Prerequisite: ART 260 or consent Variable

ART 462 (3) Renaissance Art
Origins and development of Northern and Italian Renaissance art and architecture as an expression of historical, cultural and religious issues. Prerequisite: ART 260 or consent Fall, Spring

ART 463 (3) Mannerism to Romanticism
Historical survey of art and architecture from the late sixteenth to mid-nineteenth century: Mannerism, Baroque, Rococo, Neoclassicism and Romanticism. Prerequisite: ART 261 or consent Fall, Spring

ART 464 (3) Art Museum and Exhibition Studies
The study of art museum history, theory and practice, including ethics, collecting, and display. Alongside these studies, students will conceive and realize an exhibition in order to further develop knowledge of and experience in the field. Prerequisite: ART 260, ART 261 Fall, Spring

ART 466 (3) Realism to Postmodernism
Historical survey of art, architecture and urban planning in Europe and America from the mid-nineteenth century to the present: Realism, Impressionism, Expressionism, Surrealism, Abstract Expressionism, Minimalism, Op Art, Pop Art, and Postmodern issues and trends. Prerequisite: ART 261 or consent Fall

ART 467 (3) Art of the Islamic World
Historical survey of art and architectural developments from Islam’s origins through the twentieth century. Course focuses on contextualizing monuments, paintings, and other arts from various regions around the world. Spring Diverse Cultures - Purple

ART 468 (3) Design: History and Theory
Survey of Graphic Design, Industrial Design and Architecture from historical and theoretical perspectives. Design issues examined from formal and contextual points of view, using analysis strategies that consider style, composition, historical context, functional/propagandistic significance and communicative ability. Variable

ART 469 (3) Asian Art
Historical survey of the art and architecture of China, India, Korea and Japan from pre-history to the 20th century. Prerequisite: ART 260, ART 261 or consent Variable Diverse Cultures - Purple

ART 470 (3-6) Printmaking: Advanced Studio
Continued investigation of advanced print making techniques and concepts. May be repeated. Prerequisite: ART 370 Fall, Spring

ART 475 (3-6) Photography
Expanding technical knowledge and visual awareness while building a portfolio in selected areas. May be repeated. Prerequisite: ART 375, ART 376 or consent Fall, Spring

ART 477W (3) Modern Islamic Art
Investigation of developments in sacred and secular art and architecture in various regions of the world, exploring themes such as nation-building, modernization vs. tradition, post colonialism among others, since the 19th century. Even Years Fall, Spring Diverse Cultures - Purple

ART 480 (3-6) Sculpture
Continuing development of a strongly personal means of aesthetic expression in three dimensions. May be repeated. Prerequisite: ART 380 Fall, Spring

ART 485 (3-6) Advanced Installation
This studio course focuses on the planning and implementation of site-specific work. Students’ personal interests will be paramount in the development of works that address site and audience. Professional practices necessary to carry out installations will be emphasized, including proposal development, project planning, and documentation. Environmental impact, health, and safety will be addressed. The course will cover a variety of installation artists and related readings. May be repeated. Prerequisite: ART 385 or consent Fall, Spring

ART 490 (1-6) Workshop
ART 491 (1-4) In-Service
ART 492 (1-6) Art History Seminar
Specific problems in art emphasizing both individual research and contributions to the seminar group on advanced, in-depth topics. Prerequisite: Consent Variable

ART 494 (3) Topics
Lecture/discussion/studio course on a selected area of discourse relating to the study of Art History, Art Criticism, Art Education or Art Studio. May focus on a specific artist, style period, cultural group or technical or methodological problem. Variable
ART CONTINUED

ART 495 (0-1) Senior Exhibit
A required course in all art major degree programs. Students plan and present art work in an exhibition. Can not be taken same semester as student teaching.
Prerequisite: Consent
Fall, Spring

ART 496 (1) Art History Senior Thesis
Capstone writing project. Advanced study and research required. Topic of the senior thesis determined jointly by the student and the faculty advisor. Required for art history specialization and art history major. A less expansive project is required for the art history minor.
Prerequisite: Consent of advisor
Fall, Spring

ART HISTORY BA AND MINOR

Art History
College of Arts & Humanities
Department of Art
136 Nelson Hall • 507-389-6412
Website: mnsu.edu/artdept/

Chair: Brian Frink
Faculty: Bradley Cottle, Alisa Eimer, Curt Germundson, Mika Iaidlaw, Liz Miller, David Rogers, Areca Rowe, Ellen Schollfield, Todd Shanafelt, Amy Toscani, Gina Wenger, Matt Willemsen, Joshua Winkler

Accreditation-Art: The National Association of Schools of Art and Design (NASAD)
The National Council for Accreditation of Teacher Education (NCATE)
The Department of Art program is devoted to the development of concepts, attitudes and skills in the visual arts within a broad university curriculum of liberal arts orientation. There are four objectives: professional training of artists and scholars in chosen areas of specialization, preparation of art educators, elective study for students in all areas of the university, and service to the local communities as a source of cultural enrichment. The Department of Art is accredited by the National Association of Schools of Art and Design.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
A program planning guide for each major is available in the Department of Art office. Students should obtain one to aid in the planning of their program. Advisory services are available. Drawing and design courses in the art core should be taken during the first year.

Admission to Major is granted by the department. Minimum University admission requirements are:
- a minimum of 32 earned semester credit hours;
- a minimum cumulative GPA of 2.00 ("C").

In addition to minimum University admission requirements students requesting admission to the art and education majors must complete the following:
- ART 101 (3) (Preferred) or ART 100 (3)
- ART 260 or ART 261

Students for all majors may be admitted provisionally while these requirements are being satisfied.

Contact the department for application procedures.

P/N Grading Policy. A student majoring in art may take a maximum of one-fourth of the art credits for P/N grades and must comply with the university P/N requirements.

GPA Policy. A 2.0 GPA is required. For admission to and graduation from the BFA program students must have a minimum cumulative GPA of 2.5. Students on academic probation should refer to the College of Arts and Humanities policy regarding required advising.

Studio courses require two scheduled hours of class meeting time under the direct guidance of the instructor and a minimum of one additional hour of work at the discretion of the student for each credit hour earned.

The frequency of course offerings should be verified with your art advisor or the art department office, since some changes caused by unanticipated circumstances may occur.

Art majors and minors must meet with the Art Department chairperson two semesters prior to their anticipated graduation date so that their graduation credits can be evaluated.

All students should check with the central art office concerning the future availability of courses needed for graduation. ART 421 Art Methods Elementary School, should be taken no sooner than the junior year and is required by state licensure before student teaching. The prerequisite for ART 421 is ART 100 or ART 101.

The total number of transfer credits accepted for each major/minor is as follows: BFA (24), BS (18), BA (15), and Minor (6).

The Department of Art may request the retention of student work for its permanent instructional and exhibition collection. It reserves the right to photograph students and their work. In addition, the department cannot insure student work, material and equipment or take responsibility for its loss or damage.

Art students with junior or senior standing are encouraged to seek internship opportunities in career-related settings that may include museums, production studios, design firms, and other approved venues. Arrangements are made on an individualized basis. A maximum of 6 credits may be applied toward specializations within BA, BS, or BFA degree programs.

Notations showing the costs of individual courses are included in the schedule of classes. In some cases, student fees are charged for materials used. Verifying such information with the individual instructor is suggested.

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required Professional Education courses. The Bachelor of Science in Art Education major must pass all content area coursework with a grade of “C” or higher.

ART HISTORY BA
Degree completion = 120 credits

The Bachelor of Arts degree in Art History is a thorough liberal arts degree that provides students with a general knowledge of major artists, styles, and monuments of both Western and non-Western art. Writing and reading assignments within the courses and the Art History Senior Thesis will further critical thinking, analysis, and knowledge of theory and methods. Knowledge of at least one foreign language will enable students to use primary source materials in their further career. The core requirements in studio will give students insights into the creative process.

Required General Education
ART 260 Art History Survey I (3)
ART 261 Art History Survey II (3)

Major Common Core
ART 391 Portfolio Review (0)
ART 417 Medieval Art and Architecture (3)
ART 460 Ancient Art (3)
ART 466 Realism to Postmodernism (3)
ART 496 Art History Senior Thesis (1)
A program planning guide for each major is available in the Department of Art. Students should obtain one to aid in the planning of their program. Advisory services are available.

Art Teaching

College of Arts & Humanities
Department of Art
136 Nelson Hall • 507-389-6412
Website: mnsu.edu/artdept/

Chair: Brian Frink
Faculty: Bradley Coulter, Alisa Eimen, Curt Germundson, James B. Johnson, Mika Laidlaw, Liz Miller, David Moano, David Rogers, Ellen Scholfield, Todd Sandefelt, Gina Wenger, Matt Willemsen, Joshua Winkler

Accreditation: The National Association of Schools of Art and Design (NASAD)
The National Council for Accreditation of Teacher Education (NCATE)

The Department of Art program is devoted to the development of concepts, attitudes and skills in the visual arts within a broad university curriculum of liberal arts orientation. There are four objectives: professional training of artists and scholars in chosen areas of specialization, preparation of art educators, elective study for students in all areas of the university, and service to the local communities as a source of cultural enrichment. The Department of Art is accredited by the National Association of Schools of Art and Design.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
A program planning guide for each major is available in the Department of Art office. Students should obtain one to aid in the planning of their program. Advisory services are available.

Drawing and design courses in the art core should be taken during the first year. Admission to Major is granted by the department. Minimum University admission requirements are:
- A minimum of 32 earned semester credit hours;
- A minimum cumulative GPA of 2.00 (“C”).

In addition to minimum University admission requirements students requesting admission to the art and art education majors must complete the following:
- ART 101 [3] (Preferred) or ART 100 [3]
- ART 260 or ART 261

Students for all majors may be admitted provisionally while these requirements are being satisfied.

Contact the department for application procedures.

P/N Grading Policy. A student majoring in art may take a maximum of one-fourth of the art credits for P/N grades and must comply with the university P/N requirements.

GPA Policy. A 2.0 GPA is required. For admission to and graduation from the BFA program students must have a minimum cumulative GPA of 2.5. Students on academic probation should refer to the College of Arts and Humanities policy regarding required advising.

Studio courses require two scheduled hours of class meeting time under the direct guidance of the instructor and a minimum of one additional hour of work at the discretion of the student for each credit hour earned. The frequency of course offerings should be verified with your art advisor or the art department office, since some changes caused by unanticipated circumstances may occur.
Art majors and minors must meet with the Art Department chairperson two semesters prior to their anticipated graduation date so that their graduation credits can be evaluated. All students should check with the central art office concerning the future availability of courses needed for graduation. ART 421 Art Methods Elementary School should be taken no sooner than the junior year and is required by state licensure before student teaching. The prerequisite for ART 421 is ART 100 or ART 101.

The total number of transfer credits accepted for each major/minor is as follows: BFA (24), BS (18), BA (15), and Minor (6).

The Department of Art may request the retention of student work for its permanent instructional and exhibition collection. It reserves the right to photograph students and their work. In addition, the department cannot insure student work, material and equipment or take responsibility for its loss or damage.

Art students with junior or senior standing are encouraged to seek internship opportunities in career-related settings that may include museums, production studios, design firms, and other approved venues. Arrangements are made on an individualized basis. A maximum of 6 credits may be applied toward specializations within BA, BS, or BFA degree programs.

Notations showing the costs of individual courses are included in the schedule of classes. In some cases, student fees are charged for materials used. Verifying such information with the individual instructor is suggested.

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required Professional Education courses. The Bachelor of Science in Art Education major must pass all content area coursework with a grade of “C” or higher.

**ART BS, TEACHING**

**Degree completion = 120 credits**

The Bachelor of Science degree in Art Education prepares students for careers as art educators teaching at the elementary and secondary levels.

**Required General Education**

ART 260 Art History Survey I (3)
ART 261 Art History Survey II (3)
KSP 220W Human Relations in a Multicultural Society (3)

**Major Common Core**

ART 100 Elements and Principles of Art (3)
ART 101 Design Foundations (3)
ART 250 Ceramics: Beginning Wheel (3)
ART 270 Printmaking: Beginning Silkscreen and Lithography (3)
ART 421 Art Methods Elementary School (3)
ART 426 Art Methods Secondary School (3)
ART 466 Realism to Postmodernism (3)

**ARTS AND HUMANITIES**

**ARTS AND HUMANITIES Intro. Course**

226 Armstrong Hall • 507-389-1712
Website: www.mnsu.edu/carts/

Dean: Matt Cecil

**ART 495** Senior Exhibit (0-1)

**Design Foundations** (choose 3 credits)
ART 100 Elements and Principles of Art (3)
ART 101 Design Foundations (3)

**ART Education** (choose 3 credits)
ART 424 Art Education for the Exceptional Child (3)
ART 428 Teaching Art: Historical and Contemporary Topics (3)

**Major Restricted Electives**

**STUDIO CONCENTRATION** (choose 12 credits)
Select a minimum of 12 studio credits in your specialization area at the 300/400 level in consultation with the art advisor. Certain 300-level courses need to be taken twice before proceeding to the 400-level. Consult your advisor.

ART 302 Interactive Design Survey (3)
ART 304 Typography I (3)
ART 310 Drawing (3)
ART 320 Graphic Design II (3)
ART 340 Painting (3)
ART 345 Watercolor (3)
ART 350 Intermediate Ceramics (3)
ART 370 Printmaking: Intermediate Studio (3)
ART 372 Digital Printmaking (3)
ART 375 Black and White Photography (3)
ART 377 Digital Photography (3)
ART 380 Sculpture (3)
ART 402 Motion Graphics (3)
ART 404 Typography II (3)
ART 406 Web Design (3)
ART 410 Drawing Workshop (3-6)
ART 412 Life Drawing (3)
ART 420 Graphic Design III (3-6)
ART 440 Painting (3-6)
ART 445 Watercolor (3-6)
ART 450 Advanced Ceramics (3-6)
ART 470 Printmaking: Advanced Studio (3-6)
ART 475 Photography (3-6)
ART 480 Sculpture (3-6)

**Studio Electives:** Students must complete six 200-level studio courses from five different areas.

**Installation**
ART 285 Introduction to Installation (3)

**Required Minor:** None.

**Other Graduation Requirements**

See the Secondary K-12 Professional Education section of the undergraduate catalog for admission requirements for professional education and for a list of required professional education courses.

**COURSE DESCRIPTIONS SEE ART**

**ART 101 (1) Exploring Arts & Humanities**
An interdisciplinary course introducing students to programs and careers offered by disciplines in the College of Arts & Humanities. The course prepares students to select a major to achieve their personal and professional goals. Spring
Astronomy
College of Science, Engineering and Technology
Department of Physics and Astronomy
141 Trafton Science Center N • 507-389-5743
Website: cset.mnsu.edu/pa/

Chair: Thomas R. Brown
Faculty: Paul Eskridge, Steven Kipp

The astronomy program serves the needs of a wide range of students, from those with only a casual interest in the subject to those students planning careers in the field. The 100-level courses (which include general education offerings) are designed to introduce astronomy to the student with a minimal background in mathematics and the physical sciences. The courses taken by astronomy minors cover a variety of topics in modern astronomy and astrophysics and require significant preparations in mathematics and physics. Paired with a major in physics, the astronomy minor serves as the first step toward a career in teaching or research in astronomy.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

GPA Policy. Astronomy minors must maintain a minimum 2.5 GPA in all coursework for their astronomy program, and in addition must earn a “C” or better for a course to apply to their minor. These standards apply to the courses for the degree and their prerequisites. A minimum cumulative GPA of 2.0 is required for graduation. There are no prerequisite GPA requirements for internships.

The astronomers operate two observatories on the southern edge of the campus. Standeford Observatory contains a 14-inch Schmidt-Cassegrain telescope, used for visual observations by general education students and other observatory visitors. Several other 10- to 13-inch telescopes are also available for instructional use by students in Astronomy 125L. Andreas Observatory houses a 0.5-meter computer-controlled Cassegrain telescope. This instrument, which is equipped with photographic and electronic cameras and photometers, is used primarily for advanced instruction and faculty research. Standeford Observatory is open regularly for students and other visitors during the spring and the fall. Public viewing nights at Andreas Observatory are held occasionally during the year as weather permits.

ASTRONOMY MINOR

Core for Minor
AST 125L Observational Astronomy (3)
AST 201 Spherical Astronomy (2)
AST 215 Astronomy and Astrophysics I (4)
AST 225 Astronomy and Astrophysics II (4)
AST 351 Telescope Operations (2)
PHYS 223 General Physics III (3)

COURSE DESCRIPTIONS

AST 101 (3) Introduction to Astronomy
Broad survey of astronomy: the night sky, seasons, moon phases, eclipses, light, telescopes, stars, stellar evolution, galaxies, cosmology, the solar system. Fall, Spring
GE-3

AST 102 (3) Introduction to the Planets
Survey of our solar system: the sun, planets, moons, asteroids, comets, and meteoroids; history of the discovery and exploration of the solar system. Fall, Spring
GE-3

AST 104 (2) Introduction to Experimental Astronomy
Experiments in astronomy; astronomical observations; measurement; interpretation, and analysis of various types of astronomical data. Lab included.

Pre or Co-req: AST 101 or AST 102
Variable
GE-3

AST 115 (2) Life in the Universe
The probability of extraterrestrial intelligent life; the chemical basis of life; planetary environments; habitable zones; the Drake equation; UFOs; space travel; interstellar communication; limits on technical civilizations. Fall, Spring
GE-2, GE-3

AST 125L (3) Observational Astronomy
Techniques for observing with the naked eye, binoculars and small telescopes; constellation and star identification; use of star atlases and handbooks; observations of stars, binaries, clusters, nebulae, planets and the sun and moon, etc. Students will also learn how astronomical theories are formulated and tested by observing phenomena in the sky. Evening observing labs required. Pre requisite: AST 101 or consent
Fall
GE-3

AST 201 (2) Spherical Astronomy
The celestial sphere; coordinate systems; sidereal and solar time; diurnal motion; precession; proper motion; refraction; aberration; parallax. Requires a background in trigonometry.
Spring

AST 215 (4) Astronomy and Astrophysics I
Celestial mechanics; gravitational and tidal forces; stellar motions and parallax; radiation and matter; magnitudes and stellar spectra; binary stars and stellar masses; stellar structure and evolution. Pre requisite: MATH 121 and PHYS 221
Fall

AST 225 (4) Astronomy and Astrophysics II
Stellar endpoints; close binary systems; variable stars; the Milky Way; normal galaxies; galactic evolution; active galaxies and quasars; cosmology. Pre requisite: AST 215, MATH 122, PHYS 222
Spring

AST 294 (1-6) Workshop
A short course devoted to a specific astronomical topic. May be repeated for credit on each new topic. Variable

AST 351 (2) Telescope Operations
Operating the 0.5 meter telescope; operating the BRC 250 astrograph; learning to install and operate ancillary equipment for both telescopes. Pre requisite: AST 201 and AST 215. Consent
Variable

AST 353 (2) Photometry I
Photometric systems; observational techniques of point-source photometry: methods of data reduction; interpretation of data. Pre requisite: AST 215
ALT-Fall

AST 354 (2) Photometry II
Observations of extended sources; photometric calibration of extended sources; use of secondary standard stars. Pre requisite: AST 353
ALT-Spring

AST 355 (2) Astrometry
Reduction of digital images to determine positions, proper motions, and parallaxes of stars, analysis of errors. Pre requisite: AST 201 and AST 215
ALT-Spring

AST 357 (2) Spectroscopy
Line identification; radial velocity determinations; spectral classification. Pre requisite: AST 225
ALT-Fall
ASTRONOMY CONTINUED

AST 420 (3) Stellar Astrophysics
Blackbody radiation; radiative transfer; atomic structure; spectroscopic notation; excitation; ionization; absorption and emission coefficients; line profiles; analysis of stellar spectra.
Prerequisite: AST 225 and PHYS 223
Alt-Fall

AST 421 (3) Stellar Structure
The gaseous state; degenerate matter; equations of stellar structure; polytropes; models of stellar interiors and atmospheres; stellar evolution; nucleosynthesis; stellar endpoints.
Prerequisite: AST 420
Alt-Spring

AST 430 (3) Galactic Structure
Structure, kinematics, and dynamics of our galaxy.
Prerequisite: AST 225, PHYS 222, MATH 223
Alt-Fall

AST 431 (3) Extragalactic Astronomy
Normal galaxies; groups and clusters of galaxies; galaxy interactions and mergers; active galactic nuclei; large-scale structure; galaxy formation and evolution; cosmology.
Prerequisite: AST 430
Alt-Spring

AST 488 (1-4) Seminar
May be repeated for credit on each new topic.
Prerequisite: Consent
Variable

AST 491 (1-6) In-Service
A course designed to upgrade the qualifications of persons on-the-job.
Variable

AST 493 (1-6) Undergraduate Research
Students will conduct supervised research in astronomy.
Prerequisite: Consent
Variable

AST 494 (1-6) Workshop
A short course devoted to a specific astronomical topic. May be repeated for credit on each new topic.
Variable

AST 495 (1-4) Selected Topics
A course in a particular area of astronomy not regularly offered. May be repeated for credit on each new topic.
Prerequisite: Consent
Variable

AST 497 (1-16) Internship
Provides a student the opportunity to gain expertise and experience in a special field under the supervision of a qualified person.
Prerequisite: Consent
Variable

AST 499 (1-8) Individual Study
Individual study under the guidance of an astronomy faculty member.
Prerequisite: Consent
Fall, Spring

ATHLETIC COACHING MINOR

Athletic Coaching
College of Allied Health & Nursing

Department of Human Performance
1400 Highland Center • 507-389-6313
Website: ahn.mnsu.edu/hp/
Chair: Lynnette M. Engeswick
Program Coordinator: Suzannah Armentrout
Faculty: Suzannah Armentrout

This minor prepares students for coaching positions in Minnesota and other states. For further information, contact the Department of Human Performance.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
Student must apply for practicum and athletic coaching minor.

GPA Policy. A 2.0 GPA is required.

P/N Grading Policy. All courses in the minor must be taken “grade only” except HP 482 which is P/N.

ATHLETIC COACHING MINOR

Required for Minor
HP 340 Prevention and Care (2) [Prereq. BIOL 220 (4 cr.), HLTH 210 (3 cr.)]
HP 372 Exercise Science for Coaches (3)
HP 451 Principles of Coaching (3)
HP 462 Sports Administration (3)
HP 470 Psychology of Coaching (3)
HP 482 Coaching Practicum (1)
HLTH 210 First Aid and CPR (3)

Required Electives - Choose two of the following courses (2 credits)
HP 301 Swimming Theory (1)
HP 302 Wrestling Theory (1)
HP 303 Volleyball Theory (1)
HP 304 Track & Field Theory (1)
HP 305 Baseball Theory (1)
HP 306 Football Theory (1)
HP 308 Hockey Coaching Theory (1)
HP 309 Basketball Coaching theory (1)
HP 310 Softball Theory (1)
HP 311 Cross Country Theory (1)
HP 316 Tennis Theory (1)
HP 317 Golf Coaching Theory (1)
HP 318 Soccer Theory (1)

COURSE DESCRIPTIONS
LOCATED UNDER HUMAN PERFORMANCE (HP) COURSE DESCRIPTIONS
Automotive Engineering Technology

Program Objectives.

1. apply knowledge of science, math, statistics, and engineering technology to solve problems encountered in a professional career in the automotive industry.
2. design, analyze and build virtual and real models, and conduct testing in product development environments through applied computer technologies.
3. define and communicate a set of requirements for a system, component or process and develop solutions to satisfy given criteria in an optimal fashion using creativity in design.
4. function effectively as a manager, leader, or member of a team.
5. understand and practice professional, ethical, environmental, and global responsibilities.
6. communicate effectively across all design and management interface levels of an organization.
7. recognize the need for, and then develop, the skills for life-long learning.
8. understand and engage in behavior which respects diversity and global cultures.
9. practice timeliness and quality with regard to work requirements.

Program Outcomes.

Students at the time of graduation are prepared to:

1. provide students with the highest quality education to prepare application-oriented graduates for a broad range of career opportunities in product research, design, development, and technical sales environments.
2. encourage and supporting faculty and students to engage in scholarly research and activities through partnerships with government, industry, and other constituencies that support effective and ethical transfer of technology.
3. provide access to state of the art equipment, facilities, and methodologies, along with faculty expertise to benefit AET students, and
4. broaden access to the program for diverse populations and support of K12 pipeline development.

Program Description.

The Automotive Engineering Technology (AET) degree program awards a Bachelor of Science degree (BS) to successful students through a four-year curriculum.

Engineering technology has been defined as the part of the technological field which requires the application of scientific and engineering knowledge and methods combined with technical skills in support of engineering activities; it lies in the occupational spectrum between the craftsman and the engineer at the end of the spectrum closest to the engineer. Engineering technology is oriented less toward theory and more toward practical applications. - American Society of Engineering Education (ASEE).

The Automotive Engineering Technology degree program prepares graduates for careers in product research, design and development, manufacturing, and technical sales in the original equipment and aftermarket industries. Fields include passenger cars, trucks, motorcycles, recreational vehicles, vehicle emissions, safety, fuels and lubricants, construction, industrial, and agricultural equipment. Graduates from the program are currently working for original equipment manufacturers (OEMs), such as General Motors, Polaris, John Deere, AGCO, and Ford along with aftermarket companies such as Competition Cams, OTC, and S&S Cycle. A complete reference to companies employing AET graduates may be obtained from the Department Chair.

The Society of Automotive Engineers (sae.org) and National Institute of Automotive Service Excellence (asee.com) are the lead professional societies used in developing program criteria, guiding program relevance, and making continuous improvement.

The primary goal of the AET program is to provide all graduates with the solid technical foundation necessary to insure their success in a wide variety of employ opportunities. To accomplish this goal, program outcomes and objectives are defined and assessed for continuous improvement.

Accreditation.

The Automotive Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (ETAC/ABET), 415 N. Charles Street, Baltimore, MD 21201, 410.347.7700, www.ABET.org.

The mission of the Automotive Engineering Technology (AET) degree program at Minnesota State Mankato, is to provide a broad-based education for graduates to enter globally competitive automotive careers to serve the citizens of Minnesota and the world by:

- providing the highest quality education to prepare application-oriented graduates for a broad range of career opportunities in product research, design, development, and technical sales environments;
- encouraging and supporting faculty and students to engage in scholarly research and activities through partnerships with government, industry, and other constituencies that support effective and ethical transfer of technology;
- providing access to state of the art equipment, facilities, and methodologies, along with faculty expertise to benefit AET students; and
- broadening access to the program for diverse populations and support of K12 pipeline development.

POLICIES/INFORMATION

Admission to the AET Major is granted by the Department of AMET. Admission to the major is required to register for 300-level courses. Minimum requirements for acceptance into the AET major include a cumulative GPA of 2.0 or higher and the completion of the courses listed in the Prerequisites to the Major in the AET section of this bulletin with a grade of “C” (2.0) or higher.

GPA Policy. A GPA of 2.5 or higher in the required courses for the major or minor in Automotive Engineering Technology is required in order to proceed in the program sequence and graduate. This GPA calculation is based on the following areas:

Required General Education, Prerequisite to the Major, Major Common Core and Major Restricted Electives. Refer to the College of Science Engineering and Technology Student Advising Center regarding required advising for students on academic probation.

Department Grade Policy. All courses required for the AET major (Required General Education, Prerequisite to the Major, Major Common Core and Major Restricted Electives) must be completed with a grade of “C” (2.0) or better except for AET 387, AET 488W, and AET 489W.

P/N Grading Policy. No more than 1/4 of all undergraduate credits may be P/N, except those courses offered P/N only.

Residency. A minimum of 50 percent of the credits for a major or minor in Automotive Engineering Technology must be taken at Minnesota State Mankato.

Prerequisites and co-requisites must be observed unless written permission is obtained from the instructor and the Department of AMET. A flow chart of prerequisites is available at the Department Office and on the AMET website.

The scheduling of all department courses is done biannually, based on enrollment and staffing. To obtain a current class schedule, contact the Department.

AUTOMOTIVE ENGINEERING TECHNOLOGY BS

Degree completion = 128 credits

Required General Education

CHEM 104 Introduction to Chemistry (3)
ECON 202 Principles of Microeconomics (3)
ENG 271W Technical Communication (4)
STAT 154 Elementary Statistics (4)

Prerequisites to the Major

AET 102 Introduction to Automotive Engineering Technology (1)

www.mnsu.edu 2018-2019 Undergraduate Catalog 51
### COURSE DESCRIPTIONS

**AET 102 (1) Introduction to Automotive Engineering Technology**  
An overview of careers, technology and requirements of the Automotive Engineering Technology program. Careers in engineering technology are examined along with professional organizations and ethics.  
*Fall*

**AET 160 (4) Automotive Technology & Systems**  
This course is centered on the theory, operation and service of the systems found in modern automobiles. Lectures and demonstrations cover the course topics and open lab sessions allow students to practice procedures on their own vehicles in the completion of course assignments.  
*Fall, Spring*

**AET 261 (4) Automotive Driveability and Diagnosis**  
This course focuses on the engine's mechanical, ignition, fuel, and emission systems using a systems approach to diagnose problems. Test equipment used in the course includes: fuel and fuel system; emission system; ignition oscilloscopes; valve refubishing and mechanical diagnostic equipment.  
*Fall, Spring*

**AET 262 (4) Automotive Computers and Electronics**  
This course is centered on the theory, components, and diagnostic procedures related to modern automobile electrical and electronic systems. The major emphasis of the course involves the computer, sensors, and actuators as used in vehicles to control the ignition, fuel, emission, ABS, and chassis systems.  
Prerequisite: AET 160, AET 261, EET 113  
*Fall, Spring*

**AET 334 (3) Fluid Power**  
Course provides a fundamental understanding of the physical principles of fluid power, along with a practical working knowledge of the components utilized in designing, installing, operating, and maintaining hydraulic and pneumatic power systems.  
Prerequisite: MATH 121, PHYS 211  
*Fall, Spring*

**AET 364 (4) Chassis Design and Performance Testing**  
This course is an exploration of the theory and design of chassis systems, in addition to evaluation of these designs. Research tools include software design simulators, chassis geometry gauges, and dynamometers.  
Prerequisite: MATH 121, PHYS 211  
*Fall, Spring*

**AET 366 (3) Automotive Thermodynamics and Engine Design**  
This course focuses on the study of thermodynamics as it relates to internal combustion engines and their design. Static and dynamic engine measurements are thoroughly covered along with an introduction to fuel cell and hybrid applications. Thermochemistry topics are covered including fuel characteristics, mixture ratios and emission characteristics.  
Prerequisite: CHEM 104, MATH 121, PHYS 211  
*Fall, Spring*

**AET 387 (3) Junior Design Project**  
An examination of automotive design and research along with a review of topics such as ethics, professionalism, measurement, statistics, and career development/placement. This course prepares the student for AET 488, Senior Design Project I, where the design proposal, design project and final report are completed.  
Prerequisite: ENGR 271W, STAT 154  
*Spring*

**AET 398 (0) CPT: Co-Operative Experience**  
Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and an adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.  
Prerequisite: AET 102. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.  
*Fall, Spring, Summer*

**AET 435 (1-4) Automotive Design and Construction**  
Focuses on the design and construction of prototype vehicles. Topics include: vehicle design decisions, rules, budgets, chassis design, body and aerodynamics, drivetrain choices, construction techniques, and test procedures. An experimental vehicle will be built in the course. May be repeated.  
Prerequisite: Permission Required  
*Fall, Spring*

**AET 436 (3) Hybrid and Electric Vehicles**  
This course covers advanced vehicle propulsion systems within the electric and hybrid electric category. Fundamentals of the operation of electric motors, controllers, inverters, and batteries utilized in electric and hybrid platforms will be covered. In addition a significant focus will be placed on the application, modeling, integration, testing, and optimization of the systems in electric and hybrid electric vehicles.  
Prerequisite: AET 366, MATH 122, PHYS 212  
*Variable*

**AET 465 (2) Automotive Laboratory Experience**  
This course designed to provide experience in management, organization, supervision, and maintenance in a laboratory environment. Enrollment is limited. Sign up at least two semesters ahead.  
Prerequisite: AET 364, Permission required  
*Fall, Spring*

**AET 468 (4) Automotive Research Methods**  
Automotive research techniques and equipment form the basis for this course. Environmental measurement, air flow testing, dynamometer testing, emission measurement and fuel efficiency testing is covered. Emphasis is placed on research procedures, data acquisition and interpretation.  
Prerequisite: AET 366, PHYS 211, STAT 154  
*Fall, Spring*
Students must meet the following requirements:

Armstrong Hall. All students must submit an unofficial transcript or DARS report and in FAA Order 8900.225. Information regarding the Institutional Authority program under which Minnesota by the Federal Aviation Administration (FAA) to receive the maximum time reduction aero Additionally, the B.S. Aviation, Professional Flight emphasis area is certified by the Aviation Accreditation Board International (AABI). Accreditation status can be verified at www.aabi. Minnesota State Mankato’s aviation program. The mission of Minnesota State University, Mankato’s aviation program is to educate students today who will become professionals responsible for the safe and efficient design, management, and operation of the aviation system tomorrow. The program combines all elements of a substantive university education with aviation, flight, and management components to graduate well prepared aviation professionals. Acquisition of airmanship knowledge, skills, and ability while in college develops professionalism, responsibility, self-reliance and marketable skills for early career progression, and provides important experiences which ensure a level of understanding and competency essential to becoming an effective leader in an aviation profession.

Advising. Aviation students will be assigned a faculty advisor following an initial or transfer orientation session. Faculty advising appointments may be scheduled directly with your faculty advisor. College of Education Student Relations Coordinator, is available for general education advisement. Students may make appointments with the College of Education Academic Advising Office in 117 Armstrong Hall, phone 507-389-1215.

Accreditation. Minnesota State Mankato is accredited by the Aviation Accreditation Board International (AABI). Accreditation status can be verified at www.aabi.aero. Additionally, the B.S. Aviation, Professional Flight emphasis area is certified by the Federal Aviation Administration (FAA) to receive the maximum time reduction allowed toward the Airline Transport Pilot (ATP) certificate. Graduates of these programs are eligible for a Restricted ATP certificate at 1,000 flight hours. Additional information regarding the Institutional Authority program under which Minnesota State Mankato has been certified under is contained in Advisory Circular 61-136 and in FAA Order 8900.225.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

Admission to Major. Coordinator for Admission to Major, Mymique Baxter, 117 Armstrong Hall. All students must submit an unofficial transcript or DARS report (available at the Campus Hub).

Students must meet the following requirements:

- A minimum of 32 earned semester credit hours.
- A minimum cumulative GPA of 2.50.

Students may only enroll in 1xx and 2xx-level aviation coursework prior to admission to the major.

Flight Training. Flight costs are determined on an hourly basis for aircraft and flight instruction. To obtain FAA certificates, it requires FAA exams which may require an additional fee. Students seeking admission to flight training must be examined by an FAA-designated Aviation Medical Examiner and have an FAA medical certificate and student pilot certificate before the start of flight training. Applicants intending to seek a Commercial Pilot Certificate must have 20/20 vision in each eye, or be correctable to 20/20. Medical examinations should be done far enough in advance of flight training to allow any potential problems or questions to be resolved. We recommend obtaining the 1st class FAA medical certificate.

The FAA requires any pilot’s license applicant to speak, read, write and understand the English language. Flight students whose home language is not English must demonstrate English language proficiency. In addition, the U.S. Transportation Security Administration (TSA) requires U.S. citizen flight students to present a government-issued photo identification document such as a driver’s license and an original passport or original (raised seal) birth certificate for U.S. citizenship verification. International flight students must comply with TSA requirements for a security threat assessment as specified in the Alien Flight Student Program. Generally, this process requires approximately 30 days to complete. Refer to www.flightschoolcandidates.gov for details.

Transfer of college credit and credit for certificates and/or ratings. The Minnesota State Mankato, Department of Aviation bases its flight education philosophy on a four-year university degree. Consequently, students who have obtained flight certificates/ratings without earned college credit may not have satisfied the academic and flight requirements for the aviation major. Students must demonstrate that they have received the full breadth and depth of knowledge, skills, abilities, and attitudes consistent with an education received at Minnesota State Mankato. Once enrolled at Minnesota State Mankato, students are expected to complete all subsequent flight training within Minnesota State Mankato’s aviation program.

Transfer credits. To satisfy aviation curriculum requirements, students with pilot certificates and ratings earned with college credit through an Aviation Accreditation Board International (AABI) accredited university may transfer those credits without demonstrating proficiency. College credits obtained through a non-AABI accredited institution shall be reviewed by the Department of Aviation to ensure the issuing institution follows policies and practices consistent with AABI accreditation standards. In the event credits do not transfer, students may be required to follow Examination for Credit procedures.

Prior Experience. Students entering Minnesota State Mankato with completed FAA certificates must register for and complete the applicable ground course for that flight lab. Prior experience will be evaluated through an oral and flight examination. Successful completion of the evaluation will be annotated on a Credit by Examination form giving credit for that particular flight lab. The student is responsible for the aircraft rental required for the evaluation.

GPA Policy. Admission to College of Education, 2.5 cumulative GPA.

P/N Grading Policy. Only elective and general education courses may be taken P/N, unless offered P/N only.
AVIATION CONTINUED

AVIATION BS
Degree completion = 120 credits

Required General Education
CMST 102 Public Speaking (3)
ECON 201 Principles of Macroeconomics (3)
PHIL 224W Business Ethics (3)
PHYS 101 Introductory Physics (3)

Goal Area 2 (choose 4 credits)
ENG 271W Technical Communication (4)
ENG 272W Business Communication (4)

Goal Area 4 (choose 4 credits)
MATH 112 or higher is required
MATH 112 College Algebra (4)
MATH 115 Precalculus Mathematics (4)
MATH 121 Calculus I (4)
MATH 122 Calculus II (4)

Major Common Core
AVIA 101 World of Aviation (3)
AVIA 150 Private Pilot (3)
AVIA 201 Theory of Flight (3)
AVIA 334 Aviation Management (3)
AVIA 432 Aviation Law - General (3)
AVIA 437 Aviation Safety (3)
AVIA 445 Aviation Human Factors (3)
GEOG 217 Weather (4)

Major Emphasis: Professional Flight Concentration
AVIA 151 Private Pilot Flight Lab (2)
AVIA 153 Private Pilot Flight Lab II (1)
AVIA 240 Instrument Pilot (3)
AVIA 241 Instrument Pilot Flight Lab (2)
AVIA 243 Instrument Pilot Flight Lab II (1)
AVIA 250 Commercial Pilot (3)
AVIA 251 Commercial Pilot Flight Lab (2)
AVIA 253 Commercial Pilot Flight Lab II (2)
AVIA 338 Advanced Aircraft Systems (3)
AVIA 340 Flight Operations (3)
AVIA 360 Flight Instructor (3)
AVIA 361 Initial CFI-Airplane-Multiengine Flight Lab (1)
AVIA 362 Add-on CFI-A Single Engine Flight Lab (1)
AVIA 363 CFI-Airplane/CFI-Fixed Wing Flight Lab (1)
AVIA 436 Flight Operations & Procedures (3)
AVIA 450 Professional Pilot Theory (3)
AVIA 451 Professional Pilot Course (3)
AVIA 455 Aircraft Performance (3)

The Professional Flight emphasis is FAA Approved for the Restricted ATP. Contact the program coordinator for more details.

Major Emphasis: Aviation Management Concentration
ACCT 200 Financial Accounting (3)
BLAW 200 Legal, Political, and Regulatory Environment of Business (3)
ECON 202 Principles of Microeconomics (3)
FINA 362 Business Finance (3)
MGMT 230 Principles of Management (3)
MGMT 300 Introduction to MIS (3)
MGMT 340 Human Resource Management (3)
MGMT 380 Human Behavior in Organizations (3)
MGMT 472 Project Management (3)
MRKT 210 Principles of Marketing (3)

Option Areas
(choose 6 credits)
Choose from either Airport Management or Aircraft Dispatcher options.
AVIA 343 Air Traffic Control (3)
AVIA 344 Aircraft Operations (3)
AVIA 443 Aircraft Dispatcher 1 (3)
AVIA 444 Aircraft Dispatcher 2 (3)

Major Emphasis: Aeronautics Concentration
A plan of study must be completed and approved by the Department of Aviation for this emphasis. (choose 48 credits)
Total credits in major must equal or exceed 48 credits. Faculty advising is required.

Required Minor: None.

AERONAUTICS MINOR
An Aeronautics minor in Aviation is obtained after completing 16 required aviation core courses and 10 aviation electives. The minor provides fundamentals of the Aeronautical and Aviation sciences that may result in the candidate obtaining pilot certificates provided the required flight training is completed and all practical tests passed.

Minor Core
AVIA 101 World of Aviation (3)
AVIA 150 Private Pilot (3)
AVIA 437 Aviation Safety (3)

Electives
A plan of study must be completed and approved by the Aviation Department.

Restricted Electives (choose 9 credits)
AVIA 151 Private Pilot Flight Lab (2)
AVIA 153 Private Pilot Flight Lab II (1)
AVIA 240 Instrument Pilot (3)
AVIA 241 Instrument Pilot Flight Lab (2)
AVIA 243 Instrument Pilot Flight Lab II (1)
AVIA 250 Commercial Pilot (3)
AVIA 251 Commercial Pilot Flight Lab (2)
AVIA 253 Commercial Pilot Flight Lab II (2)
AVIA 333 Airline Operations (3)
AVIA 337 Avionics (3)
AVIA 343 Airport Management (3)
AVIA 432 Aviation Law I (3)
AVIA 435 Aviation Law II (3)
AVIA 436 Advanced Flight Operations (3)
AVIA 442 Fundamentals of Air Traffic Control (3)
AVIA 443 Aircraft Dispatcher I (3)
AVIA 445 Aviation Human Factors (3)

PRIVATE FLIGHT MINOR

Minor Core
AVIA 101 World of Aviation (3)
AVIA 150 Private Pilot (3)
AVIA 437 Aviation Safety (3)

Restricted Electives (choose 9 credits)
AVIA 151 Private Pilot Flight Lab (2)
AVIA 153 Private Pilot Flight Lab II (1)
AVIA 171 Multi-Engine Flight Lab (1)
AVIA 240 Instrument Pilot (3)
AVIA 241 Instrument Pilot Flight Lab (2)
AVIA 243 Instrument Pilot Flight Lab II (1)
AVIA 250 Commercial Pilot (3)
AVIA 251 Commercial Pilot Flight Lab (2)
AVIA 253 Commercial Pilot Flight Lab II (2)

PROFESSIONAL FLIGHT MINOR

Minor Core
AVIA 101 World of Aviation (3)
AVIA 150 Private Pilot (3)
AVIA 437 Aviation Safety (3)

Required Elective
AVIA 151 Private Pilot Flight Lab (2)
AVIA 153 Private Pilot Flight Lab II (1)
AVIA 171 Multi-Engine Flight Lab (1)
AVIA 240 Instrument Pilot (3)
AVIA 241 Instrument Pilot Flight Lab (2)
AVIA 243 Instrument Pilot Flight Lab II (1)
AVIA 250 Commercial Pilot (3)
AVIA 251 Commercial Pilot Flight Lab (2)
AVIA 253 Commercial Pilot Flight Lab II (2)

Total credits in major must equal or exceed 48 credits. Faculty advising is required.
On Demand

the FAA private Pilot Helicopter Certificate.

Provides initial flight student with the in-flight training requirements needed to obtain the FAA Private Pilot’s Certificate.

Provides beginning flight student with the in-flight requirements needed to obtain the FAA Private Pilot written exam.

Satisfactory completion of this course may result in an endorsement for the FAA Commercial Pilot written exam. The course meets, but is not limited to, FAR part 61.105 (a, 1-6).

A study of basic aeronautical knowledge including principals of flight, aerodynamics, aviation regulations, weather, visual and instrument navigation, and emergencies. The course meets, but is not limited to, FAR part 61.65 (b, 1-4). Satisfactory completion of this course may result in an endorsement for the FAA Instrument Pilot written exam.

A study of physics and aerodynamic principals of flight and propulsion systems. The nature of aerodynamic forces are explained. Flight principals of lighter-than-air, airplane, glider, rotocraft and powered lift are covered in detail.

On Demand

PROFESSIONAL PILOT CERTIFICATE (CERT)

Note: This certificate program is not currently accepting students.

Certificate Core
AVIA 150 Private Pilot (3)
AVIA 201 Theory of Flight (3)
AVIA 202 Principles of Air Navigation (3)
AVIA 240 Instrument Pilot (3)
AVIA 250 Commercial Pilot (3)
GEOG 217 Weather (4)
GEOG 218 Weather Laboratory (1)

Certificate Restricted Electives
Helicopter or Airplane
Select one group, either the helicopter option (12 credits) or the airplane option (10 credits).

Helicopter
AVIA 152 Private Pilot Helicopter Flight Lab (3)
AVIA 242 Instrumental Pilot Helicopter Flight Lab (3)
AVIA 252 Commercial Pilot Helicopter Flight Lab (3)
AVIA 270 Helicopter Pilot (3)

Airplane
AVIA 151 Private Pilot Flight Lab (2)
AVIA 251 Commercial Pilot Flight Lab (2)
AVIA 261 Instrument Pilot Flight Lab (3)
AVIA 371 Multi-Engine Flight Lab (1)

AVIA 101 (3) World of Aviation
Provides an expanded study of the changing and shrinking world brought on by the introduction of technology using the medium of aviation, especially the fixed-wing airplane, throughout the course of history. Students will analyze the significant impact and rapid changes aviation has had on cultures, commerce, wars, economics, and transportation. The effect the introduction and expansion aviation technology has had throughout the world created many of the same effects the expansion of the internet has had over the last 20 years.

AVIA 102 (3) Aviation Terminology
Aviation Terminology teaches international students the terms and meanings of airports, aircraft, and aviation in general. The course will also include instruction in proper pilot and air traffic control radio procedures and methods when in flight and on the ground. The course should reduce future difficulties in follow-on aviation management or professional flight courses.

AVIA 150 (3) Private Pilot
A study of basic aeronautical knowledge including principals of flight, aerodynamics, aviation regulations, weather, visual and instrument navigation, and emergencies. The course meets, but is not limited to, FAR part 61.105 (a, 1-6). Satisfactory completion of this course may result in an endorsement for the FAA Private Pilot written exam.

AVIA 151 (2) Private Pilot Flight Lab
Provides beginning flight student with the in-flight requirements needed to obtain the FAA Private Pilot's Certificate.

AVIA 152 (3) Private Pilot Helicopter Flight Lab
Provides initial flight student with the in-flight training requirements needed to obtain the FAA private Pilot Helicopter Certificate.

AVIA 153 (1) Private Pilot Flight Lab II
Continues the flight lab progression in the Minnesota State Mankato aviation program to the second stage of the Private Pilot flight lab. The course reviews and expands the classroom knowledge received in the Private Pilot Ground Course as well as the skills developed in AVIA 151. The training flights continue the building block approach to training with student pilots gradually obtaining the skills to safely fly an aircraft and pass an FAA administered practical examination.

AVIA 171 (1) Multi-Engine Flight Lab
Prepares advanced flight student with the in-flight requirements needed to obtain the FAA Multi-Engine Pilot rating.

AVIA 201 (3) Theory of Flight
A study of physics and aerodynamic principals of flight and propulsion systems. The nature of aerodynamic forces are explained. Flight principals of lighter-than-air, airplane, glider, rotocraft and powered lift are covered in detail.

AVIA 240 (3) Instrument Pilot
A study of the aeronautical knowledge including aviation regulations, weather, instrument navigation, and instrument emergencies. The course meets, but is not limited to, FAR part 61.65 (b, 1-4). Satisfactory completion of this course may result in an endorsement for the FAA Instrument Pilot written exam.

AVIA 241 (2) Instrument Pilot Flight Lab
Prepares advanced flight students with the in-flight requirements needed to obtain the FAA Instrument Pilot rating.

AVIA 242 (3) Instrument Pilot Helicopter Flight Lab
Prepares advanced flight students with the in-flight requirements needed to obtain the FAA Instrument Pilot Helicopter rating.

AVIA 243 (1) Instrument Pilot Flight Lab II
Continues the flight lab progression in the Minnesota State Mankato aviation program to the second stage of the Instrument Pilot flight lab. The FAA requires each pilot to obtain their Instrument Pilot flight certificate to fly in instrument weather conditions. The course reviews and expands the classroom knowledge received in the Instrument Pilot Ground Course as well as the skills developed in AVIA 241. The training flights continue the building block approach to training with student pilots gradually obtaining the skills to fly in all instrument conditions and to pass an FAA administered practical examination.

AVIA 250 (3) Commercial Pilot
A study of advanced aeronautical knowledge, including aerodynamics, aviation regulations, weather, visual and instrument navigation, and emergencies. The course meets, but is not limited to, FAR part 61.125 (a, 1-4). Satisfactory completion of this course may result in an endorsement for the FAA Commercial Pilot written exam.

AVIA 251 (2) Commercial Pilot Flight Lab
Prepares advanced flight students with the in-flight requirements needed to obtain the FAA Commercial Pilot’s Certificate.

AVIA 252 (3) Commercial Pilot Helicopter Flight Lab
Prepares advanced flight students with the in-flight requirements needed to obtain the FAA Commercial Pilot Helicopter Certificate.
AVIA 253 (2) Commercial Pilot Flight Lab II
Continues the flight lab progression in the Minnesota State Mankato aviation program. The FAA requires each pilot to obtain their Commercial Pilot flight certificate to be compensated for work as a pilot. This stage two course of the Commercial Pilot flight lab reviews and expands required classroom knowledge received in the Commercial Pilot Ground Course. The training flights use a building-block approach to training with student pilots gradually obtaining the skills to fly the more difficult maneuvers and to pass an FAA administered practical examination. Fall, Spring, Summer

AVIA 270 (3) Helicopter Pilot
Study of Helicopter theory to meet FAA part 141 certification requirements for helicopter. Prerequisite: AVIA 150, AVIA 250, AVIA 260
On Demand

AVIA 275 (3) Helicopter Flight Theory
This course covers all the knowledge areas required for the FAA helicopter private, instrument and commercial pilot certification at a deeper and more academic level. Variable

AVIA 300 (1) Advanced Studies Orientation
Orientation to academic and administrative expectations of upper division students including basic academic requirements, conducting aviation research, resources available, professional and personal standards of performance, program progression, APA format, and critical thinking. Prerequisite: ENG 271W or ENG 272W Fall, Spring

AVIA 305 (1) Aviation Professional Communications
This course will teach students to communicate tactical and strategic messages through written and oral means. Students will develop public speaking skills specific to the aviation industry to include aviation interviewing techniques, crisis communication, and passenger communication. Students will develop their professional resume specific to their career choice. Fall, Spring

AVIA 306 (1) Intercollegiate Flight Team
Students train for and participate in intercollegiate flight competition as a member of the Minnesota State Mankato Flight Team. An additional fee is required during semesters in which the team participates in competition. A maximum of 4 credits can be earned. Fall, Spring

AVIA 333 (3) Airline Operations
Designed to cover the complex area of operation techniques and problems confronting the airlines today. Entails a study of marketing research, passenger trends, feasibility route studies, etc. Fall, Spring

AVIA 334 (3) Aviation Management
Provides an understanding of management and financial techniques related to aviation businesses. Generally accepted and proven business techniques are applied to the aviation setting. Fall, Spring

AVIA 336 (3) Basic Aircraft Systems
Aircraft systems for light and medium category general aviation aircraft, includes the study of structure, control, electrical, fuel, environmental, landing gear, and engine systems. Examples of general aircraft category aircraft systems will be discussed from the pilot's perspective. Fall

AVIA 337 (3) Avionics
Principles of Avionics is an expanded course on the theory and Applications of Aviation Electronics for future pilots and students of aviation and aeronautics. The course highlights modern synthetic displays, navigation, automatic flight control, FMS, and other essential aircraft equipment. Variable

AVIA 338 (3) Advanced Aircraft Systems
Hydraulic, pneumatic, electrical, pressurization, environmental, and other systems for large transport category aircraft are covered. Also turbine engines, primary and secondary flight controls, and miscellaneous important systems are examined. Examples of systems in large transport category jets will be discussed from the pilot operational perspective. Prerequisite: AVIA 201

AVIA 339 (3) Aerospace Propulsion
The course provides basic principles of operation and components description of the traditional and modern propulsion systems used in atmospheric and space transportation vehicles. Reciprocating engines with propellers, turbine jet engines, and chemical rockets are covered. Spring

AVIA 340 (3) Flight Operations
Introduces students to airline training, regulations, and flight management systems (FMS). Students will develop an understanding of airline operations as they experience an FAA Part 121 style basic indoctrination. Students will be trained on procedures, requirements, and limitations for airline operations through all phases of flight and ground in a simulated Advanced Qualifications Program (AQP) style course. Students will also develop technical and procedural knowledge of FMS. Prerequisite: AVIA 151 Fall, Spring

AVIA 343 (3) Airport Management
Course provides students with an overview of airport management. Studies include the day-to-day operations of air carrier and general aviation airports as well as planning, design, construction, finance and public relations associated with airport management. Students are exposed to many career opportunities in this area. The course includes a case study of the Minneapolis/St. Paul metropolitan area airport system and several site visits. Spring

AVIA 344 (3) Airport Operations

AVIA 360 (3) Flight Instructor
A study of the fundamentals of instruction including the learning process, effective teaching evaluation, course development, lesson planning, and instructing techniques. The course meets, but is not limited to, FAR part 61.187 (a), (1)-6. Satisfactory completion of this course may result in an endorsement for the FOI and CFI-A written exam. Prerequisite: AVIA 240, AVIA 241 Co-requisite: AVIA 250 Fall, Spring

AVIA 361 (1) Initial CFI-Airplane-Multiengine Flight Lab
Prepares advanced flight students for the in-flight requirements needed to obtain the FAA Multi-Engine Flight Instructor's Certificate. Fall, Spring

AVIA 362 (1) Add-on CFI-A Single Engine Flight Lab
Prepares advanced flight students with the in-flight requirements needed to obtain the FAA Certified Flight Instructor's Certificate. Fall, Spring

AVIA 363 (1) CFI-Instrument Airplane (CFI-I) Flight Lab
Prepares advanced flight students with the in-flight requirements needed to obtain the FAA Instrument Flight Instructor's Certificate. Fall, Spring

AVIA 364 (1) Add-on CFI-I Multiengine Flight Lab
Prepares advanced flight students with the in-flight requirements needed to obtain the FAA Instrument Flight Instructor's Certificate. Fall, Spring

AVIA 383 (1) Flight Instructor Helicopter Flight Lab
Prepares advanced flight students with the in-flight requirements needed to obtain the FAA Certified Flight Instructor Helicopter Certificate. Prerequisite: AVIA 252 On Demand

AVIA 392 (1) Instrument Instructor Helicopter Flight Lab
Prepares advanced flight students with the in-flight requirements needed to obtain the FAA Instrument Helicopter Flight Instructor Certificate. Prerequisite: AVIA 242, AVIA 252 On Demand

AVIA 432 (3) Aviation Law - General
To instruct the student relative to legal implications of aircraft ownership, leases, rentals, and overall aircraft operation. Emphasis is placed on the understanding of liability and negligence from the operator and pilot standpoints. Fall
Biochemistry

College of Science, Engineering and Technology
Department of Chemistry & Geology
241 Ford Hall • 507-389-1963
http://cset.mnsu.edu/chemgeol/

Chair: Mary Hadley

Faculty: Brian Groh, Charles R. Kraus, Michael J. Lusch, Marie K. Miller-Pomije, Rebecca Moen, Jeffrey R. Pribyl, Danae Quirk Dorr, Lyudmyla Stackpool, Daniel Swart, John Thoenke, Trent Vorlicek

Biochemistry is a discipline which encompasses both biology and chemistry. This rapidly expanding science focuses on the study of the molecular aspects of living organisms. The tools and concepts of biochemistry are important as a foundation for careers in many areas of research and in medicine. Students considering a BA or BS degree in biochemistry should consult a biochemistry advisor for specific information regarding the program. This major is appropriate for students in pre-professional programs such as pre-dental, pre-medical, and pre-pharmacy programs.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVIA 435 (3)</td>
<td>Aviation Law - Transactions</td>
<td></td>
<td>This course will take an in-depth look at several legal topics that touch the aviation industry. The course will use the case study method to look at several aviation-related cases, including commercial airline accidents, pilot certificate actions, airline security violation cases, international aviation law, and several other current legal matters that involve the airline industry. Prerequisite: AVIA 432 Spring</td>
</tr>
<tr>
<td>AVIA 436 (3)</td>
<td>Flight Operations &amp; Procedures</td>
<td>Introduces advanced professional flight students to FAR Part 121 style standardized flight training in a regional jet. Course will include aircraft systems, procedures training, and techniques used in high performance turbine aircraft. Emphasis on standard operating procedures (SOP), crew resource management (CRM), and line oriented flight training (LOFT). Prerequisite: AVIA 340</td>
<td></td>
</tr>
<tr>
<td>AVIA 437 (3)</td>
<td>Aviation Safety</td>
<td>The understanding and implementation of safe operating procedures. Assists the student in arriving at proper decisions related to periods of stress when operating as pilot in command. Various FAA regulations and standard and safe operating procedures are also discussed. Prerequisite: AVIA150, AVIA 201 Fall, Spring</td>
<td></td>
</tr>
<tr>
<td>AVIA 442 (3)</td>
<td>Fundamentals of Air Traffic Control</td>
<td>To provide the student with the fundamental knowledge of ATC as a career and the fundamentals necessary for FAA certification. Prerequisite: AVIA 240 Fall</td>
<td></td>
</tr>
<tr>
<td>AVIA 443 (3)</td>
<td>Aircraft Dispatcher 1</td>
<td>Introduces the workings of the complex system of air control in the US and abroad. Covers such subjects as radio communications, airspace classification, radar control, and operation as well as aircraft separation. Looks at present and future air traffic control systems. Prerequisite: GEOG 217, AVIA 240, AVIA 250, AVIA 340 Spring</td>
<td></td>
</tr>
<tr>
<td>AVIA 444 (3)</td>
<td>Aircraft Dispatcher 2</td>
<td>Preparation for the Federal Aviation Administration (FAA) Aircraft Dispatcher Certificate through an in-depth understanding of regulations, meteorology, navigation, aircraft systems, communications, air traffic control, emergency and abnormal procedures and practical dispatch applications. At the completion of the course, students will be prepared for the Federal Aviation Administration Aircraft Dispatcher oral examination. Spring Prerequisite: AVIA 240, AVIA 250, AVIA 340, AVIA 443</td>
<td></td>
</tr>
<tr>
<td>AVIA 445 (3)</td>
<td>Aviation Human Factors</td>
<td>A study of various techniques designed to enhance management and leadership methods. Emphasizes decision-making and judgment skills as well as methods to improve effective communication and skills to develop a productive work environment for flight crew and other airline personnel. Prerequisite: AVIA 150, AVIA 201 Fall, Spring</td>
<td></td>
</tr>
<tr>
<td>AVIA 450 (3)</td>
<td>Professional Pilot Theory</td>
<td>This course is designed to develop students technical understanding of information and knowledge required for Air Transport Pilots. Students will participate in a capstone research project and present their findings in a research paper and oral presentation. Course completion requirements will include preparation for the FAA ATP written exam. Prerequisite: AVIA 251 Co-requisite: AVIA 340, AVIA 436 Fall, Spring</td>
<td></td>
</tr>
<tr>
<td>AVIA 451 (3)</td>
<td>Professional Flight Course</td>
<td>Prepares students who desire careers as professional pilots. Emphasizes complete ground tutoring and flight instruction relating to instrument maneuvers, SOP’s, regulation interpretation, pilot discipline, and professional procedures. Crew resource management, LOFT, and turbine-transition flights in an advanced jet flight simulator are used. This course is taken in conjunction in the same semester as AVIA 450. Prerequisite: AVIA 253, AVIA 450 Fall, Spring</td>
<td></td>
</tr>
<tr>
<td>AVIA 452 (3)</td>
<td>Professional Aviator Course</td>
<td>This is a standalone course designed for the person who is not a Minnesota State Mankato aviation major. The course offers a complete jet aircraft transition training program. Summer</td>
<td></td>
</tr>
<tr>
<td>AVIA 455 (3)</td>
<td>Aircraft Performance</td>
<td>The fundamental principles and calculation of the performance in various phases of flight: takeoff and land, climb and descent performance, maximum-range and maximum-endurance cruise, single-engine performance in multi-engine aircraft, standard atmosphere and basic subsonic and supersonic aerodynamics is covered. Prerequisite: AVIA 338 Variable</td>
<td></td>
</tr>
<tr>
<td>AVIA 458 (3)</td>
<td>Aeromedical Factors</td>
<td>Covers aeromedical factors that are essential for high-altitude flying aircraft. Hypoxia, hyperventilation, dysbarism, basic gas laws. Armstrong line, vision in flight, day and night. Pressurization systems, pressurized suits, danger of loss of cabin pressure, future HSCT and LEO commercial flights. Variable</td>
<td></td>
</tr>
<tr>
<td>AVIA 490 (1-10)</td>
<td>Aviation Workshop</td>
<td>Co-requisite: ANTH 491 or ANTH 492 or ANTH 493 or ANTH 494 Variable</td>
<td></td>
</tr>
<tr>
<td>AVIA 497 (1-12)</td>
<td>Aviation Internship</td>
<td>Supervised experience in business, industry, state or federal institutions. Fall, Spring</td>
<td></td>
</tr>
<tr>
<td>AVIA 499 (1-6)</td>
<td>Individual Study in Aviation</td>
<td>Allows the student an individual course of study on an aviation topic to be arranged with the department. Fall, Spring</td>
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</tbody>
</table>

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Academic Map/Degree Plan at www.mnsu.edu/programs/#All

Accreditation. The BS Biochemistry program is accredited by the American Society for Biochemistry and Molecular Biology (ASBMB) and offers an ASBMB certified BS degree.

POLICIES/INFORMATION
The first year of coursework for biochemistry majors should include two semesters of chemistry (CHEM 201, CHEM 202), MATH and at least one semester of Biology (BIOL 105). Organic Chemistry should be taken during the second year.
Major Restricted Electives

CHEM 494 Biochemistry Capstone Experience (1)
CHEM 495 Senior Seminar (1)

Capstone

(choose 1 credit from either CHEM 494 or CHEM 495)

Major Restricted Electives

Upper Division Electives

Choose a minimum of 9 credits of upper division electives from either BIOL or CHEM courses. These electives must be approved by the Biochemistry Advisor.

Courses used in the core cannot count as electives.

BIOL 300 - BIOL 499
CHEM 300 - CHEM 499

Other Graduation Requirements

Choose at least 2 additional upper division credits to meet graduation requirements.

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)

Required Minor: None.

BIOCHEMISTRY BS

Required General Education

BIOL 105 General Biology I (4)
CHEM 201 General Chemistry I (5)

Major Common Core

Required for Bachelor of Arts (BA) degree ONLY:

Choose at least 2 additional upper division credits to meet graduation requirements.

Other Graduation Requirements

Choose a minimum of 7 credits of upper division electives from either BIOL or CHEM courses. These electives must be approved by the Biochemistry Advisor.

Courses used in the core cannot count as electives.

BIOL 300 - BIOL 499
CHEM 300 - CHEM 499

Required Minor: None.
Biology

College of Science, Engineering & Technology
Department of Biological Sciences
242 Trafton Science Center S • 507-389-2786
Website: www.cset.mnsu.edu/biology/

Chair: Penny Knoblich DVM, PhD

Lois Anderson MA, Biology; MT(ASCP); Michael Bentley PhD; Rachel Cohen PhD; Bradley Cook PhD; Geoffrey Goettler PhD; Marilyn Hart PhD, Matthew Kaproth PhD; Penny Knoblich PhD; John Krenz PhD; Allison Land PhD; Bethann Lavioie PhD; Gregg Magr PhD; Steven Mercurio PhD; Bertha Proctor PhD; Christopher Ruehlman PhD; Timothy Secott PhD; Kyungwoon Seo PhD; David Sharlin PhD; Brittany Smith PhD; Robert Sorensen PhD; Daniel Toma P

The Department of Biological Sciences offers programs for students preparing for careers in education, laboratory and field research, biotechnology, environmental sciences, medical laboratory sciences, cytotechnology, food science technology and pre-professional programs including pre-medicine, pre-dental, and pre-veterinary medicine. The biology major offers a core program intended to develop a common background in biology and additional upper level courses designed to provide specialized options. Students typically take a broad based general biology major or an emphasis in one of the following: general biology, cytotechnology, ecology, biomedical sciences, microbiology, plant science, toxicology, or zoology. Programs in biotechnology, environmental sciences, food science technology, medical laboratory science, and life science teaching are also offered.

POLICIES/INFORMATION

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

Policies/Information

Admission to Major granted by the department. Admission requirements are 32 earned semester hours including BIOL 105, BIOL 106, BIOL 211, and CHEM 201 with a grade of "C" or better; completed General Education Goal Area 4 (Mathematics); completed General Education Goal Area 1, Part A (English Composition); and a minimum cumulative GPA of 2.2, with a cumulative GPA in Biology courses of 2.0. For Life Science Teaching majors, the combined GPA for BIOL 105, BIOL 106, BIOL 211, and CHEM 201 must be 2.4 or better.

Residency requirement for the Major. At least 50% of courses 300 level and up that are required for the major must be taken at Minnesota State University, Mankato.

Graduation with a Biology Major requires a minimum cumulative GPA of 2.0, and a minimum cumulative GPA in Biology courses of 2.0.

P/N Grading Policy. All courses leading to a major or a minor in biology must be taken for letter grades. Any exception to this policy must be approved by the chairperson of the department.

Refer to the College regarding required advising for students on academic probation.

GPA Policy. In programs where not specifically noted, a minimum GPA of 2.0 must be maintained in biological sciences. "A minimum GPA of 2.5 in the sciences and a "C" or better in all science courses is required for graduation with a BS Life Science Teaching degree.

In addition to the specific requirements of the major, all university requirements must be met for graduation. This includes 120 credits of coursework, 40 credits of upper division courses (including those in the major), purple and gold course requirements, and two writing intensive courses.

Several biology scholarships are available for entering first year students and currently enrolled Minnesota State Mankato students who meet the requirements. Application deadline is in early February of each year.

The Department of Biological Sciences offers a well-balanced summer school program. For details concerning the courses being offered consult the summer schedule.

BIOLOGY BS AND MINOR

BIOLOGY BS

Degree completion = 120 credits

Students may elect to complete the general non-specialized biology major or select one of the alternative specialized options or emphases.

Required General Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 105</td>
<td>General Biology I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 201</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>ENG 271W</td>
<td>Technical Communication</td>
<td>4</td>
</tr>
</tbody>
</table>

Major Common Core

<table>
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<tr>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 105</td>
<td>General Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 211</td>
<td>Genetics</td>
<td>4</td>
</tr>
</tbody>
</table>

Major Emphasis: General, Non-Specialized

Students may elect to complete the general, non-specialized biology major or select one of the alternative specialized emphases. All emphases require BIOL 105, 106, 211, CHEM 201, and ENG 271W.

Math Requirement (choose 3-4 credits)

<table>
<thead>
<tr>
<th>Course</th>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 113</td>
<td>Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>MATH 115</td>
<td>Precalculus Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 121</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>Introductory Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 211</td>
<td>Principles of Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 221</td>
<td>General Physics I</td>
<td>4</td>
</tr>
</tbody>
</table>

Statistics Requirement (choose 3-4 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 154</td>
<td>Elementary Statistics</td>
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</tr>
<tr>
<td>STAT 154</td>
<td>Elementary Statistics</td>
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</table>

Emphasis Common Core (choose 20 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 215</td>
<td>General Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 301</td>
<td>Evolution</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 320</td>
<td>Cell Biology</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 202</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
</tbody>
</table>

Physiology Requirement—Choose ONLY ONE of the four following pairs of courses [6 to 9 credits total]. Emphasis Restricted Electives plus Emphasis Unrestricted Electives must total at least 18 credits to fulfill the 40-credit major requirement.

Human

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIOL 220</td>
<td>Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 330</td>
<td>Principles of Human Physiology</td>
<td>4</td>
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</tbody>
</table>

Plant

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIOL 217</td>
<td>Plant Science</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 441</td>
<td>Plant Physiology</td>
<td>4</td>
</tr>
</tbody>
</table>

Microbiology

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 270</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 476</td>
<td>Microbial Physiology and Genetics</td>
<td>5</td>
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</tbody>
</table>

Animal

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 316</td>
<td>Animal Diversity</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 431</td>
<td>Comparative Animal Physiology</td>
<td>3</td>
</tr>
</tbody>
</table>

Emphasis Unrestricted Electives (choose 9-12 credits)

Choose additional upper-division courses such that you have a total of 40 credits in Biology. At least 7 of these elective credits must be from courses with a laboratory component.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 300</td>
<td>499</td>
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</table>

Recommended Support Courses (choose 0-8 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 360</td>
<td>Principles of Biochemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 460</td>
<td>Biochemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 465</td>
<td>Biochemical Techniques I</td>
<td>1</td>
</tr>
</tbody>
</table>

Required Minor: None.

Major Emphasis: Biomedical Sciences

The purpose of this option is to prepare the student for a career in biomedicine. The option fulfills the science course requirements for most medical, osteopathic, dental, and chiropractic schools as well as the science course requirements for graduate
education in biomedicine. If you are interested in applying for a specific medical school, please contact that school for their specific requirements. All emphases require BIOL 105, 106, 211, CHEM 201, and ENG 271W.

**Emphasis Required General Education**

1. **PHYS 211** Principles of Physics I (4)
2. **Math Requirement** Choose 3 - 4 credits
3. **MATH 113** Trigonometry (3)
4. **MATH 115** Precalculus Mathematics (4)
5. **MATH 121** Calculus I (4)

**Emphasis Common Core**

- **BIOL 220** Human Anatomy (4)
- **BIOL 270** Microbiology (4)
- **BIOL 320** Cell Biology (4)
- **BIOL 330** Principles of Human Physiology (4)
- **CHEM 202** General Chemistry II (5)
- **CHEM 322** Organic Chemistry I (4)
- **PHYS 212** Principles of Physics II (4)

**Emphasis Restricted Electives**

1. Additional Math/Stats Requirement
   - Choose 3-4 credits. Math 121 cannot be counted in this category if previously counted in the above Math Requirement.
   - **HITH 475** Biostatistics (3)
   - **MATH 121** Calculus I (4)
   - **STAT 354** Concepts of Probability & Statistics (3)

2. **Emphasis Unrestricted Electives**
   - Choose 12 credits. At least one course must have a laboratory component. Choose a maximum of 4 credits from BIOL 497 or BIOL 499. Co-registering for Biol 424 and Biol 425 will count towards elective plus laboratory.
   - Choose from:
     - BIOL 324 Neurobiology (3)
     - BIOL 380 Blood Banking/Urinalysis (3)
     - BIOL 417 Biology of Aging and Chronic Diseases (3)
     - BIOL 420 Diagnostic Parasitology (3)
     - BIOL 424 Developmental Biology (3)
     - BIOL 425 Developmental Biology Lab (1)
     - BIOL 430 Hematology/Introduction to Immunology (4)
     - BIOL 433 Cardiovascular Physiology (3)
     - BIOL 435 Histology (4)
     - BIOL 438 General Endocrinology (3)
     - BIOL 452 Biological Instrumentation (3)
     - BIOL 460 Introduction to Toxicology (3)
     - BIOL 466 Principles of Pharmacology (3)
     - BIOL 473 Virology (3)
     - BIOL 474 Immunology (4)
     - BIOL 475 Medical Microbiology (4)
     - BIOL 479 Molecular Biology (4)
     - BIOL 497 Internship I (1-12)
     - BIOL 499 Individual Study I (1-4)

**Biochemistry Requirement**

1. **CHEM 360** Principles of Biochemistry (4)

**One Semester Option** Choose 4 credits

2. **CHEM 460** Biochemistry I (3)
3. **CHEM 461** Biochemistry II (3)
4. **CHEM 465** Biochemical Techniques I (2)

**Analytical/Organic Chemistry Requirement**

1. **Analytical/Supplemental Organic option (Choose 5 Credits)**
2. **CHEM 305** Analytical Chemistry (4)
3. **CHEM 323** Supplemental Organic Functional Group Chemistry (1)
4. **Organic II with Lab option (Choose 4 Credits)**
5. **CHEM 324** Organic Chemistry II (3)
6. **CHEM 325** Organic Chemistry II Lab (1)

**Required Minor:** None.

**Major Emphasis: Cytotechnology**

A cytotechnologist is an allied health professional and is involved in the microscopic study of cells for evidence of disease and cancer. Cytotechnologists are trained to accurately identify precancerous, malignant, and infectious conditions using cytological techniques. The “Pap test” (an evaluation of cells from the uterine cervix) is the best known test in this field. The four-year curriculum consists of three years spent at the university completing the required courses and the fourth year is a 32 credit internship spent in professional education. Agencies participating in the cytotechnology program include, but are not limited to: Mayo School of Health Sciences in Rochester, MN. Admission into the fourth year hospital clinical internship is competitive. Therefore, admission to the program does not ensure placement into the fourth year internship. The BS degree is awarded by the university after successful completion of the internship year. Graduates are then eligible to take the certifying examination. Cytotechnologists are employed in hospital laboratories, universities, and private laboratories. Adjunct faculty at the clinical sites include: Kara Harsing, CT (ASCP). Students accepted into the clinical internship will be responsible for: Proof of Medical / Hospitalization / Health Insurance; Health Physical Exam; Tuberculosis (TB) testing; and Proof of Immunization which may include the following: Hepatitis B, Measles, Mumps, Rubella, Tetanus, Chickenpox (Varicella), and Influenza. Students may also be required to submit to Drug Screen Testing. Internship sites are required by law to do Background Checks on all students admitted to their cytotechnology programs. All emphases require BIOL 105, 106, 211, CHEM 201, and ENG 271W.
**Major Emphasis: Microbiology**

Microorganisms impact every area of life. The option exposes students to a variety of topics in microbiology and teaches numerous skills needed to work with microorganisms. Training in microbiology prepares students for employment in industry (e.g., quality assurance, vaccine production) and government (e.g., laboratory technicians). Currently, employment opportunities abound in applied areas of microbiology such as biological products/pharmaceuticals, food processing, and environmental assessment. It also prepares a student for continuing education in microbiology, immunology, and cell and molecular biology. Students may elect to work on research projects with faculty who work in the areas of food microbiology, immunology, microbial genetics, and molecular biology. All emphases require BIOL 105, 106, 211, CHEM 201, and ENG 271W.

**Math Requirement** (choose 3 - 4 credits)
- MATH 112 College Algebra (4)
- MATH 113 Trigonometry (3)
- MATH 115 Precalculus Mathematics (4)
- MATH 121 Calculus I (4)

**Emphasis Required General Education courses:**
- **Physics**
  - PHYS 211 Principles of Physics I (4)
- **Math**
  - Choose 3-4 credits from the following:
    - MATH 113 Trigonometry (3)
    - MATH 115 Precalculus Mathematics (4)
    - MATH 121 Calculus I (4)

**Emphasis Restricted Electives – Physiology Requirement.**

**Completer One Group.**

- **Animal Physiology**
  - BIOL 316 Animal Diversity (3)
  - BIOL 431 Comparative Animal Physiology (3)

- **Microbial Physiology**
  - BIOL 270 Microbiology (4)
  - BIOL 476 Microbial Physiology and Genetics (5)

- **Plant Physiology**
  - BIOL 217 Plant Science (4)
  - BIOL 441 Plant Physiology (4)

**Emphasis Unrestricted Electives – Choose courses to total 40 credits in biology.**

Courses other than those listed are allowed with consent of your advisor. A limit of 4 total credits is allowed from BIOL 492, BIOL 497, and BIOL 499 combined. Choose from:
- BIOL 320 Cell Biology (4)
- BIOL 404 Wetlands (4)
- BIOL 405 Fisheries Biology (3)
- BIOL 409 Advanced Field Ecology (4)
- BIOL 410 Global Change Biology (3)
- BIOL 412 Soil Ecology (4)
- BIOL 431 Comparative Animal Physiology (3)
- BIOL 432 Lake Ecology (4)
- BIOL 436 Animal Behavior (4)
- BIOL 441 Plant Physiology (4)
- BIOL 442 Flora of Minnesota (4)
- BIOL 451 Agroecology (4)
- BIOL 460 Introduction to Toxicology (3)
- BIOL 472 Microbial Ecology and Bioremediation (4)
- BIOL 479 Molecular Biology (4)
- BIOL 497 Internship I (1-12)
- BIOL 499 Individual Study (1-4)

**Recommended General Electives** (choose 0 - 7 credits)
- HLTH 475 Biostatistics (3)
- MATH 121 Calculus I (4)

**Required Minor: None.**

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**Major Emphasis: Plant Science**

The Plant Science option includes the study of cells, genetics, anatomy, physiology, taxonomy, and ecology of terrestrial and aquatic vascular plants, mosses, algae and fungi. The option emphasizes plant structure and function, diversity, evolutionary and anatomical adaptations and interactions between plants and their environment. An option in plant sciences prepares undergraduate students for careers in education, biotechnology, field biology, pharmaceutical companies, and government agencies. In addition, the option prepares students for Master’s and Doctoral degrees in Plant Science. All emphases require BIOL 105, 106, 211, CHEM 201, and ENG 271W.

**Math Requirement** (choose 3 - 4 credits)
- MATH 113 Trigonometry (3)

**Emphasis Required General Education courses:**
- **Physics**
  - PHYS 211 Principles of Physics I (4)
- **Math**
  - Choose 3 - 4 credits

**Emphasis Common Core** (choose 20 credits)
- BIOL 215 General Ecology (4)
- BIOL 217 Plant Science (4)
- BIOL 441 Plant Physiology (4)
- BIOL 442 Flora of Minnesota (4)
- BIOL 443 Plant Ecology (4)
- HLTH 475 Biostatistics (3)

**Emphasis Restricted Electives**

**Chemistry Requirement** (choose one course)
- CHEM 111 Chemistry of Life Processes (5)
- CHEM 202 General Chemistry II (5)

**Emphasis Unrestricted Electives** Choose at least 8 credits from the following list of electives. At least two of the courses must have laboratory components. A maximum of 4 credits may be selected from BIOL 492, BIOL 497, and BIOL 499 combined.

Choose from:
- BIOL 301 Evolution (2)
- BIOL 320 Cell Biology (4)
- BIOL 404 Wetlands (4)
- BIOL 409 Advanced Field Ecology (4)
- BIOL 410 Global Change Biology (3)
- BIOL 412 Soil Ecology (4)
- BIOL 432 Lake Ecology (4)
- BIOL 451 Agroecology (4)
- BIOL 460 Introduction to Toxicology (3)
- BIOL 479 Molecular Biology (4)
- BIOL 492 Honors Research (1-3)
- BIOL 497 Internship I (1-12)
- BIOL 499 Individual Study (1-4)
Recommended Support Courses
Choose from
IT 100 Introduction to Computing and Applications (4)
MATH 121 Calculus I (4)

Required Minor: None.

Major Emphasis: Toxicology
Toxicology is the study of the harmful effects of chemicals, radiation, and other stressors on biological systems. This is a wide-ranging course of study, allowing students to connect their background on chemistry, biology, physics, mathematics, etc. to understand all aspects of how an exposure may or may not yield a toxic result. The students develop elementary risk assessment and environmental or medical analyses. The purpose of this option is to train students in the theory and hands-on research techniques of an interdisciplinary biological science at the undergraduate level in a field in which there are few programs in the United States. Since toxins can be antibiotics antiviral or other chemotherapeutic medications, antidotes, agricultural chemicals, industrial chemicals, radiation, or just stressors such as poor ergonomics, graduates can and have proceeded into research and testing of pharmaceuticals, pesticides, and environmental toxicology in industry, government, or academic institutions. Additionally, training in risk assessments leads to additional opportunities for statistical modeling, which is employed in the areas mentioned above and industrial hygiene. All emphases require BIOL 105, 106, 211, CHEM 201, and ENG 271W.

Emphasis Required General Education (choose 8 credits)
MATH 121 Calculus I (4)
PHYS 211 Principles of Physics I (4)

Emphasis Common Core (choose 6.5 credits)
BIOL 215 General Ecology (4)
BIOL 220 Human Anatomy (4)
BIOL 270 Microbiology (4)
BIOL 330 Principles of Human Physiology (4)
BIOL 460 Introduction to Toxicology (3)
BIOL 461 Environmental Toxicology (4)
BIOL 462 Toxicology Seminar (1)
BIOL 464 Methods of Applied Toxicology (3)
BIOL 465 Applied Toxicology Project (3)
BIOL 466 Principles of Pharmacology (3)
BIOL 467 Industrial Hygiene (3)
CHEM 201 Chemistry of Life Processes (5)
CHEM 320 Analytical Chemistry (4)
CHEM 322 Organic Chemistry I (4)
CHEM 324 Organic Chemistry II (3)
CHEM 460 Biochemistry I (3)
CHEM 461 Biochemistry II (3)
CHEM 465 Biochemical Techniques I (1)
CHEM 466W Biochemical Techniques II (2)
HITHT 475 Biostatistics (3)

Required Minor: None

Major Emphasis: Zoology
Zoology is a major branch of the biological sciences that involves the study of animals. Study in this area focuses on organismal diversity, animal structures and the functions, genetics, development, evolution, behavior, and ecological interactions. Occupations that may be available to graduates include: Animal Husbandry, Museum/Zoo Guide, Animal Laboratory Technician, Animal Trainer, Pest Control Technician, Museum Curator, Entomologist, Environmental Consultant, Field Researcher, Science Writer, Physician, Veterinarian, Wildlife Rehabilitator, Zoo Keeper, and Zoologist. Advanced training in professional or graduate school is required in many of these areas and access for advanced training is competitive. Success in this career field typically requires: a thorough knowledge of general biology, the ability to work and relate with animals, proficiency in reading and writing and the ability to collect and analyze data, and an interest in problem solving and decision making. All emphases require BIOL 105, 106, 211, CHEM 201, and ENG 271W.

Emphasis Core Courses (choose 19 credits)
BIOL 215 General Ecology (4)
BIOL 301 Evolution (2)
BIOL 315 Animal Diversity (3)
BIOL 408 Vertebrate Ecology (4)
BIOL 431 Comparative Animal Physiology (3)
BIOL 434 Developmental Biology (3)
HITHT 475 Biostatistics (3)

Emphasis Restricted Electives (choose 6 - 7 credits)
BIOL 420 Diagnostic Parasitology (3)
BIOL 421 Entomology (3)
BIOL 436 Animal Behavior (4)
BIOL 438 General Endocrinology (3)

Emphasis Unrestricted Electives (choose 6 credits)
Other courses may apply with advisor’s consent. A MAXIMUM of four credits may be used from BIOL 492, BIOL 497, and BIOL 499 combined.

COURSES DESCRIPTIONS
BIOL 100 (4) Our Natural World
Introductory course designed for students not majoring in science. Focuses on basic biological principles with special emphasis on the human species. Includes scientific problem solving, biodiversity, human and social aspects of biology, ecology, cellular processes and organ function, human reproduction, pre-natal development, and heredity. Lecture, laboratory, and small group discussions. Fall, Spring
GE-8

BIOL 101 (2-4) Biological Perspectives
Students focus on specific biological perspectives, including environmental science, biology of women, biotechnology, human heredity, etc. May be repeated for credit under different subfields. Fall, Spring
GE-3

BIOL 102 (3) Biology of Women
An introduction to biological topics of special interest to women with emphasis on anatomic and physiologic changes over the course of a woman’s lifetime. Designed for students not majoring in science. Presents fundamental biologic concepts within this specialized context and provides opportunity to collect, evaluate, and analyze data. Fall, Spring
GE-3

BIOL 105 (4) General Biology I
Study of biological processes at the suborganismal level including cell chemistry, metabolism, reproduction, genetics, and complex tissue physiology. Laboratory and discussion sessions stress problem solving and experimental design. Fall, Spring
GE-3

Recommended Support Courses
IT 100 Introduction to Computing and Applications (4)
MATH 121 Calculus I (4)

Math Requirement (choose 3 - 4 credits)
MATH 113 Trigonometry (3)
MATH 115 Precalculus Mathematics (4)
MATH 121 Calculus I (4)

Physics (choose 4 credits)
PHYS 211 Principles of Physics I (4)

Emphasis Required Support Courses
Chemistry (choose one)
CHEM 111 Chemistry of Life Processes (5)
CHEM 202 General Chemistry II (5)

Recommended Support Courses
IT 100 Introduction to Computing and Applications (4)
MATH 121 Calculus I (4)
BIOL 105W (4) General Biology I
Study of biological processes at the suborganismal level including cell chemistry, metabolism, reproduction, genetics, and complex tissue physiology. Laboratory and discussion sessions stress problem solving and experimental design.
Fall, Spring
WI, GE-3

BIOL 106 (4) General Biology II
Study of biological processes at the organismal level including a survey of life forms (viruses, bacteria, protists, fungi, plants, and animals), their evolution, and ecology. Laboratory and discussion sessions stress problem solving and experimental design.
Prerequisite: BIOL 105
Fall, Spring

BIOL 175 (1) Orientation to Clinical Laboratory Science
An introduction to the health care profession with special emphasis on clinical laboratory personnel. Course includes presentations by professionals in some of the major health care fields, especially medical technology. Includes lectures, field observations.
Spring

BIOL 211 (4) Genetics
Introduction to genetic analysis. Topics covered include those both classical and modern genetics: population genetics, molecular genetics, genetic manipulation of organisms and selection. Central to this course will be the primacy of the trait as the object of genetics and the development/refinement of the concept of the gene. Lab included.
Prerequisite: BIOL 105, BIOL 106, and MATH 112
Fall, Spring, Summer

BIOL 215 (4) General Ecology
Principles of the study of relationships between organisms and the environment. Topics include flow of energy and materials, organism-level interactions, growth and evolution of populations, and community ecology. Field trips to prairie, lake, stream, and forest communities, training in data collection and analysis, use of equipment, and report writing. Lab included.
Prerequisite: BIOL 105 and BIOL 106 or consent
Fall

BIOL 217 (4) Plant Science
Biology of plants including unique features of plant cells, life histories, metabolism, anatomy, physiology, and ecology. The course emphasizes plants’ remarkable adaptations to their environments, their diversity, and the vital roles they play in ecological interactions. For biology and environmental science majors and minors. Lab included.
Prerequisite: BIOL 105 and BIOL 106 or consent
Spring

BIOL 220 (4) Human Anatomy
Systems approach to the structure of the human body. The course is designed for students majoring in biology or health related programs. Lab included.
Fall, Spring

BIOL 270 (4) Microbiology
An introduction to the general principles and methods used in the study of microorganisms. Lab included.
Prerequisite: One BIOL course and one semester of chemistry among CHEM 104, CHEM 106, CHEM 111, or CHEM 201
Fall, Spring

BIOL 283 (1) MAX Scholar Seminar
This class provides MAX scholars with an opportunity to explore a set of topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. NOTE: Credit does not apply to any major.
Prerequisite: Recipient of a MAX scholarship or instructor consent.
Fall, Spring

BIOL 301 (2) Evolution
Evolution is a unifying theory of biology. Students are provided the history of evolutionary thought and the Darwinian revolution, evidence for evolution, mechanics of evolution, and an array of special topics such as speciation, molecular evolution, conservation, and extinction. Readings will include book chapters and journal articles. Lecture/discussion.
Prerequisite: BIOL 105, BIOL 106, BIOL 211
Spring

BIOL 302 (4) Principles of Human Physiology
Principles of functions of human cells, organs, and systems with an emphasis on organ/system interactions. Designed for majors that do not require a strong medical and research emphasis. Includes an active learning laboratory to facilitate learning the complex lecture material.
Prerequisite: BIOL 220, CHEM 104 or CHEM 106 or CHEM 111 or CHEM 201
Fall, Spring, Summer

BIOL 315 (4) Cell Biology
An examination of eukaryotic cellular structure, organization and physiology. Lab included.
Prerequisite: BIOL 105 and BIOL 106, BIOL 211
Fall and Spring, Summer (On Demand)

BIOL 324 (3) Neurobiology
Basic anatomy and physiology of the nervous system. The course is designed for students majoring in biology, psychology or health related programs.
Prerequisite: BIOL 220
Fall

BIOL 330 (4) Principles of Human Physiology
Principles of functions of human cells, organs, and systems with an emphasis on organ/system interactions. This course is designed for students majoring in biology, chemistry, or related sciences, and medically-related areas. Includes a laboratory with a research and medical emphasis.
Prerequisite: BIOL 220, CHEM 104 or CHEM 106 or CHEM 111 or CHEM 201
Fall, Spring, Summer

BIOL 380 (3) Blood Banking/Urinalysis
Basic understanding of the principles of immunohematology applied to the area of blood blanking including major blood group systems, principles for antigen/antibody detection and identification, donor blood collection, transfusion evaluation, theory of renal function in health and disease, specimen collection, handling, and processing, and components of routine urinalysis.
Spring

BIOL 402 (4) Stream Ecology
The structure and function of stream ecosystems are presented with emphasis on adaptations of organisms to stream life and connections between stream organisms, the aquatic environment, and the surrounding watershed. Includes lab, field work, and team projects.
Prerequisite: BIOL 105, BIOL 106, BIOL 215 or consent
Summer

BIOL 403 (3) Conservation Biology
Applications of principles from ecology, genetics, behavior, demography, economics, philosophy, and other fields to the conservation and sustainable use of natural populations of plants and animals. Lectures and discussions address topics such as habitat fragmentation, parks and reserves, genetic diversity, population viability, and extinction.
Prerequisite: BIOL 215 or consent
Spring

BIOL 404 (4) Wetlands
To provide students the values and functions of wetlands and to use wetlands as an example of the relationship of ecology to management, and the impact that classification systems have politically. Lab [fieldwork] included.
Prerequisite: BIOL 105, BIOL 106, BIOL 215, or consent
Spring

BIOL 405 (3) Fisheries Biology
An introduction to fish biology and fisheries management, diversity, form and function in the aquatic environment, functional physiology, evolution and speciation, identification and use of keys, ecology, and management topics.
Prerequisite: BIOL 105, BIOL 106, BIOL 215, or consent of instructor
Alt Fall
A comparison of adaptation mechanisms, from cell to organ-system, used by animals in response to "changes in" environmental conditions such as oxygen, carbon dioxide, food availability, temperature, water, solutes, pressure and buoyancy. Prerequisite: BIOL 105, BIOL 106 or consent

BIOL 436 (4) Animal Behavior
An exploration of behavioral strategy, communication, learning, and social systems of animals, with emphases placed on the causes, evolution, ecological implications, and function of behavior at the individual and population level. Lab included. Prerequisite: BIOL 105, BIOL 106, BIOL 215

BIOL 438 (3) General Endocrinology
This course provides the basis for understanding hormones and the mechanisms of their actions in both the normal and pathological states. Sample topics to be included are diabetes, osteoporosis, hormones of reproduction and current social and medical issues related to the course. Prerequisite: BIOL 100 or BIOL 105

BIOL 441 (4) Plant Physiology
Plant functions such as water relations, mineral nutrition, translocation, metabolism, photosynthesis, photospiration, fat and protein metabolisms, respiration, growth and development, phytohormones, reproduction and environmental physiology. Lab included. Prerequisite: BIOL 105, BIOL 106, BIOL 217; one semester organic chemistry recommended.

BIOL 442 (4) Flora of Minnesota
Field identification of plants with emphasis on local flora. History, systematic, techniques, plant biogeography, methods of plant collection, preservation, preparation of herbarium specimens are covered. Lab and field trips included.

BIOL 443 (4) Plant Ecology
Expands upon general principles of ecology to focus on the factors that regulate the distribution and abundance of plants, analysis of plant populations, and dynamics of plant communities. Lecture and lab (fieldwork) included. Prerequisite: BIOL 105, BIOL 106, BIOL 217; strongly recommended.

BIOL 451 (4) Agroecology
Lecture/laboratory course that presents an integrated view of plant biology, crop science, ecology, sustainability and current issues in biotechnology. Course focuses on issues of global concern such as sustainable food production, cropping techniques, climate change responses, pest management and herbicides, resistance, biofuels, genetically modified crops, molecular phrasing, and tissue culture.

BIOL 452 (4) Biological Instrumentation
The principle and operation of instruments and their application to biological research. Types of instrumentation examined include spectroscopic, chromatographic, electroanalytic, radiographic, and imaging. Laboratory Information Management systems (LIMS) will also be examined. Emphasis is placed on GLP, GMP, and ISO 9000 practices. Prerequisite: BIOL 105, BIOL 106, or consent

BIOL 453 (4) Biological Engineering Analysis I
The application of engineering principles and skills as applied to fermentation and to biological product recovery. Prerequisite: BIOL 270 and one semester each of calculus, physics, and organic chemistry, taken concurrently with BIOL 456.
BIO 454 (4) Biological Engineering Analysis II
Continuation of Biological Engineering Analysis I. The application of engineering principles and skills as applied to fermentation and to biological product recovery. Prerequisite: BIOL 453, taken currently with BIOL 457
Spring

BIO 456 (3) Biotechnology Project/Laboratory I
Practical laboratory experience in biotechnology through the selection and development of a research project. Students are expected to spend an average of 12 hours per week on the project. Prerequisite: Concurrent enrollment in BIOL 453
Fall

BIO 457 (3) Biotechnology Project/Laboratory II
Continuation of Biotechnology Project/Laboratory I. Practical laboratory experience in biotechnology through the selection and development of a research project. Students are expected to spend an average of 12 hours per week on the project. Prerequisite: BIOL 456, taken concurrently with BIOL 454
Spring

BIO 460 (3) Introduction to Toxicology
A lecture course covering basic principles of toxicity evaluation in living organisms, mechanisms of responses to chemicals or physical agents within an overview of practical medical, environmental and science policy implications. Presentation of comparisons of specific organ and tissue reactions to toxins in a variety of species follow these introductory concepts. Prerequisite: BIOL 105, BIOL 106, and 1 year of General Chemistry
Fall/Fall

BIO 461 (4) Environmental Toxicology
A lecture/laboratory course that focuses on anthropogenic and natural toxics, mathematical modeling of the dispersion of chemical and physical agents in the environment, effects on species and ecosystems with a special section on aquatic risk assessment. The laboratory includes techniques in environmental toxicity and a genuine research project. Prerequisite: BIOL 460
Fall

BIO 462 (1) Toxicology Seminar
A seminar course that involves critical evaluation of published studies in toxicology, student presentations of a selected published manuscript and requires students to write a paper on one aspect of the course’s topic area that semester. Topic areas vary each time the course is offered. Prerequisite: BIOL 105, BIOL 106, and General Chemistry
Fall/Spring

BIO 464 (3) Methods of Applied Toxicology
A lecture/laboratory course focusing on the steps necessary to start a research project from project definition through methods testing and evaluation, and a final report that includes a project flow chart. Third year students will have senior and/or graduate mentors. Prerequisite: BIOL 105, BIOL 106, and General Chemistry
Fall/Fall

BIO 465 (3) Applied Toxicology Project
A lecture/laboratory course where students perform all aspects of their own designed research topic in toxicology while critically evaluating the progress of other projects as well. Students will be expected to keep timelines or develop modified timelines as necessary. The inverted triangle approach of project design will be examined and then included in all designs. Prerequisite: BIOL 464
Fall/Spring

BIO 466 (3) Principles of Pharmacology
A lecture course that examines mechanisms of drug action, physiological responses and adverse reactions from sensitivities or allergies through overdose. Prerequisite: BIOL 105, BIOL 106, and 1 year of General Chemistry
Fall/Spring

BIO 467 (3) Industrial Hygiene
A lecture course that examines Minnesota State Mankato, as your own work place to develop reports on a selected group of chemical and physical hazards of the workplace. Evaluation methods and solutions to existing problems are developed with concise reporting skills. Prerequisite: BIOL 105, BIOL 106, and 1 year of General Chemistry
Fall/Fall
Biotechnology is the application of recent developments in technology to manipulate the genetic and biochemical characteristics of an organism so that the organism or its metabolites can be economically produced for our benefit. In practice it requires the selection and genetic improvement of an organism for a specific purpose. Organisms may be used to synthesize a desirable product or degrade unwanted materials. The industrialization of this technology is dependent on the development of methods for scaling up processes developed in the laboratory.

Students interested in biotechnology could find careers in a wide variety of industrial applications. Examples of industries that use biotechnology are antibiotic and pharmaceutical; food; energy; agricultural pesticides; herbicides; fertilizers; growth chemicals and breeding programs; industrial chemicals, biocatalysts and diagnostics.

The biotechnologist works with research scientists on the development of processes in the laboratory and with engineers to transfer and scale up laboratory processes for large scale production required by industry. Because of the interdisciplinary nature of biotechnology, biotechnologists must have a strong background in the analytical and quantitative areas of science. In addition, the biotechnologist must be familiar with the theory and practice of genetic engineering and biochemical processes.

BIOI 483 (1) MAX Scholar Seminar
This class provides MAX scholars with an opportunity to explore a set of topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Students will be required to participate in mentoring of lower division MAX scholarship recipients and provide written and oral presentations of various topics during the semester.
Prerequisite: Consent
Fall, Spring

BIOI 485 (4) Biology Teaching Methods and Materials
A basic science methods course designed to prepare prospective junior and senior high life science teachers. Course will cover science teaching methods and support materials as they apply to life science teaching situations.
Prerequisite: 16 credits BIOI
Fall

BIOI 486 (3) Field-Based Teaching Methods and Materials
A lecture/laboratory course that provides opportunity for prospective junior and senior high life science teachers to observe, practice, and refine their teaching skills. Students will work in a school setting and experience actual classroom.
Prerequisite: BIOI 485
Fall

BIOI 490 (1-4) Workshop
A variable topic course designed for a selected topic in Biology. Workshops provide an intensive learning experience on a new topic in the Biological Sciences and/or hands-on experiences in a current area not covered by other course offerings. The course involves background reading, demonstrations, and laboratory or field experiences.
Prerequisite: Consent
Fall, Spring

BIOI 492 (1-3) Honors Research
Prerequisite: Consent
Fall, Spring

BIOI 493 (1-12) Cyto technology Clinical Internship I
The clinical internship and training includes lectures, demonstrations, laboratory sessions, and clinical practice in the area of cytotechnology. Instructor permission required.
Fall, Spring

BIOI 494 (1-12) Cyto technology Clinical Internship II
Continuation of Cytotechnology Clinical Internship I. The clinical internship and training includes lectures, demonstrations, laboratory sessions, and clinical practice in the area of cytotechnology. Instructor Permission required.
Fall, Spring

BIOI 495 (1-12) Cyto technology Clinical Internship III
Continuation of Cytotechnology Clinical Internship II. The clinical internship and training includes lectures, demonstrations, laboratory sessions, and clinical practice in the area of cytotechnology. Instructor Permission required.
Fall, Spring

BIOI 496 (1-12) Cyto technology Clinical Internship IV
Continuation of Cytotechnology Clinical Internship III. The clinical internship and training includes lectures, demonstrations, laboratory sessions, and clinical practice in the area of cytotechnology. Instructor Permission required.
Fall, Spring

BIOI 497 (1-12) Internship I
Experience in applied biology according to a prearranged training program for a minimum of five 40-hour weeks.
Prerequisite: Consent
Fall, Spring

BIOI 498 (1-12) Internship II
Experience in applied biology according to a prearranged training program for a minimum of five 40-hour weeks. Only four credits can be applied to the major.
Prerequisite: Consent
Fall, Spring

BIOI 499 (1-4) Individual Study
Prerequisite: Consent
Fall, Spring

BIOTECHNOLOGY BS

POLICIES/INFORMATION
Admission to Major is granted by the department. Admission requirements are 32 earned semester credit hours including BIOI 105 and BIOI 106; with a grade of a “C” or better in both BIOI 105 and BIOI 106; and a minimum cumulative GPA of 2.0.

BIOT ECHNOLOGY BS
Degree completion = 120 credits

Required General Education
CHEM 201 General Chemistry I (5)
MATH 121 Calculus I (4)
PHYS 211 Principles of Physics I (4)

Prerequisites to the Major
BIOI 105 General Biology I (4)
BIOI 106 General Biology II (4)
BIOI 211 Genetics (4)

Major Common Core
BIOI 270 Microbiology (4)
BIOI 320 Cell Biology (4)
BIOI 452 Biological Instrumentation (3)
BIOI 453 Biological Engineering Analysis I (4)
BIOI 454 Biological Engineering Analysis II (4)
BIOI 474 Immunology (4)
BIOI 476 Microbial Physiology and Genetics (5)
BIOI 479 Molecular Biology (4)
CHEM 202 General Chemistry II (5)
CHEM 322 Organic Chemistry I (4)
CHEM 373 Supplemental Organic Functional Group Chemistry (1)
CHEM 360 Principles of Biochemistry (4)
PHYS 212 Principles of Physics II (4)

Academic Map/Degree Plan at www.mnsu.edu/programs/#All
Major Restricted Electives
For those students planning on graduate or professional school, CHEM 305 Analytical Chemistry and MATH 122 Calculus II are strongly recommended. BIOL 451 Agroecology is strongly recommended for a student who plans to work in the agricultural biotechnology.

Additional Math/Statistics (choose 3-4 credits)
- HETH 475 Biostatistics (3)
- MATH 122 Calculus II (4)
- STAT 154 Elementary Statistics (4)

Capstone Experience (choose 6 credits from the following)
Choose in consultation with your advisor.
- BIOL 456 Biotechnology Project/Laboratory I (3)
- BIOL 457 Biotechnology Project/Laboratory II (3)
- BIOL 497 Internship I (1-12)
- BIOL 498 Internship II (1-12)
- BIOL 499 Individual Study (1-4)

Required Minor: None.

POLICIES/INFORMATION

P/N Grading Policy. All courses must be taken for letter grades. Any exception to this policy must be approved by the chairperson of the department.

Refer to the College regarding required advising for students on academic probation.

GPA Policy. A minimum GPA of 2.0 must be maintained in biological sciences. Several biology scholarships are available for entering first year students and currently enrolled Minnesota State Mankato students who meet the requirements.

The Department of Biological Sciences offers a well-balanced summer school program. For details concerning the courses being offered consult the summer catalog.

BUSINESS ADMINISTRATION MINOR

Business Administration

College of Business
150 Morris Hall • 507-389-2966
Coordinator: Linda Meidl

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

Students who are business minors, non-business majors or those who are not seeking a four year degree may take up to 24 credits in the College of Business. However, prerequisites are enforced.

College of Business Majors. Majors within the College of Business are not eligible for the Business Administration minor.

GPA Policy. Students must earn a minimum grade point average of 2.0 (‘C’) on the total courses taken within the Business Administration minor.

Residency. Transfer students pursuing a minor in the College of Business must complete at least 50% (one-half) of their minor coursework at Minnesota State Mankato.

Assessment Policy. The College of Business believes that the ongoing assessment of its programs makes a vital contribution to the quality of those programs and to student learning. Student participation is an important and expected part of the assessment process.

BUSINESS EDUCATION BS

Business Education

College of Education
313 Armstrong Hall • 507-389-5210

Carrie Chapman, Ph.D.

Students should contact the Office of the Dean of this College for additional information.

Business Education BS

The Business Education BS Teaching degree is a cooperative degree program. The majority of the business education courses are taught at Winona State University. The required general business core courses are taught at Minnesota State Mankato.

Other Graduation Requirements
See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

www.mnsu.edu 2018-2019 Undergraduate Catalog 67
### BUSINESS LAW MINOR

**Business Law**

**College of Business**  
*Department of Accounting and Business Law*  
150 Morris Hall • 507-389-2965  
Chair: Paul Brennan, Ph.D.  
Faculty: Wade Davis JD; Vicki Luoma JD

**Academic Map/Degree Plan at** [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)

**Policies/Information**

A minor in business law provides students with practical knowledge of the complex legal issues that govern the business environment. The minor teaches students the knowledge and skills necessary to identify and manage legal and ethical issues in a wide array of settings including contracts, management, employment and human resources, construction, banking, international business, and intellectual property. It is also excellent preparation for students who plan to attend law school.

Students who are business minors, non-business majors or those who are not seeking a four year degree may take up to 24 credits in the College of Business.

**GPA Policy:** Students must earn a minimum grade point average of 2.0 (C-) on the total courses taken in the College of Business to meet graduation requirements.

**Residency:** Transfer students pursuing a minor in the College of Business must complete at least 50% (one-half) of their minor coursework at Minnesota State Mankato.

**Assessment Policy:** The College of Business believes that the ongoing assessment of its programs makes a vital contribution to the quality of those programs and to student learning. Student participation is an important and expected part of the assessment process.

### BUSINESS LAW MINOR

**Core**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BLAW 200</td>
<td>Legal Environment of Business (3)</td>
<td></td>
</tr>
<tr>
<td>BLAW 450</td>
<td>Contracts, Sales, and Professional Responsibility (3)</td>
<td></td>
</tr>
<tr>
<td>BLAW 452</td>
<td>Employment and Labor Law (3)</td>
<td></td>
</tr>
<tr>
<td>IT 101</td>
<td>Introduction to Information Systems (3)</td>
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**Electives (Choose & Credits)**

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<tbody>
<tr>
<td>BLAW 371</td>
<td>Technology and Intellectual Property Law (3)</td>
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</tr>
<tr>
<td>BLAW 453</td>
<td>International Legal Environment of Business (3)</td>
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<tr>
<td>BLAW 455</td>
<td>Legal Aspects of Banking and Finance (3)</td>
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<tr>
<td>BLAW 474</td>
<td>Environmental Regulation and Land Use (3)</td>
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<tr>
<td>BLAW 476</td>
<td>Construction and Design Law (3)</td>
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<tr>
<td>BLAW 477</td>
<td>Negotiation and Conflict Resolution (3)</td>
<td></td>
</tr>
<tr>
<td>BLAW 483</td>
<td>Special Topics (1-3)</td>
<td></td>
</tr>
<tr>
<td>BLAW 492</td>
<td>Study Tour (3)</td>
<td></td>
</tr>
</tbody>
</table>

**Course Descriptions**

**BUS 100 (3) Introduction to Business and Business Careers**  
This course prepares students for success by exposing them to the requirements, expectation, resources and opportunities of the College of Business. Students will have business experiences and will develop professional skills.  
Variable

**BUS 295 (2) Professional Preparation for Business Careers**  
This course is required for admission to the College of Business for all business majors. The purpose of the course is to provide students with an overview of the College of Business majors, allow students to create an academic plan for graduation, and develop professional skills needed for future job placement. Topics include cover letter and resume writing, interviewing skills, the process of networking, the internship program, etiquette skills, and requirements for graduation.  
Fall, Spring

**BUS 397 (3) IBE Practicum**  
BUS 397 is an applied course that entails developing, launching, managing, and closing a business with the cohort of students enrolled in the class. Students write and present a business plan as they seek financing for their start-up company. The business start-up experience creates a real-world context in which students can practice the concepts introduced in MGMT 230, MKRT 210, and FINA 362. BUS 397 is part of the United Prairie Bank Integrated Business Experience, and students must enroll concurrently in BUS 397 and sections of FINA 362, MGMT 230, and MKRT 210 that are designated for IBE students.  
Prerequisite: Must be admitted to a major.  
Co-requisite: FINA 362, MGMT 230, MKRT 210  
Fall, Spring

**BLAW 131 (3) Consumer Law & Ethics**

A survey of the law and ethics governing marriage, family, car ownership and insurance; civil rights (fair credit, fair housing, and equal employment opportunity); planning for illness and death; court procedures and alternative dispute resolution methods; jury service; the landlord-tenant relationship; and the rights of victims and people accused of crimes.  
Fall, Spring

**BLAW 200 (3) Legal Environment of Business**

Application of law to business settings; the American court system; alternative dispute resolution; ethics and the social responsibility of business; fundamentals of legal reasoning; sources of law; constitutional, criminal, tort, and contract law; business associations.  
Fall, Spring

**BLAW 371 (3) Technology and Intellectual Property Law**

This class examines major legal issues involving technology and computing such as intellectual property (patents, trademarks, copyrights, and trade secrets); free speech; defamation; privacy; computer crime; the internet and social media; and other emerging issues.  
Fall

**BLAW 398 (0) CPT: Co-Operative Experience**

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.  
Prerequisite: BLAW 200. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.  
Fall, Spring, Summer

**BLAW 450 (3) Contracts, Sales, and Professional Responsibility**

Fundamentals of contracts; the law of sales under the UCC; the liability of accountants to clients and third parties. Formation of contracts; statute of frauds and parol evidence rule; contract performance; remedies for breach of contract; scope of UCC Article Two; sales warranties.  
Prerequisite: BLAW 200  
Fall, Spring

**BLAW 452 (3) Employment and Labor Law**

Federal employment discrimination laws; sexual harassment; first amendment rights; employee safety; workers’ compensation; privacy; wrongful termination; federal laws governing the right to organize and bargain collectively; emerging issues.  
Prerequisite: BLAW 200  
Spring

**BLAW 453 (3) International Legal Environment of Business**

Legal aspects of United States global trade policies, regulation of imports, contracting in the global marketplace, international marketing concerns, structure of various international organizations and treaties. Legal aspects of international licensing and technology, transfers risks of nationalization and expropriation, international dispute resolution, comity, the Act of State, and sovereign immunity doctrines.  
Prerequisite: BLAW 200  
Variable
CHEMISTRY

CHEMISTRY BA, BS AND MINOR

Chemistry

College of Science, Engineering and Technology
Department of Chemistry & Geology
241 Ford Hall • 507-389-1963
https://cse.mnsu.edu/chemgeol/
Chair: Mary Hadley
Faculty: Brian Groh, Charles R Krois, Michael J Lusch, Marie K Miller-Pomije, Rebecca Moen, Jeffrey R Pribyl, Danae Quirk Dorr, Lyudmyla Stackpool, Daniel Swart, John Thoemke, Trent Vorlicek

Accreditation. American Chemical Society (ACS).

The department is recognized by the American Chemical Society (ACS) and offers a BS major that is approved by that organization. Anyone considering a chemistry major or chemistry minor should choose a departmental faculty member as an advisor and consult that advisor often throughout the course of study.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

Admission to Major. Admission to a program is necessary before enrolling in 300- and 400-level courses. Admission is granted by the department. To be eligible for admission to the chemistry program, a student must have declared Chemistry or Chemistry Teaching as a first major, completed 32 credits including CHEM 201 and CHEM 202 and achieved a minimum GPA of 2.0. Students should also have an assigned chemistry advisor with whom they have discussed the program. Applications for admission to the chemistry program are available in the College Student Advising Center, 125 Trafon Science Center.

GPA Policy. Students obtaining a major or minor in chemistry must maintain an overall GPA of 2.2 in all courses required for their selected program with no more than 4 credits of “D” (1.0) work in chemistry courses.

P/N Grading Policy. Courses leading to a major or minor in chemistry or biochemistry may not be taken on a P/N basis except where P/N grading is mandatory. For students who choose to obtain a BS in Chemistry or a BA in Chemistry, CHEM 495 must be taken at Minnesota State Mankato. This course will not be substituted. This policy does not apply to students who chose to obtain a BS in Chemistry Teaching.

The first year of coursework for all chemistry majors should include two semesters of chemistry (CHEM 201, CHEM 202) and two semesters of mathematics (selection of courses depends on mathematics background). During the second year, the recommended courses include organic chemistry, advanced mathematics, physics and analytical chemistry. For BS chemistry majors, it is important that the calculus and physics sequences be completed by the end of the second year since they are prerequisites for physical chemistry. Physical chemistry and instrumental analysis should be taken during the third year. The advanced courses in chemistry and biochemistry can be taken in the junior and senior years. Participation in senior seminar is required of all majors. The coursework in mathematics and physics that is required for a major may be credited toward a major or minor in these areas. For this reason it is often desirable and convenient to choose a joint major or minor with physics or mathematics.

Transfer students who are considering the Chemistry BS should note that before taking physical chemistry in the third (junior) year, students must successfully complete with a grade of “C” (2.0) or higher an analytical chemistry course in addition to appropriate mathematics and physics courses either here at Minnesota State Mankato or transferable to Minnesota State Mankato. Completion of an Associate’s degree may not meet the physical chemistry prerequisites and may add up to one year to the program of study.

CHEMISTRY BA

Degree completion = 120 credits

Required General Education

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<tr>
<th>Course</th>
<th>Credits</th>
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<tr>
<td>MAth</td>
<td>121</td>
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<tr>
<td>Physics</td>
<td>(choose 4 credits - choose 1 from the following)</td>
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<tr>
<td>Phys</td>
<td>211 Principles of Physics</td>
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<tr>
<td>Phys</td>
<td>221 General Physics</td>
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</table>

Major Common Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chem</td>
<td>201 General Chemistry</td>
</tr>
<tr>
<td>Chem</td>
<td>202 General Chemistry II</td>
</tr>
<tr>
<td>Chem</td>
<td>305 Analytical Chemistry</td>
</tr>
</tbody>
</table>
CHEMISTRY CONTINUED

CHEM 322  Organic Chemistry I (4)
CHEM 324  Organic Chemistry II (3)
CHEM 325  Organic Chemistry II Laboratory (1)
CHEM 340  Quantitative Skills for Chemistry and Biochemistry I (1)
CHEM 341  Quantitative Skills for Chemistry and Biochemistry II (1)
CHEM 381W  Introduction to Research (2)
CHEM 440  Physical Chemistry I (3)
CHEM 495  Senior Seminar (1)

Major Restricted Electives

Physics (choose 4 credits)
[choose either PHYS 212 or PHYS 223 and PHYS 233]

PHYS 212  Principles of Physics II (4)
PHYS 223  General Physics III (3)
PHYS 233  General Physics III Laboratory (1)

Biochemistry Foundation (choose 3-4 credits)

[choose 1 course from the following]
CHEM 360  Principles of Biochemistry (4)
CHEM 460  Biochemistry I (3)

Inorganic Foundation (choose 3 credits)

[choose 1 course from the following]
CHEM 316  Descriptive Inorganic Main Group Chemistry (3)
CHEM 317  Transition Metal Chemistry (3)

Major Unrestricted Electives

Choose a minimum of 6 credits and at least 2 different courses from the 300-400 level CHEM courses other than CHEM 323, CHEM 479, and CHEM 482. No CHEM courses can be double-counted in the degree.

Other Graduation Requirements

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)

Required Minor: Yes. Any but Chemistry

Chemistry Minor

Required General Education

MATH 121  Calculus I (4)
Physics (choose 4 credits from one of the following)
PHYS 211  Principles of Physics I (4)
PHYS 221  General Physics I (4)

Major Common Core

CHEM 201  General Chemistry I (5)
CHEM 202  General Chemistry II (5)
CHEM 305  Analytical Chemistry (4)
CHEM 322  Organic Chemistry I (4)
CHEM 324  Organic Chemistry II (3)
CHEM 325  Organic Chemistry II Laboratory (1)
CHEM 340  Quantitative Skills for Chemistry and Biochemistry I (1)
CHEM 341  Quantitative Skills for Chemistry and Biochemistry II (1)
CHEM 381W  Introduction to Research (2)
CHEM 440  Physical Chemistry I (3)
CHEM 441  Physical Chemistry II (3)
CHEM 450  Physical Chemistry Laboratory I (1)
CHEM 451  Physical Chemistry Laboratory II (1)
CHEM 495  Senior Seminar (1)
MATH 122  Calculus II (4)

Biochemistry Foundation (choose from the 3-4 credits) choose 1 course
CHEM 360  Principles of Biochemistry (4)
CHEM 460  Biochemistry I (3)
Inorganic Foundation (choose 3 credits) choose 1 course
CHEM 316  Descriptive Inorganic Main Group Chemistry (3)
CHEM 317  Transition Metal Chemistry (3)

Major Restricted Electives

Math Electives (choose 4 credits) choose 1 course
MATH 223  Calculus III (4)
MATH 247  Linear Algebra I (4)
MATH 321  Ordinary Differential Equations (4)

Physics (choose 4 credits)
[choose either PHYS 212 or PHYS 223 and PHYS 233]

PHYS 212  Principles of Physics II (4)
PHYS 223  General Physics III (3)
PHYS 233  General Physics III Laboratory (1)

Major Unrestricted Electives

Choose 12 credits and at least 3 different courses from the 300-400 level CHEM courses other than CHEM 323, CHEM 479 and CHEM 482. No CHEM courses can be double-counted in the degree.

Required Minor: None.

CHEMISTRY MINOR

Minor Core

CHEM 201  General Chemistry I (5)
CHEM 202  General Chemistry II (5)
CHEM 305  Analytical Chemistry (4)
CHEM 322  Organic Chemistry I (4)
CHEM 324  Organic Chemistry II (3)

Minor Electives

Choose a minimum of 4 credits from the 300-400 level CHEM courses except CHEM 323, CHEM 479, CHEM 482, or CHEM 495. Core courses cannot count as electives. A minimum of 4 credits of chemistry courses must be taken at Minnesota State University Mankato for the minor.

CHEMISTRY TEACHING BS

Requirements for the Chemistry Teaching BS can be found in the SCIENCE TEACHING section of the catalog. For information, consult the chemistry education advisor, Jeffrey Pribyl.

COURSE DESCRIPTIONS

CHEM 100 (4) Chemistry in Society
This lecture and laboratory course investigates the world of chemistry, the nature of matter and our interactions with chemicals on a daily basis. This course is intended for non-science majors and is not a preparation for CHEM 111 or CHEM 201. Credit will not be given to students who have previously taken a chemistry course at or above CHEM 111 and received a passing grade.
Fall, Spring
GE-3

CHEM 104 (3) Introduction to Chemistry
This course is an introduction to general chemistry. It is a non-laboratory class designed to prepare students for CHEM 201 or to be utilized as a general education course. This course will address more mathematical relationships than CHEM 106. Credit will not be given to students who have previously taken a chemistry course at or above CHEM 111 and received a passing grade.
GE-3

CHEM 106 (3) Chemistry of Life Process Part I (General)
This course covers fundamental concepts required to understand the general chemistry in living organisms. This is a non-laboratory class. This chemistry course will not prepare students for any Chemistry course at or above the 200 level. Prerequisite: “Student must demonstrate math placement requirements at or above MATH 112 in the placement chart. See Mathematics for details.”
GE-3

CHEM 111 (5) Chemistry of Life Process Part II (Organic & Biochemistry)
This course is an introduction to organic chemistry and biological chemistry. The laboratory will reinforce lecture. Prerequisite: CHEM 106 or high school chemistry
Fall, Spring
GE-2, GE-3

CHEM 131 (3) Forensic Science
This chemistry course explores the scientific methods used in criminal investigations. Course topics will include discussions of different kinds of evidence, how to select and analyze samples, and especially how to interpret results of scientific tests. Specific topics will include the analysis of DNA, drugs, accelerants and explosives, and other organic and inorganic compounds. Case studies will be used as examples throughout the course. There will also be discussions concerning the ethics analysis, and uses of forensic data.
Variable
GE-3, GE-9
CHEM 134 (3) Mind Altering Substances
This course will explore the scientific, pharmacological, neurochemical and cultural aspects of psychoactive substances. The material is presented intuitively, with no mathematics. Course topics will include discussions of the major classes of pharmaceutical and psychoactive substances, basic neurochemistry, the role of psychoactive substances in medicine, the ritual use of psychoactive substances by traditional cultures, the FDA approval process, the significance and implications of drug testing, the controversy of drug-induced behavioral modification, national and global perspectives of substance abuse and the ethics of legalization.
Variable
GE-3

CHEM 135 (3) Science of Sport
An online course introducing the science related to sports issues including nutrition, movement, equipment selection, and healthy exercising/training.
Variable
GE-3

CHEM 191 (3) Chemistry Applications
From an engineering perspective, concepts of general chemistry will be investigated. Topics include atomic structure, stoichiometry, gas laws, periodic trends chemical bonds, thermodynamics, kinetics and organic chemistry. Prerequisite: High school chemistry or "C" (2.0) or higher in CHEM 104. Student must demonstrate math placement requirements at or above MATH 115 in the placement chart. See Mathematics for details.
Fall
GE-2, GE-3

CHEM 200 (1) GC1 Laboratory Component
General chemistry lab for students who successfully have completed a general chemistry lecture course elsewhere and transferred to Minnesota State Mankato. The transfer course must be accepted by the Chemistry Department as content/level appropriate and the Minnesota State Mankato major must require Chemistry 201. This course requires special permission. Prerequisite: college level general chemistry lecture. Prerequisite: CHEM 191
Variable

CHEM 201 (5) General Chemistry I
Introduction to the basic principles of chemistry including atomic and molecular structure, bonding, chemical reactions, stoichiometry, thermodynamics and states of matter. Laboratory will reinforce lecture concepts. Prerequisite: "C" (2.0) or higher in MATH 112 or the equivalent; high school chemistry or "C" (2.0) or higher in CHEM 104. Student placement chart. See Mathematics for details.
Fall, Spring
GE-2, GE-3

CHEM 202 (5) General Chemistry II
Continuation of the basic principles of chemistry including properties of solutions, kinetics, acids and bases, equilibria, buffers, precipitation reactions, electron transfer reactions, electrochemistry, entropy and free energy. Laboratory will reinforce lecture concepts. Prerequisite: "C" (2.0) or higher in CHEM 201
Fall, Spring

CHEM 299 (1-6) Individual Study

CHEM 305 (4) Analytical Chemistry
Introduction to the principles of chemical analysis, with emphasis on classical methods of analysis. Lectures will stress the theory of chemical measurements and sample handling. Laboratory exercises will provide students with opportunities to explore calibration methods, method development, and established procedures for volumetric and gravimetric analyses. Basic atomic spectroscopy is also presented. Prerequisite: "C" (2.0) or higher in CHEM 202
Fall, Spring

CHEM 316 (3) Descriptive Inorganic Main Group Chemistry
This course is designed to survey descriptive main group chemistry and augment General Chemistry’s introduction to solid state and nuclear chemistry. Prerequisite: "C" (2.0) or higher in CHEM 202
All Fall

CHEM 317 (3) Transition Metal Chemistry
This course is designed to address transition metal chemistry, introduce bonding theory, nomenclature, reactivity and mechanisms for transition metal compounds. It will also address and use examples from bioinorganic chemistry and catalysis. Prerequisite: "C" (2.0) or higher in CHEM 202
All Fall

CHEM 322 (4) Organic Chemistry I
Introduction to organic nomenclature, structure, bonding, chemical reactivity, organic acid-base reactions, mechanisms and stereochemistry. IR, MS, and NMR spectroscopy will be introduced. The chemistry of alkanes, alkenes, alkynes, aromatics, and special reactions will be covered. Laboratory will illustrate synthetic techniques and the preparation and reactions of functional groups discussed during lecture.
Prerequisite: CHEM 202, "C" (2.0) or higher in CHEM 202
Fall

CHEM 323 (1) Supplemental Organic Functional Group Chemistry
This course is a supplement to CHEM 322 and includes a brief coverage of functional groups and their chemistry not previously covered that are important in biochemistry. This course is intended only for students taking, or who have taken, only one semester of organic chemistry and who plan to take CHEM 360, Principles of Biochemistry.
Prerequisite: CHEM 322
Corequisite: CHEM 222
Fall

CHEM 324 (3) Organic Chemistry II
This course is a continuation of CHEM 322 and includes organic nomenclature, structure, bonding, chemical reactivity, organic acid-base reactions, and reaction mechanisms; the chemistry of ethers, aromatic and heterocyclic compounds, polyenes, ketones, aldehydes, amines, carboxylic acids and their derivatives, and alpha carbon and aldehydes compounds and synthetic transformations. Prerequisite: CHEM 322, "C" (2.0) or higher.
Spring

CHEM 325 (1) Organic Chemistry II Lab
Laboratory will highlight common techniques including recrystallization, melting point determination, simple and fractional distillation, extraction, gas and thin layer chromatography, and chemical and spectroscopic qualitative analysis. Single and multi-step syntheses illustrating aromatic and carboxylic chemistry will be performed. Prerequisite: CHEM 324
Corequisite: CHEM 324
Spring

CHEM 330 (1) Quantitative Skills for Chemistry and Biochemistry I
Students will use chemical and biochemical experimental case studies to learn how to analyze, interpret, and critically evaluate experimental data. Software tools will be used to perform linear least squares and other fitting procedures. Intended to be taken prior to, or concurrent with CHEM 340. Prerequisite: CHEM 202, MATH 121 "C" (2.0) or higher in CHEM 202, MATH 121 (2.0)
Spring

CHEM 341 (1) Quantitative Skills for Chemistry and Biochemistry II
Application of differential and integral calculus to chemical and biochemical problem solving. Use of software tools to implement numerical methods for integration and approximation. Intended to be taken following completion of, or concurrent with CHEM 340. Prerequisite: CHEM 202, MATH 121, PHYS 211 or PHYS 221 "C" (2.0) or higher in CHEM 202, MATH 121, PHYS 211 or PHYS 221) previously or concurrently.
Spring

CHEM 360 (4) Principles of Biochemistry
Analysis of the structure and metabolism of biologically important compounds. This intermediate-level course is designed for students in the medical technology, food science, chemistry education, chemistry and pre-professional health majors. The laboratory teaches basic biochemical techniques. Prerequisite: Either CHEM 322 and CHEM 324 or CHEM 322 and CHEM 323. "C" (2.0) or higher in all prerequisites
Spring

CHEM 381W (2) Introduction to Research
Introduction to the use of chemical literature (in print and electronic media), current departmental faculty research interests, safety and ethical conduct of laboratory research, and proper recording of research results in laboratory notebooks. Students perform a literature search and write a proposal for an undergraduate research project. Prerequisite: CHEM 322, "C" (2.0) or higher
Fall
WI
CHEM 407 (3) Environmental Chemistry
The sources of various elements and chemical reactions between them in the atmosphere and hydrosphere are treated. Current research topics relevant to the field of environmental chemistry will also be addressed. Laboratory exercises will emphasize proper sampling technique and various analytical methods for quantifying environmentally important components.
Prerequisite: "C" (2.0) or higher in CHEM 305
Variable

CHEM 419 (2) Physical Inorganic Chemistry Foundations
This course is designed to emphasize the theoretical foundations of physical inorganic chemistry. Course topics include: bonding theory, quantum mechanics and periodic trends, symmetry and group theory.
Prerequisite: "C" (2.0) or higher in CHEM 322, MATH 121
Fall-Spring

CHEM 423 (4) Spectroscopic Determination of Structure
Spectroscopic techniques including nuclear magnetic resonance, infrared, and mass spectrometry for determining structural features of molecules will be covered. Spectroscopic methods emphasize interpretation of spectra, and also provide hands-on operation of the corresponding electronic instruments. The laboratory uses these techniques for the determination of the structures of a series of unknown compounds.
Prerequisite: CHEM 324, CHEM 325. "C" (2.0) or higher in all prerequisites
Spring

CHEM 424 (3) Advanced Organic Chemistry
Advanced synthetic organic reactions and their mechanisms. Laboratory will include examples of some of this chemistry, and techniques for reaction monitoring and product purification.
Prerequisite: CHEM 324. "C" (2.0) or higher
Spring-EVEN

CHEM 434 (2) Industrial Chemistry
The synthesis and properties of organic macromolecules, especially industrially important polymers, and the chemistry of other industrially important chemical reactions and processes.
Prerequisite: CHEM 324. "C" (2.0) or higher
Spring-ODD

CHEM 437 (4) Food Chemistry
This lecture laboratory course will cover the fundamental principles of food chemistry. Chemical and physical properties of major and minor food components will be discussed. The laboratory will involve both traditional wet chemical methods and more sophisticated instrumental analyses.
Prerequisite: CHEM 305, CHEM 322 "C" (2.0) or higher in all prerequisites
Variable

CHEM 440 (3) Physical Chemistry I
Detailed treatment of thermodynamics and chemical kinetics. Topics include equations of state, laws of thermodynamics, statistical thermodynamics, phase and reaction equilibrium, thermodynamics of solutions and electrochemistry, transport properties, and reaction kinetics.
Prerequisite: CHEM 305, CHEM 340, CHEM 341, MATH 121 and PHYS 211 or PHYS 221. "C" (2.0) or higher in all prerequisites
Fall

CHEM 441 (3) Physical Chemistry II
Detailed treatment of quantum mechanics, spectroscopy, and statistical mechanics. Topics include the foundations of quantum mechanics, application of quantum mechanics to atomic and molecular structure, foundations of spectroscopic techniques and statistical mechanics.
Prerequisite: Must have a "C" (2.0) or higher in CHEM 440 and MATH 122, and a "C" (2.0) or higher in PHYS 212 or PHYS 223.
Spring

CHEM 450 (1) Physical Chemistry Laboratory I
Laboratory to accompany CHEM 440. An advanced treatment of measurement theory and data analysis precedes a series of thermodynamic and kinetic experiments designed to complement topics treated in lecture to help students' independence and sophistication in planning, performing, and reporting experimental work.
Prerequisite: CHEM 440 previously or concurrently
Fall

CHEM 451 (1) Physical Chemistry Laboratory II
Laboratory to accompany CHEM 441. Experiments and computational projects in quantum mechanics, spectroscopy, and statistical mechanics. The experiments and projects will continue to work toward the goal of increasing the students' independence and sophistication.
Prerequisite: "C" (2.0) or higher in CHEM 440
Pre or Corequisite: CHEM 441
Spring

CHEM 460 (3) Biochemistry I
Detailed analysis of the structures, properties, and functions of proteins, carbohydrates, fats, lipids, nucleic acids, introduction to carbohydrate metabolism, theory for the purification and analysis of proteins. Concurrent enrollment in CHEM 465 is recommended.
Prerequisite: BIOL 106, CHEM 324, BIOL 106 or permission "C" (2.0) or higher in all prerequisites.
Fall

CHEM 461 (3) Biochemistry II
Detailed analysis of the reactions involved in intermediary metabolism, translation, transcription, and replication.
Prerequisite: CHEM 460
Spring

CHEM 465 (2) Biochemical Techniques I
A lecture/laboratory course, which presents methodology and instrumentation used to purify and analyze biomolecules. Techniques include chromatography, radioisotope techniques, polyacrylamide gel electrophoresis, spectrophotometry, and PCR analysis.
Prerequisite: Concurrent registration in CHEM 460 and completion of CHEM 460 with "C" or higher. CHEM 305 is highly recommended.
Fall

CHEM 466W (2) Biochemical Techniques II
Students work in teams to solve biochemical research problems by analyzing data from experiments which they design.
Prerequisite: CHEM 460 and CHEM 465
Spring

CHEM 474 (2) Chromatography
Theory and applications of thin layer, paper, liquid, gas and supercritical fluid chromatography and capillary electrophoresis.
Prerequisite: CHEM 322. "C" (2.0) or higher
Fall-EVEN

CHEM 475 (4) Instrumental Analysis
Theory and practice of modern instrumental methods including basic electronics. Special emphasis placed on sampling methods, analog and digital electronics, electrochemistry, spectrophotometry and chromatographic methods, surface and thin-film analysis and computer acquisition and data processing techniques.
Prerequisite: "C" (2.0) or higher in CHEM 305; PHYS 212 or PHYS 222 is recommended.
Spring

CHEM 479 (4) Teaching Physical Science
Methods and materials for teaching physical sciences in middle school through high school. Clinical experiences are required for the course.
Prerequisite: Consent
Spring

CHEM 482 (1-3) Problems in Teaching Science
Variable

CHEM 490 (1-6) Workshop

CHEM 494 (1) Biochemistry Capstone Experience
This course is designed for the BS Biochemistry major or the BA Biochemistry major who chooses to do research. Requirements include submission of an undergraduate research grant, and after completion of the research, presentation of the results in proper format in a research conference such as the URC and as an oral presentation to peers. This capstone experience will also include the submission of a formal research paper. Students are required to attend capstone experience seminars for at least two semesters. Students should enroll for this course in their final semester.
Prerequisite: CHEM 466, by permission only
Spring
Prerequisite: (Select 1 Course) CHEM 440 or CHEM 460

CHEM 495 (1) Senior Seminar
Capstone course for majors in Chemistry, Biochemistry and Chemistry Teaching. During this course, students will present the results of their research in several different forums including oral presentations and poster sessions.
Prerequisite: (Select 1 Course) CHEM 440 or CHEM 460

CHEM 496 (1-6) Senior Thesis

CHEM 497 (1-16) Internship

CHEM 498 (1-6) Undergraduate Research

CHEM 499 (1-6) Individual Study

CHINESE (MANDARIN) COURSES

Chinese (Mandarin)

College of Arts & Humanities
Department of World Languages & Cultures
227 Armstrong Hall • 507-389-2116
Website: www.mnsu.edu/languages

Chair: Adriana Gordillo

Although Minnesota State Mankato does not offer a degree in Chinese, students may register for Chinese courses by contacting the Department of World Languages & Cultures.

CHIN 101 Elementary Mandarin I [5]
CHIN 102 Elementary Mandarin II [5]

CIVIL ENGINEERING BSCE

Civil Engineering

College of Science, Engineering and Technology
Department of Mechanical and Civil Engineering
205 Trafton Science Center E • 507-389-6383
Fax 507-389-5002
Website: ce.mnsu.edu

Chair: Patrick Tebbe P.E.
Program Coordinator: Stephen J. Druschel, P.E.


Adjunct Faculty: Dan Flatgard, David Hanson

Accreditation. The Civil Engineering program is accredited by the Engineering Accreditation Commission of ABET, www.ABET.org.

Civil Engineering, as defined by the American Society of Civil Engineers, is a profession in which a knowledge of the mathematical and physical sciences gained by study, experience, and practice is applied with judgment to develop ways to utilize, economically, the materials and forces of nature for the well-being of humanity in creating, improving and protecting the environment, in providing facilities for community living, industry and transportation, and in providing structures for the use of humanity.

Civil engineers design and supervise the construction of roads, buildings, airports, tunnels, dams, bridges, water supply, water and wastewater treatment, and many other systems. Major specialties within civil engineering include structural, geotechnical, water resources, transportation, environmental, and construction engineering.

The Mission of the Civil Engineering Program at Minnesota State University, Mankato, is to provide an exceptional, practice-based engineering education with ties to industry, enabling graduates to excel in any discipline within the civil engineering profession and serve people throughout Minnesota, across the Nation, and around the globe.

Program Objectives. Within 3-6 years of graduation, Minnesota State University, Mankato civil engineering graduates are expected to contribute to the profession and to society by achieving the following.

- Pursue leadership positions and advanced responsibilities in their profession and/or community.
- Become a licensed professional engineer, mindful of the safety, health, and welfare of the public.
- Further their education through professional development and/or post-graduate studies.

Other important features of a civil engineering education at Minnesota State Mankato include:

- Senior students work together as a design team in a full academic year course incorporating multiple civil engineering disciplines in a comprehensive design project.
- Students work closely with engineers from design firms and government agencies, and with faculty and students from other engineering courses in the senior design project.
- Students take the Fundamentals of Engineering exam in their senior year – the first step towards professional registration.
- The faculty maintain ties to industry, keeping current with new technologies, design methodologies, and the world of civil engineering practice – a valuable resource for students.

Preparation. Recommended high school preparation is one year each of precalculus, physics and chemistry. Without this background it may take longer than four years to earn the degree. Computer skills such as programming, word processing, spreadsheets, and presentations are also recommended.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All
POLICIES/INFORMATION

Program Admission. Admission to the Civil Engineering Program is granted by the department, and is required before enrolling in 300- and 400-level courses. Near the end of the sophomore year, students submit an application for admission to the civil engineering program.

To be admitted to the upperdivision civil engineering program, a student must complete a minimum of 43 credits, for grade, including the following core courses: calculus-based physics (mechanics), 4 credits; calculus and differential equations, 16 credits; introduction to problem solving and civil engineering design, 2 credits; engineering analysis (numerical methods and statistics), 3 credits; engineering mechanics (statics, dynamics, and mechanics of materials), 9 credits; chemistry with lab, 5 credits; and English composition, 4 credits. These courses must be completed with a grade of "C" (2.00) or better and a cumulative GPA of 2.50. All core course grades (including those for repeated courses) will be considered in the computation of the GPA for admission to the program. Provisional admission to the program for one semester may be granted in limited cases.

All admitted students are required to take a department-administered diagnostic test early in their junior year.

Transfer Students. The department makes a special effort to accommodate transfer students. Transfer students are encouraged to contact the department as soon as possible to facilitate a smooth transition. Generally, no transfer credits are allowed for upper division civil engineering courses. Transfer students must complete a minimum of 12 credits at Minnesota State Mankato prior to being considered for admission to the program.

Satisfactory Progress. Once admitted to the civil engineering program, a student must demonstrate satisfactory progress by maintaining a cumulative GPA of at least 2.30 in all upperdivision engineering courses.

P/N Grading. P/N credit is not allowed for any course used to meet civil engineering degree requirements.

Probation. An admitted student who does not maintain satisfactory progress will be placed on program probationary status for a maximum of one semester. During the probationary period, the student must complete at least 8 credits, approved by the department, of upperdivision engineering courses for grade from the prescribed Civil Engineering curriculum. Students may not receive a degree without first conforming to the satisfactory progress criteria. A student who fails to meet satisfactory progress for a second semester will not be allowed to continue in the program.

Appeals. A student may appeal any departmental decision in writing.

CIVIL ENGINEERING BSCE

Degree completion = 128 credits

Required General Education

Required Special General Education [23 credits]

The Bachelor of Science in Civil Engineering degree does not adhere to the standard general education program required by other majors. Rather, it requires a special distribution of communication, humanities, and social science courses. Courses may be chosen to satisfy the university cultural diversity requirement concurrently.

Required Humanities and Social Science Courses (minimum of 15 credits) To satisfy this requirement, the courses selected must provide both breadth and depth and should not be limited to a selection of unrelated introductory courses. Each student should discuss with his/her academic advisor on the selection of courses to meet this requirement early in their academic career. A current list of acceptable courses is posted in the department office and on the department web site. Specifically, the minimum requirements consist of at least 6 credits in the humanities area, and at least 6 credits in the social sciences area in addition to the Required General Education courses.

To provide a measure of depth to the course of study, at least 3 credits at the 300-level or above must be included in either the humanities of the social sciences requirement. At least one upper division course must follow a course in the same subject area as a course at the 100 or 200 level.

ENG 101 Composition (4)
ENG 271W Technical Communication (4)
ECON 201 Principles of Macroeconomics (3)
ECON 202 Principles of Microeconomics (3)

Prerequisites to the Major

CHEM 201 General Chemistry I (5)
CIVE 201 Introduction to Problem Solving and Civil Engineering Design (2)
MATH 121 Calculus I (4)
MATH 122 Calculus II (4)

MATH 223 Calculus III (4)
MATH 321 Ordinary Differential Equations (4)
ME 212 Statics (3)
ME 214 Dynamics (3)
ME 223 Mechanics of Materials (3)
ME 291 Engineering Analysis (3)
PHYS 221 General Physics I (4)

Major Common Core

CIVE 101 Introduction to Engineering - Civil (2)
CIVE 145 CAD for Civil Engineering (2)
CIVE 235 Properties of Civil Engineering Materials (3)
CIVE 271 Civil Engineering Measurements (2)
CIVE 321 Fluid Mechanics (3)
CIVE 340 Structural Analysis (3)
CIVE 350 Hydraulics and Hydrology (4)
CIVE 360 Geotechnical Engineering (4)
CIVE 370W Transportation Engineering (4)
CIVE 380 Environmental Engineering (3)
CIVE 401W Civil Engineering Design I (2)
CIVE 402W Civil Engineering Design II (3)
CIVE 435 Civil Engineering Experimentation I (2)
CIVE 436 Civil Engineering Experimentation II (2)
GEOL 121 Physical Geology (4)
PHYS 221 General Physics I (4)
ME 241 Thermodynamics (3)
ME 299 Thermal Analysis (2)
CIVE 446 Reinforced Concrete Design (3)
CIVE 448 Steel Design (3)

Major Restricted Electives

Physics II or III
Choose one group

College Physics II
PHYS 222 General Physics II (3)
PHYS 232 General Physics II Laboratory (1)

College Physics III
PHYS 223 General Physics III (3)
PHYS 233 General Physics III Laboratory (1)

Civil and Technical Electives

Choose a minimum of 14 credits in civil (minimum 9) and technical (minimum 2) electives. Elective courses are selected from the list below, and are recommended to be taken after identifying an area of interest and in consultation with an academic advisor.

Civil Engineering Electives [choose 9 - 12 credits]

CIVE 432 Properties of Concrete (3)
CIVE 446 Reinforced Concrete Design (3)
CIVE 447 Prestressed Concrete Design (3)
CIVE 448 Steel Design (3)
CIVE 450 Finite Element Method (3)
CIVE 452 Open Channel Flow (3)
CIVE 454 Hydraulic Structures (3)
CIVE 458 Stormwater Management (3)
CIVE 461 Fundamentals of Pavement Design (3)
CIVE 465 Foundation Design (3)
CIVE 467 Earth Structures (3)
CIVE 470 Traffic Engineering (3)
CIVE 471 Highway Planning and Design (3)
CIVE 476 Planning and Design of Airports (3)
CIVE 481 Water & Wastewater Treatment, Collection & Distribution (3)
CIVE 482 Utility Pipeline Inspection, Repair and Rehabilitation (3)
CIVE 484 Landfill and Hazardous Waste Engineering (3)

Technical Electives [choose 2 - 5 credits]

BIO 270 Microbiology (4)
BLAV 450 Contracts, Sales, and Professional Responsibility (3)
BLAV 453 International Legal Environment of Business (3)
BLAV 474 Environmental Regulation and Land Use (3)
BLAV 476 Construction and Design Law (3)
CHEM 202 General Chemistry II (5)
CHEM 305 Analytical Chemistry (4)
CHEM 407 Environmental Chemistry (3)
CIVE 300 - 489 Except Required Courses
CM 310 Estimating I (3)
CIVIL ENGINEERING CONTINUED

COURSE DESCRIPTIONS

CIVE 100 (1) Explorations in Engineering
This course offers an introduction to the various disciplines of engineering and their relationship to the principles of physics and mathematics. Students are prepared for academic success and the transition into an engineering program.
Fall, GE-12

CIVE 101 (2) Introduction to Engineering · Civil
To prepare the students for a career in engineering with some emphasis in civil; introduce the engineering fundamentals and the skills necessary to have a successful learning experience; and to prepare students for engineering education and profession through interactions with upper-class engineering students and practicing engineers.
Prerequisite: MATH 113 or MATH 115 or MATH 121
Fall

CIVE 145 (2) CAD for Civil Engineering
Basic computer applications for drafting and designing civil engineering projects. Structure and use of standard CAD software. Basic orthographic construction and projections, and development of different types of drawings - sections, plan and profile, and construction details.
Fall, Spring

CIVE 201 (2) Introduction to Problem Solving and Civil Engineering Design
Introduction to the design concepts of civil engineering projects including presentations, codes and standards, construction drawings, and public hearing; problem solving skills for civil engineering analysis and design including the use of appropriate computational tools and programming logic. Includes laboratory component.
Prerequisite: CIVE 101
Fall, Spring

CIVE 235 (3) Properties of Civil Engineering Materials
Co-requisite: ME 223
Spring

CIVE 271 (2) Civil Engineering Measurements
Basic civil engineering measurements as relates to construction layout, including distances, angles, bearings, elevations, mapping, and positioning. Includes laboratory component.
Co-requisite: MATH 121
Fall

CIVE 293 (1) MAX Scholar Seminar
This class provides MAX scholars with an opportunity to explore a set of topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Students will be required to participate in mentoring of lower division MAX scholarship recipients and provide written and oral presentations of topics during the semester. This course may be repeated and will not count towards graduation requirements.
Prerequisite: Recipient of a MAX scholarship or instructor consent.
Fall, Spring

CIVE 297 Internship (1-4)
On Demand: Fall, Spring, Summer

CIVE 321 (3) Fluid Mechanics
Introduction to fluid properties, fluid statics, buoyancy, fluid kinematics, Bernoulli’s equation, control volume and differential approach to flow conservation equations, dimensional analysis, similitude, viscous flow in pipes, flow over immersed bodies, and pumps. Includes significant design component.
Prerequisite: CIVE 214 or ME 214
Co-requisite: ME 241 or ME299
Fall

CIVE 340 (3) Structural Analysis
Minimum design loads for buildings using ASCE 7 guidelines and load distribution. Analysis of determinate structural systems including the case of moving loads. Analysis of indeterminate structures using the flexibility and moment distribution methods. Use of software to enhance the analysis.
Prerequisite: CIVE 223 or ME 223
Fall

CIVE 350 (4) Hydraulics and Hydrology
Concept of hydraulics such as pipe flow and open channel flow. Hydrologic principles such as weather patterns; precipitation measurement and distribution, abstractions, and runoff; storm hydrograph and peak flow analysis. Design includes flood design, reservoir and channel routing. Includes significant design component.
Prerequisite: CIVE 321 or ME 321, ME 291
Spring

CIVE 360 (4) Geotechnical Engineering
Study of soil behaviors and their classifications; index properties. Applications of mechanics principles to soils as an engineering material, consolidation theory, compaction theory, effective stresses, shear strength; earth pressure and slope stability. Elements of foundation designs. Includes significant design component.
Prerequisite: CIVE 323 or ME 223
Co-requisite: CIVE 321 or ME 321
Spring

CIVE 370W (4) Transportation Engineering
Introduction to Transportation systems, land use and transportation interaction, planning, and traffic operations; transportation decision making using economic analysis. Introduction to design, construction, maintenance, and operation of various transportation modes. Includes significant design component.
Prerequisites: CIVE 145
Co-requisite: CIVE 271, ME 291
Fall
Winter

CIVE 380 (3) Environmental Engineering
Introduction of the fundamental chemical, biological and physical principles of environmental engineering for water and wastewater treatment and distribution systems, solid waste management, air pollution control, and the analysis of air quality, surface water, and ground water. Includes significant design component.
Prerequisite: CHEM 201, MATH 321
Fall

CIVE 398 (0) CPT: Co-Operative Experience
Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.
Prerequisite: CIVE 201. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.
Fall, Spring, Summer

CIVE 401W (2) Civil Engineering Design I
Practical civil engineering design project with real world constraints. This course focuses on the planning and formulation of a project, and the presentation of preliminary findings to the public. Includes significant design component.
Prerequisite: CIVE 340, CIVE 350, CIVE 360, CIVE 370
Co-requisite: CIVE 380
Fall
CHEMISTRY

CIVE 402W (3) Civil Engineering Design II
Practical civil engineering design project with real world constraints. Focuses on the engineering analysis, design, and economic analysis of the project. Includes significant design component.
Prerequisite: CIVE 401
Spring

CIVE 432 (3) Properties of Concrete
Selected studies in the properties and design of concrete mixtures, cement chemistry, concrete durability, specialty concrete, construction, admixtures, and quality control. Includes laboratory and significant design components.
Prerequisite: ME 223
Variable

CIVE 435 (2) Civil Engineering Experimentation I
Provides students with hands-on experience in the testing of civil engineering materials including concrete, metals, and structural systems. Includes laboratory component.
Prerequisite: CIVE 340 & CIVE 370
Fall

CIVE 436 (2) Civil Engineering Experimentation II
Provides students with hands-on experience in the testing of civil engineering materials including soil and asphalt, fluid mechanics, hydraulics, and hydrology. Includes laboratory component.
Prerequisite: CIVE 350, CIVE 360
Spring

CIVE 446 (3) Reinforced Concrete Design
Design of reinforced concrete beams, columns, slabs, and structural foundations according to AASHTO Building Code requirements. Includes significant design component.
Prerequisite: CIVE 340
Fall, Spring

CIVE 447 (3) Prestressed Concrete Design
Prerequisite: CIVE 340
Spring

CIVE 448 (3) Steel Design
Behavior and properties of structural steel. Design of tension members, compression members, beams, and connections using the LRFD method. Use of the AISC Steel Construction Manual is required. Includes significant design component.
Prerequisite: CIVE 340
Fall, Spring

CIVE 452 (3) Open Channel Flow
Analysis of open channel flow systems. Includes natural channels, designed channels, flow transitions, steady flow, unsteady flow, uniform flow, and non-uniform flow. Includes significant design component.
Prerequisite: CIVE 350
Variable

CIVE 454 (3) Hydraulic Structures
Analysis and design of water regulating structures. Includes dams, spillways, gates, dikes, levees, stilling basins, water distribution systems, and various simpler structures. Environmental impacts of hydraulic structures are discussed throughout the course. Includes significant design component.
Prerequisite: CIVE 350
Variable

CIVE 458 (3) Stormwater Management
Application of fluid mechanics and hydrology to the design of stormwater management facilities. Environmental impacts of stormwater management are discussed throughout the course. Includes significant design component.
Prerequisite: CIVE 350
Variable

CIVE 461 (3) Fundamentals of Pavement Design
Performance and design of rigid, flexible, and composite pavement structures with emphasis on modern pavement design procedures. Principles of pavement maintenance, rehabilitation, and pavement management systems. Materials characterization, tests, quality control, and life cycle cost analysis. Includes significant design component.
Prerequisite: CIVE 370, CIVE 223 or ME 223
Corequisite: CIVE 360
Variable

CIVE 465 (3) Foundation Design
Classification of foundations; applications of fundamental soil mechanics to design and analysis of soil-structure systems; design and computer application of shallow and deep foundations, piles and caissons, retaining structures. Introduction to rock mechanics. Includes significant design component.
Prerequisite: CIVE 360
Variable

CIVE 467 (3) Earth Structures
Design and construction of traditional embankments, including slope stability analysis; earth and rockfill dams, introduction to seepage analysis; excavations, earth retaining structures, and other geotechnical structures. Geotechnical software application in analysis and design. Includes significant design component.
Prerequisite: CIVE 360
Variable

CIVE 470 (3) Traffic Engineering
Elements of traffic engineering including road use, vehicle and roadway systems; traffic flow theory; traffic studies and data collections; traffic control devices; principles of intersecting signalization; capacity and level of service; analysis of freeways, rural highways and intersections using computer software for traffic operations and management. Includes significant design component.
Prerequisite: CIVE 370
Variable

CIVE 471 (3) Highway Planning and Design
Classification and design process of highways; development and use of design controls, criteria, and highway design elements; design of vertical and horizontal alignment, and establishment of sight distances; design of cross sections, intersections, and interchanges. Extensive use of CAD software. Includes significant design component.
Prerequisite: CIVE 145 and CIVE 370
Variable

CIVE 476 (3) Planning and Design of Airports
Development and design of airport facilities and the integration of multiple disciplines including runway orientation and capacity, terminal facilities, forecasting, planning, noise, airspace utilization, parking, lighting, and construction. Includes significant design component.
Prerequisite: CIVE 370
Variable

CIVE 481 (3) Water & Wastewater Treatment, Collection & Distribution
Overview of municipal water and wastewater treatment and distribution practices. Application of chemical, biological and physical principles to design and the operation of water and wastewater treatment and distribution systems. Includes significant design component.
Prerequisite: CIVE 380
Variable

CIVE 484 (3) Landfill and Hazardous Waste Engineering
This course will be taught as a classroom based course with a combination of lecture, individual and group projects, reading, homework, discussion, review, and examinations. The goal of the course is to develop competency in the design and implementation of landfill design and hazardous waste remediation, with understanding of both performance and cost implications to all choices.
Prerequisite: CIVE 380
Variable

CIVE 491 (1-4) In-Service
May be repeated for credit on each different topic.
Variable

CIVE 493 (1) MAX Scholar Seminar
This class provides MAX scholars with an opportunity to explore a set of topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Students will be required to participate in mentoring of lower division MAX scholarship recipients and provide written and oral presentations of various topics during the semester. This course may be repeated and will not count towards graduation requirements.
Prerequisite: Recipient of a MAX scholarship or instructor consent.
Fall, Spring
Cognitive Science

College of Arts and Humanities
Department of Philosophy
227 Armstrong Hall  •  507-389-2012

Cognitive Science Program Director: Richard Liebendorfer.

Biology Concentration Advisor: Geoffrey Goellner
Computer Science Concentration Advisor: Rebecca Bates
Philosophy Concentration Advisor: Richard Liebendorfer
Psychology Concentration Advisor: Bradley Arsznow

Cognitive Science Program Core Faculty: Dawn Albertson (Psychology), Bradley Arsznow (Psychology), Rebecca Bates (Computer Science), Michael Bentley (Biology), Geoffrey Goellner (Biology), Moses Langley (Psychology), Karla Lassonde (Psychology), Richard Liebendorfer (Philosophy), Guarionex Salvia (Computer Science), Daniel Toma (Biology), Sun Kyeong Yu (Philosophy), Julie Wulfemeyer (Philosophy)

Cognitive Science is an interdisciplinary inquiry concerned with understanding the nature and development of such intelligent capacities as perception, language, reasoning, learning and problem-solving, whether these capacities are realized in biological or artificial systems. Such inquiry is by its very nature interdisciplinary, integrating methodological, theoretical and practical foci of Biology, Computer Science, Philosophy and Psychology into a single course of study.

Academic Map/Degree Plan at www.mnsu.edu/programs/#BS

POLICIES/INFORMATION

The cognitive science major is a broad major and does not require that a student complete a minor in addition to the major. The major requires approximately 71-79 credits (depending on area of concentration) including prerequisites. As prerequisites for the major students must take CHEM 201, MATH 121, PSYC 201, or STAT 354. Some of prerequisite requirements also fulfill General Education goal areas. Some of the concentrations have additional prerequisites (see course descriptions for more information). The program requirements below should be read carefully.

Each Cognitive Science major will concentrate in one of the four participating disciplines: Biology, Computer Science, Philosophy and Psychology. The concentration typically requires 24 credits of work. In addition to the concentration each student will take core courses from each of the other three participating disciplines.

The structure of the major insures that students have a solid grounding in each of the four disciplines as well as a specific concentration in one area that draws on the interdisciplinary foundation. Graduates of the program will be prepared for a variety of post-baccalaureate options.

• They will be prepared for any of the careers open to graduates with degrees in one of the participating disciplines.
• They will be prepared for graduate study in traditional programs in Biology, Computer Science, Psychology or Philosophy.
• They will also be prepared for study in one of the many recently developed graduate Cognitive Science programs as well as graduate study in related programs such as cognition, brain, and behavior, cognitive neuroscience, biopsychology and human-computer interaction.

Those who choose to study the law, a path frequently chosen by philosophy majors, will be well suited for legal practice concerned with the variety of legal complexities associated with the development of new technology.

Admission to the major is granted by the Cognitive Science Program. Minimum admission requirements are:

• a minimum of 32 earned semester hours.
• a minimum cumulative GPA of 2.5

Contact the Cognitive Science Program Director or the Program Advisors in one of the four participating departments.

Grading Policy. All coursework applied towards the major must be taken for a letter grade except for courses offered only as P/N. A minimum grade of “C” is required in all courses which are to be applied towards the major. In addition, a minimum grade of “C” is required for all prerequisite courses where dictated by individual department polices. Grades of “D” are not accepted by the program for Prerequisites to the major, major common core and major restricted elective courses.

CIV 494 (1) Global Experience in Engineering and Technology
This class provides students pursuing a minor in “Global Solutions in Engineering and Technology” with an opportunity to explore a set of topics related to achieving success in advance of and following an international experience (internship, study abroad, etc.) Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Returning students will be required to participate in mentoring of students preparing for their international experience and provide written and/or oral presentations of various topics during the semester. This course is required both before and after participation in the international experience (min. 2 cr.)

Variable

CIV 497 (1-6) Internship
Variable

CIV 499 (1-6) Individual Study

COGNITIVE SCIENCE BS

Degree completion = 120 credits

Required General Education

BIOL 105 General Biology I (4)
MATH 121 Calculus I (4)
Choose 5 Credits
CHEM 111 Chemistry of Life Process Part I (Organic & Biochemistry) (5)
CHEM 201 General Chemistry I (5)

Prerequisites to the Major

CS 110 Computer Science I (4)
PSYC 206 Introduction to Cognitive Science (4)
Choose 3 - 4 Credits
HILTH 475 Biostatistics (3)
PSYC 201 Statistics for Psychology (4)
STAT 154 Elementary Statistics (4)
STAT 354 Concepts of Probability & Statistics (3)

Major Common Core

BIOL 220 Human Anatomy (4)
BIOL 324 Neurobiology (3)
BIOL 330 Principles of Human Physiology (4)
CS 111 Computer Science II (4)
CS 230 Introduction to Intelligent Systems (4)
PHIL 101W Philosophical Problem: The Mind-Body Problem (3)
PHIL 475 Philosophical Issues in Cognitive Science (3)
PSYC 211W Research Methods and Design (4)
PSYC 321 Brain and Behavior (4)
PSYC 325 Introduction to Cognitive Psychology (4)

Major Restricted Electives

In addition to the common core courses, students will select one of the four core areas as their discipline of emphasis and complete 3-4 specialized courses in that area.

Computer Science Electives (choose 3 - 4 Credits)

CS 430 Artificial Intelligence (3)
IT 482 Human Computer Interaction (4)

Philosophy Electives Choose 6 Credits

PHIL 311 Symbolic Logic (3)
PHIL 410 Philosophy of Language (3)
PHIL 474 Philosophy of the Mind (3)
PHIL 476 Philosophy of Perception (3)
Students completing course requirements under previous catalogs are advised to consult the department chairperson for appropriate course substitutions.

The minimum level of professional preparation in communication sciences and disorders requires the master's degree. The department does not recommend bachelor degree graduates for professional employment in the field.

Admission to Major is granted by the department upon completion of the courses of CDIS 312, CDIS 322, CDIS 392, and CDIS 394, with a 3.0 grade point average. Students should seek admission to the program during their sophomore year or fall semester of their junior year and should work with an advisor in the department to plan a course of study. Permission to enroll in 400 level courses requires a 3.0 average in the following courses: CDIS 312, CDIS 322, CDIS 392, CDIS 394. In addition to the grade point requirement of 3.0, students may earn a final grade of "C" in no more than one course among the four. Any courses with a final grade of "C" or lower must be repeated and a grade of "B" or better must be earned to fulfill requirements for the Communication Sciences and Disorders major.

Students planning to major in an area of study in the College of Allied Health and Nursing have an advisor assigned to them. Questions and concerns pertaining to advising and the assignment of advisors can be answered by the student relations coordinator. Contact the Dean's office for contact information.

GPA Policy. A minimum GPA of 3.0 is required to enroll in practicum (CDIS 495). Refer to the College regarding required advising for students on academic probation.

P/N Grading Policy. All courses must be taken for letter grades by majors except those offered on a P/N only basis.

The Communication Disorders Program provides curriculum for a major in communication disorders, pre-professional preparation in speech-language pathology or audiology, and supportive coursework for majors from other departments with interests in human communication or its disorders. The beginning courses concern the normal aspects of speech, language and hearing—its nature and development, as well as introducing the student to the disorders of speech, language, and hearing. Advanced courses are devoted to specific disorders in terms of their nature and treatment. The undergraduate training culminates with supervised practicum experiences in which the student works with people who have communication disorders.

The minor in Communication Disorders (16 credits) is designed to acquaint students with the nature of impaired human communication. One minor core course, one minor capstone, and 12 credits of minor specialization are required. There is considerable flexibility in the "specialization" portion of the program. Therefore, students are required to meet with a Communication Disorders advisor to identify classes that are appropriate to their plan of study.

The Communication Sciences and Disorders Program provides curriculum for a major in communication disorders, pre-professional preparation in speech-language pathology or audiology, and supportive coursework for majors from other departments with interests in human communication or its disorders.

Communication Sciences and Disorders
College of Allied Health & Nursing
Department of Speech, Hearing and Rehabilitation Services
314 Clinical Sciences Building • 507-389-1414
Website: http://ahn.mnsu.edu/cd/
Chair: Megan Mahowald, Ph.D.
Faculty: Bonnie B. Berg Ph.D.; Hsinhuei Sheen Chiou, Ph.D.; Jessica Jones, M.S.; Bruce Boburka, Ph.D.; Renee Shellum, Au.D.

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COMMUNICATION SCIENCES AND DISORDERS CONTINUED

Required for Major

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CDIS 201</td>
<td>Observation of Human Communication (3)</td>
</tr>
<tr>
<td>CDIS 220</td>
<td>Basic Audiology (3)</td>
</tr>
<tr>
<td>CDIS 290</td>
<td>Introduction to Communication Disorders (3)</td>
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<tr>
<td>CDIS 312</td>
<td>Speech and Language Development (3)</td>
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<tr>
<td>CDIS 322</td>
<td>Speech and Hearing Science (3)</td>
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<tr>
<td>CDIS 392</td>
<td>Phonetics (3)</td>
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<tr>
<td>CDIS 394</td>
<td>Applied Anatomy and Physiology (3)</td>
</tr>
<tr>
<td>CDIS 402</td>
<td>Child Language Disorders (2)</td>
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<tr>
<td>CDIS 403</td>
<td>Child Language Disorders Lab (1)</td>
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<tr>
<td>CDIS 410</td>
<td>Neurological Bases of Speech (2)</td>
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<tr>
<td>CDIS 416</td>
<td>Voice and Resonance Disorders (3)</td>
</tr>
<tr>
<td>CDIS 421</td>
<td>Aural Rehabilitation (3)</td>
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<tr>
<td>CDIS 431</td>
<td>Orientation Lab (1)</td>
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<tr>
<td>CDIS 434</td>
<td>Orientation to Clinical Practicum (2)</td>
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<tr>
<td>CDIS 438</td>
<td>Speech Sound Disorders (3)</td>
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<tr>
<td>CDIS 444</td>
<td>Appraisal and Diagnosis (3)</td>
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<tr>
<td>CDIS 445</td>
<td>Grand Rounds - Foundation (1)</td>
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<tr>
<td>CDIS 446</td>
<td>Grand Rounds - Presentation (2)</td>
</tr>
<tr>
<td>CDIS 495</td>
<td>Clinical Practicum: Speech/Language Disorders (2)</td>
</tr>
</tbody>
</table>

CDIS 291 (1-3) Individual Study

Fall, Spring

CDIS 208 (3) Advanced Sign Language II

Continuation of Advanced Sign Language I: expanded study of Sign Language with emphasis on conversation skills and storytelling, continued expansion of knowledge of Deaf Culture and Deaf Community.

Prerequisite: CDIS 207. Must have earned a grade of “A” or “B” in CDIS 207.

CDIS 220 (3) Basic Audiology

Functional anatomy of the ear, common pathologies, and measurement of hearing and sound.

Prerequisite: CDIS 322

GE-8

CDIS 230 (2) Speech/Language Foreign Students

Modification of oral communication and listening of speakers who are learning English as a foreign language. Individualized, clinical model is employed.

Variable

CDIS 290 (3) Introduction to Communication Disorders

Classification and management of speech, language and hearing disorders and how their effects can marginalize a population.

Fall, Spring

GE-7

Diverse Cultures - Purple

CDIS 312 (3) Speech and Language Development

Acquisition and sequences of phonological, syntactical, morphological and semantic features of language across the lifespan. Theory and research.

Fall

CDIS 322 (3) Speech and Hearing Science

This course is designed to provide the students with a comprehensive knowledge base of the auditory and speech sciences as they relate to communication disorders. The major emphasis is on the characteristics of sound and sound transmission and the relationship to speech perception.

Fall
CDIS 392 (3) Phonetics
Using IPA to analyze and transcribe the sounds of English, emphasizing understanding the process involved to produce phonemes in normal, culturally different and disordered speech.
Fall

CDIS 394 (3) Applied Anatomy and Physiology
Anatomy and Physiology with specific focus on structure and function of speech, language, and hearing mechanisms. Specific systems include respiration, phonation, articulation, hearing, and neurology (peripheral and central).
Fall

CDIS 401 (3) Hearing Disorders
This course is designed to provide students with the knowledge base of various auditory and vestibular disorders. It will explore the effects of auditory dysfunction as it relates to communication, education and remediation.
Fall

CDIS 402 (2) Child Language Disorders
Types and characteristics of language disorders in children.
Fall

CDIS 403 (1) Child Language Disorders Lab
Lab associated with CDIS 402. Practice in applying course content to the language of children.
Fall

CDIS 404 (3) Dimensions of Deafness
This course is designed to provide students with a knowledge base of Deaf culture. The many facets of the deaf/hard of hearing person’s life will be explored. The debate over cochlear implantation is discussed in great detail.
Spring

CDIS 408 (3) Seminar in Central Auditory Processing Disorders
Students will learn the definition of central auditory processing disorders (CAPD), as well as the controversies surrounding the diagnosis of the disorder. The neu- ronatomy and physiology related to auditory processing will also be covered in order to understand the diversity involved in the diagnostic and management methods of CAPD. Students will learn the appropriate test batteries, the diagnostic team involved, the inclusion of a multidisciplinary team approach and treatment/management options for CAPD. This course would be beneficial to education majors, CDIS majors, and Educational Psychology.
Spring

CDIS 409W (3) Literacy Foundations and Disorders for Speech-Language Pathologists
This course is designed to provide students with knowledge and skills in the areas of literacy foundations, development, assessment, intervention and disorders. Students will engage in both clinical and academic writing in the context of literacy assessment and intervention.
All Year

CDIS 410 (2) Neurological Bases of Speech
An overview of neuroanatomy and neuroscience and relationships between neuroscience and speech, language, and hearing.
Fall

CDIS 416 (3) Voice and Resonance Disorders
Description, etiology, assessment and management of voice and resonance disorders.
Fall

CDIS 421 (3) Aural Rehabilitation
Habitual audiologic and the instruction of the hearing-impaired, including hearing aids, speech reading and auditory training.
Spring

CDIS 431 (1) Orientation Lab
Supervised observation of the diagnostic and remedial management of speech and language disorders.
Prerequisite: Concurrent enrollment in CDIS 434
Spring

CDIS 434 (2) Orientation to Clinical Practicum
Procedures and operation of the clinical program in communication disorders.
Prerequisite: Consent, concurrent enrollment in CDIS 431
Spring

CDIS 438 (3) Speech Sound Disorders
Description, etiology, assessment and management of speech sound problems.
Spring

CDIS 444 (3) Appraisal and Diagnosis
Tests, measures, procedures and processes for the evaluation and diagnosis of speech and language.
Spring

CDIS 445 (1) Grand Rounds-Foundation
Observation of clinical case studies.
Variable

CDIS 446 (2) Grand Rounds-Presentation
Presentation of clinical case studies.
Variable

CDIS 447W (3) Transdisciplinary Research in Health-Related Fields
This course will explore transdisciplinary research design with emphasis related to the areas of allied health and nursing sciences and disciplines. Basic overview of research methodologies commonly utilized in health sciences and approaches to transdisciplinary research will be explored through review of original research. Students will be required to produce and revise scientific writing with specific focus on inter/transdisciplinary studies. Team-based problem centered research questions will be developed and investigated using transdisciplinary methodology with current health-related issues.
Fall

CDIS 490 (1-4) Independent Study
Fall, Spring, Summer

CDIS 491 (1-6) In-service
Study of a specific disorder or aspects of communication disorders that are not provided in the current curriculum.

CDIS 495 (2) Clinical Practicum: Speech/Language Disorders
A practicum course designed to train the student to provide competent clinical services to persons with communication disorders. The student will develop skills to conduct diagnostic sessions, design and implement intervention plans and write clinical reports. Prerequisite: 3 of the following: CDIS 402, CDIS 416, CDIS 438 (completion of or concurrent enrollment in CDIS 444). GPA of 2.8 in major courses.
Fall, Spring
COMMUNICATION STUDIES BS AND MINOR

Communication Studies

College of Arts & Humanities,
Department of Communication Studies
230 Armstrong Hall • 507-389-2213
Website: www.mnsu.edu/cmst

Chair: Christopher Brown Ph.D.
Director of Basic Course and Teaching Assistants: Laura Jacobi Ph.D.
Director of Graduate Studies Deepa Oommen Ph.D.
Director of Forensics: Leah White Ph.D.
Office Manager: Beth Teigen


Communication Studies is the exploration of how people generate shared meaning through the use of verbal and nonverbal symbols. Communication Studies majors work to develop confidence and effectiveness in their public speaking, interpersonal, and small group communication abilities. The focus is on helping students to develop interpersonal, organizational, intercultural, and public presentation skills which will enhance the quality of their lives across a variety of contexts (e.g., within the workplace, family, civic and social situations).

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
Admission to Major is granted by the department. Minimum University admission requirements are:
- a minimum of 30 earned semester credit hours.
- a minimum cumulative GPA of 2.0.

Contact the department for application procedures. In addition to the general requirements, a cumulative GPA of 2.2 must be maintained in the courses of the major.

Waiver of CMST 102: Students who take CMST 100 and CMST 333 will have CMST 102 waived for the BS major in Communication Studies.

GPA Policy. Students must maintain a minimum of 2.2 GPA.

P/N Grading Policy. Total credits in the department must not exceed 25 percent P/N for a major or a minor.

Internships. Internships are P/N option only.

Academic Probation Advising. Refer to the information listed in the College of Arts and Humanities section of the catalog.

Communication Studies minors may apply no more than 4 credits of CMST 498 and 4 credits of CMST 499 to fulfillment of the minor. Additional credits may be applied for graduation requirements. Communication Studies majors may apply no more than 8 credits of CMST 498 and 4 credits of CMST 499 to fulfillment of the major. Additional credits may be applied for graduation requirements.

CMST 102 does not count toward major or minor requirements.

Course Repeat Policy. Students with a major/minor in Communication Studies may repeat any course in the department in an effort to improve grades. A student may repeat a specific course only once. In exceptional circumstances, a student may appeal to the department chair for a second repeat of a course. The official grade for the course, listings on a student's transcript, and other matters related to course repeats will adhere to appropriate university policies.

COMMUNICATION STUDIES BS
Degree completion = 120 credits

Required General Education
CMST 101W Interpersonal Communication [4]
CMST 102 Public Speaking [3]
CMST 203 Intercultural Communication [4]

Major Restricted Electives
Communication Skills Foundation. Choose 4 Credits
Courses may not double count in the major.
CMST 310 - Performance of Literature [4]
CMST 312 - Professional Communication & Interviewing [4]
CMST 333 - Advanced Public Communication [4]

Communication Skills Electives. Choose 4 Credits
CMST 340, 490, and 498 require approval of program advisor.
CMST 201 - Small Group Communication [2]
CMST 202 - Nonverbal Communication [4]
CMST 215 - Effective Listening [2]
CMST 225 - Communicating With/Through Technology [4]
CMST 310 - Performance of Literature [4]
CMST 312 - Professional Communication & Interviewing [4]
CMST 333 - Advanced Public Communication [4]
CMST 335 - Communication & Community [4]
CMST 340 - Special Topics [1-4]
CMST 445 - Conflict Mediation [4]
CMST 490 - Workshop [1-4]
CMST 498 - Internship [1-12]

Communication Analysis Foundation. Choose 8 Credits
CMST 302 - Argumentation [4]

Communication Analysis Electives. Choose 4 Credits
CMST 440 requires approval of program advisor.
CMST 403 - Gender and Communication [4]
CMST 409 - Performance Studies [4]
CMST 410 - Topics in Relational Communication [1-4]
CMST 412 - Organizational Communication [4]
CMST 415 - Topics in Rhetoric and Culture [1-4]
CMST 416 - Topics in American Public Address [1-4]
CMST 440 - Special Topics [1-4]

Communication Research. Choose 8 Credits
CMST 306 - Communication Research Methods [4]
CMST 485W Senior Seminar [4]

Major Unrestricted Electives. Choose 8 Credits
Courses may not double count in the major.
CMST 200 - 499

Required Minor: Yes. Any.

COMMUNICATION STUDIES MINOR

Required for Minor
CMST 101W Interpersonal Communication [4]
CMST 102 Public Speaking [3]
CMST 302 Argumentation [4]

Required Electives for Minor (8 credits)
4 of the 8 elective credits must be in upper-level classes. CMST 100 does not count toward the minor.
CMST 103 through CMST 499 - Communication Studies

INTERDISCIPLINARY COMMUNICATIONS MINOR (27 credits)
This interdisciplinary minor is for students who wish to enhance their communication skills for use in business and other professional settings. Students completing this minor will develop an understanding of contexts and rhetorical strategies for oral and written communication among professionals. Students will also develop their own ability to communicate through written texts, oral communication, and electronic formats. These skills are highly desirable by employers in a wide range of business, government, and nonprofit organizations. Students may major in any of the programs affiliated with this minor, but the courses taken for the minor will not count toward the major. Students must earn a “C” or better in English courses in order to apply them to the minor.
COMMUNICATION STUDIES CONTINUED

Restricted Electives

English Focus (choose 4 credits)

ENG 271W Technical Communication (4)
ENG 272W Business Communication (4)

Disciplinary Choices (choose 6 - 8 credits)

Students must take two courses from the list below. Each course must be from a different discipline.

CMST 223 Communicating With/Through Technology (4)
CMST 333 Advanced Public Communication (4)
CMST 335 Communication and Community (4)
CMST 409 Performance Studies (4)
CMST 412 Organizational Communication (4)
CMST 445 Conflict Management (4)
ENG 471 Voice and Technical Communication (4)
ENG 472 Topics in Technical Communication (1-4)
ENG 473 Desktop Publishing (4)
ENG 474W Research and Writing Technical Reports (4)
ENG 475 Editing Technical Publications (4)
ENG 476 Online Documentation (4)
ENG 477W Technical Documentation, Policies, and Procedures (4)
MASS 233 Public Relations Principles (4)
MASS 312 Mass Media Law (4)
MASS 325W Media Reporting and Editing (4)
MASS 330 Writing for Online Multimedia (4)
MASS 334 Writing & Speaking for Broadcast (4)
MASS 340 Mass Media Research (4)
MASS 351 Digital Imaging for Mass Media (4)
MASS 350 Digital Design for Mass Media (4)
MASS 411 Mass Media Ethics and Criticism (4)
MASS 450 Strategic Communications Case Studies (4)
NPL 273 Introduction to the Nonprofit Sector (3)
NPL 473 Advanced Workshop in Nonprofit Leadership (3)
RPLS 377 Public Relations (3)
RPLS 465 Event Management (3)
URBS 150 Sustainable Communities (3)
URBS 230W Community Leadership (3)
URBS 412 Public Information and Involvement (3)

COURSE DESCRIPTIONS

CMST 100 (3) Fundamentals of Communication
A course designed to improve a students understanding in communication, including the areas of interpersonal, nonverbal, listening, small group and public speaking.
GE-1B

CMST 101W (4) Interpersonal Communication
A course blending theory and practice to help individuals build effective relationships through improved communication.
WI, GE-2

CMST 102 (3) Public Speaking
A course in communication principles to develop skills in the analysis and presentation of speeches.
GE-1B

CMST 201 (2-4) Small Group Communication
Development of communication skills for working with others in small group situations.
GE-1B

CMST 202 (4) Nonverbal Communication
Investigation of the concepts and theories of nonverbal communication. Designed to assist students in increasing their awareness and understanding of their nonverbal communication and in analyzing and understanding the nonverbal communication of others.

CMST 203 (4) Intercultural Communication
The course explores communication with people from other cultures, why misunderstandings occur and how to build clearer and more productive cross-cultural relationships.
GE-7, GE-8

Diverse Cultures - Purple

CMST 215 (2) Effective Listening
This course is designed to provide students with skills of effective listening, and the ability to apply that knowledge in a variety of educational and professional settings.

CMST 220 (1-4) Forensics
Activity course involving participation in intercollegiate speech tournaments. Course can be repeated for credit.

CMST 225 (4) Communicating With/Through Technology
A course designed to help students learn effective communication using a variety of contemporary technologies. Students will be better equipped to use communication technologies to communicate personal, professional, and public messages. Variable

CMST 240 (1-4) Special Topics
Special interest courses devoted to specific topics within the field of communication studies. Topics vary, and course may be repeated for credit under different topic headings.

CMST 301 (4) Communication Studies: Approaches and Perspectives
Course is designed to provide the student with an understanding of the history, scholarly writing, and academic journals in the communication discipline, thus preparing the student for more advanced courses in the Department of Communication Studies.
Fall, Spring, Summer On Demand

CMST 302 (4) Argumentation
An exploration of the field of argument, addressing structure, types and critical analysis. Students will learn to identify types of reasoning, argument fallacies and pseudo-reasoning. Students will apply concepts in the construction and refutation of argument positions.
Fall, Spring

CMST 306 (4) Communication Research
An introduction to the theory and practice of research in communication studies, including the critical evaluation of contemporary communication research. Prerequisite: CMST 301

CMST 310 (4) Performance of Literature
This course is designed to develop the skills to complete the artistic process of studying literature through performance and sharing that study with an audience.
GE-6, GE-11

CMST 312 (4) Professional Communication & Interviewing
Designed to help students improve oral communication skills in the workplace. The emphasis is on the preparation and presentation of public messages in formats commonly used in business and professional settings. Listening as an oral communication skill in the workplace will be explored, as well the role of intercultural communication in the workplace. Individual speeches, group presentations, and interviews are the major presentations.

CMST 320 (1-4) Advanced Forensics
Activity course involving participation in intercollegiate forensics with primary emphasis on applying communication theories to forensic practice. Students may not enroll concurrently with CMST 220. Course may be repeated for an overall total of 4 credits. Variable

CMST 321 (4) Argumentation and Debate
Development of skills in the analysis, application and evaluation of argumentative communication.

CMST 330 (4) Ethics and Free Speech
This course is divided into two sections. First, the class explores ethical parameters involved in communication from a variety of social and cultural perspectives. Second, the class investigates current standards and issues involving freedom of speech.
GE-9

CMST 333 (4) Advanced Public Communication
This is an advanced course in public presentation focused on improving presentational skills of speech delivery and language choice.

CMST 335 (4) Communication and Community
Students examine everyday communication practices (rituals, stories, symbols) analyzing what discursive practices turn individuals into a community. Students explore the meaning of community through experiential learning by experiencing and reflecting upon the way communication creates, maintains, transforms, and repairs community. Variable
CMST 340 (1-4) Special Topics
Special interest courses devoted to specific topics within the field of communication studies. Topics vary, and course may be retaken for credit under different topic headings.

CMST 403 (4) Gender and Communication
This course is designed to develop an understanding of how gender and communication interact. Students learn the basic theories and principles of communication as it applies to gender and develop skills to enhance communication between and among gender groups.

Diverse Cultures - Purple

CMST 409 (4) Performance Studies
This course is an overview of key performance studies concepts, including cultural performance, of everyday life, theories of play, social influence, and identity performance. Students will develop and present performances as a means to understand theoretical concepts.

CMST 410 (1-4) Topics in Relational Communication
Special interest courses devoted to topics within relationship communication. Topics vary, and course may be retaken for credit under different topic headings.

Fall (On Demand), Spring (On Demand), Summer (On Demand)

CMST 412 (4) Organizational Communication
This course is designed to develop an understanding of communication studies in the organizational context. The course will aid each individual in working more effectively within any type of organization through exposure to major theories and works in the area of organizational communication.

CMST 415 (1-4) Topics in Rhetoric and Culture
Special interest courses devoted to specific topics within the intersecting fields of rhetoric and culture. Topics vary, and course may be retaken for credit under different topic headings.

CMST 416 (1-4) Topics in American Public Address
Special interest courses devoted to specific topics within field of American Public Address. Topics vary, and course may be retaken for credit under different topic headings.

CMST 417 (4) Experiential Study in Communication and Culture
This is a special interest course devoted to the development of students' understanding of the strategies and practices of communication in cultural contexts. The course is an experiential course involving travel, typically outside the United States. Odd Years. Spring

Diverse Cultures: Gold

CMST 421 (1-4) Communication Studies Teaching and Coaching Methods
The course fulfills secondary licensure requirements for Communication Arts and Literature. First, the course covers teaching methods and materials needed to develop units for communication courses in grades 5-12. Second, the course covers methods and techniques in the development of competitive speech programs in grades 5-12. Spring

CMST 435 (4) Forensics Pedagogy
A course designed to give students a theoretical understanding of competitive speech and debate.

Fall

CMST 440 (1-4) Special Topics
A course designed for students who have a general interest in communication studies. Content of each special topics course will be different. May be retaken for credit.

CMST 445 (4) Conflict Management
This theory and research-oriented course examines the relationship between communication and conflict, and is designed to provide students with knowledge and skills in dealing with conflict situations.

CMST 460 (4) Dialogue, Discussion, and Debate
This course is designed to provide students with the theoretical foundations necessary to both participate and critique arguments. Students will engage contemporary theories of argumentation and apply those theories in discussion and formal debate.

Fall

CMST 485W (4) Senior Seminar
This is a required capstone course of all Communication Studies majors and involves the completion and presentation of a senior level research project. Teaching majors are excluded from this requirement.

WI

CMST 490 (1-4) Workshop
Topics vary as announced in class schedules.

CMST 497 (1-12) Teaching Internship
Firsthand experience in the classroom assisting a faculty member.

CMST 498 (1-12) Internship
Provides firsthand experience in applying communication theories in the workplace under the direction of an on-site supervisor.

CMST 499 (1-4) Individual Study
Independent study under the supervision of an instructor.
The Community Health Education Internship. The internship requires the completion of 450 clock hours at an approved internship site.

Maximum Number of Credit Hours During the Community Health Education Internship. Students may take no more than 12 credits of coursework, including 9 credits of HLTH 496: Internship: Health Education, during the internship semester.

Background Check. Students involved in any field experience need to undergo a criminal background check prior to registering for HLTH 496 Internship: Health Education. Students are responsible for the fees associated with the background checks. This information is provided to health agencies and organizations for their determination of suitability for placement. The Department of Health Science coordinates the background check process.

Internship Prerequisites. Prerequisites for the Community Health Education internship (HLTH 496: Internship: Health Education) include:
• a "C" or better in all Major Common Core courses (except Human Anatomy);
• a minimum G.P.A. of 2.5;
• a meeting with the Director of the Community Health Education Internship Program one semester in advance of their anticipated internship semester;
• submission of required application materials by the designated due date;
• official approval of the site by the Internship Director. Note: Eligibility for selection at internship sites may be subject to terms and policies of the internship site (i.e. background checks, criminal history, etc.) and the Community Health Education Program; and
• completion of a criminal background check.

COMMUNITY HEALTH EDUCATION BS
Degree completion = 120 credits

Required General Education
CMST 102 Public Speaking (3)
HLTH 101 Health and the Environment (3)
HLTH 212 Consumer Health (3)
STAT 54 Elementary Statistics (4)

Choose 3 Credits
Must complete one of the CHEM courses listed
CHEM 104 Introduction to Chemistry (3)
CHEM 106 Introduction to Chemistry (for Allied Health) (3)
CHEM 111 Chemistry of Life Processes (5)
CHEM 201 General Chemistry (5)

Major Common Core (44 total credits)
BIOL 220 Human Anatomy (4)
BIOL 310 Basics of Human Physiology (4)
HLTH 260 Introduction to Health Education (3)
HLTH 260 Theories and Models in Health Education (3)
HLTH 361W Health Communication and Advocacy (4)
HLTH 380W Health Education Planning, Implementing, and Evaluating 1 (3)
HLTH 454 Chronic and Infectious Diseases (3)
HLTH 460 Introduction to Epidemiology (3)
HLTH 480 Health Education Planning, Implementing and Evaluating 2 (3)
HLTH 482 Administration and Grant Writing in Health Education (4)
HLTH 495 Senior Seminar in Health Education (1)
HLTH 496 Internship: Health Education (1-9)

Major Restricted Electives (choose 6 credits)
FCS 242 Nutrition for Healthcare Professionals (3)
HLTH 210 First Aid & CPR (3)
HLTH 211 Human Sexuality in a World of Diversity (3)
HLTH 225 Introduction to Alcohol and Drug Studies (3)
HLTH 240 Drug Education (3)
HLTH 311 Family Life & Sex Education (3)
HLTH 315 Holistic Health and Wellness (3)
HLTH 321 Medical Terminology (3)
HLTH 400 Women's Health (3)
HLTH 410W Current Health Issues (3)
HLTH 417 Principles of Wellness Coaching (3)
HLTH 440 Teaching First Aid and CPR (2)
HLTH 441 Death Education (3)
HLTH 450 Environmental Health (3)
HLTH 451 Emotional Health and Stress (3)
HLTH 455 Health and Aging (3)
HLTH 456 Assessment and Diagnosis of Substance Use Disorders (3)
HLTH 457 Transdisciplinary Research in Health-Related Fields (3)
HLTH 459 Critical Topics in Health (1-3)

Required Minor: None

COMPANY APPLICATION DEVELOPMENT BAS

Computer Application Development

College of Science, Engineering & Technology
Department of Computer Information Science
273 Wissink Hall • 507-389-1412
Website: cset.mnsu.edu/cis
Chair: Mahbubur Syed
Faculty: Cyrus Azarbod, Rajeev Bukralia, Jonathan Hardwick, Sarah Kruse, Guaronex Salvia, Christophe Veltos, Michael Wells

The CApp major enables students to become developers who can deploy appropriate technology to solve problems in businesses and organizations. Individuals with strong backgrounds of technical and analytical skills, effective communication abilities, and project development knowledge are in demand as the information needs of the world continue to grow. CApp majors can go on to pursue careers as web developers, database application developers, enterprise application developers, and general application programmers.

A student graduating from this program will have the ability to:
• write programs, working either independently or in groups, using different modern high-level and special-purpose languages (including object-oriented language, client-server web programming language and SQL) to implement desired needs.
• use state-of-the art tools and technologies and best programming practices and standards in the development of applications.
• use current computing knowledge, techniques, skills, and software tools to analyze a problem, determine and document user needs, create an effective project plan, and document program design and implementation.
• effectively add a solution into an already-existing user environment.
• better assimilate into professional working environments and conduct themselves professionally.
• engage in continuing professional development, including the learning of new general-purpose and special-purpose programming languages independently.
• analyze the local and global impact of computing on individuals, organizations, and society.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
Admission to Major. The program admits a limited number of students every summer. To be eligible for acceptance to the Computer Application Development major, students must apply for admission to Minnesota State University, Mankato. To be admitted to the program students must satisfy the following requirements:
• The student must have already completed an AS or AAS at an accredited school in computer science, information technology or related area with a GPA of at least 2.5.
• Completion of at least a year of programming courses equivalent to IT 210 and IT 214, with a GPA of 3.0 or above in these courses.
• At least 45 credits of technical course work.

Transfer Policy:
• Student will receive 45 credits of technical coursework.
• Student may be able to transfer up to 15 credits of General Education coursework.
• General Education coursework transferred will be subject to transfer evaluation and mapped to appropriate Goal Areas.

General Education Policy:
• Minnesota State Mankato policy states that students with an AS or AAS degree are exempt from Goal areas 2 and 11 and that will need 40 credits rather than 44 credits to satisfy General Education requirements.
• Student must fulfill all General Education Requirements, except those from which the student is exempt (2, 11), with at least 5 credits of upperdivision (300 level or above) courses taken at Minnesota State Mankato.

GPA Policy. The completion of any major or minor in the Department of Computer Information Science requires both:
- a GPA of 2.5 or higher for all departmental courses (IT), or their substitutions, used to complete the major or minor, and
- a GPA of 2.5 or higher for all courses, or their substitutions, used to complete the major or minor. This includes all departmental courses, supporting courses, and General Education courses required for the major or minor.

It is recommended that students who cannot maintain a GPA of 3.0 in required 100 and 200 level courses see their advisor for a program review.

Grade Policy. All coursework used to complete a departmental major or minor, including required courses, required supporting courses, and required General Education courses, must be taken for a letter grade except for courses offered only as P/N.

No course completed with a grade of “D” can be used to complete a departmental major or minor program, or to meet a departmental prerequisite.

Registration Hold Policy. The department will place a registration hold on any student who earns a “D” or “F” in any of its courses. The department will also place such a hold on any student who drops any of its courses after the first two weeks of the semester. A student with a registration hold cannot register for courses until the hold is released, which requires filling out an appeal form and taking it to the student’s advisor for discussion. Appeal forms are available from the departmental office.

This hold policy does NOT apply to students who are taking 100-level IT courses.

Dual Major Policy. Students may earn at most one undergraduate major from this department.

Incomplete Policy. The department gives incomplete grades for only two conditions. The first condition is illness, which requires a doctor’s written recommendation. The second condition arises when a death in the student’s family has caused the student to be away from the campus for an extended period. The student must have a satisfactory grade (“C” or better) in the course at the time of the onset of the condition.

Internship Policy. The Department of Computer Information Science continuously strives for improvements in the academic program. Coursework, coupled with extensive laboratory experience, play an important part in the student’s educational program. However, application of the concepts discussed in class to on-the-job situations is equally important. As a result, the department requires an internship or a capstone experience for all IT majors.

Excluded Courses Policy. IT 201, IT 296 do not count toward a major or minor in the department.

Residency Policy. Students must earn at least 50 percent of the credits required for a departmental major or minor at Minnesota State Mankato.

Required General Education
All of these courses (or comparable) are available at the 2-year schools. Some are required in various 2-year programs. (Corresponding Minnesota State Mankato course in parentheses.) Students may have already completed these courses before entering Minnesota State Mankato, thus the remaining credits to complete the 60 required credits must be completed with open electives.

CMST 102  Public Speaking (3)
ENG 101  Composition (4)
ENG 272W Business Communication (4)
MATH 112  College Algebra (4)
STAT 154  Elementary Statistics (4)

Major Common Core
22 credits total consisting of 4 classes (16 credits) specifically designed for tight integration with industry partners, plus 6 credits of internship (1 or 2 credits per semester; pass/no credit portfolio based on employer recommendation).

CMST 333  Advanced Public Communication (4)
IT 340  Introduction to Database Systems (4)
IT 350  Information Security (4)
IT 380  Systems Analysis and Design (4)
IT 497  Internship (1-12)

Major Restricted Electives
5 classes (20 credits) of electives selected from the following. Additional special topics classes may also be available.

IT 310  Data Structures & Algorithms (4)
IT 311  Business Application Programming (4)
IT 320  Machine Structures and Operating Systems (4)
IT 360  Introduction to Networking (4)
IT 414  Advanced Object-Oriented Programming with Design Patterns (4)
IT 440  Database Management Systems II (4)
IT 450  Information Warfare (4)
IT 460  Network and Security Protocols (4)
IT 462  Network, Security, Administration and Programming (4)
IT 465  Mobile Device Application Programming (4)
IT 480  Software Quality Assurance and Testing (4)
IT 482  Human Computer Interaction (4)
IT 483  Web Applications and User Interface Design (4)
IT 484  Software Engineering (4)
IT 499  Individual Study (1-4)

Computer Engineering BSCE

Computer Engineering
College of Science, Engineering & Technology
Department of Electrical and Computer Engineering and Technology
242 Trafton Science Center N • 507-389-5747
Website: www.cset.mnsu.edu/ecet
Email: ece@mnsu.edu

Chair: Guizhang
Program Coordinator: Guizhang

Faculty: Gale Allen, Nannan He, Han-Way Huang, Muhammad Khaliq, Julio Mandojana, Putei Megahamari, Ryan Shirk, Vincent Winstead, Xuanhui Wu, Jianwu Zeng, Guizhang


Computer Engineering (CE) encompasses the research, development, design and operation of computers and computerized systems and their hardware and software components. This program leads to a Bachelor of Science in Computer Engineering. The primary objective of the Computer Engineering program is to educate engineer- ing professionals who possess sound design and analytical background coupled with a strong laboratory experience supporting Computer Engineering concepts. This means that the department prepares its graduates for:
1. Entry into the engineering work environment with well-developed design and laboratory skills.
2. Further study toward advanced degrees in engineering and other related disciplines.
3. Advancement into managerial ranks and/or entrepreneurial endeavors.

The educational objectives for our Bachelor of Science in Computer Engineering degree are:
1. Graduates who receive the B.S.C.E. (Graduates) will function as responsible members of society with an awareness of the social, ethical, and economic ramifications of their work.
2. Graduates will become successful practitioners in engineering and other diverse careers.
3. Graduates will succeed in full time graduate and professional studies.
4. Graduates will pursue continuing and life-long learning opportunities.
5. Graduates will pursue professional registration.
6. Graduates will gain foundational education that allows for personal growth and flexibility throughout their career.

Our metrics for determining success in meeting these objectives will include:
1. Assessment of societal, economic awareness, and ethical performance of our graduates by the graduate and employer.
2. Monitoring of the success of our graduates in the workforce.
3. Monitoring of the success of our graduates in graduate and professional programs.
4. Assessment of continuing and life-long learning by the graduate (and their employer as applicable).
5. Reviewing the number and success of our students completing professional registration to advance their careers.

In support of these objectives, the program provides a curriculum including the following components that will prepare students for excellent careers in Computer Engineering:
1. A strong background in the physical sciences, mathematics, and engineering sciences, including extensive hands-on laboratory instruction.
2. An integrated design component including instruction in basic practices and procedures, creativity, control, economics, and synthesis. The process begins with basic instruction during the first year and concludes with a capstone design project.
3. A choice of sub-disciplines such as Internet of Things (IoTs), Application Specific Integrated Circuits (ASICs), in the junior/senior-level elective class.
4. Opportunities for students to develop sensitivity to the social and humanistic implications of technology and motivate them to make worthwhile contributions to the profession and society, while upholding the highest standards of professional ethics.
5. A course in engineering economics to promote awareness of the economic aspects of engineering.
6. Preparation for continuing study and professional development.

During the senior year, as allowed by the state, students are strongly recommended to take the Fundamentals of Engineering (FE) examination or its equivalent. The curriculum offers students the opportunity to emphasize a number of specialized areas including advanced digital systems, communications, digital signal processing, networking and system design. The recommended high school preparation is two years of algebra, one year of geometry, one-half year of trigonometry, one-half year of college algebra, and a year each of physics and chemistry plus a programming language. Without this background, it may take students longer than four years to earn a degree. During the first two years students take physics and mathematics courses common to all branches of engineering, program-design courses, and a discrete mathematics course (specifically designed for computer engineers), as well as supporting work in English, humanities, and social sciences. Second-year engineering students complete physics, mathematics and 200-level engineering and object-oriented design and software development courses.

All international students wishing to have transfer credits granted from non-U.S. schools will be required to use the ECE evaluation service to be completed no later than the first semester at Minnesota State Mankato.

**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)**

**POLICIES/INFORMATION**

**Admission to Major.** Admission to the college is necessary before enrolling in 300- and 400-level courses. Minimum college requirements are:
- A minimum of 32 earned semester credit hours.
- A minimum cumulative GPA of 2.00 (C-).

Please contact the department for application procedures.

During the spring semester of the sophomore year, students should submit an application for admission to the Computer Engineering program. Admission to the program is selective and, following applications to the department, subject to approval from the department chair. The department makes a special effort to accommodate transfer students. Only students admitted to the program are permitted to enroll in upper-division electrical engineering courses. No transfer credits are allowed for upper-division engineering courses except by department chair review and approval.

Before being accepted into the program and admitted to 300-level engineering courses (typically in the fall semester), a student must complete the following courses including all necessary prerequisites:
- General Physics I and II (calculus-based) (8 credits)
- Calculus I, Calculus II and Differential Equations (12 credits)
- Introduction to Electrical/Computer Engineering I and II (6 credits)
- Circuit Analysis I and II (including lab) (7 credits)
- English Composition (4 credits)
- Technical Communication (4 credits)
- Microprocessor course and lab (4 credits)

A cumulative GPA of 2.5 for all science and math courses must have been achieved for program admittance. Grades must be 1.65 (“C-”) or better for courses to be accepted.

**GPA Policy.** Students graduating with a degree in Computer Engineering must have:
- completed a minimum of 20 semester credit hours of upper division EE and CS courses at Minnesota State Mankato.
- have a cumulative GPA of 2.25 on all upper division EE and CS courses, and
- have completed their senior design sequence at Minnesota State Mankato.

**GPA.** A cumulative grade-point average of 2.5 for all science, math and engineering courses must have been maintained. Grades must be 1.65 (“C-”) or better for course to be accepted. Minnesota State Mankato students should complete the pre-engineering courses listed under the major.

Petition to evaluate transfer credits must occur no later than the first semester the student is enrolled in or declared a major housed in the Department of Electrical and Computer Engineering Technology.

**P/N Grading Policy.** A student who majors in CE must elect the grade option for all required courses including courses offered by another department.

**COMPUTER ENGINEERING BSCE**

Degree completion = 128 credits

**Required General Education**

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<th>Course</th>
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<tr>
<td>ENGR 101</td>
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<td>ENGR 271W</td>
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<tr>
<td>MATH 121</td>
<td>4</td>
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<td>PHYS 221</td>
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<td>ECON 201</td>
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<td>ECON 202</td>
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**Economics (choose 3 credits)**

- Principles of Macroeconomics (3)
- Principles of Microeconomics (3)

**Prerequisites to the Major**

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<tr>
<td>EE 106</td>
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<td>EE 107</td>
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<td>EE 123</td>
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<td>EE 221</td>
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<td>EE 231</td>
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<td>EE 240</td>
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<td>MATH 122</td>
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**Major Common Core**

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<th>Course</th>
<th>Credits</th>
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<td>CS 460</td>
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<td>CS 281</td>
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<td>CS 337</td>
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<td>CS 341</td>
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</table>

**Required Courses in Electrical Engineering (EE)**

- Operating Systems: Design and Implementation (3)
- Digital System Design with Testability (3)
- Digital System Design with Testability Lab (1)
- Electronics I (3)
- Microprocessor Engineering II (3)
- Principles of Engineering Design I (1)
- Principles of Engineering Design II (1)
- Signals & Systems (3)
Computer Engineering Courses

Computer Information Technology Courses

IT 214 (4) Fundamentals of Software Development
A continuation of IT 210, IT 214 introduces object-oriented concepts, programming techniques, lists, stacks, queues, and trees. Students are expected to produce larger applications, utilizing multiple compilation units.
Prerequisite: IT 210 or IT 214 and MATH 113 or MATH 115 or MATH 121 or MATH 180.
Fall, Spring

IT 310 (4) Data Structures & Algorithms
Study of trees, hashing, and graph algorithms. Analysis of algorithms, memory management, and proof techniques.
Prerequisite: IT 214

Electrical Engineering Courses

EE 100 (1) Explorations in Engineering
This course offers an introduction to the various disciplines of engineering and their relationship to the principles of physics and mathematics. Students are prepared for academic success and the transition into an engineering program.
Fall
GE-12

EE 106 (3) Fundamental Digital System Design for Electrical and Computer Engineers
This introductory course covers digital systems topics including binary numbers, logic gates, Boolean algebra, circuit simplification using Karnaugh maps, flip-flops, counters, shift registers and arithmetic circuits. Problem solving methods, study skills and professional development will be addressed throughout the course.
Prerequisite: MATH 112
Fall, Spring

EE 107 (3) Intro to Electrical and Computer Engineering Through Software Development
The course presents algorithmic approaches to problem solving and computer program design using the C language. Students will explore Boolean expressions, implement programs using control structures, modular code and file input/output, and interface with external hardware using robots and sensors.
Prerequisite: EE 106 or concurrent
Spring

EE 230 (3) Circuit Analysis I
This course is meant to develop Electrical Engineering Circuit Analysis skills in DC and AC circuits. It includes circuit laws and theorems, mesh and node analysis. Natural and step response of RL, RC, and RLC circuits.
Prerequisite: PHYS 222 or concurrent, MATH 321 or concurrent
Fall

EE 231 (3) Circuit Analysis II
Continuation of Circuit Analysis I to include special topics in circuit analysis.
Prerequisite: EE 230 and EE 240, MATH 321, PHYS 222
Spring

EE 234 (3) Microprocessor Engineering I
A course that teaches how to write computer assembly language programs, make subroutine calls, perform I/O operations, handle interrupts and resets, interface with a wide variety of peripheral chips to meet the requirements of applications.
Prerequisite: EE 106, EE 107
Corequisite: EE 235
Fall

EE 235 (1) Microprocessor Engineering Laboratory I
Use of development boards and assembly language programming to handle interrupts, interface with parallel I/O ports, memory, and timers. Experiments will involve signal and frequency measurements, data conversions, and software design.
Prerequisite: EE 106, EE 107
Corequisite: EE 234
EE 240 (1) Evaluation of Circuits

EE 244 (2) Introduction to Digital Systems
Simple coding schemes, Boolean algebra fundamentals, elements of digital building blocks such as gates, flip-flops, shift registers, memories, etc.; basic engineering aspects of computer architecture.

EE 253 (1) Logic Circuits Lab
Laboratory support to complement EE 244. Use of laboratory instrumentation to measure characteristics of various logic circuits and digital subsystems. Experimental evaluation of digital logic devices and circuits including logic gates, flip-flops, and sequential machines. Prerequisite: EE 230 and concurrent with EE 244. Spring

EE 254 (1) Digital and Circuits Lab
Laboratory support for EE 231 and EE 244. Experimental evaluation of AC and transient circuits, digital logic devices including logic gates, flip-flops, and sequential machines. Prerequisite: EE 230, EE 240 and concurrently with EE 231 and EE 244. Spring

EE 281 (3) Digital System Design with Testability
Introduction to representing digital hardware using a hardware description language. Introduction to implementation technologies such as PAL’s, PLAS, FPGA’s and Memories. Analysis, synthesis and design of sequential machines; synchronous, pulse code, asynchronous and incompletely specified logic. Prerequisite: EE 106, EE 107 Variable

EE 282 (1) Digital System Design with Testability Lab
Laboratory support for EE 282 practical aspects of design and analysis of different types of sequential machines will be presented through laboratory experience. Corequisite: EE 281

EE 298 (1-4) Topics
Varied topics in Electrical and Computer Engineering. May be repeated as topics change. Prerequisite: to be determined by course topic

EE 303 (3) Introduction to Solid State Devices
Introduction to crystal structure, energy band theory, conduction and optical phenomena in semiconductors, metals and insulators. Study of equilibrium and non-equilibrium charge distribution, generation, injection, and recombination. Analysis and design of PN-junctions, (bipolar transistor, junction) and MOS field-effect transistors. Introduction to transferred electron devices and semiconductor diode lasers. Prerequisite: PHYS 222, and MATH 321 Fall

EE 304 (1) Lab: Introduction to Solid State Devices
Laboratory support for EE 303. Experiment includes resistivity and sheet resistance measurements of semiconductor material, probing material, probing of IC chips, PN-junction IV and CV measurements, BJT testing to extract its parameters; MOSFET testing and evaluating its parameters, cvmeasuringments of MOS structure, and familiarization with surface analysis tools. Fall

EE 332 (3) Electronics I
Introduction to discrete and microelectronics circuits including analog and digital electronics. Device characteristics including diodes, BJTs, JFETs, and MOSFETs will be studied. DC bias circuits, small and large signal SPICE modeling and analysis and amplifier design and analysis will be discussed. Prerequisite: EE 231

EE 333 (3) Electronics II
The second course of the electronics sequence presenting concepts of feedback, oscillators, filters, amplifiers, operational amplifiers, hysteresis, bistability, and non-linear functional circuits. MOS and bipolar digital electronic circuits, memory, electronic noise, and power switching devices will be studied. Prerequisite: EE 332 Spring

EE 334 (3) Microprocessor Engineering II
A more advanced study of microprocessors and microcontrollers in embedded system design. Use of C language in programming, interrupt interfaces such as SPI, I2C, and CAN. External memory design and on-chip program memory protection are also studied. Fall

EE 336 (1) Principles of Engineering Design I
Electrical and computer engineering project and program management and evaluation techniques will be studied. Emphasis will be placed on the use of appropriate tools for planning, evaluation, and reporting on electrical and computer engineering projects. Prerequisite: Junior Standing Fall

EE 337 (1) Principles of Engineering Design II
Application of the design techniques in the engineering profession. Electrical engineering project and program management and evaluation including computer assisted tools for planning and reporting, design-to-specification techniques and economic constraints. Prerequisite: EE 336 Spring

EE 341 (3) Signals & Systems
Analysis of linear systems and signals in the time and frequency domain. Laplace and Fourier transforms. Z-transform and discrete Fourier transforms. Prerequisite: EE 230. MATH 321 and PHYS 222 Fall

EE 342 (1) Electronics Laboratory
This lab is designed to accompany EE 332. The lab covers the experimental measurement and evaluation of diode, BJT, and MOS characteristics; various feedback topologies; oscillator and op-amp circuits; and rectifiers and filter circuitry. Prerequisite: EE 231 and EE 332 taken concurrently. Fall

EE 344 (1) Design & Evaluation of Microprocessors
Laboratory support for EE 334. Use of development boards and C Programming language to handle I/O devices, interrupts, and all peripheral functions. Multiple functions such as timers, A/D converters, I/O devices, interrupts, and serial modules will be used together to perform desired operations. Prerequisite: Concurrent with EE 334 Fall

EE 350 (3) Engineering Electromagnetics

EE 353 (3) Communications Systems Engineering
Signals and Systems; Fourier transforms, Parseval’s theorem. Autocorrelation functions and spectral density functions. Information theory. Noise and noise figure, probability and statistics. Transformation of random variables, probability of error and bit error rate. Modulation and demodulation. Overview of analog, sampled analog and digital communication systems. Spread spectrum systems. Prerequisite: EE 341, MATH 223 Spring

EE 358 (3) Control Systems
Theory and principles of linear feedback control systems. Analysis of linear control systems using conventional techniques like block diagrams, Bode plots, Nyquist plots and root-locus plots. Introduction to cascade compensation: proportional, derivative and integral compensation. State space models. Prerequisite: EE 341 Spring

EE 363 (1) Communication Systems Laboratory
EE 368 (1) Control Systems Laboratory
Laboratory support for EE 358. Experimental evaluation of basic control system concepts including transient response and steady state performance. Analog and digital computers.
Prerequisite: EE 341 and concurrent with EE 358
Spring

EE 390 (4) Smart Sensor Systems
This course explains the interfacing method between a sensor and the microcontroller; describes the features and functions of several frequently used sensors, it then proceeds to explore the subject of sensor fusion, describe the algorithms how multiple sensors are used to extract correct and more useful information than each individual single sensor; finally the course also explores how a large number of sensor nodes are connected together via the wireless or wired networking technology using one of the few possible topologies to enable the monitoring and control of our environment to improve our life.
Prerequisite: EE334 & EE344
Spring

EE 395 (3) Computer Hardware and Organization
High-level language constructs using a selected assembly language, design alternatives of computer processor datapath and control, memory hierarchy/management unit, use of HDL in describing and verifying combinational and sequential circuits. Design of computer processor and memory system.
Prerequisite: EE 234, EE 235, EE 281
Spring

EE 398 (0) CPT: Co-Operative Experience
Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.
Prerequisite: EE 235. At least 60 credits earned, in good standing; instructor permission; co-op contract; other prerequisites may also apply.
Fall, Spring, Summer

EE 450 (3) Engineering Economics
Overview of accounting and finance and their interactions with engineering. Lectures include the development and analysis of financial statements, time value of money, decision making tools, cost of capital, depreciation, project analysis and payback, replacement analysis, and other engineering decision making tools.
Prerequisite: Advanced standing in the program.
Fall

EE 453 (3) Advanced Communications Systems Engineering
Behavior of analog systems and digital systems in the presence of noise, principles of digital data transmission, baseband digital modulation, baseband demodulation/detection, bandpass modulation and demodulation of digital signals. Channel coding, modulation and coding tradeoffs, spread spectrum techniques, probability and information theory.
Prerequisite: EE 353 and EE 363
Fall

EE 463 (3) Advanced Digital System Design
Design of combinational and sequential systems and peripheral interfaces. Design techniques using MSI and LSI components in an algorithmic state machine; implementation will be stresses. Rigorous timing analysis transmission-line effects and metastability of digital systems will be studied.
Prerequisite: EE 244

EE 467W (1) Principles of Engineering Design III
The design and organization of engineering projects. Project proposals, reporting, feasibility studies, and interpretation. Specification preparation, interpretation, and control. Issues involving creativity, project planning and control, and intellectual property rights. Students enrolled in this course must initiate and complete a design project in a small team format.
Prerequisite: EE 337 and senior standing
Fall

EE 471 (3) Advanced Control Systems
This course is a continuation of EE 358. Techniques for the analysis of continuous and discrete systems are developed. These techniques include pole placement, state estimation, and optimal control.
Prerequisite: EE 358 and EE 368
Fall

EE 472 (3) Digital Signal Processing
Develop design and analysis techniques for discrete signals and systems via Z-transforms, Discrete Fourier Transforms, implementation of FIR and IIR filters. The various concepts will be introduced by the use of general and special purpose hardware and software for digital signal processing.
Prerequisite: EE 341
Spring

EE 473 (3) Electrical Power Systems Analysis and Design
Power generation, transmission and consumption concepts, electrical grid modeling, transmission line modeling, electric network power flow and stability, fault tolerance and fault recovery, economic dispatch, synchronous machines, renewable energy sources and grid interfacing.
Prerequisite: EE 231 or via permission from instructor
Variable

EE 474 (4) Power Electronics
This course is designed to provide students with knowledge of the design and analysis of static power conversion and control systems. The course will cover the electrical characteristics and properties of power semiconductor switching devices, converter power circuit topologies, and the control techniques used in the applications of power electronic systems. Laboratories consist of computer-based modeling and simulation exercises, as well as hands-on laboratory experiments on basic converter circuits and control schemes.
Prerequisite: EE 333
Spring

EE 475 (3) Integrated Circuit Engineering
Introduction to theory and techniques of integrated circuit fabrication processes; oxidation, photolithography, etching, diffusion of impurities, ion implantation, epitaxy, metallization, material characterization techniques, and VLSI process integration, their design and simulation by SUPREM.
Prerequisite: EE 303 and EE 332
Fall

EE 476 (3) Antennas, Propagation, & Microwave Engineering
Principles of electromagnetic radiation, antenna parameters, dipoles, antenna arrays, long wire antennas, Microwave antennas, Mechanisms of radiowave propagation, scattering by rain, sea water propagation, guided wave propagation, periodic structures, transmission lines, microwave/millimeter wave amplifiers and oscillators, MIC & MMIC technology.
Prerequisite: EE 350
Variable

EE 477W (1) Principles of Engineering Design IV
Completion of design projects and reports. Lectures on ethics, issues in contracting and liability, concurrent engineering, ergonomics and environmental issues, economics and manufacturability, reliability and product lifetimes. Lectures by faculty and practicing engineers.
Prerequisite: EE 467 and Senior Standing
Spring

EE 479 (3) Superconductive Devices
Prerequisite: EE 303
Variable

EE 480 (1) Integrated Circuit Fabrication Lab
Introduction to integrated circuit fabrication processes, device layout, mask design, and experiments related to wafer cleaning, etching, thermal oxidation, thermal diffusion, photolithography, and metallization. Fabrication of basic integrated circuit elements pin junction, resistors, MOS capacitors, BJT and MOSFET in integrated form. Use of analytic tools for in process characterization and simulation of the fabrication process by SUPREM.
Prerequisite: Concurrent with EE 475
Fall

EE 481 (1) VLSI Design Laboratory
This laboratory accompanies EE 484. The laboratory covers the basics of layout rules, chip floor planning, the structure of standard cells and hierarchical design, parasitic elements, routing, and loading. Students will learn to design and layout standard cells as well as how to use these cells to produce complex circuits. The laboratory culminates with the individual design and layout of a circuit.
Prerequisite: Concurrent with EE 484
Spring
EE 482 (3) Electromechanics
Electrical power and magnetic circuit concepts, switch-mode converters, mechanical electromechanical energy conversion, DC motor drives, feedback controllers, AC machines and space vectors, permanent magnet AC machines and drives, induction motors and speed control of induction motors, stepper motors.
Prerequisite: EE 230
Fall

EE 484 (3) VLSI Design
Prerequisite: EE 333
Spring

EE 485 (4) ASIC Design
This course focuses on CMOS Application Specific Integrated Circuit (ASIC) design of Very Large Scale Integration (VLSI) systems. The student will gain an understanding of issues and tools related to ASIC design and implementation. The coverage will include ASIC physical design flow, including logic synthesis, timing, floor-planning, placement, clock tree synthesis, routing and verification. An emphasis will be placed on low power optimization. The focus in this course will be Register-transfer level (RTL) abstraction using industry-standard VHDL/Verilog tools.
Prerequisite: EE 484
Fall

EE 487 (3) RF Systems Engineering
Prerequisite: EE 353 and EE 363
Variable

EE 489 (4) Real-Time Embedded Systems
This course introduces students the recent advances in real-time embedded systems design. Topics cover real-time scheduling approaches such as clock-driven scheduling and static and dynamic priority driven scheduling, resource handling, timing analysis, intertask communication and synchronization, real-time operating systems (RTOS), hard and soft real-time systems, distributed real-time systems, concepts and software tools involved in the modeling, design, analysis and verification of real-time systems.
Prerequisite: EE 107, EE 334, EE 395
Variable

EE 491 (1-4) In-Service

EE 494 (1) Global Experience in Engineering and Technology
This class provides students pursuing a minor in “Global Solutions in Engineering and Technology” with an opportunity to explore a set of topics related to achieving success in advance of and following an international experience [internship, study abroad, etc.]. Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Returning students will be required to participate in mentoring of students preparing for their international experience and provide written and/or oral presentations of various topics during the semester. This course is required both before and after participation in the international experience (min. 2 cr.)
Variable

EE 497 (1-6) Internship

EE 498 (1-4) Topics
Varied topics in Electrical and Computer Engineering. May be repeated as topics change.
Prerequisite: to be determined by course topic

EE 499 (1-6) Individual Study

Computer Engineering Technology BS and Certificate

The Educational Objectives for our Bachelors Degree in Computer Engineering Technology program area:
1. Function as responsible members of society with an awareness of the social, ethical, and economic ramifications of their work.
2. Become successful practitioners in computer engineering technology and other diverse careers.
3. Pursue continuing and life-long learning opportunities.
4. Provide necessary skills to advance technically and/or managerially.
5. Provide foundational education that allows for personal growth and flexibility through their career.

Our metrics for determining success in meeting these objectives will include:
1. Assessment of societal, economic awareness, and ethical performance of our graduates by the graduate and employer.
2. Monitoring of the success of our graduates in the work force.
3. Assessment of continuing and life-long learning by the graduate (and their employer as applicable).
4. Ongoing contact with graduates to determine career paths and challenges confronted.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
Admission to Major is granted by the department. Minimum program admission requirements are:
- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 ("C")

Contact the department for application procedures.

Students who do not have the required background for MATH 115 may have to take additional preparatory coursework as well. Consult with your major adviser to plan your general education and major requirements. Grades must be 1.67 "C" or better for courses taken at Minnesota State Mankato to be accepted. All students must complete a minimum of 12 semester credits of mathematics starting with Precalculus math and a minimum of 24 semester credits of mathematics and science courses.

GPA Policy: Students graduating with a degree in Computer Engineering Technology must have:
1. completed a minimum of 20 semester credit hours of upper division EET at Minnesota State Mankato,
2. have a cumulative GPA of 2.0 or better on all upper division EET courses, and
3. have completed their senior design sequence (EET 461 and EET 462) at Minnesota State Mankato.
4. Grades must be 1.67 “C-” or better for courses taken at Minnesota State Mankato to be accepted.

P/N Grading Policy. A student who majors in CET must elect the grade option for all required courses including general education courses listed by number even if offered by another department.

If the credits earned for composition, and speech courses equal less than 9 credits, either an advanced speech course or a course in English language literature must be selected as a general elective.

Transfer of credit to the CET major is subject to policies described in this catalog for all students transferring to Minnesota State Mankato and to the following department policies:

1. All transfer students must take EET 221 if not proficient with current Minnesota State Mankato software.

2. For courses taken at technical colleges/vocational technical schools and pertinent courses taken in the military the student may receive up to 8 credits upon review of course materials, grades and written approval by the program coordinator. These credits may be used for EET 112, EET 113, and EET 114. The student may also attempt to test out of EET 114, EET 222, EET 223.

3. For courses taken at community colleges and four-year colleges, up to 25 credits may be accepted if the transcript is from an ABET accredited program. If the program is not accredited by ABET, up to 20 credits may be accepted. Grades of transfer credits must be “C” or better to be acceptable for substitution for required courses.

Petition to evaluate transfer credits must occur no later than the first semester the student is enrolled in or declared a major housed in the Department of Electrical and Computer Engineering and Technology.

All international students wishing to have transfer credits granted from non-U.S. schools will be required to use the ECE evaluation service to be completed no later than first semester at Minnesota State Mankato.

Testing for course credit will be available via prior application made with the program coordinator. Students may not apply for credit by examination for an EET course in which they were previously enrolled at Minnesota State Mankato or for any EET course above EET 223.

COMPUTER ENGINEERING TECHNOLOGY BS
Degree completion = 128 credits

Required General Education
CMST 102 Public Speaking [3]
ENG 101 Composition [4]

Prerequisites to the Major
EET 113 DC Circuits [3]
EET 114 AC Circuits [3]
EET 141 Integrated Computer Technology I [4]
EET 142 Integrated Computer Technology II [4]
EET 143 Integrated Computer Technology III [4]
EET 221 Electronic CAD [3]
EET 222 Electronics I [4]
EET 223 Electronics II [4]
EET 254 Microprocessors I [4]
MATH 115 Precalculus Mathematics [4]
MATH 121 Calculus I [4]
MATH 127 Calculus II for Engineering Technology: Integration [2]
PHYS 211 Principles of Physics I [4]
PHYS 212 Principles of Physics II [4]

Major Common Core
Three [3] credits of EET 497 may be used to satisfy major common core requirements.
CHEM 104 Introduction to Chemistry [3]
EET 310 Programming Tools [4]
EET 430 Computer Networking I [4]
EET 441 Embedded Systems [4]
EET 456 Analog Communications [4]
EET 461 Industrial Automation I [4]
EET 462 Industrial Automation II [4]
EET 484 Microprocessors II [4]
EET 497 Internship [3]
MATH 180 Mathematics for Computer Science [4]
MET 427 Quality Management Systems [3]

Major Restricted Electives
Choose a minimum of 6 credits from 300-level and 400-level courses with advisor’s approval.

Major Unrestricted Electives
(choose one of the following courses)
STAT 154 Elementary Statistics [4]

Required Minor: None.

INTERNET OF THINGS CERTIFICATE PROGRAM
The Internet of Things (IoT) certificate program includes targeted courses related to internet connectivity and information connectivity using wired and wireless communication methods implemented within embedded systems. This implementation also involves hardware and software (or firmware) development to allow for sensor fusion in a smart network environment. To that end, the certificate program includes five courses for a total of 19 credits and is intended to supplement an AS/BS degree in engineering technology, information technology or related field.

Major Common Core
EE 470 Wireless Networking [3]
EET 254 Microprocessors I [4]
EET 430 Computer Networking I [4]
EET 441 Embedded Systems [4]
EET 484 Microprocessors II [4]

COURSE DESCRIPTIONS
EET 112 (3) Elementary Electricity and Electronics
The basic elements of electricity and electronics are explored in an internet enabled, self-paced course. Laboratories make use of a Virtual Laboratory environment to provide experience with issues in wiring, power, circuits, and digital electronics.
Fall, Spring
GE-3

EET 113 (3) DC Circuits
A study of DC electrical circuits, Kirchhoff’s laws, series and parallel circuits, inductors, capacitors, circuit response to RL, RC and RLC circuits. Thévenin’s equivalent circuit theorem, and other network analysis theorems. Use of dependent sources in DC circuits.
Prerequisite: EET 113, or concurrent
Fall, Spring

EET 114 (3) AC Circuits
Prerequisite: EET 113
Fall, Spring

EET 115 (3) Understanding Computers
A self-paced, interactive, multi-media course, for non-engineering students, exploring the basics of computer hardware. The course will cover concepts behind computer design and operation, including issues such as the need for RAM, hard drive, memory, ROM, etc.
Fall, Spring
GE-13

EET 116 (3) Communications-Past, Present & Future
This is an introductory course in the use of technology for communication. During the semester students will study the evolution of communications technology from early days to the present. This course will cover wireless, analog, and digital techniques including telephony, the internet, and mobile formats. The student will study theory and principles involved in the different types of communications. Modern techniques in digital communications will be discussed and demonstrated through simulation. A consumer example of digital communication will be given.
Variable
GE-13

EET 117 (3) Introduction to Digital Electronics
Hands-on experiences in the use of digital integrated circuits and logic families. Students will study logic gates, number systems, flip flops, latches, registers, computer arithmetic and memory. A self paced format with an open laboratory format.
Variable
EET 118 (3) Electricity - Generation, Usage & Green Alternatives
This course covers the development and status of electrical power as a global resource. This includes usage, generation, and impact on societies throughout the world. Finally, the course will examine the many renewable generation options. Prerequisite: GE-3, GE-8

EET 125 (3) Perspective on Technology
This course introduces computational and critical thinking aspects of technology with an emphasis on interdisciplinary applications. History, culture, ethical, philosophical, developmental, and creative aspects of technology as a discipline are explored. The course also examines concepts and events leading to important innovations of recent times; microwave ovens, FAX machines, personal computers, traffic signals, and video games. Fall

EET 141 (4) Integrated Computer Technology I
Digital circuit, logic, and C programming skills needed for electronic and computer engineering technology. Covers binary arithmetic, clock distribution, timing, TTL, CMOS, logic gates, Boolean algebra, multiplexer, counter, adder, logic simulation, C language elements, C programming techniques and use of digital test equipment. Students design and build an Arithmetic Logic Unit (ALU) from small-scale logic components and simulate each block in C. Prerequisite: EET 113

Corequisite: EET 113
Fall

EET 142 (4) Integrated Computer Technology II
Continues building digital circuit, logic, and C programming skills needed for electronic and computer engineering technology. Covers comparators, decoding, encoding, multiplexers, flip-flops, Schmitt Trigger, C functions, arrays, variables, recursive functions, structures, and strings. Students design, build and test a microprocessor using TTL gates and simulate each block in C. Prerequisite: EET 141

Spring

EET 143 (4) Integrated Computer Technology III
Sequential circuits, logic timing, clock distribution, counter, LED display, shift register, transceiver, 555 timer, 555 oscillator, D/A converter, RAM, ROM, mass memory, synchronous logic, asynchronous logic, microprocessor interfacing, testability, and simulation. Prerequisite: EET 142

Fall

EET 221 (3) Electronic CAD
Drafting Principles involving use of computer electronic CAD software in laying out block diagrams, schematic diagrams, production drawings, graphical presentation of data, and printed circuit board layout and construction. Prerequisite: EET 113

Fall

EET 222 (4) Electronics I
An introduction to semiconductor theory and circuits: includes characteristics curves, biasing techniques and small signal analysis of FETs and MOSFETs, feedback concept, BJTs and FETs frequency response. Prerequisite: EET 113

EET 223 (4) Electronics II
An introduction to differential amplifier, linear and nonlinear operational amplifiers, power amplifiers, linear digital ICs, oscillators, power supplies, D/A, A/D conversion, four layered devices and their applications. Prerequisite: EET 222

Corequisite: EET 114
Spring

EET 254 (4) Microprocessors I
A study of microcomputer hardware and software fundamentals, the instruction set and the addressing modes of a microprocessor/microcontroller, assembly programming, basic I/O concepts, parallel I/O methods, asynchronous serial I/O methods, synchronous serial I/O methods, A/D conversion, and timer applications. Prerequisite: EET 113

Spring

EET 298 (1-4) Topics
Varied topics in Electronic and Computer Engineering Technology. May be repeated as topics change. Prerequisite: to be determined by course topic

EET 310 (4) Programming Tools
Several programming tools and their use in creating electronic hardware systems are covered in this course. Creating special-purpose hardware using numerical analysis programs written in C. Creating hardware utilizing Visual applications written in C. Use of scripting languages in hardware applications. Using Excel for input-output functions. Prerequisite: EET 143, EET 222 and EET 254

EET 315 (3) Programmable Instrumentation
Instrumentation system design and integration with sensors, actuators and other electronic indicator components. Programming in a block diagram environment and with embedded C to interface different hardware components. Prerequisite: MATH 113 or MATH 115

Variable

EET 340 (4) Programmable Hardware Technology
Create working programmable hardware using FPGA, GAL and other logic technology. Use industry standard tools such as Verilog, Xilinx, Orcad and Multisim along with development kits and extension boards to implement programmable systems. Interface LED displays, switches and I/O devices with programmable logic to create processing systems. Evolution of programmable logic and analog circuits. Prerequisite: EET 143

Spring

EET 341 (2) Electronic Shop Practices
An introduction to tools, equipment, materials, and techniques used in fabrication of electronic projects and printed circuit boards. Prerequisite: EET 142

Spring

EET 355 (3) Electrical Power Systems
Electrical power and magnetic circuit concepts, transformers, generators and motors (DC, synchronous, induction), special purpose motors, power-electronic motor drivers, prime movers/alternatives, generation, transmission/distribution, system stability/protection. Prerequisite: PHYS 212

Fall

EET 393 (1-4) Practicum
Elective credit for approved experience in off-campus work related to EET major. Prerequisite: Permission required.

Fall, Spring

EET 398 (0) CPT: Co-Operative Experience
Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information. Prerequisite: EET 223. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

Fall, Spring, Summer

EET 430 (4) Computer Networking I
An introduction to the basic foundations of computer networking. The course will encompass telecommunications, local area networks, wide area networks and wireless communication. Topics covered include OSI model, the TCP/IP MODEL, different network topologies and associated hardware, error detection and correction, protocols, and security. Prerequisite: EET 143, EET 223, EET 254

Fall

EET 431 (4) Computer Networking II
A continuation of EET 430. Router configurations, advanced LAN topologies, network configurations, protocols, and switching designs. Network troubleshooting and threaded case studies. Prerequisite: EET 430

Spring

EET 441 (4) Embedded Systems
Design and prototyping of embedded systems including both hardware and software components. A variety of hardware, software, sensors and displays will be used depending on the embedded system requirements. Issues related to hardware and software specifications will be studied as well as appropriate documentation standards. Prerequisite: EET 143

Spring

EET 452 (3) Operational Amplifier Applications
Operational amplifier circuits used in filters, sensors, comparators, voltage regulators, device testing, measurement systems, multipliers, phase-locked loops, and A/D converters. Differential amplifier basics. Linear integrated circuit processing. Prerequisite: EET 223 and MATH 121

Fall
Computer Information Technology

College of Science, Engineering & Technology
Department of Computer Information Science
273 Wissink Hall • 507-389-1412
Website: cset.mnsu.edu/cis

Chair: Mahbubur Syed
Faculty: Cyrus Azarbad, Rajeev Bukralia, Jonathan Hardwick, Sarah Kruse, Guarione Salvia, Christophe Veltsos, Michael Wells

COMPUTER INFORMATION TECHNOLOGY BS, CERTIFICATES AND MINORS

EET 455 (3) Power Electronics
Use of solid-state switching devices in the conversion and control of electrical energy for low power and high power applications such as switched-mode regulated DC power supplies, motor speed control, lighting control, uninterruptible power supplies and HVDC transmission.
Prerequisite: EET 143
Variable

EET 456 (4) Analog Communications
Communications principles and systems. Practical engineering aspects involved in modulation-demodulation, receivers, transmitters and filters. Also included are radiation and antennas, guided waves, microwaves, and microwave systems.
Prerequisite: EET 222
Spring

EET 458 (1) Advanced Instrumentation
Experiences with electronic equipment and instrumentation including maintenance, repair, calibration, safety and component identification.
Prerequisite: 25 hours of EET courses, or consent
Spring

EET 461 (4) Industrial Automation I
Automation components and subsystems involving sensors, transistors, logic, amplifiers, software, microprocessors, PICs, actuators, encoders, stages, motors, controllers, and drives. Students design, simulate, build, test and document automation systems for Capstone projects.
Prerequisite: EET 223 and EET 254
Fall

EET 462 (4) Industrial Automation II
Continues building skills in automation components and subsystems involving sensors, transistors, logic, amplifiers, software, microprocessors, PICs, actuators, encoders, stages, motors, controllers and drives. Students design, simulate, build, test and document automation systems for Capstone projects.
Prerequisite: EET 461
Spring

EET 484 (4) Microprocessors II
A study of a high performance microprocessor architecture. Applications of a microprocessor for monitoring and controlling systems will be studied. Optimal utilization of a microprocessors resources will be stressed. PC programming in assembly and a high level language.
Prerequisite: EET 143
Fall

EET 486 (3) Digital Communications
Prerequisite: EET 142, EET 222
Variable

EET 487 (3) RF Systems Technology
Prerequisite: EET 223
Variable

EET 491 (1-4) In-Service

EET 492 (4) Integrated Circuit Technology
Semiconductor industry and overview of integrated circuit manufacturing, integrated circuit types, crystal growth and wafer manufacturing, physics of semiconductor materials, detail of major IC fabrication steps, process yield, semiconductor devices and integrated circuit formation, packaging, and semiconductor measurements, introduction to layout tools.
Prerequisite: EET 223
Spring

EET 494 (1) Global Experience in Engineering and Technology
This class provides students pursuing a minor in “Global Solutions in Engineering and Technology” with an opportunity to explore a set of topics related to achieving success in advance of and following an international experience (internship, study abroad, etc.). Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Returning students will be required to participate in mentoring of students preparing for their international experience and provide written and/or oral presentations of various topics during the semester. This course is required both before and after participation in the international experience [min. 2 cr.]
Variable

EET 497 (1-6) Internship
Should be taken at end of junior year.
Permission required. Prerequisite: 40 hrs EET credits or written permission from program coordinator.
Fall, Spring

EET 498 (1-4) Topics
Varied topics in Electronic and Computer Engineering Technology. May be repeated as topics change.
Prerequisite: to be determined by course topic
Fall, Spring

EET 499 (1-4) Individual Study
Fall, Spring

The program’s mission is to ensure that each graduate is exceptionally well qualified to undertake a successful information career in industry, business, education, or government. In support of this mission, the program is designed so that each student will:

• Gain a sound foundation in computing basics, analysis and design, programming, testing, software development, security, database, software QA and testing and web application design and development.
• Learn the theory and practice of information technology and develop skills to apply this knowledge to analyze and solve problems.
• Develop analytical, critical thinking, and interpersonal skills applicable to real-world problem solving.
• Develop effective oral and written communication skills.
• Appreciate the social and ethical issues in information technology.

Academic Map/ Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
Admission to Major is granted by the department. Admission to the Major is required before the student is permitted to take 300- and 400-level courses. Requirements are:

• A minimum of 32 earned semester credits
Computer Information Technology Continued

- Completion of MATH 121 with a grade of “C” or better
- Completion of ENG 101 with a grade of “C” or better
- Completion of IT 210 with a grade of 3.0 or better and IT 214 with a grade of 2.0 or better (or in their equivalents).

GPA Policy. The completion of any major or minor in the Department of Computer Information Science requires both:
- a GPA of 2.5 or higher for all departmental courses (IT), or their substitutions, used to complete the major or minor, and
- a GPA of 2.5 or higher for all courses, or their substitutions, used to complete the major or minor. This includes all departmental courses, supporting courses, and General Education courses required for the major or minor.

It is recommended that students who cannot maintain a GPA of 3.0 in required 100 and 200 level courses see their advisor for a program review.

Grade Policy. All coursework used to complete a departmental major or minor, including required courses, required supporting courses, and required General Education courses, must be taken for a letter grade except for courses offered only as P/N.

No course completed with a grade of “D” can be used to complete a departmental major or minor program, or to meet a departmental prerequisite.

Registration Hold Policy. The department will place a registration hold on any student who earns a “D” or “F” in any of its courses. The department will also place such a hold on any student who drops any of its courses after the first two weeks of the semester. A student with a registration hold cannot register for courses until the hold is released, which requires filling out an appeal form and taking it to the student’s advisor for discussion. Appeal forms are available from the departmental office. This hold policy does NOT apply to students who are taking 100-level IT courses.

Dual Major Policy. Students can earn at most one undergraduate major from this department.

Incomplete Policy. The department gives incomplete grades for only two conditions. The first condition is illness, which requires a doctor’s written recommendation. The second condition arises when a death in the student’s family has caused the student to be away from the campus for an extended period. The student must have a satisfactory grade (“C” or better) in the course at the time of the onset of the condition.

Internship Policy. The Department of Computer Information Science continuously strives for improvements in the academic program. Coursework, coupled with extensive laboratory experience, play an important part in the student’s educational program. However, application of the concepts discussed in class to on-the-job situations is equally important. As a result, the department requires an internship or a capstone experience for all IT majors.

Excluded Courses Policy. IT 201, IT 296 do not count toward a major or minor in the department.

Residency Policy. Students must earn at least 50 percent of the credits required for a departmental major or minor at Minnesota State Mankato.

Computer Information Technology BS

Degree completion = 120 credits

Required General Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>Composition (4)</td>
</tr>
<tr>
<td>IT 200W</td>
<td>Computers in Society (4)</td>
</tr>
<tr>
<td>STAT 154</td>
<td>Elementary Statistics (4)</td>
</tr>
<tr>
<td>MATH 121</td>
<td>Calculus I (4)</td>
</tr>
<tr>
<td>CMST 100</td>
<td>Fundamentals of Communication (3)</td>
</tr>
<tr>
<td>CMST 102</td>
<td>Public Speaking (3)</td>
</tr>
<tr>
<td>CMST 312</td>
<td>Professional Communication &amp; Interviewing (4)</td>
</tr>
</tbody>
</table>

Major Common Core

Three credits of IT 497 are required for the major. Additional credits may only be used to satisfy degree requirements.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 271</td>
<td>Technical Communication (4)</td>
</tr>
<tr>
<td>IT 210</td>
<td>Fundamentals of Programming (4)</td>
</tr>
<tr>
<td>IT 214</td>
<td>Fundamentals of Software Development (4)</td>
</tr>
<tr>
<td>IT 310</td>
<td>Data Structures &amp; Algorithms (4)</td>
</tr>
<tr>
<td>IT 320</td>
<td>Machine Structures and Operating Systems (4)</td>
</tr>
</tbody>
</table>

IT 340  Introduction to Database Systems (4)
IT 350  Information Security (4)
IT 360  Introduction to Data Communication and Networking (4)
IT 380  Systems Analysis & Design (4)
IT 440  Database Management Systems (4)
IT 497  Internship (1-12)

Major Restricted Electives

Choose 12 credits from any courses listed in the bulletin with denomination IT 4xx and have not been used to fulfill any other requirements.

Required Minor: Yes, Any (Computer Science excluded)

Computer Information Science Minor

Required for Minor

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 210</td>
<td>Fundamentals of Programming (4)</td>
</tr>
<tr>
<td>IT 214</td>
<td>Fundamentals of Software Development (4)</td>
</tr>
<tr>
<td>IT 380</td>
<td>Introduction to Software Engineering (4)</td>
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</tbody>
</table>

Database Technologies Minor

Required for Minor

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>IT 210</td>
<td>Fundamentals of Programming (4)</td>
</tr>
<tr>
<td>IT 214</td>
<td>Fundamentals of Software Development (4)</td>
</tr>
<tr>
<td>IT 340</td>
<td>Introduction to Database Systems (4)</td>
</tr>
<tr>
<td>IT 440</td>
<td>Database Management Systems (4)</td>
</tr>
<tr>
<td>IT 442</td>
<td>Database Security, Auditing, and Disaster Recovery (4)</td>
</tr>
<tr>
<td>IT 444</td>
<td>Data Analytics (4)</td>
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</tbody>
</table>

International Technology Minor

This minor is designed to allow the student to gain technology project experience in a cross-cultural and cross-disciplinary environment. The student will participate in the process of conceiving, designing and implementing technological solutions/products in this environment.

Minor Core

Study abroad to earn at least 12 credits. For international students, this must be in a country whose culture differs significantly from the student’s home country. The international program of study must be approved by both the student’s advisor and by the chair of the Computer Information Science Department. The 12 credits can be taken as IT 390 or as other courses as determined and approved by the student, advisor, and CIS chair.

Elective

For Majors in CIS Department [choose 8 credits]
When this minor accompanies a major from the Computer Information Science Department, choose 8 credits of 300- and 400-level IT courses. These courses must not be included among those used to complete the requirements for the major.

IT 300 - IT 499
For Majors from another department [choose 8 credits]
When this minor accompanies a major from another department, choose 8 credits of IT courses numbered 200 and above.

IT 200 - IT 499
NETWORKING AND INFORMATION SECURITY MINOR

Required for Minor
IT 210 Fundamentals of Programming (4)
IT 214 Fundamentals of Software Development (4)
IT 310 Data Structures and Algorithms (4)
IT 360 Introduction to Networking (4)
IT 450 Information Warfare (4)
IT 460 Network and Security Protocols (4)
IT 462 Network Administration and Programming (4)

SOFTWARE DEVELOPMENT MINOR

Required for Minor
IT 210 Fundamentals of Programming (4)
IT 214 Fundamentals of Software Development (4)
IT 310 Data Structures and Algorithms (4)
IT 414 Advanced Object-Oriented Programming w/Design Patterns (4)
IT 480 Software Quality Assurance and Testing (4)
IT 484 Software Engineering (4)

CERTIFICATE PROGRAMS

Requirements for Certificate Programs in Computer Information Technology.

Admission Requirements
Knowledge of programming (equivalent of IT 210 and IT 214) or equivalent programming experience.

Prerequisites Requirements
For the Undergraduate Certificate Programs in IT, all of the Certificates’ prerequisite requirements can be met through Minnesota State Mankato coursework, transfers, substitutions and/or waivers, as may be appropriate.

Completion Requirements
Without exception, the twelve credits of coursework required for each Certificate must all be completed in the Department of Computer Information Science at Minnesota State University, Mankato.

DATABASE TECHNOLOGIES CERTIFICATE

The Database Technologies undergraduate certificate provides students with the necessary knowledge to apply information technology principles and theory so they are able to address real world business and organizational challenges and opportunities. This certificate focuses on planning, designing, programming and developing secure databases, and the challenges and specific issues in maintaining, managing and securing databases. Students are introduced to the security challenges and threats in database systems and are provided an understanding of the state-of-the art security technologies, and data recovery strategies.

Prerequisites. Students must have fundamental knowledge or experience of database (equivalent of IT 340). Students planning to take IT 442 must also have knowledge or experience of information security (equivalent of IT 350). Students planning to take IT 483 must have basic knowledge or experience of database (equivalent of IT 340). (choose three of the following courses) (12 credits)
IT 440 Database Management Systems (4)
IT 442 Database Security, Auditing, and Disaster Recovery (4)
IT 444 Data Analytics (4)
IT 483 Web Application and User Interface Design (4)

INFORMATION SECURITY CERTIFICATE

The Information Security certificate provides students with the necessary knowledge in information security principles and practices and an understanding of how information security functions in an organization from both business and technology aspects. The program will engage students with a thorough review of viruses, worms, backdoors, Trojan horses, Rootkits, and other threats. Students will analyze malware in order to understand the infection, propagation, and deception mechanisms of these attack vectors. It will also focus on risk assessment to identify reasonably foreseeable internal and external risks to the security, confidentiality and integrity of user information and assess the sufficiency of any safeguards in place to control these risks.

Prerequisites. Students planning to take IT 460 must have basic knowledge of or experience in data communications and networking (equivalent of IT 360). Students planning to take IT 442 must have basic knowledge of or experience in databases (equivalent of IT 340).

NETWORKING TECHNOLOGIES CERTIFICATE

The Networking Technologies certificate provides students with the necessary knowledge in networking principles, administration, programming, security issues and practices so that they are able to apply them in real world organizational challenges and opportunities. The students completing this certificate program will understand and evaluate current and emerging networking and security technologies and assess their applicability to address the needs of individuals and organizations.

Prerequisites. Students planning to take IT 462 must have basic knowledge of or experience in information security (equivalent of IT 350). Students planning to take IT 483 must have basic knowledge of or experience in databases (equivalent of IT 340). (choose three of the following courses) (12 credits)
IT 360 Introduction to Networking (4)
IT 460 Network and Security Protocols (4)
IT 462 Network Administration and Programming (4)
IT 483 Web Application and User Interface Design (4)

SOFTWARE DEVELOPMENT CERTIFICATE

The software development certificate provides the students with an understanding of the successful delivery of software projects that support organizational goals. Students gain knowledge in the use of tools necessary to organize project objectives, create realistic plans, and build and manage an accomplished team through every phase of the software development project. Students gain practical skills needed to meet today’s demands for faster and more efficient development.

Prerequisites: Students must have fundamental knowledge of or experience in systems analysis and design (equivalent of IT 380). Students planning to take IT 414 must also have basic knowledge of or experience in data structures and databases (equivalent of IT 310 and IT 340). Students planning to take IT 483 must have basic knowledge of or experience in databases (equivalent of IT 340). (choose three of the following courses) (12 credits)
IT 414 Advanced Object-Oriented Programming w/Design Patterns (4)
IT 480 Software Quality Assurance and Testing (4)
IT 482 Human Computer Interaction (4)
IT 483 Web Application and User Interface Design (4)
IT 484 Software Engineering (4)

COURSE DESCRIPTIONS

IT 100 (4) Introduction to Computing and Applications
Basic foundations in computer concepts. Topics include: hardware, software, uses of technology in industry, and ethical, and social issues. Lab work covers various systems and applications software including word processing, email, the Internet, spreadsheets, databases, and presentation software.
Fall, Spring
GE-9, GE-13

IT 101 (3) Introduction to Information Systems
Introduction to personal computers as productivity tools for business majors. Using Microsoft Office suite, students learn to be productive with document processing, spreadsheets, electronic presentations, and databases. Cannot be used toward any major or minor in Information Systems & Information Technology.
Fall, Spring

IT 113 (4) Synergy between Health Humanities, Healthcare Informatics and Outcome Measures
This course uses health humanities storytelling to prepare students with a sincere concern for human values within the capture, management, and evaluation of health information. Students will explore the synergy between health related data, healthcare informatics, and outcome measures. Students will gain fundamental information technology skills to understand and critique data, identify relationships between visual arts and written works regarding health, and explore cultural aspects of healthcare experiences and risk adjustment of quality outcome measures. All Year: Fall, On Demand: Spring, Summer
GE-6, GE-7
Diverse Cultures: Purple

COMPUTER INFORMATION TECHNOLOGY CONTINUED
IT 201 (2) Introduction to Assistive Technology
This course introduces students to assistive technology and its applicability to people with various disabilities. Hardware and software demonstrations with an emphasis placed on inexpensive and readily available solutions. Extensive use of the Internet will be employed to keep current with latest technology and to facilitate a continuing dialogue with instructor.
Variable

IT 202W (4) Computers in Society
Students prepare written summaries and oral presentations related to the complex social and ethical issues associated with computers. Through thoughtful questions, informative readings, and the analysis of opposing viewpoints, participants gain insight into the complexity of technology-related issues in a world without clearly defined borders.
Fall, Spring
WI, GE-9, GE-13

IT 210 (4) Fundamentals of Programming
This is the first course for students planning to major or minor in Information Systems or Information Technology. Programming in a high-level language, abstraction and problem-solving skills are emphasized.
Prerequisite: MATH 112 or MATH 113 or MATH 115 or MATH 121 or MATH 180
Fall, Spring

IT 214 (4) Fundamentals of Software Development
A continuation of IT 210, IT 214 introduces object-oriented concepts, programming techniques, lists, stacks, queues, and trees. Students are expected to produce larger applications, utilizing multiple compilation units.
Prerequisite: JEE 107 or IT 210 and (MATH 113 or MATH 115 or MATH 121 or MATH 180)
Fall, Spring

IT 213 (4) Applied Programming for Healthcare Professionals
This course reviews basic programming concepts such as data types and variables, loops, functions, input/output and visualization. Students become prepared to produce larger, more complex applications. A strong emphasis on problem-solving as students explore how programming concepts are applied to scenarios drawn from healthcare and other domains. Students develop programming skills necessary to implement data structures, exception handling, and object-oriented concepts. Students are also introduced to incremental program development, testing, and debugging.
Prerequisite: MATH 115, IT 210
Fall, Spring

IT 296 (1-2) Introduction to Selected Topics
Special topics not covered in other 100- and 200-level courses. May be repeated for each new topic.

IT 310 (4) Data Structures & Algorithms
Study of trees, hashing, and graph algorithms. Analysis of algorithms, memory management, and proof techniques.
Prerequisite: IT 214
Variable

IT 311 (4) Business Application Programming
Business application development using a non-object oriented programming language. Emphasis on principles of application programming such as control breaks, read a record/write a line, driver, shared sub-routines, pass by reference, and sub-programming. File concepts emphasized include index-sequential file handling, CRUD, heap files, sorting transaction, and master files. Programming concepts include input-processing-output definitions, understanding requirements, structure charts, program documentation, and programming standards. Large group project is completed during semester.
Prerequisite: IT 214
Spring

IT 320 (4) Machine Structures and Operating Systems
Introduction to computer hardware, Boolean logic, digital circuits, data representations, digital arithmetic, digital storage, performance metrics, pipelining, memory hierarchy, and I/O. Operating System concepts, interface, multi-tasking, threads, memory and file management, tools.
Prerequisite: IT 214
Fall, Spring

IT 340 (4) Introduction to Database Systems
Introduction to database systems, entity relationship models, relational algebra, database design, data modeling, normalization, and conversion of business rules into relational model. Introduction to basic SQL including subqueries, joins, functions, sequences, triggers, views, and stored procedures.
Prerequisite: IT 210, a 3.0 or higher grade in IT 210 or in an approved substitute is required.
Fall, Spring

IT 350 (4) Information Security
Security concepts and mechanisms; security technologies; authentication mechanisms; mandatory and discretionary controls; cryptography and applications; threats; intrusion detection and prevention; regulations; vulnerability assessment; information assurance; forensics; anonymity and privacy issues; disaster recovery planning, legal issues and ethics.
Prerequisite: a 3.0 or higher grade in IT 210 or in an approved substitute is required.
Fall, Spring

IT 360 (4) Introduction to Networking
This course covers basic concepts related to computer networking. Topics addressed will include the OSI model, the Internet model, network management, network protocols and data security.
Prerequisite: a 3.0 or higher grade in IT 210 or in an approved substitute is required.
Fall, Spring

IT 380 (4) Systems Analysis and Design
This course explores both structured as well as object oriented systems analysis and design. Use of upper and lower CASE tools are employed in the analysis, design and implementation of a team oriented term project.
Prerequisite: IT 214, IT 340
Fall, Spring

IT 390 (12) International Technology Experience
Study abroad for one semester to participate in a project-based technology/media-oriented program of study. The program of study must be one approved by the student’s advisor and the chair of this department.
Prerequisite: Permission
Fall, Spring

IT 398 (0) CPT/Co-Operative Experience
Curricular Practical Training. Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.
Prerequisite: IT 380. At least 60 credits earned; in good standing, instructor permission, co-op contract; other prerequisites may also apply.
Fall, Spring, Summer

IT 414 (4) Advanced Object-Oriented Programming with Design Patterns
This course provides student with a solid understanding of the principles, techniques and design patterns involved in advanced object-oriented programming. Successful students should have a distinct advantage in the marketplace.
Prerequisite: IT 310, IT 380
Variable

IT 418 (4) Foundations of Data Science
This course provides an introduction to data science, discusses opportunities and challenges associated with data science projects, and develops competencies related to data collection, data cleaning, data analysis, and model evaluation. The course focuses on hands-on exercises using data analytics tools.
Prerequisite: IT 310, IT 340
Fall Odd Years

IT 440 (4) Database Management Systems
Extensive coverage of SQL, database programming, large scale data modeling, and database enhancement through reverse engineering. This course also covers theoretical concepts of query processing, and optimization, basic understanding of concurrency control and recovery, and database security and integrity in centralized/distributed environments. Team-oriented projects in a heterogeneous client server environment.
Prerequisite: IT 380
Fall, Spring

IT 442 (4) Database Security, Auditing, and Disaster Recovery
Covers science and study of methods of protecting data, and designing disaster recovery strategy. Secure database design, data integrity, secure architectures, secure transaction processing, information flow controls, inference controls, and auditing. Security models for relational and object-oriented databases.
Prerequisite: IT 350, IT 440
Variable
IT 443 (4) Health Information Technology in Clinical Practice
This course introduces students to a variety of existing and emerging technologies used within healthcare environments. Emphasis will be on software used to capture clinical data and generate reports. Students will complete a team oriented project incorporating business requirements, project management, and design elements for a system implementation, system change, or reporting request. Prerequisite: IT 113, IT 340
Fall, Spring, Summer

IT 444 (4) Data Analytics
The course explores big data in structured and unstructured data sources. Emphasis is placed on big data strategies, techniques and evaluation methods. Various data analytics are covered. Students experiment with big data through big data analytics, data mining, and data warehousing tools. Prerequisite: IT 310, IT 440

IT 450 (4) Information Warfare
Covers information warfare principles and technologies. Information warfare concepts; Protocols, Authentication, and Encryption; Network attack techniques, methodologies, and tools; Network defense; Malware: trojans, worms, viruses, and malicious code; Electronic crimes and digital evidence. Prerequisite: IT 350
Fall

IT 460 (4) Network and Security Protocols
Advanced coverage of data communication, networking, and security protocols. Topics: transmission methods, error detection and recovery, flow control, routing, security issues and performance analysis of existing and emerging protocols for secure communication. Prerequisite: IT 360
Fall

IT 462 (4) Network Security, Administration and Programming
Network and server systems administration. Domain administration; file system management; networked printers; user management; workstation configuration. Network programming assignments/projects in Layered Software Systems, HTTP Server, UDP (TFTP or DNS), CGI program, IPv6, RPC/SCTP. Prerequisite: IT 360
Variable

IT 464 (4) Applications of Wireless and Mobile Networks
Existing and emerging mobile and wireless data networks with emphasis on digital data communications. Gain an understanding of the unique considerations that must be given to network protocols for wireless and mobile communication and their applications. Prerequisite: IT 360
Variable

IT 465 (4) Mobile Device Application Programming
This course is designed to give students the skills required to write applications for mobile devices (smartphones and tablets). Topics to be covered include interacting with the UI, using an emulator/simulator, application lifecycle, moving from one screen to another, services, alarms, broadcast receivers, maps API, location based programs, gps, persistence, hardware sensors, and web applications. Prerequisite: IT 310, IT 380
Variable

IT 480 (4) Software Quality Assurance and Testing
Topics include software quality assurance, software quality metrics, software configuration management, software verification and validation, reviews, inspections, and software process improvement models, functional and structural testing models. Prerequisite: IT 310, IT 380
Fall, Spring

IT 482 (4) Human Computer Interaction
This course discusses concepts and techniques for design, development and evaluation of user interfaces. Students will learn the principles of interaction design, interaction styles, user-centered design, usability evaluation, input/output devices, design and analysis of controlled experiments and principles of perception and cognition used in building efficient and effective interfaces. Group project work. Prerequisite: IT 380 or CS 230, STAT 154 or PSYC 201 and MATH 121
Fall

IT 483 (4) Web Applications and User Interface Design
HTTP Protocol; Webmarkup languages; Client-side, Serverside programming; Web services; Web servers; Emerging technologies; Security; Standards & Bodies; Web interface design techniques; User-centered design; Visual development environments and development tools; Interface design effectiveness. Prerequisite: IT 380
Fall, Spring

IT 484 (4) Software Engineering
An introduction to all important aspects of software engineering. The emphasis is on principles of software engineering including project planning, requirements gathering, size and cost estimation, analysis, design, coding, testing, implementation, and maintenance. Group project work. Prerequisite: IT 310, IT 380
Fall, Spring

IT 485 (4) Game Design and Development
This course is designed to give students the skills required to design and develop video games. The primary focus of the course is on mobile game development, game design principles and user-centered design methodologies. A play-centric approach to game design and development will be studied, discussed and applied in the production of a game demo. Prerequisite: IT 310, IT 380
Spring: On Demand; Fall, Summer

IT 495 (1) Seminar in Information Technology
Provides Information Technology majors an opportunity, in a small group setting, to explore a topic not normally covered in the curriculum. Prerequisite: Consent
Variable

IT 496 (1-4) Selected Topics in Information Technology
Special topics not covered in other courses. May be repeated for credit on each new topic. Prerequisite: Consent
Variable

IT 497 (1-12) Internship
Provides students with opportunity to utilize their training in a real-world business environment working under the guidance and direction of a faculty. (At most 4 hours toward a major in this department.) Prerequisite: Permanent admission to IT and consent
Fall, Spring, Summer

IT 498 (4) Information Technology Capstone
Develop high quality software application researching and applying fundamental software engineering techniques, several advanced development and test tools, human factors of interface design and a team approach, each student controlling only a part of the system. Prerequisite: Senior Standing and consent
Fall, Spring

IT 499 (1-4) Individual Study
Problems on an individual basis. Prerequisite: Consent
Fall, Spring
COMPUTER SCIENCE MINOR

Computer Science

Department of Integrated Engineering
College of Science, Engineering & Technology
131 Trafton Science Center
507-389-2744
Email: integrated.engineering@mnsu.edu
Websites: cset.mnsu.edu/ie and cset.mnsu.edu/cs
Chair: Dean Kelley
Faculty: Rebecca Bates, Dean Kelley

The field of computer science spans a wide range of topics from theoretical and algorithmic foundations to cutting-edge development in computer hardware and software. A computer science minor prepares students to apply the tools and theory of computer science to whatever their major field of study is. Applications in biology, physics, chemistry, engineering, cognitive science and the social sciences can benefit from a deeper understanding of computer science.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

GPA Policy. A GPA of 2.5 or higher in courses required for the minor is required for graduation with the minor.

Grading Policy. All coursework applied towards the minor must be taken for a letter grade except for course offerings only as P/N. A minimum grade of “C-” is required in all courses which are to be applied towards a minor. In addition, a minimum grade of “C” is required for all prerequisite courses. Grades of “D” are not accepted by the department.

Incomplete Policy. An incomplete grade for a course will generally be given only under two conditions. The first condition is illness—a doctor’s written recommendation must be supplied. The second condition arises when a death in the student’s family has caused the student to be away from the campus for an extended period of time. The student must have a satisfactory grade (“C” or better) in the course at the time of the onset of the condition.

Residency. At least 50 percent of the computer science credits required for a minor from this department must be earned from the Computer Science program at Minnesota State Mankato when using transfer credits. Students receiving a computer science minor must take at least 15 credits of Computer Science courses, which may include CS 201W, CS 293, CS 492, and CS 495. These classes may allow a student to fulfill the residency requirement but do not meet other requirements of the minor.

COMPUTER SCIENCE MINOR

Minor Core
MATH 121 Calculus I (4)

[choose 1 option]

CS Option
CS 110 Computer Science I (4)
CS 111 Computer Science II (4)
CS 305 Algorithmic Structures (4)

EE/CE Option
EE 106 Fundamental Digital System Design for Electrical and Computer Engineers (3)
EE 107 Intro to Electrical and Computer Engineering Through Software Development (3)
CS 111 Computer Science II (4)
CS 305 Algorithmic Structures (4)

Minor Electives (choose 6-7 credits)

[choose 2 classes from the following]
CS 230 Introduction to Intelligent Systems (4)
CS 350 Network Architectures (3)
CS 430 Artificial Intelligence (3)
CS 460 Operating Systems: Design and Implementation (3)

COURSE DESCRIPTIONS

CS 105 (3) Computer Science Foundations
This course provides fundamental conceptual, mathematical, and logical tools for students wishing to major in Computer Science. Topics include hardware concepts, number systems, computer arithmetic, counting, sets and functions, logic, simple induction, etc. Co-requisite: Math 112
Fall

CS 110 (4) Computer Science I
Students will learn programming skills in object-oriented C++. Students will design algorithms and learn how to write, compile, run and debug programs that include selection and repetition structures, functions, and arrays. Study skills and professional development will be addressed.
Prerequisite: MATH 112 (College Algebra)
Fall, Spring

CS 111 (4) Computer Science II
Continues the exploration of introductory Computer Science begun in CS 110. Focus is on developing basic knowledge of algorithms, programming skills and problem solving techniques. Topics include recursion, sorting, linked lists, stacks and queues.
Prerequisite: CS 110 or EE 107. MATH 113 or MATH 115 or MATH 121
Fall, Spring

CS 171 (2) Introduction to C++ Programming
This course provides an introduction to programming using C++. Emphasis is on structured programming concepts, with a brief discussion of object-oriented programming. Control structures, expressions, input/output, arrays and functions.
Prerequisite: MATH 113 or MATH 115
Fall, Spring

CS 201W (4) Artificial Intelligence & Science Fiction
Course will explore the interplay between science fiction (1950s-present) and the development of artificial intelligence. Turing tests, agents, senses, problem solving, game playing, information retrieval, machine translation robotics, and ethical issues.
Variable
WI, GE-6, GE-9

CS 209 (2) C++ for Java Programmers
C++ syntax for students who already know Java. Specific topics: data types, operators, functions, arrays, string operations, pointers, structures, classes, constructors, destructors, pointers as class members, static classes, “this” pointer, operator functions, data type conversions, inheritance, polymorphism, and dynamic binding.
Prerequisite: Consent
Variable

CS 210 (4) Data Structures
Investigates efficient data structuring techniques to support a variety of operations in different problem scenarios. Topics include binary trees, binary search trees, multiway search trees, hashing and hash tables, priority queues, and algorithm analysis for best, worst and average cases.
Prerequisite: CS 111 and MATH 121
Fall, Spring

CS 220 (3) Machine Structures and Programming
This course introduces students to assembly language programming and basic machine structures. Topics include number systems, basic central processing unit (CPU) organization, instruction formats, addressing modes and their use with a variety of data structures, and parameter passing techniques.
Prerequisite: CS 110 and EE 106
Fall, Spring

CS 221 (1) Machine Structures and Programming Lab
This laboratory course complements CS 220, offering students hands-on programming experience to reinforce assembly language programming concepts. Topics include number systems, instruction formats, addressing modes and their use, and parameter passing techniques including the use of a stack frame.
Co-requisite: CS 220
Fall, Spring
CS 230 (4) Introduction to Intelligent Systems
Fundamentals of data mining and knowledge discovery. Methods include decision tree algorithms, association rule generators, neural networks, and web-based mining. Rule-based systems and intelligent agents are introduced. Students learn how to apply data mining tools to real-world problems.
Prerequisite: CS 110
Fall

CS 271 (3) Introduction to Graphical Programming
An introduction to graphical programming environments. Topics include data and data types, repetition, selection, data acquisition, data dependency, efficiency, modular program construction, array processing, debugging, and visualization.
Prerequisite: EET 115, MATH 121
Fall, Spring

CS 293 (1) MAX Scholar Seminar
This class provides MAX scholars with an opportunity to explore a set of topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants.
Prerequisite: Recipient of a MAX scholarship or instructor consent
Fall, Spring

CS 294 (1-3) Workshop
Workshop topics will be announced. Workshops on different topics may be taken for credit.
Prerequisite: Consent of instructor
Variable

CS 295 (1) Computer Science Seminar
Provides students interested in a computer science major or minor an opportunity to explore topics not normally covered in the curriculum. Speakers will include faculty, graduate students, undergraduate students admitted to the Computer Science major, visiting researchers and industry members.
Fall, Spring

CS 296 (1-2) Introduction to Selected Topics
Special topics not covered in other 100 or 200-level courses. May be repeated for each new topic.
Variable

CS 300 (4) Large-Scale Software Development
A team-based capstone experience for the mid-point of the CS program. Students are introduced to principles and methodologies of large-scale software development and engineering by working on a full life-cycle software project solving a substantial problem using multiple CS concepts.
Prerequisite: CS 210 and CS 220
Spring

CS 305 (4) Algorithmic Structures
Study of the core algorithm design and analysis techniques of computer science and the data structures which support them with attention to the applicability to specific problem types and comparison metrics.
Prerequisite: CS 111, MATH 121
Fall

CS 310 (3) Algorithm Analysis
Algorithm design and analysis is central to much of computer science. This course exposes students to fundamental algorithm design and analysis techniques. Topics include many of the basic topic areas of computer science: searching, sorting, numeric computation, data representation, communication.
Prerequisite: CS 210
Fall

CS 315 (4) Introduction to Cryptographic Methods
An introduction to methods, algorithms, and tools of cryptography. We will study the algorithmic and mathematical aspects of cryptographic methods and protocols. We will experiment with how they can be used to solve particular data and communication security problems.
Prerequisite: CS 305 or permission of instructor
Variable

CS 320 (3) Computer Architecture
This course presents historical and current concepts and implementations of computer organization. Topics include instruction set design, digital storage, performance metrics, processor datapath and control, pipelining, memory hierarchy, busses and I/O interfacing, and parallel processors.
Prerequisite: CS 111 and CS 220, or EE 334
Spring

CS 330 (4) Introduction to Neural Computation
This course provides an introduction to the theory and practice of neural computation. The goal is to familiarize students with the major models, techniques, and problems of neural network computation and to provide hands-on experience using these things. Topics include neural network models, supervised and unsupervised learning, associative memory models, and data representation.
Prerequisite: CS 293
Co-requisite: Permission of the Instructor
Spring

CS 340 (3) Concepts of Database Management Systems
This course covers the fundamentals of database management focusing on the relational data model. Topics include database organization, file organization, query processing, concurrency control, recovery, data integrity, optimization and view implementation.
Prerequisite: CS 210 and CS 320
Fall

CS 350 (3) Network Architectures
An introduction to data communications and networks. The field encompasses local area networks, wide area networks, and wireless communication. Topics include digital signals, transmission techniques, error detection and correction, OSI model, TCP/IP model, network topologies, network protocols, and communications hardware.
Prerequisite: CS 305 or EE 234
Spring

CS 351 (1) Network Architectures Lab
A laboratory in conjunction with CS 350.
Prerequisite: CS 305 or EE 234. Permission of instructor
Co-requisite: CS 350
Fall

CS 360 (3) Systems Programming
This course focuses on machine level I/O and operating system file processing. Structure of system programs including assemblers, linkers, and object-oriented utilities and interfaces. Students will gain experience in writing utility programs and extensions to an operating system.
Prerequisite: CS 111 or EE 107, and CS 320
Fall

CS 361 (3) Windows Programming
This course introduces the student to Windows programming in C++ using the Application Programming Interface. Windows programs are created in a visual development environment which includes editing and code generating facilities. Hands-on programming skills are developed in the lab.
Prerequisite: CS 210
Variable

CS 365 (3) Graphics and Game Programming
I
The course introduces the student to graphics and game programming. Graphics programming topics addressed include modeling, rendering, and animation of vector-based components and bitmaps. Programs are created using a current graphics and game development environment.
Prerequisite: CS 210, CS 220, MATH 121
All Fall

CS 370 (3) Concepts of Programming Languages
Fundamental concepts of programming languages, including principles of language design, language constructs, and comparison of major languages. Topics: formal methods of examining syntax and semantics of languages and lexical analysis of language components and constructs, and propositional and predicate calculi.
Prerequisite: CS 210
Fall

CS 380 (3) Analysis and Design of Software Systems
Students are introduced to techniques used in analysis and design of software systems. Traditional techniques are reviewed and current methodologies for both object-oriented and procedural systems are studied. Standard notations used to document software requirements and designs are presented.
Prerequisite: CS 300
Spring
COMPUTER SCIENCE CONTINUED

CS 400 (3) Software Design and Architecture
Current processes, methods and tools related to formal methods for modeling and designing software systems. Topics include software architectures, methodologies, model representations, component-based design, patterns, frameworks, CASE-based designs, and case studies. Prerequisite: CS 300 and MATH 121
Variable

CS 410 (3) Formal Languages/Abstract Machines
This course studies the theoretical underpinnings of modern computer science, focusing on three main models of computation: DFA, PDA, and Turing Machines. Students determine model capabilities and limitations: what is and is not computable by each of them. Prerequisite: CS 310 and MATH 375
Fall

CS 415 (3) High Performance Computing
High Performance Computing techniques used to address problems in computational science. Topics include application areas and basic concepts of parallel computing, hardware design of modern HPC platforms and parallel programming models, methods of measuring and characterizing serial and parallel performance. Prerequisite: CS 310, CS 350, and MATH 247
Variable

CS 420 (3) Advanced Computer Architecture
This course addresses advanced topics in computer architecture including a major emphasis on measuring and improving computer performance. Topics include advances in pipelining and analysis and optimization of storage systems and networks, multiprocessor challenges and trends. Prerequisite: CS 320 and MATH 375
Variable

CS 425 (3) Real-time and Embedded Systems
This course provides an overview of embedded and real-time systems including design principles, methodologies, design tools and problem solving techniques. Students design and build a real-time operation system with a microprocessor to host real-time service data processing using sensor/actuator devices. Prerequisite: CS 210 and CS 320
Variable

CS 430 (3) Artificial Intelligence
Basic introductory concepts and a history of the field of Artificial Intelligence (AI) are covered. Emphasis is placed on the knowledge representation and reasoning strategies used for AI problem solving. Solutions are found using the LISP programming language. Prerequisite: CS 230 or CS 305
Fall, Spring

CS 431 (3) Computational Linguistics
Computational linguistics topics covered include regular expressions, finite state automata, information theory, context free grammars, hidden Markov models and Viterbi algorithms. Students will work on problems within the field including parsing, machine translation, speech recognition, information extraction and parsing. Prerequisite: CS 210 or CS 230
Fall

CS 433 (3) Data Mining and Machine Learning
A blend of computer science, information science, and statistics for storing, accessing, mining, and understanding large datasets. Topics include fundamental data mining algorithms: decision trees, classification, regression, association rules, statistical models, neural networks, and support vector machines. Prerequisite: CS 210 and STAT 354
Fall

CS 434 (3) Network Protocol Internals
As an advanced coverage of data communication, this course explores principles, protocols and performance evaluation techniques of advanced networking technologies. Topics include error detection and recovery, flow control, routing, data throughput, and performance analysis of existing and emerging Internet protocols. Prerequisite: CS 350 and STAT 354
Variable

CS 435 (4) Computational Geometry
This course studies the problems, methods, and algorithms of computational geometry. We will focus on the core problems and categories of the discipline: static problems, geometric query problems, and dynamic problems. Some additional attention will be given to numerical geometric problems (e.g., parametric surfaces). Prerequisite: CS 305 and Math 247 or permission of instructor.
Fall (Even), Spring (Odd Years)

CS 460 (3) Operating Systems: Design & Implementation
This course studies historical and current concepts and implementations of computer operating systems. Basic operating systems topics include processes, interprocess communication, interprocess synchronization, deadlock, memory allocation, segmentation, paging, resource allocation, scheduling, file systems, storage, devices, protection, security, and privacy. Prerequisite: CS 305 or EE 395
Spring

CS 461 (1) Operating Systems Lab
A laboratory in conjunction with CS 460. Prerequisite: CS 305, EE 395. Permission of instructor.
Co-requisite: CS 460
Fall

CS 465 (3) Graphics and Game Programming II
The second of a two-course sequence on graphics and game programming. The course concentrates on 3D graphics including modeling, rendering, and animation for computer games and graphic simulations. Programs are created using a current graphics and game development environment. Prerequisite: CS 365, MATH 375
Variable

CS 470 (3) Compilers
This course offers an introduction to specification and implementation of modern compilers. Topics include lexical scanning, parsing, type checking, code generation and translation, optimization, and complete-time and runtime support for modern programming languages. Students build a working compiler. Prerequisite: CS 370
Variable

CS 480 (3) Advanced Programming Practices
This course covers advanced programming for general-purpose software development. Topics include tools and processes appropriate for employing object-oriented designs and programming within a significant software development environment and advanced data structures and algorithms, graphical user interfaces, and software development processes. Prerequisite: CS 300 and CS 380
Variable

CS 490W (4) Senior Capstone
Students gain experience working with a team to solve a substantial problem in the field of computer science using concepts that span several topic areas in computer science. Class time focuses primarily on project design and implementation. Prerequisite: Senior standing and successful completion of all core requirements.
Co-requisite: CS 480
Fall

CS 493 (1) MAX Scholar Seminar
This class is for MAX scholars and covers topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members. Students will mentor lower division scholars and do presentations. Prerequisite: Recipient of a MAX scholarship or instructor consent.
Fall
Construction Management

College of Science, Engineering & Technology
Department of Construction Management
302 Wreicking Center • 507-389-6385
Website: cset.mnsu.edu/cm
Chair: Mohamed Diab PhD
Faculty: Scott Fee, PhD; Brian Wasserman, DIT; Leah Roue, PhD; Seong Jin Kim, PhD

Accreditation. American Council of Construction Education (ACCE).

The Construction Management program prepares graduates for success in the rapidly changing construction industry. Coursework emphasizes management with an additional focus on technology that is specific to the construction industry. The Construction Management program provides students with opportunities to gain applied skills and knowledge in the areas of estimating, planning, scheduling and project management, as well as developing strong interpersonal, speaking and organizational skills allowing them to successfully pursue careers in small and large commercial, residential and industrial environments.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
Admission to Major is granted by the College of Science, Engineering and Technology. Admission requirements are:
- A minimum of 32 earned semester credit hours
- Overall GPA of "C" 2.0
- Completion of CM 111, grade of "C" (2.0) or above
- Completion of ENG 101, grade of "C" (2.0) or above
- Completion of MATH 112 & MATH 113 or MATH 115, grade of "C" (2.0) or above
- Completion of CM 297, grade of "C" (2.0) or above

Contact the CSET Advising Center for application procedures.

GPA Policy. A minimum grade of "C" (2.0) is required in all courses listed in the Construction Management BS Degree.

P/N Grading Policy. All courses in the major must be taken for letter grade except where P/N is the only option.

CONSTRUCTION MANAGEMENT BS
Degree completion = 120 credits

Required General Education
ECON 201 Principles of Macroeconomics (3)
ECON 207 Business Statistics (4)
ENG 101 Composition (4)
ENG 271W Technical Communication (4)
MATH 115 Precalculus Mathematics (4)

Analytical Science Courses
(choose 3-4 credits)
PHYS 101 Introductory Physics (3)
PHYS 211 Principles of Physics I (4)
(choose remaining credits - Choose 4-5 credits)
CHEM 201 General Chemistry I (5)
GEOL 100 Our Geologic Environment (3-4)

Major Common Core
ACCT 200 Financial Accounting (3)
ACCT 210 Managerial Accounting (3)
BLAVW 200 Legal, Political, and Regulatory Environment of Business (3)
BLAVW 476 Construction and Design Law (3)
CM 108 Construction Work Experience (1)
CM 111 Introduction to Construction Management (1)
CM 120 Construction Graphics (3)
CM 130 Construction Documents (2)
CM 210 Construction Materials and Methods I (3)
CM 220 Construction Materials and Methods II (3)
CM 222 Introduction to Statics and Mechanics of Materials (3)
CM 271 Civil Engineering Measurements (2)
CM 297 Construction Professional Practice (1)
CM 300 Construction Safety (3)
CM 310 Estimating I (3)
CM 330 Planning and Scheduling (3)
CM 340 Construction Project Management (3)
CM 350 Mechanical and Electrical Systems for Construction (3)
CM 380 Construction Equipment Management (3)
CM 410 Estimating II (3)
CM 450 Construction Capstone Project (3)
CM 492 Construction Management Seminar (3)
CM 497 Internship (1-12)
IT 101 Introduction to Information Systems (3)
MGMT 230 Principles of Management (3)
MGMT 300 Introduction to MIS (3)

Minimum of 3 credits required for CM 497

Major Restricted Electives
Select one of two classes. (choose 3 credits)
FINA 362 Business Finance (3)
MRKT 210 Principles of Marketing (3)

Required Minor: None.

CS 494 (1-3) Workshop
Workshop topics will be announced. Workshops on different topics may be taken for credit.
Variable
Prerequisite: Consent of Instructor

CS 495 (1) Computer Science Seminar
Provides Computer Science majors or minors an opportunity to explore topics not normally covered in the curriculum. Speakers will include faculty, graduate students, undergraduate students admitted to the Computer Science major, visiting researchers and industry members. This class may be repeated for credit.
Prerequisite: Admitted to major
Fall, Spring

CS 496 (1-4) Selected Topics in Computer Science
Special topics not covered in other courses. May be repeated for credit on each new topic.
Prerequisite: Consent
Variable

CS 497 (1-6) Internship
This course is designed to provide students with an opportunity to utilize their training in a real-world environment. Participants work under the guidance and direction of a full-time staff member. (At most 4 hours towards the CS major.)
Prerequisite: Permanent admission to the CS major, CS 300, consent.

CS 498W (4) Senior Thesis
Advanced study and research required. Topic of the senior thesis determined jointly by the student and the faculty advisor.
Prerequisite: Senior standing and consent
Fall, Spring
WI

CS 499 (1-4) Individual Study
Problems in the field of computer science are studied on an individual basis under the guidance of a faculty mentor.
Prerequisite: Consent
Fall, Spring
COURSE DESCRIPTIONS

CM 108 (1) Construction Work Experience
The Construction Experience course is one step toward building a future in the management of projects for the built environment. This course inspires students to explore opportunities within the diverse construction industry under the guidance and approval of the course instructor.
Fall, Spring, Summer

CM 111 (1) Introduction to Construction Management
Overview of academic preparation and career opportunities in the fields of Construction Management. Skills needed for estimating, scheduling, project management and field supervision will be previewed with an emphasis on future trends in the industry.
Fall, Spring

CM 120 (3) Construction Graphics
Emphasis on plan reading, basic sketching and drawing techniques, graphic vocabulary, detail hierarchies, scale, content, notes and specifications, reference conventions, and computer applications.
Fall, Spring

CM 130 (2) Construction Documents
Basic understanding of the plans and specifications for construction projects. Emphasis on interpretation of bidding and contractual documents, conditions of the contract, plans/working drawings, and applications of existing and new technology preparing students for the future.
Fall, Spring

CM 210 (3) Construction Materials and Methods I
Understand how construction affects professional industry and society, present state of the profession and its future. Learn about the various materials used in construction—the composition, properties, standard designations, sizes, gradations and testing techniques. Understand changes in technology of building construction materials.
Fall, Spring

CM 220 (3) Construction Materials and Methods II
Fundamentals of building construction and their applications in construction systems and utilities. Application of the principles of building science to construction sites; relationship between technology and innovations in methods, sustainable building practices and “green” building requirements.
Prerequisite: CM 210
Fall, Spring

CM 222 (3) Introduction to Statics and Mechanics of Materials
Course introduces the design theory and applied principles of force equilibrium, stress and strain, shear, bending moments, force diagrams, deformations of beams, and stress/strain analysis.
Prerequisite: PHYS 101, MATH 113 or MATH 115 or MATH 121
Fall, Spring

CM 271 (2) Civil Engineering Measurements
Basic civil engineering measurements as relates to construction layout, including distances, angles, bearings, elevations, mapping and positioning.
Prerequisite: MATH 113 or MATH 115 or MATH 121
Fall, Spring

CM 297 (1) Construction Professional Practice
Principles of professional conduct, ethical codes and best practices are applied to the development of a portfolio and presentation. Students will sit for interviews, set career goals, and begin building a professional network.
Prerequisite: CM 108, CM 210
Fall, Spring

CM 300 (3) Construction Safety
Principles and practices of construction safety, health, and loss control. Emphasis is on hazard recognition, control procedures and management systems for measuring and evaluating loss control performance in the construction industry.
Prerequisite: CM 210
Fall, Spring

CM 310 (3) Estimating I
This course covers types of estimates and their uses, the basics of quantity take-off, labor and equipment productivity and basic computer applications.
Prerequisite: MATH 113 or MATH 115 or MATH 121
Fall, Spring

CM 330 (3) Planning and Scheduling
Understanding project planning, scheduling and control models with emphasis on the critical path methods. Introductions to the techniques used in the industry utilizing commercial software on personal computers, highlighting the importance of analysis of schedules; considering and understanding schedule alternatives will be stressed.
Prerequisite: ENGS 271W, CM 220
Fall, Spring

CM 340 (3) Construction Project Management
This course examines the project management framework, including key terminology, project management context, and project management processes. Topics include project management knowledge areas, life cycles, and organizational designs. Different project delivery methods will be discussed and the roles of project stakeholders will be identified and analyzed.
Prerequisite: CM 220, CM 222, CM 297
Fall, Spring

CM 350 (3) Mechanical and Electrical Systems for Construction
Design concepts of plumbing, HVAC, and electrical and control systems are analyzed for attributes that affect the design and construction processes and the performance of completed structures.
Prerequisite: CM 220
Fall, Spring

CM 380 (3) Construction Equipment Management
This course provides understanding of the different building and civil construction equipment’s functions; analysis of equipment costs, production, methods of equipment selection and safety requirements including heavy equipment. Reading and understanding highway construction plans.
Prerequisite: CM 220, CM 300
Fall, Spring

CM 398 (0) CPT: Co-Operative Experience
Curricular Practical Training: The Co-Operative Experience is a zero-credit, full-time practical training experience. Please contact an advisor in the Construction Management program for details.
Fall, Spring, Summer

CM 410 (3) Construction Project Management
This course covers types of estimates and their uses, pricing and price databases, labor and equipment productivity, proposal presentations, computer applications in estimating and research in sustainable construction.
Prerequisite: CM 310, CM 330
Fall, Spring

CM 450 (3) Construction Capstone Project
The course will involve the students in a Capstone Project in teams representing a construction company. This is a project where students will integrate the coursework concept of the core program through research, application and presentation.
Prerequisite: CM 340, CM 410
Fall, Spring

CM 492 (3) Construction Management Seminar
A seminar course that involves a critical evaluation of an area in the construction management discipline and/or industry. Topics vary from year to year. Students are usually required to make a presentation to the class.
Prerequisite: Senior Standing or instructor permission
Fall, Spring

CM 497 (1-12) Internship
Prerequisite: CM 300, CM 310, CM 330
Fall, Spring, Summer

CM 499 (1-4) Individual Study
An in-depth study on a topic of particular interest to the student. Project must be approved by project supervisor and department chairperson.
Corrections

College of Social & Behavioral Sciences
Department of Sociology & Corrections
113 Armstrong Hall • 507-389-1561
Website: http://sbs.mnsu.edu/soccorr

Chair: Luis A. Pasas

Faculty: Barbara Carson, Jeffery Dennis, Jessica Mclaughlin, Pedro Thomas, Sherrise Truesdale-Moore, Tyler Vaughan

The Corrections major is designed to prepare students for entry level professional work in corrections. The major is built upon a foundation of general education, sociological and criminological concepts, and a commitment to understanding and transforming correctional practice. The major achieves its objectives through the melding of academic learning with experiential education. This program is further expected to promote, within corrections and to the community at large, a commitment to the principles of social justice, respect, tolerance, dignity and worth of all persons.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

Admission to Major. Students enrolling in 300-400 level courses must be admitted to the program. Admission is granted by the Department. Minimum university admission requirements are:
- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00.

Residency Requirements

Excluding CORR 106 and SOC 101, all majors must complete 42 of the required 48 credits within the Department of Sociology and Corrections at Minnesota State Mankato. Transfer courses that will not be accepted are Field Practice, Capstone and Experiential courses such as CORR 200, CORR 350, CORR 355 CORR 485 and CORR 449.

Normally the department will not accept transfer courses at the 200-level for our upper level courses, except on a case-by-case basis.

Excluding CORR 106, all students minor in corrections must complete 12 of the required 18 credit hours within the Department of Sociology and Corrections at Minnesota State Mankato.

GPA Policy: A minimum grade of “C” is required for all courses counting towards the Corrections major.

Combined BS, BA/MS, MA Program:

Undergraduate students in our Sociology and Corrections programs interested in pursuing a master’s degree in either of these two fields may be granted permission to double count up to 12 credits for both the undergraduate and the graduate program. To apply for this option, students must have completed their sophomore year, have and maintain a GPA of at least 3.0, and declare their intent to complete the graduate program following the completion of the baccalaureate degree. If accepted, students must obtain special permission to register for double counted courses and will receive graduate student credit when the undergraduate degree has been conferred and they have been fully admitted into one of our graduate programs. Please contact the Department Graduate Coordinator for detailed information.

CORRECTIONS BS AND MINOR

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>CORR 106</td>
<td>Introduction to Criminal Justice Systems (3)</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology (3)</td>
</tr>
<tr>
<td>CORR 200</td>
<td>Foundations and Orientation to Corrections (3)</td>
</tr>
<tr>
<td>CORR 255</td>
<td>Juvenile Delinquency (3)</td>
</tr>
<tr>
<td>CORR 300-400 Level</td>
<td>Required Electives for Minor (12 credits)</td>
</tr>
<tr>
<td>CORR 350</td>
<td>JOLT: Joint Opportunity to Learn and Thrive, Part II (3)</td>
</tr>
<tr>
<td>CORR 355</td>
<td>Women in the Criminal Justice System (3)</td>
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<tr>
<td>CORR 441</td>
<td>Social Deviance (3)</td>
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<td>Victimization (3)</td>
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<td>CORR 453</td>
<td>Drugs and Society (3)</td>
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<td>CORR 454</td>
<td>Sociology of Mental Health (3)</td>
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<td>Victimology (3)</td>
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<td>CORR 456</td>
<td>Family Violence (3)</td>
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<td>Correctional Law (3)</td>
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<tr>
<td>CORR 472</td>
<td>Identity Work in Women’s Reentry Experiences (3)</td>
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<tr>
<td>CORR 485</td>
<td>Evidence-Based Practices in Corrections (3)</td>
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<tr>
<td>CORR 496</td>
<td>Field Practicum: Corrections (10)</td>
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<tr>
<td>CORR 497</td>
<td>Capstone Seminar (2)</td>
</tr>
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Required Minor: Yes. Any.

CORRECTIONS MINOR

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Required Electives for Minor (12 credits)

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<td>CORR 350</td>
<td>JOLT: Joint Opportunity to Learn and Thrive, Part II (3)</td>
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<td>CORR 497</td>
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COURSE DESCRIPTIONS

CORR 106 (3) Introduction to Criminal Justice Systems
Examines the making of criminal law, the evolution of policing, the adjudication of persons accused of criminal law violations, and the punishment of adult offenders. Fall, Spring
GE-5, GE-9
Diverse Cultures - Purple

CORR 200 (3) Foundations and Orientation to Corrections
Introduction to academic concepts and issues in corrections, with emphasis on student professional development. The course includes a 50-hour service learning component to be completed outside of class. Corrections majors should take this course as early as possible
Prerequisite: CORR 106 and SOC 101
Fall, Spring

CORR 255 (3) Juvenile Delinquency
A critical consideration of definitions of juvenile delinquency, emphasis on micro and macro level of struggle in which delinquent behavior takes place, critique of current theories on delinquency, and the juvenile justice response to delinquency. Fall, Spring
GE-5, GE-9

CORR 291 (4) Exploratory Studies
May be used to explore areas of interest not covered in regular courses. A maximum of three hours applicable toward a major or minor in the department with consent of an advisor.
Prerequisite: Consent
Fall, Spring
CORR 310 (3) Corrections Research Methods
Research methodologies as they apply to correctional evidence-based practices are covered, as are strengths and limitations of various research practices, especially with respect to central correctional concepts such as risk, recidivism, and program evaluation. Students will gain experience with data sources, data collection, and basic interpretation of data analysis.
Fall, Spring

CORR 350 (3) JOLT: Joint Opportunities to Learn and Thrive
JOLT is a collaborative effort between the University and several probation offices. Students will mentor delinquents in the community and be mentored by local probation officers. This is a year-long commitment.
Prerequisite: CORR 200
Fall

CORR 355 (3) JOLT: Joint Opportunity to Learn and Thrive, Part II
JOLT-II is a second semester continuation of CORR 350. Can only enroll after completing CORR 350.
Prerequisite: CORR 350
Spring

CORR 398 (0) CPT: Co-Operative Experience
Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.
Prerequisite: At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.
Fall, Spring, Summer

CORR 417 (3) Program Administration
Implications of Sociological Knowledge for the administration of Human Services programs. Theoretical and practical aspects of administration with the Social Service systems.
Prerequisite: SOC 101
Spring

CORR 441 (3) Social Deviance
Sociological perspective on social deviance; overview of theoretical approaches; emphasis on symbolic interactionism; issues of social control; research examples and policy implications.
Prerequisite: SOC 101
Fall, Spring

CORR 442 (3) Criminology
A critical consideration of myths concerning crime, perspectives on crime and their assumptions, current criminology theory, and construction of alternative explanations related to crime.
Prerequisite: SOC 101
Fall, Spring

CORR 443 (3) History of Prisons and Punishment
Addresses the justifications and the historical development of punishment, the legal and policy issues concerning capital punishment, and the use of incarceration as a response to crime.
Prerequisite: CORR 106 and CORR 200
Fall, Spring

CORR 444 (3) Women in the Criminal Justice System
This course focuses on the experiences of women in the criminal justice system—as victims, offenders, and professionals. Women’s involvement in this system (whether they were a defendant, an attorney, an inmate, a correctional officer or a crime victim) has often been overlooked or devalued. The goal of this course is to bring the special needs and contributions of women in the criminal justice system into sharper focus.
Fall
Diverse Cultures - Purple

CORR 447 (3) Community Corrections
Addresses theoretical roots, historical developments, and current practices of probation, parole, and other community corrections programs. Special attention is given to innovative, future approaches to community corrections.
Prerequisite: SOC 101 and CORR 106
Fall, Spring

CORR 447W (3) Community Corrections
Addresses theoretical roots, historical developments, and current practices of probation, parole, and other community corrections programs. Special attention is given to innovative, future approaches to community corrections.
Prerequisite: SOC 101 and CORR 106
Fall, Spring

CORR 448 (3) Correctional Law
Examines the rights of inmates, probationers, and parolees.
Prerequisite: CORR 106 and CORR 200
Fall, Spring

CORR 449 (3) Correctional Counseling
Principles and methods of individual and group counseling with juvenile and adult offenders; development of interpersonal helping skills, negotiation, and mediation skills.
Fall, Spring

CORR 450 (3) Evidence Based Practices in Corrections
This class will be taught in modules where students will gain learn how to determine if practices in Corrections are evidence based, the types of programming in Corrections that are supported by research, and skills and knowledge necessary to implement these practices.
Spring

CORR 452 (3) Victimology
Overview of characteristics of victims, victim offender relationships, societal victimization, victim’s rights and services, and restorative justice.
Prerequisite: SOC 101 and CORR 106
Fall

CORR 459 (3) Issues in Corrections
A critical examination of current issues in the correctional field.
Spring

CORR 468 (3) Cultural Competency in Corrections
Assist the students in starting a healthy conversation on cultural competencies for correctional professionals, and develop resources, skills, and strategies needed to address racism and inequity. The idea is to take a journey in building a more inclusive, connected, and effective correctional organization. Students will discover a framework to help discuss issues related to cultural competency: learn about methods, practices, and values that define cultural competency and culturally based work in various fields and organizations; understand the complexities within ethnic communities; and gain insights into the nature of institutionalized racism.
Fall, Spring
Diverse Cultures - Purple

CORR 471 (3) New Directions in Correctional Policy: Transforming Practice
A comprehensive historical and cross-cultural study of social policy analysis, the transforming role correctional policy formation plays in correctional practice, and the process of policy change and the mechanisms leaders can employ to encourage effective and ethical social policy.
Summer

CORR 472 (3) Drugs and Society
A sociological perspective to examine the history of drug use and abuse in the United States. Multicultural issues in drug abuse, international drug distribution networks, prevention efforts, and legal issues will be discussed.
Fall, Spring
Diverse Cultures - Purple

CORR 485 (2-6) Selected Topics
Topics vary as announced in class schedule. May be retaken for credit if topic varies.
Prerequisite: SOC 101
Variable

CORR 491 (1-6) In-Service
Topics vary as arranged by students and instructor. May be retaken for credit.
Variable

CORR 492 (1) Honors Reading
For Honors students only.
Variable
Counseling and Student Personnel

College of Education
Department of Counseling and Student Personnel
107 Armstrong Hall • 507-389-2423
Fax: 507-389-5074
Website: www.coled.mnsu.edu/departments/csp

Chair: Dr. Jacqueline Lewis

The mission of Department of Counseling and Student Personnel (CSP) is to prepare professional practitioners at the graduate level who will serve in a variety of helping settings including elementary and secondary schools, colleges and universities, mental health and other community agencies, business and industry, and marriage and family counseling settings. In addition to the preparation of graduate students in the helping professions, the Department of Counseling and Student Personnel offers courses and other experiences designed to assist the undergraduate student in development of critical thinking skills, decision-making skills, and interpersonal helping skills. Please contact the department chair or visit the website for more information.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

COURSE DESCRIPTIONS

CSP 115 (3) Decision Making for Career and Life
The purpose of this course is to help students develop critical thinking, problem solving and decision making skills necessary to manage the challenges they face now (choice of major) and in the future (career choice and balancing work and life roles). Meets General Education requirements for critical thinking.
Fall, Spring
GE-2

CSP 110 (3) Decision Making for Career and Life
The purpose of this course is to help students develop critical thinking, problem solving and decision making skills necessary to manage the challenges they face now (choice of major) and in the future (career choice and balancing work and life roles). Meets General Education requirements for critical thinking.
Fall, Spring

CSP 117 (3) Processes & Skills for Facilitating Effective Change
An introduction to basic processes and skills related to facilitating effective change. Selected topics (chemical use and abuse, facilitating diversity, working in groups) related to personal, social and interpersonal issues affecting families, and professionals will be presented.
Spring

CSP 470 (3) Group Procedures
Strategies for establishing a group. A review of concepts related to group membership, group member roles and group techniques, therapeutic factors and leadership roles. An experiential component is included in this course.
Prerequisite: CSP 471
Summer

CSP 499 (1-4) In-service
CSP 491 (1-4) In-service

CSP 471 (3) Interpersonal Helping Skills
Provides the developing helping professional with an introduction to basic helping skills: attending, listening, responding to content and affect, probing, and providing feedback. The course is experiential in nature and includes small group interaction, videotaping, and role playing simulations.
Spring, Summer

CSP 473 (3) Counseling the Chemically Dependent Family
Understanding the impact of chemical dependency on the family. Family counseling skills and relapse prevention strategies will also be included.
Spring

CSP 499 (1-4) Individual Study

Critical Thinking Certificate and Minor

College of Arts & Humanities
Department of Philosophy
227 Armstrong Hall • 507-389-2012

Chair: Brandon Cooke

Faculty: Brandon Cooke, John Humphrey, Richard Liebendorfer, Craig Matarrese, Joshua Peiss, Bekka Williams, Julie Wulfemeyer, Sun Kyeong Yu

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

CRITICAL THINKING CERTIFICATE

The Critical Thinking certificate program is a non-degree program targeted to students enrolled in Minnesota State Mankato. The Program provides students with the training in critical thinking skills and issues them Critical Thinking Certificates which will prove to be useful credentials for their active roles in a wide variety of academic, professional and commercial workplaces. This undergraduate program is intended for those interested in the critical, analytical and philosophical dimensions of business, social science, natural science, arts, humanities or history. Upon completion of the 12 unit program an Undergraduate Certificate will be awarded. The program is open to currently enrolled students as well as those who are not currently enrolled but meet undergraduate admission requirements.

Major Common Core (choose 3 credits)
PHIL 110 Logic and Critical Thinking (3)
PHIL 112 Logic of Scientific Method (3)

Major Restricted Electives
Students must take two courses (6 credits) from one of the following five areas. (Substitution may be made for the following requirements with permission of the chair or the undergraduate advisor of the Philosophy Department.)

AREA 1: For those interested in the critical, analytical and philosophical dimensions of natural science. (choose 6 credits)
PHIL 101W Philosophical Problem: The Mind/Body Problem (3)
PHIL 420 Epistemology (3)

COURSES

Corrections Program. To be taken concurrently with CORR 496.
Prerequisite: Completion of all other required CORR courses.
Fall, Spring

CORR 496 (10) Field Practicum: Corrections
Full time experience in a corrections agency with an emphasis on the development of skills. For Corrections majors only. Required for major. Formal application required.
Prerequisite: Consent
Fall, Spring

CORR 497 (2) Capstone Seminar
Capstone is an evaluative course which allows students to document their learning and provide an assessment of their personal learning and the effectiveness of the Corrections Program. To be taken concurrently with CORR 496.
Prerequisite: Completion of all other required CORR courses.
Fall, Spring

CORR 498 (1-12) Internship: Corrections
The internship in Corrections is designed to provide opportunities to apply classroom learning, to practice and enhance skills, to experience professional socialization, and to explore a career. It also serves as a vehicle for the student to become more aware of personal strengths and to identify areas in which further growth is needed.
Prerequisite: Consent
Fall, Spring

CORR 499 (1-6) Individual Study
A maximum of six credits is applicable toward a single major in the department; three credits toward a minor.
Prerequisite: Consent

CRITICAL THINKING CERTIFICATE AND MINOR

For those interested in the critical, analytical and philosophical dimensions of natural science. (choose 6 credits)
PHIL 101W Philosophical Problem: The Mind/Body Problem (3)
PHIL 420 Epistemology (3)

CRITICAL THINKING CERTIFICATE

The Critical Thinking certificate program is a non-degree program targeted to students enrolled in Minnesota State Mankato. The Program provides students with the training in critical thinking skills and issues them Critical Thinking Certificates which will prove to be useful credentials for their active roles in a wide variety of academic, professional and commercial workplaces. This undergraduate program is intended for those interested in the critical, analytical and philosophical dimensions of business, social science, natural science, arts, humanities or history. Upon completion of the 12 unit program an Undergraduate Certificate will be awarded. The program is open to currently enrolled students as well as those who are not currently enrolled but meet undergraduate admission requirements.

Major Common Core (choose 3 credits)
PHIL 110 Logic and Critical Thinking (3)
PHIL 112 Logic of Scientific Method (3)

Major Restricted Electives
Students must take two courses (6 credits) from one of the following five areas. (Substitution may be made for the following requirements with permission of the chair or the undergraduate advisor of the Philosophy Department.)

AREA 1: For those interested in the critical, analytical and philosophical dimensions of natural science. (choose 6 credits)
PHIL 101W Philosophical Problem: The Mind/Body Problem (3)
PHIL 420 Epistemology (3)
### CRITICAL THINKING MINOR

Critical thinking skill is the ability to construct, evaluate and explain our thoughts and our views of the world in a logical and rational manner. This skill assists us to analyze, understand, and respond others’ thoughts correctly and efficiently. The Critical Thinking Minor is intended for students interested in the critical, analytical and philosophical dimensions of business, social science, natural science, arts, humanities or history. The program provides them with the training in critical and philosophical thinking skills so as to enable each of them to play an active role in a wide variety of academic, professional or commercial workplaces.

#### Core (choose 3 credits)
- PHIL 110 Logic and Critical Thinking (3)
- PHIL 112 Logic of Scientific Method (3)

#### Elective
Students must take 15 credits from one of the following five areas. At least 9 of those credits must be upper division (300-400 level) AND at least 6 of those 9 credits (or 2 courses) must be upper division (300-400 level) philosophy courses. (Substitution may be made for the following requirements with permission of the chair or the undergraduate advisor of the Department of Philosophy.)

**AREA 1:** For those interested in the critical, analytical and philosophical dimensions of natural science

Choose 15 credits from the following.
- CHEM 201 General Chemistry I (5)
- PHIL 420 Epistemology (3)
- PHIL 430 Metaphysics (3)
- PHIL 474 Philosophy of the Mind (3)
- PHIL 475 Philosophical Issues in Cognitive Science (3)
- PHIL 476 Philosophy of Perception (3)
- PHIL 477 Animal Minds (3)
- PHIL 480 Philosophy of Science (3)
- PHIL 481 Philosophy of Biology (3)

**AREA 2:** For those interested in the critical, analytical and philosophical dimensions of business, social science, natural science, arts, humanities or history

Choose 15 credits from the following list. At least 9 credits must be upper division (300-400 level).
- CMST 300 Ethics and Free Speech (4)
- ENG 211W Perspectives in Literature and Human Diversity (4)
- ENG 212W Perspectives in World Literature (4)
- ENG 213W Perspectives: Ethics and Civic Responsibility in Literature (4)
- ENG 405 Shakespeare: Comedies and Histories (2)
- ENG 406 Shakespeare: Tragedies (2)
- ENG 433 Selected Studies in World Literature (4)
- ENG 435 The World Novel (2-4)
- ENG 436 Native American Literature (2-4)
- ENG 437 Latina/o Literature (2-4)
- ENG 438 African American Literature (2-4)
- ENG 441 Literary Theory and Criticism (4)
- ENG 455 Existentialism & Phenomenology (3)
- ENG 465 Philosophy of Film (3)
- PHIL 466 Philosophy of Perception (3)
- PHIL 482 Philosophy of Social Science (3)

**AREA 3:** For those interested in the critical, analytical and philosophical dimensions of history.

Choose 15 credits from the following list. At least 9 credits must be upper division (300-400 level).
- CMST 300 Ethics and Free Speech (4)
- CMST 412 Mass Media History (4)
- CMST 420 Mass Media Theory (4)
- ENG 211W Perspectives in Literature and Human Diversity (4)
- ENG 212W Perspectives in World Literature (4)
- ENG 213W Perspectives: Ethics and Civic Responsibility in Literature (4)
- ENG 405 Shakespeare: Comedies and Histories (2)
- ENG 406 Shakespeare: Tragedies (2)
- ENG 433 Selected Studies in World Literature (4)
- ENG 435 The World Novel (2-4)
- ENG 436 Native American Literature (2-4)
- ENG 437 Latina/o Literature (2-4)
- ENG 438 African American Literature (2-4)
- ENG 441 Literary Theory and Criticism (4)
- ENG 455 Existentialism & Phenomenology (3)
- ENG 465 Philosophy of Film (3)
- PHIL 466 Philosophy of Perception (3)
- PHIL 482 Philosophy of Social Science (3)

**AREA 4:** For those interested in the critical, analytical and philosophical dimensions of business.

(choose 6 credits)
- PHIL 120W Introduction to Ethics (3)
- PHIL 205W Culture, Identity, and Diversity (3)
- PHIL 212 Logics of Scientific Method (3)
- PHIL 321W Social & Political Philosophy (3)
- PHIL 420 Epistemology (3)
- PHIL 423 Philosophy of Perception (3)
- PHIL 424 Environmental Ethics (3)
- PHIL 425 Philosophy of Social Science (3)

**AREA 5:** For those interested in the critical, analytical and philosophical dimensions of business.

(choose 6 credits)
- PHIL 120W Introduction to Ethics (3)
- PHIL 222W Medical Ethics (3)
- PHIL 224W Business Ethics (3)
- PHIL 321W Social & Political Philosophy (3)
- PHIL 420 Epistemology (3)
- PHIL 424 Environmental Ethics (3)
- PHIL 425 Philosophy of Social Science (3)
- PHIL 427 Philosophy of Perception (3)

Major Unrestricted Electives

Students must take one course (3 credits) from any courses that the Philosophy Department offers.
**Dakota**

**College of Arts & Humanities**
Department of World Languages & Cultures
227 Armstrong Hall • 507-389-2116
Website: www.mnsu.edu/languages

Chair: Adriana Gordillo

Although Minnesota State Mankato does not offer a degree in Dakota, students may register for Dakota courses by contacting the Department of World Languages & Cultures.

**DAKOTA COURSES**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAK 101</td>
<td>Elementary Dakota I</td>
<td>4</td>
</tr>
<tr>
<td>DAK 102</td>
<td>Elementary Dakota II</td>
<td>4</td>
</tr>
<tr>
<td>DAK 201</td>
<td>Intermediate Dakota I</td>
<td>4</td>
</tr>
<tr>
<td>DAK 202</td>
<td>Intermediate Dakota II</td>
<td>4</td>
</tr>
</tbody>
</table>

**DANCE BFA, BA, BS AND MINOR**

**Dance**

**College of Arts & Humanities**
Department of Theatre and Dance
201 Earley Center for Performing Arts • 507-389-2118
Fax: 507-389-2922
Website: www.mnsdance.com

Director: Julie Kerr-Berry, Ed.D.

The Minnesota State Mankato Dance Program offers students degree options that are grounded in the liberal arts tradition. Students learn about the depth and breadth of dance as they practice their art form in multiple arenas. The curriculum is designed to balance students’ artistic experiences with practical applications to better prepare them to enter the dance world upon graduation. Students receive a comprehensive education that readies them for a lifetime in dance, including: teaching, performing, bodywork, choreographing, dance therapy, writing, dance technology, and dance production. Through an audition and adjudication process, students have many opportunities to present their choreographic work and/or perform in four concerts each year. Students can also audition to perform in musical theatre productions. Whatever their chosen path in dance, students emerge from the Minnesota State Mankato Dance Program with multiple skills, and the ability to think critically and act globally as emerging dance artists.

**POLICIES/INFORMATION**

**GPA Policy.** A grade of "C" or better must be earned for major or minor credit.

**P/N Grading Policy.** Required courses must be taken for a grade.

**DANCE BFA**

Degree completion = 120 credits

**Required General Education**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 120W</td>
<td>Introduction to Dance</td>
<td>3</td>
</tr>
<tr>
<td>THEA 101</td>
<td>Acting for Everyone</td>
<td>3</td>
</tr>
</tbody>
</table>
### Major Common Core
- DANC 225 Worlds of Dance (3)
- DANC 321 Dance Composition I (2)
- DANC 322 Dance Improvisation (2)
- DANC 329 Dance Practicum I (1)
- DANC 421 Dance Composition II (2)
- DANC 427 Topics in Dance (3)
- DANC 429 Senior Dance Project (1)
- DANC 430 Choreographic Project I (1)
- DANC 431 Choreographic Project II (1)
- DANC 484W Dance History (3)
- THEA 262 Dance Production: Costumes (1)
- THEA 272 Dance Production: Lighting (1)
- THEA 276 Dance Production: Sound (1)

### Major Restricted Electives
- Contemporary Dance Technique (Choose 14 Credits)
- Choose courses in consultation with an advisor. A minimum of 4 credits of DANC 328 is required. Courses may be repeated for credit.
- DANC 125 Afro-Caribbean Dance Forms (2)
- DANC 228 Contemporary Dance II (2)
- DANC 328 Contemporary Dance III (2)

- Ballet Technique (Choose 14 Credits)
- Choose courses in consultation with an advisor. A minimum of 2 credits of DANC 326 is required. Courses may be repeated for credit.
- DANC 126 Ballet II (2)
- DANC 226 Ballet II (2)
- DANC 326 Ballet III (2)

- Theatre Activity (Choose 5 Credits) (Choose 3 areas)
  - THEA 102 Theatre Activity: Acting (1-2)
  - THEA 103 Theatre Activity: Management (1-2)
  - THEA 104 Theatre Activity: Dance Captain (1-2)
  - THEA 105 Theatre Activity: Stagecraft (1-2)
  - THEA 107 Theatre Activity: Costume (1-2)
  - THEA 108 Theatre Activity: Lighting (1-2)
  - THEA 109 Theatre Activity: Sound (1-2)

- Practicum (Choose 1 - 2 Credits)
  - DANC 329 Dance Practicum (1)
  - THEA 301 Practicum: Directing (1-2)
  - THEA 302 Practicum: Acting (1-2)
  - THEA 303 Practicum: Theatre Management (1-2)
  - THEA 304 Practicum: Scene Design (1-2)
  - THEA 305 Practicum: Tech Theatre (1-2)
  - THEA 306 Practicum: Costume Design (1-2)
  - THEA 307 Practicum: Costume Construction (1-2)
  - THEA 308 Practicum: Light Design (1-2)
  - THEA 309 Practicum: Sound (1-2)
  - THEA 432 Practicum: Choreography (1-2)

### Major Unrestricted Electives
- (Choose 4 Credits)
  - Courses from the Common Core may be repeated for credit.
  - DANC 125 Afro-Caribbean Dance Forms (2)
  - DANC 223 Jazz Dance II (2)
  - DANC 227 Tap Dance II (2)
  - DANC 320 Dance Somatics (2)
  - DANC 323 Jazz Dance III (2)
  - DANC 324 Methods and Materials for Teaching Dance (3)
  - DANC 327 Tap Dance III (2)
  - DANC 332 Dance Partnering (1)
  - DANC 333 Dance Partnering for Theatre (1)

### Degree Completion
- DANCE BA
  - Degree completion = 120 credits
DANC 223 Intermediate Jazz Dance (2)
DANC 225 Worlds of Dance (3)
DANC 226 Ballet II (2)
DANC 227 Tap Dance I (2)
DANC 228 Contemporary Dance II (2)
DANC 322 Dance Improvisation (2)
THEA 101 Acting for Everyone (3)

Minor Electives
Must take 2 credits of the following:
DANC 123 Jazz Dance I (2)
DANC 126 Ballet I (2)
DANC 127 Tap Dance I (2)
DANC 128 Contemporary Dance I (2)
DANC 323 Jazz Dance III (2)
DANC 326 Ballet III (2)
DANC 327 Tap Dance III (2)
DANC 328 Contemporary Dance III (2)

COURSE DESCRIPTIONS

DANC 120 (3) Introduction to Dance
A survey of dance in all its vibrant forms intended to develop student understanding and appreciation for the significant role dance plays in world cultures.
Spring
GE-6, GE-8

DANC 120W (3) Introduction to Dance
A survey of dance in all its vibrant forms intended to develop student understanding and appreciation for the significant role dance plays in world cultures.
Spring
WI, GE-6, GE-8

DANC 123 (2) Jazz Dance I
Fundamentals of jazz technique, including knowledge and application of terminology. May be repeated.
Spring
GE-11

DANC 125 (2) Afro-Caribbean Dance Forms
ALT-Fall
GE-11

DANC 126 (2) Ballet I
Fundamentals of ballet technique, including knowledge and application of terminology. May be repeated.
Fall
GE-11

DANC 127 (2) Tap Dance I
Fundamentals of tap dance technique utilized in musical theatre. May be repeated.
Fall
GE-11

DANC 128 (2) Contemporary Dance I
Fundamentals of modern dance technique, including an improvisatory component. May be repeated.
Fall, ALT-Spring
GE-11

DANC 129 (1-2) Dance Activities
Performing in a mainstream dance production. May be repeated.
Prerequisite: Consent
Fall, Spring

DANC 223 (2) Jazz Dance II
Expanding knowledge and skill of jazz dance technique with more direct application to musical theatre and concert dance, as well as focus on emerging performance skills. May be repeated.
Prerequisite: DANC 123 or consent
Fall, ALT-Spring
GE-11

DANC 225 (3) Worlds of Dance
Cross-cultural survey of dance from around the world with emphasis on historical, social, and cultural dimensions. Includes Western concert dance as one among many other forms.
Prerequisite: DANC 125, DANC 126 or DANC 128
ALT-Spring
GE-8, GE-11
Diverse Cultures - Purple

DANC 226 (2) Ballet II
Expanding knowledge and skill of ballet technique with increasing development of centerfloor and across-the-floor variations, as well as emerging performance skills. May be repeated.
Prerequisite: DANC 126 or consent
Fall, Spring
GE-11

DANC 227 (2) Tap Dance II
Expanding knowledge and skill of tap technique in musical theatre, as well as focus on emerging performance skills. May be repeated.
Prerequisite: DANC 127 or consent
ALT-Spring
GE-11

DANC 228 (2) Contemporary Dance II
Expanding knowledge and skill of modern dance technique including floor work, elevations, inversions, and emerging performance skills. May be repeated.
Prerequisite: DANC 128 or consent
Fall, Spring
GE-11

DANC 295 (1-4) Touring Dance
This course is designed for dance students to perform as part of a touring dance production. May be repeated.
Prerequisite: Consent

DANC 320 (2) Dance Somatics
Study and practice of specific techniques to improve dancers’ performance, health, and teaching.
Prerequisite: DANC 126, DANC 128 or consent
Spring

DANC 321 (2) Dance Composition I
The study of dance making, dance accompaniment, and dance criticism through the creation of dance works.
Prerequisite: DANC 128, DANC 228, DANC 322
ALT-Fall, ALT-Spring

DANC 322 (2) Dance Improvisation
Exploration of a variety of improvisational techniques for beginning Dance Majors and Minors. May be repeated.
Prerequisite: DANC 128
ALT-Fall, ALT-Spring

DANC 323 (2) Jazz Dance III
Increasing difficulty of jazz dance technique though complexity of combinations, multiple turns, and more developed performance skills as applied to musical theatre or concert dance. May be repeated.
Prerequisite: DANC 223 or consent
ALT-Spring

DANC 324 (3) Methods and Materials for Teaching Dance
This course is first in a two-part series of courses required for the K12 Dance Education license. It examines the theory and practice of dance education and applies this knowledge to simulated teaching and to selected clinical settings.
Prerequisite: DANC 226, DANC 228, DANC 321, DANC 322
Fall

DANC 325 (2) Movement Analysis: Laban Studies
Study of Laban-based systems and principles including Labanotation, EffortShape, and Space Harmony.
Prerequisite: DANC 226, DANC 228
On Demand
DANCE CONTINUED

DANCE 326 (1) Ballet III
Increasing difficulty of ballet technique with more complex combinations, multiple turns, point work, and greater emphasis on performance skills. Prerequisite: DANC 226 or consent. Fall, Spring

DANCE 327 (1) Tap Dance III
Increasing complexity of tap technique for musical theatre with greater emphasis on performance skills. May be repeated. Prerequisite: DANC 126, DANC 223. Fall, Spring

DANCE 328 (1) Contemporary Dance III
Increasing complexity of modern dance technique including floor work, partnering, elevation, inversions, and performance skills. May be repeated. Prerequisite: DANC 228 or consent. Fall, Spring

DANCE 329 (1) Dance Practicum
Individualized teaching, performance, or choreographic experiences occurring on or off-campus. May be repeated. Prerequisite: Consent. Fall, Spring

DANCE 332 (1) Dance Partnering
Expanding knowledge and skill in dance partnering, with the emphasis on styles used in performance of concert dance. May be repeated. Prerequisite: DANC 322 or consent. Fall (On Demand), Spring (On Demand)

DANCE 333 (1) Dance Partnering for Theatre
Expanding knowledge and skill in dance partnering, with the emphasis on styles used in performance of theatre and musical theatre. May be repeated. Fall (On Demand), Spring (On Demand)

DANCE 421 (1) Dance Composition II
Continuation of the principles and techniques of choreography with an emphasis on group forms. Prerequisite: DANC 321. ALT-Fall

DANCE 424 (1) Dance Pedagogy
This course is the second in a two-part series of courses required for the K-12 Dance Education License. The focus of the course is on lesson planning, assessment, and teaching in a variety of K-12 settings. Prerequisite: DANC 324. Spring

DANCE 427 (1) Topics in Dance
Rotation of a variety of topics in dance. May be repeated. Prerequisite: DANC 226, DANC 228. Fall, Spring

DANCE 428 (1) Dance Repertory
Repertory experience in performance of the choreography by a variety of dance artists. May be repeated. Prerequisite: DANC 126, DANC 128 or consent. Fall, Spring

DANCE 429 (1) Senior Dance Project
Capstone experience for all dance majors. Individually paced and directed, this project can be choreographic, performance, or written. Prerequisite: Completion of all dance major requirements. Fall, Spring

DANCE 430 (1) Choreographic Project I
Course will advance individual student's compositional skills through her/his solo and group projects in an self-paced manner. Prerequisite: DANC 421. Variable

DANCE 431 (1) Choreographic Project II
Course will further advance individual student's compositional skills through her/his solo and group projects in an self-paced manner. Prerequisite: DANC 430. Consent. Variable

DANCE 484 (1) Dance History
Investigation of concert dance history from diverse perspectives. Along with Western European contributions, the legacies and traditions associated with the African diaspora, North American indigenous populations, vernacular and folk forms will also be included. Sociopolitical ideologies of race, class, and gender will apply to this historical examination. Prerequisite: DANC 120, DANC 225, DANC 226, DANC 228, DANC 321. ALT-Fall. WI

DANCE 484W (1) Dance History
Investigation of concert dance history from diverse perspectives. Along with Western European contributions, the legacies and traditions associated with the African diaspora, North American indigenous populations, vernacular and folk forms will also be included. Sociopolitical ideologies of race, class, and gender will apply to this historical examination. Prerequisite: DANC 120, DANC 225, DANC 226, DANC 228, DANC 321. ALT-Fall. WI

DANCE 497 (1-8) Dance Internship
This course is designed to provide dance students additional dance experiences through work beyond the campus environment. Prerequisite: consent. Fall, Spring

DANCE 499 (1-3) Individual Study
This course is designed to provide student with specialized study in dance. Prerequisite: consent. Fall, Spring

DANCE K-12 EDUCATION BS

Dance K-12 Education BS

College of Arts & Humanities
Department of Theatre and Dance
201 Earley Center for Performing Arts • 507-389-2118
Fax: 507-389-2922
Website: www.mnsudance.com

Director: Julie Kerr-Berry, Ed.D.

The Minnesota State Mankato Dance Program offers students degree options that are grounded in the liberal arts tradition. Students learn about the depth and breadth of dance as they practice their art form in multiple arenas. The curriculum is designed to balance students' artistic experiences with practical applications to better prepare them to enter the dance world upon graduation. Students receive a comprehensive education that readsies them for a lifetime in dance, including teaching, performing, bodywork, choreographing, dance therapy, writing, dance technology, and dance production. Through an audition and adjudication process, students have many opportunities to present their choreographic work and/or perform in four concerts each year. Students can also audition to perform in musical theatre productions. Whatever their chosen path in dance, students emerge from the Minnesota State Mankato Dance Program with multiple skills, and the ability to think critically and act globally as emerging dance artists.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

GPA Policy: A grade of “C” or better must be earned for major or minor credit.
P/N Grading Policy: Required courses must be taken for a grade.

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2018-2019 Undergraduate Catalog

www.mnsu.edu
K-12 DANCE EDUCATION BS
Degree completion = 120 credits

Required General Education
DANC  120W  Introduction to Dance (3)
HITH  240  Drug Education (3)
HP   178  Social, Folk and Square Dance Techniques (1)
THEA 101  Acting for Everyone (3)

Major Common Core
DANC  223  Jazz Dance II (2)
DANC  225  Worlds of Dance (3)
DANC  226  Ballet II (2)
DANC  227  Tap Dance II (2)
DANC  228  Contemporary Dance II (2)
DANC  320  Dance Somatics (2)
DANC  321  Dance Composition I (2)
DANC  322  Dance Improvisation (2)
DANC  324  Methods and Materials for Teaching Dance (3)
DANC  421  Dance Composition II (2)
DANC  424  Dance Pedagogy (3)
DANC  427  Topics in Dance (3)
DANC  484W  Dance History (3)
THEA  276  Dance Production: Lighting (1)
THEA  272  Dance Production: Sound (1)
DANC  428  Dance Repertory (1)

Major Restricted Electives
Theatre Activities (choose 3 credits) (Choose 2 different areas)
THEA 102  Theatre Activity: Acting (1-2)
THEA 103  Theatre Activity: Management (1-2)
THEA 104  Theatre Activity: Dance Captain (1-2)
THEA 105  Theatre Activity: Stagecraft (1-2)
THEA 107  Theatre Activity: Costume (1-2)
THEA 108  Theatre Activity: Lighting (1-2)
THEA 109  Theatre Activity: Sound (1-2)

Major Unrestricted Electives (choose 5 credits)
DANC  123  Jazz Dance I (2)
DANC  125  Afro-Caribbean Dance Forms (2)
DANC  126  Ballet I (2)
DANC  127  Tap Dance I (2)
DANC  128  Contemporary Dance I (2)
DANC  323  Jazz Dance III (2)
DANC  326  Ballet III (2)
DANC  327  Tap Dance III (2)
DANC  328  Contemporary Dance III (2)
DANC  332  Dance Partnering (1)
DANC  333  Dance Partnering for Theatre (1)

Other Graduation Requirements
See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

COURSE DESCRIPTIONS SEE DANCE

DENTAL HYGIENE BS

Dental Hygiene
College of Allied Health & Nursing
Department of Dental Education
120 Clinical Sciences Building • 507-389-1313
Dental Clinic • 507-389-2147
Email: msudentalclinic@mnsu.edu
Dept. Website: http://ahn.mnsu.edu/dental

Chair: Brigette Cooper MS
Faculty: Terri Brown MS; Brigette Cooper MS; Julie Dittrich MS; Lynnette Engeswick PhD; Lisa Fleck MS; Trisha Krenik-Matejek MS, Angela Monson PhD

Accreditation. The Dental Program is accredited by the Commission on Dental Accreditation (CODA).

The dental hygiene curriculum is designed to provide opportunities for the student to develop a sound clinical and theoretical foundation for the practice of dental hygiene. The graduate is prepared to work in a variety of settings and roles including clinical practice, corporate, public health, researcher, educator, administrator, and entrepreneur as put forth by the American Dental Hygienists' Association.

The program is accredited by the American Dental Association’s Commission on Dental Accreditation, and meets the American Dental Association’s Commission on Dental Accreditation Standards for Dental Hygiene. A Bachelor of Science degree is earned upon completion of the program.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
Admission to Program. Application for admission to the Dental Hygiene program is a separate process in addition to being admitted to the University. It is highly recommended to meet with a Dental Education advisor to formulate a plan of study as soon as possible. Requirements for application for admission to the dental hygiene program include:

1. Completion of at least 36 semester credits.
2. A minimum career grade-point average of 2.9.
3. Successful completion of prerequisites of CMST 100 or CMST 102, ENG 101, PSYC 101, SOC 150 or SOC 101, BIOL 220, STAT 154 or SOC 202, DHYG 100, DHYG 219 or DHYG 225 and two of these three courses: BIOL 270, BIOL 330, CHEM 106 or CHEM 111

Transfer students are exempt from the application requirements to complete DHYG 219 or DHYG 225 prior to applying to the program. However, both DHYG 219 and DHYG 225 must be completed prior to starting the program in the fall. Transfer students accepted into the fall DHYG class and first attending Minnesota State University in the fall to start the DHYG program will have DHYG 100 waived.

The application form may be obtained from the Department of Dental Education website ahn.mnsu.edu/dental/program/. The number of students admitted to the Dental Hygiene major is limited to 20 students each fall semester. Applicants are accepted primarily based on academic achievement in prerequisite courses with an emphasis placed on the science prerequisites.

P/N Grading Policy. All courses required for Dental Hygiene must be taken for a letter grade and a letter grade of “C” or higher must be achieved. A grade of “D” or “F” in a Dental Hygiene course will result in academic suspension from the program. Completion of didactic course numbers DHYG 236 forward requires successful completion of previous Dental Hygiene courses obtaining a “C” or better in order to continue in the Dental Hygiene program. Students must achieve a “C” or higher in DHYG 219 and DHYG 225. A grade of “D” or “F” in either of these courses will result in academic suspension from the program and the student’s position in the fall class will go to another individual on the waiting list.

Costs. A student in the dental hygiene program should be prepared to spend about $375 each semester for books and supplies. At the beginning of the program students will purchase scrubs and lab coats ($800). Students are responsible for purchasing two kits of instruments and supplies during the program. The first kit fee of $3,125+ is attached to DHYG 313 in the fall of the junior year. The second kit fee of $1,700+ is attached to DHYG 331 in the spring of the junior year. Upon acceptance to the program a deposit of $500 towards the first kit fee is required.

Risks: Dental hygienists are at risk for exposure to blood borne pathogens (BBP). Accepted students are highly encouraged to be vaccinated against Hepatitis B...
and will also have their blood tested following any exposures to BBP through needle sticks, cuts or splashes that occur at the Minnesota State Mankato Dental Clinic or any offsite clinical sites. Currently the vaccine series costs approximately $150. Accepted students are required to have a Mantoux test prior to starting the fall semester.

**KEY:**
- Must be completed **prior to applying** to Dental Hygiene Program
- Must be completed **prior to starting** Dental Hygiene Program
- Two of these three courses must be successfully completed ("C" or above) prior to applying to the Dental Hygiene Program.
- One of these two courses must be completed prior to **applying** to the program and the other must be completed prior to **starting** the program.

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**DENTAL HYGIENE BS**

Degree completion = 120 credits

**Required General Education**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIOL 270</td>
<td>Microbiology (4)^</td>
<td></td>
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<tr>
<td>ENG 101</td>
<td>Composition (4)^</td>
<td></td>
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<tr>
<td>HETH 101</td>
<td>Health and the Environment (3)^</td>
<td></td>
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<tr>
<td>PSYC 101</td>
<td>Introduction to Psychological Science (4)^</td>
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<tr>
<td>(choose 3 credits)</td>
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<tr>
<td>SOC 101</td>
<td>Introduction to Sociology (3)^</td>
<td></td>
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<tr>
<td>SOC 150</td>
<td>Social Problems (3)^</td>
<td></td>
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<tr>
<td>(choose 3 credits)</td>
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<tr>
<td>CMST 100</td>
<td>Fundamentals of Communication (3)^</td>
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<tr>
<td>CMST 102</td>
<td>Public Speaking (3)^</td>
<td></td>
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<tr>
<td>(choose 3-4 credits)</td>
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<tr>
<td>SOC 202</td>
<td>Introductory Social Statistics (3)^</td>
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<tr>
<td>STAT 154</td>
<td>Elementary Statistics (4)^</td>
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<tr>
<td>(choose 3 credits)</td>
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<tr>
<td>PHIL 120W</td>
<td>Introduction to Ethics (3)^</td>
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<tr>
<td>PHIL 222W</td>
<td>Medical Ethics (3)^</td>
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<tr>
<td>(choose one course 3-5 credits)</td>
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<tr>
<td>CHEM 106</td>
<td>Chemistry of Life Process Part I (General) (3)^</td>
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<tr>
<td>CHEM 111</td>
<td>Chemistry of Life Processes Part II (5)^</td>
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</table>

**Prerequisites to the Major** (choose 16 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>BIOL 220</td>
<td>Human Anatomy (4)</td>
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<tr>
<td>DHYG 100</td>
<td>Perspectives in Dental Hygiene (1)</td>
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<tr>
<td>DHYG 219</td>
<td>Head and Neck Anatomy and Histology (2)</td>
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<tr>
<td>DHYG 223</td>
<td>Pharmacology (3)</td>
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<tr>
<td>DHYG 225</td>
<td>Oral Anatomy (2)</td>
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<tr>
<td>FCS 242</td>
<td>Nutrition for Healthcare Professionals (3)</td>
<td></td>
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<tr>
<td>(choose 4 credits)</td>
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<tr>
<td>BIOL 310</td>
<td>Basics of Human Physiology (4)</td>
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<tr>
<td>BIOL 330</td>
<td>Principles of Human Physiology (4)</td>
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</table>

**Major Common Core**

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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>DHYG 311</td>
<td>Preclinical Orientation (3)</td>
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<tr>
<td>DHYG 313</td>
<td>Clinical Skills Development (3)</td>
<td></td>
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<tr>
<td>DHYG 321</td>
<td>Radiography I (3)</td>
<td></td>
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<tr>
<td>DHYG 322</td>
<td>Biomaterials I (2)</td>
<td></td>
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<tr>
<td>DHYG 326</td>
<td>Biomaterials II (2)</td>
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<tr>
<td>DHYG 327</td>
<td>Periodontology I (2)</td>
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<tr>
<td>DHYG 328</td>
<td>Radiography Interpretation (2)</td>
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<tr>
<td>DHYG 329</td>
<td>Oral Embryology and Pathology (3)</td>
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<tr>
<td>DHYG 331</td>
<td>Clinical Dental Hygiene I (2)</td>
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<tr>
<td>DHYG 332</td>
<td>Clinical Seminar I (2)</td>
<td></td>
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<tr>
<td>DHYG 333</td>
<td>Clinical Dental Hygiene II (2)</td>
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<tr>
<td>DHYG 334</td>
<td>Dental Computer Software Management (1)</td>
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<tr>
<td>DHYG 420</td>
<td>Local Anesthesia (1)</td>
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<td>DHYG 421</td>
<td>Clinical Dental Hygiene II (3)</td>
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<tr>
<td>DHYG 422</td>
<td>Clinical Seminar II (1)</td>
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<tr>
<td>DHYG 424</td>
<td>Nitrous Oxide Sedation (1)</td>
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<tr>
<td>DHYG 425W</td>
<td>Community Dental Health (3)</td>
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</tr>
<tr>
<td>DHYG 426</td>
<td>Dental Hygiene Jurisprudence and Ethics (1)</td>
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<tr>
<td>DHYG 427</td>
<td>Periodontology II (2)</td>
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<tr>
<td>DHYG 428</td>
<td>Technology in Dentistry (1)</td>
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<td>DHYG 431</td>
<td>Clinical Dental Hygiene III (3)</td>
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<td>DHYG 432</td>
<td>Clinical Seminar III (2)</td>
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<td>DHYG 433</td>
<td>Community Practicum (2)</td>
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<tr>
<td>DHYG 437</td>
<td>Dental Management of the Medically Compromised Patient (2)</td>
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<tr>
<td>DHYG 438</td>
<td>Advanced Community Practice I (1)</td>
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<tr>
<td>DHYG 439</td>
<td>Advanced Community Practice II (1)</td>
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<tr>
<td>DHYG 440</td>
<td>Restorative Functions (4)</td>
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</tbody>
</table>

**Required Minor: None**

**General Electives**

The student may choose 2 credits of general electives to complete the 120 credits for graduation.

**Other Graduation Requirements**

DH to BSDH Online Program

(choose 32 Credits).

This track is for licensed dental hygienists who want to earn a Bachelor of Science Degree.

<table>
<thead>
<tr>
<th>Course</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>DHYG 441</td>
<td>Advanced Dental Hygiene Practice (3)</td>
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<tr>
<td>DHYG 442</td>
<td>Current Issues in Dental Hygiene (3)</td>
<td></td>
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<tr>
<td>DHYG 443</td>
<td>Technology in Oral Health (3)</td>
<td></td>
</tr>
<tr>
<td>DHYG 444W</td>
<td>Principles of Oral Health Promotion (3)</td>
<td></td>
</tr>
<tr>
<td>DHYG 445</td>
<td>Educational Methods in Dental Hygiene (3)</td>
<td></td>
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<tr>
<td>DHYG 451</td>
<td>Dental Hygiene Care Planning (3)</td>
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<tr>
<td>DHYG 452</td>
<td>Decision Making in Periodontology (3)</td>
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<tr>
<td>DHYG 453</td>
<td>Research Methods in Dental Hygiene (3)</td>
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<tr>
<td>DHYG 454</td>
<td>Oral Health Promotion Practice (3)</td>
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<tr>
<td>DHYG 455</td>
<td>Educational Practice in Dental Hygiene (3)</td>
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<tr>
<td>DHYG 456</td>
<td>Oral Medicine and Treatment Planning (2)</td>
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</table>

**Study Abroad**

Choose 0 - 6 Credit(s). These courses are optional and may not be offered each year/semester.

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>DHYG 336</td>
<td>Cultural Awareness through the Lens of Health (3)</td>
<td></td>
</tr>
<tr>
<td>DHYG 447</td>
<td>Dental Health Study Abroad in Belize (3)</td>
<td></td>
</tr>
</tbody>
</table>

**Required Minor: None**

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**DENTAL HYGIENE BS DEGREE COMPLETION OPTION**

Students who have graduated with an A.S. or A.A.S. degree in Dental Hygiene from an accredited program are eligible to apply to the B.S. Degree completion option. Courses within this program are 100% online.

Requirements for admission to the Dental Hygiene BS Degree Completion option are:

1. Successful completion of a Program in Dental Hygiene accredited by the ADA Commission on Dental Accreditation.
2. License to practice dental hygiene (or eligible for licensure).
3. CPR Level C certification.
4. Completion of HBV series.
5. A minimum grade point average of 2.0

The Dental Hygiene BS degree completion option is considered a broad major and does not require a minor. Each student will develop an individual plan of study with the Degree Completion Coordinator to meet the general education and upper division requirements. Contact Julie Dittrich at julie.dittrich@mnsu.edu for more information.

**Required for Major**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
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<td>Principles of Oral Health Promotion (3)</td>
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<tr>
<td>DHYG 445</td>
<td>Educational Methods in Dental Hygiene (3)</td>
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<tr>
<td>DHYG 451</td>
<td>Dental Hygiene Care Planning (3)</td>
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<tr>
<td>DHYG 452</td>
<td>Decision Making in Periodontology (3)</td>
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<tr>
<td>DHYG 453</td>
<td>Research Methods in Dental Hygiene (3)</td>
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<td>DHYG 454</td>
<td>Oral Health Promotion Practice (3)</td>
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<td>DHYG 455</td>
<td>Educational Practice in Dental Hygiene (3)</td>
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</tr>
<tr>
<td>DHYG 456</td>
<td>Oral Medicine and Treatment Planning (2)</td>
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</table>
COURSE DESCRIPTIONS

**DHYG 100 (1) Perspectives in Dental Hygiene**
This course will give the student an introduction to Dental Hygiene as a profession and career. Exploration of dental hygiene practice and an overview of the dental hygiene curriculum and conceptual framework will be covered.
Fall, Spring

**DHYG 219 (2) Head and Neck Anatomy and Histology**
Head and Neck Anatomy is the study of the hard and soft tissues of the head and neck including bones, muscles, nerves, blood supply, glands and how they function. Oral Histology is the study of cells and cell layers which compose basic tissues, oral mucosa, gingival and dentogingival tissues, orofacial structures, enamel, dentin and pulp.
Prerequisite: BIOL 220
Variable

**DHYG 222 (3) Pharmacology**
Pharmacology is the study of drugs used in dentistry or medicine for the treatment, prevention and diagnosis of disease.
Prerequisite: BIOL 220, CHEM 106 or CHEM 111
Fall, Spring, Summer (On Demand)

**DHYG 225 (2) Oral Anatomy**
This course includes the study of normal head and neck structure and function. Oral Anatomy includes the study of each individual tooth’s morphology, function and occlusion.
Prerequisite: BIOL 220
Variable

**DHYG 311 (3) Preclinical Orientation**
This course includes an introduction to dental terminology and clinical aspects of dental hygiene treatment including care and use of equipment/instruments, infection control and preparation of patient records.
Prerequisite: Admission into Dental Hygiene Program and Dental Terminology packet
Fall

**DHYG 313 (3) Clinical Skills Development**
This course will teach the operative techniques needed to perform oral prophylactic procedures and health education through laboratory/clinical practice.
Prerequisite: Admission into Dental Hygiene Program
Fall, Variable

**DHYG 321 (3) Radiography I**
This course includes production of dental radiographs, physics of radiation, biologic effects, interpretation, processing, mounting, and laboratory practice on mannequins and patients. Special attention is given to infection control, safety precautions, and patient selection.
Prerequisite: Admission into Dental Hygiene Program
Fall

**DHYG 322 (2) Biomaterials I**
This course is the first of two courses that studies the fundamental elements, purposes and uses of dental materials in the modern dental office. In addition it will give the dental hygiene student a fundamental understanding and skill level of basic dental assisting techniques utilized in the dental office.
Prerequisite: Admission into Dental Hygiene Program
Fall

**DHYG 326 (2) Biomaterials II**
This course is the second of two courses that studies the fundamental elements, purposes and uses of the materials used in the modern dental office. The student will develop laboratory or clinical competency in functions using dental materials that are legal duties for Minnesota dental hygienists.
Spring

**DHYG 327 (2) Periodontology I**
This course will include a study of supporting tooth structures, identification, classification, etiology, progression and treatment of periodontal diseases.
Fall

**DHYG 328 (2) Radiography Interpretation**
This course will study the normal anatomical features from intraoral and extraoral radiographs. Students will then use this knowledge to interpret what is seen on radiographs to discern normal from abnormal. Interpretation of dental caries, periodontal disease and pathology are among the topics this course will cover.
Spring

**DHYG 329 (3) Oral Embryology and Pathology**
Oral Embryology encompasses development of human body from conception through birth, with a focus on development of the face and hard and soft tissues of the oral cavity. Oral Pathology addresses the causes and mechanisms of disease with special emphasis on common oral lesions and neoplasms, stressing their etiology and clinical manifestations.
Spring

**DHYG 331 (2) Clinical Dental Hygiene I**
This course provides an opportunity for dental hygiene students to develop their roles as educators, clinicians, consumer advocates, change agents, researchers, and administrators in a clinical setting.
Spring, Variable

**DHYG 332 (2) Clinical Seminar I**
This course includes an introduction to dental hygiene treatment procedures in the Minnesota State Mankato Dental Clinic.
Summer, Variable

**DHYG 333 (2) Clinical Dental Hygiene IS**
This course offers the student continued practice of dental hygiene treatment procedures in the Minnesota State Mankato Dental Clinic.
Variable

**DHYG 334 (1) Dental Computer Software Management**
This course is designed to equip the dental hygiene students with the skills necessary to manage a dental computer software program. A focus on networking, dental resource codes and insurance protocol will also be covered.
Spring

**DHYG 336 (3) Cultural Awareness through the Lens of Health**
Concepts of “Global Citizenship” and “Intercultural Competency” are desired attributes of future health care professionals. Students will self-assess their cultural knowledge in preparation for international travel. Interacting with individuals from different cultural backgrounds will provide the opportunity for students to become aware of their own cultural understanding and improve critical thinking and interpersonal skills. Through travel and experiential learning, the students will begin to develop the capacity to identify, discuss and reflect upon the ethical challenges presented in political, social, and personal lives to understand diverse world views of social justice and common good.
Spring

**Diverse Cultures - Gold**

**DHYG 420 (1) Local Anesthesia**
This course is designed to be a study of the fundamental elements, purposes, and uses of local anesthesia for the dental hygienist.
Spring

**DHYG 421 (3) Clinical Dental Hygiene II**
This course offers the student continued practice of dental hygiene treatment procedures in the Minnesota State Mankato Dental Clinic. It includes several mandatory off-campus experiences.
Fall

**DHYG 422 (1) Clinical Seminar II**
This course focuses on clinical procedures, educational techniques and legal and ethical issues as they apply to patient-dental hygiene provider relationship.
Fall

**DHYG 424 (1) Nitrous Oxide Sedation**
The course is designed to be a study of the fundamental elements, purposes and uses of nitrous oxide sedation in the practice of dental hygiene. The course meets the educational criteria established by the Minnesota Board of Dentistry.
Fall

**DHYG 425 (3) Community Dental Health**
This course introduces second year dental hygiene students to the disciplines and basic principles of community dental health, epidemiologic methods and biostatistical measurement analysis. Preventive oral health measures and program development is included to provide a background for the practical application of dental public health methods to the community.
Fall
DHYG 425W (3) Community Dental Health
This course introduces second year dental hygiene students to the disciplines and basic principles of community dental health, epidemiologic methods and biostatistical measurement analysis. Preventive oral health measures and program development is included to provide a background for the practical application of dental public health methods to the community. This course is an upper division writing intensive course for the traditional dental hygiene program. WI

DHYG 426 (1) Dental Hygiene Jurisprudence and Ethics
This course focuses on legal and ethical issues as applied to the patient dental hygiene provider relationship.

DHYG 427 (2) Periodontology II
Didactic and clinical study of etiology, diagnosis, preventive and therapeutic procedures involved with periodontal disease.

DHYG 428 (1) Technology in Dentistry
This course is designed to prepare the dental hygiene student in the use of new technologies in the modern dental office. Students will learn to integrate these new technologies into the teledentistry model.

DHYG 431 (3) Clinical Dental Hygiene III
This course offers the student continued practice of dental hygiene treatment procedures in the Minnesota State Mankato Dental Clinic. It includes several mandatory off-campus experiences.

DHYG 432 (2) Clinical Seminar III
This course focuses on the development of a personal sense of responsibility for the well-being and development of one’s workplace from an employee perspective.

DHYG 435 (2) Community Practicum
This course focuses on the role of dental hygiene practitioners in promoting optimal oral health at the individual level and in the community.

DHYG 437 (2) Dental Mgmt. of the Medically Compromised Patient
The course is designed to provide the dental hygiene practitioner with a survey of common medical disorders that may be encountered in a dental practice. The medical problems are organized to provide a brief overview of the basic disease process, etiology, incidence, prevalence, behavior characteristics, medications and oral manifestations commonly presented by the dental patients. As a result of the accumulation of evidence based research, the dental hygiene practitioner will be provided with an understanding of the disease, recognize the severity of the common medical disorders and make a dental management decision providing the patient with the highest possible level of oral health.

DHYG 438 (1) Advanced Community Practice I
The first of two clinical courses designed to utilize the assessment, planning, implementation and evaluation process in a community based setting. This course will address efforts to reduce incidence and severity of oral diseases resulting in improved access to community oral health in complex cases.

DHYG 439 (1) Advanced Community Practice II
This is the second of two clinical courses designed to utilize the assessment, planning, implementation and evaluation process in a community based setting. This course will address efforts to reduce incidence and severity of oral diseases resulting in improved access to community oral health in complex cases.

DHYG 440 (4) Restorative Functions
This course meets the requirements of the Minnesota Board of Dentistry for dental hygienists and assistants to legally perform new expanded duties including the placement, contouring and adjustment of amalgam, glass ionomer and composite restorations and the placement and adjustment of stainless steel crowns.

DHYG 441 (3) Advanced Dental Hygiene Practice
Identify clinical skills and knowledge needed to improve effectiveness as a dental hygienist. Areas addressed: ultrasonic implementation using multiple types of devices, risk factor analysis, comprehensive treatment planning, Periscope (endoscope), carbide/diamond files, advanced instrumentation techniques, patient management, case presentation.

DHYG 442 (3) Current Issues in Dental Hygiene
Topics included but not be limited to: advanced practice models to expand oral health services, including restorative procedures, counseling regarding smoking cessation; recent medical advances in the field of dentistry and legal and policy issues currently impacting dental hygiene.

DHYG 443 (3) Technology in Oral Health
Assessment, planning, implementation and evaluation of the impact of emerging dental technology. Topics include dental practice software management, digital radiography, intra-oral cameras, patient education software, lasers in dentistry, and internet information sources for both practitioners and patients.

DHYG 444W (Principles of Oral Health Promotion
Leadership preparation in the delivery of oral health care in the public health model. Emphasis will be placed on defining oral health problems and solutions, community planning, implementation and evaluation based on the oral health objectives of Healthy People 2010.

DHYG 445 (3) Educational Methods in Dental Hygiene
Examines educational methods needed for effective dental hygiene instruction. Topics addressed within this course will include learner and context analysis, performance objectives, assessment instruments, instructional strategies, formative and summative evaluations. Emphasis will be placed on competency based instruction.

DHYG 447 (3) Dental Health Study Abroad in Belize
The purpose of this course is to introduce students to first hand experience in providing dental hygiene services through a study abroad opportunity. This course centers on an international week long service learning project to San Pedro, Belize. Most of our time and effort will be spent providing dental hygiene treatment for children attending Holy Cross Anglican School. This course will also address ethics, cultural issues, standard of care issues, as well as challenges in providing dental hygiene care in a third world country.

DHYG 448 (3) Dental Hygiene Jurisprudence and Ethics
This course focuses on legal and ethical issues as applied to the patient dental hygiene provider relationship.

DHYG 449 (3) Dental Health Study Abroad in Belize
Provides student awareness of the American Dental Hygienists’ Research Agenda and prepares students on the methodology of research. Includes strengths and limitations of quantitative and qualitative research methods while developing methodological skills and proficiencies related to research.

DHYG 450 (4) Oral Health Promotion Practice
Demonstration of oral health delivery in community based clinics embracing oral health promotion efforts as a methodology. Increasing demand for care, dental services and prevention resulting in reduction of oral diseases and improved community oral health. Prerequisite: DHYG 444

DHYG 451 (3) Dental Hygiene Care Planning
Evidence based dental management of patients with medical disorders encountered in dental practice. Provides an overview of basic disease processes, epidemiology, pathophysiology, and accepted medical therapies utilizing human needs model to formulate a dental hygiene care plan.

DHYG 452 (3) Decision Making in Periodontology
Combines the sciences and knowledge in the discipline of dental hygiene that permits synthesis and application of periodontal treatment techniques. Surgical and aggressive management of medically compromised periodontal patients will be addressed in this course.

DHYG 453 (3) Research Methods in Dental Hygiene
Provides student awareness of the American Dental Hygienists’ Research Agenda and prepares students on the methodology of research. Includes strengths and limitations of quantitative and qualitative research methods while developing methodological skills and proficiencies related to research.

DHYG 454 (3) Oral Health Promotion Practice
Demonstration of oral health delivery in community based clinics embracing oral health promotion efforts as a methodology. Increasing demand for care, dental services and prevention resulting in reduction of oral diseases and improved community oral health. Prerequisite: DHYG 444

DHYG 455 (3) Research Methods in Dental Hygiene
Provides student awareness of the American Dental Hygienists’ Research Agenda and prepares students on the methodology of research. Includes strengths and limitations of quantitative and qualitative research methods while developing methodological skills and proficiencies related to research.

DHYG 456 (3) Oral Health Promotion Practice
Demonstration of oral health delivery in community based clinics embracing oral health promotion efforts as a methodology. Increasing demand for care, dental services and prevention resulting in reduction of oral diseases and improved community oral health. Prerequisite: DHYG 444
A GPA of 2.0 or higher in a major or minor is required for graduation.

Earth Science

College of Social & Behavioral Sciences
Department of Geography
206 Morris Hall • 507-389-2617
Website: http://sbs.mnsu.edu/earths/reviews/

Director: Phillip Larson
Faculty: Paul Eskridge, Steven Kipp, Donald A. Friend, Bryce Hoppie, Steven Losh, Chad Wittkop, Forrest Wilkerson, Ginger Schmid, Thomas R. Brown, Martin Mitchell

The Earth Science program focuses study on the Earth’s interrelated natural systems of the atmosphere, biosphere, geosphere, hydrosphere, cryosphere and Earth’s place in the cosmos. Earth Science provides the scientific basis for understanding the interactions of chemical, physical and biological processes at all spatial and temporal scales on our planet ranging from microscopic to planetary and on timescales from the immediate to billions of years. The impact of Earth systems and humans on one another are of paramount societal importance and are a focus of Earth Science studies.

The Earth Science program provides a number of pathways to study the science of our planet. The Earth Science major (BA or BS), the Certificate in Geomorphology and Earth Surface Processes and the minor in Earth Science are offered. An associated interdisciplinary certificate in “Geoarchaeology” is described under “Anthropology” and an associated certificate in “Geographic Information Science” is described under “Geography.” For secondary teacher licensure, see the “Science Teaching” program and major.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

DEVELOPMENTAL ADAPTED PHYSICAL EDUCATION, TEACHING MINOR (DAPE)

Developmental Adapted Physical Education, Teaching Minor (DAPE)

College of Allied Health & Nursing

Department of Human Performance
1400 Highland Center • 507-389-6313
Website: ahn.mnsu.edu/hp/
Chair: Lynnette M. Engeswick
Program Coordinator: Sue Tarr
Faculty: Sue Tarr

Required for Minor
HP 411 Developmental Adapted Physical Education (3)
HP 412 Assessment in Adapted Physical Education (3)
HP 413 Lifespan Motor Development (2)
HP 423 Teaching Strategies in Secondary Developmental Adapted Physical Education (3)
HP 445 Teaching Students with Cognitive & Emotional/Behavioral Disabilities (3)
HP 471 Consulting Techniques in Developmental Adapted Physical Education (3)
HP 493 Internship in Developmental Adapted Physical Education (1)

Required Support Course for Minor Special Education, 3 credits
SPED 405 Individuals with Exceptional Needs (3)

COURSE DESCRIPTIONS LOCATED UNDER HUMAN PERFORMANCE (HP) COURSE DESCRIPTIONS

POLICIES/INFORMATION

Admission to Major is granted by the department. Minimum university admission requirements are:
- a minimum of 32 earned semester credit hours
- a minimum cumulative GPA of 2.00 (“C”).
Contact the department for application procedures.

GPA Policy. A GPA of 2.0 or higher in a major or minor is required for graduation.
Referral of the College regarding required advising for students on academic probation.
P/N Grading Policy. All courses in earth science must be taken for a letter grade.

www.mnsu.edu 2018-2019 Undergraduate Catalog 115
### EARTH SCIENCE CONTINUED

**EARTH SCIENCE BA and BS**  
Degree completion = 120 credits

<table>
<thead>
<tr>
<th>Major Common Core</th>
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</thead>
<tbody>
<tr>
<td>AST 101</td>
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<tr>
<td>AST 102</td>
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<tr>
<td>BIOL 100</td>
</tr>
<tr>
<td>CHEM 201</td>
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<tr>
<td>GEG 101</td>
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<td>GEG 217</td>
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<td>GEG 302</td>
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<td>GEG 373</td>
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<td>GEG 411</td>
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<td>GEG 412</td>
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<td>GEG 414</td>
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<td>GEG 415</td>
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<td>GEG 416W</td>
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<td>GEG 420</td>
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<td>GEG 440</td>
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<td>GEG 471</td>
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<td>GEG 302</td>
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<td>GEG 320W</td>
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<td>GEG 330</td>
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<td>GEG 370</td>
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<tr>
<td>GEG 410</td>
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<tr>
<td>GEG 450</td>
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<tr>
<td>GEG 497</td>
</tr>
</tbody>
</table>

**Required for Bachelor of Arts (BA) degree ONLY:** Language (8 credits)

**Minor Required:** None.

**EARTH SCIENCE BS TEACHING (5-12)**

Requirements for the Earth Science, Teaching major can be found in the SCIENCE TEACHING section of this catalog.

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### ECONOMICS BA, BS AND MINOR

**Economics**

College of Social & Behavioral Sciences,  
Department of Economics  
150 Morris Hall • 507-389-2969  
Website: http://sbs.mnsu.edu/economics/  
Chair: Phillip Miller  
Faculty: Kwang-Il Choe, Ashok Chowdhury, Atryayee Ghosh-Roy, Saleheen Khan, Ishuan Li, Phillip Miller, Kwang Woo Park, Ved Sharma, Robert Simonson, Michael Spencer

Economics provides students with the basic analytical tools to understand how markets and economies work. It also provides students with the basic tools to analyze data for decision-making purposes. Students learn critical thinking and problem-solving skills suited for a wide variety of careers. Economics is an excellent major for students contemplating careers in business, government, and non-profits. It is also an excellent major for students preparing for graduate education in law school, MBA programs, and Economics.

### Other Graduation Requirements

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

**ECONOMICS MINOR**

**Required General Education for Minor**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AST 101</td>
<td>Introduction to Astronomy (3)</td>
</tr>
<tr>
<td>BIOL 100</td>
<td>Our Natural World (4)</td>
</tr>
<tr>
<td>CHEM 100</td>
<td>Chemistry in Society (4)</td>
</tr>
<tr>
<td>GEG 101</td>
<td>Introductory Physical Geography (3)</td>
</tr>
<tr>
<td>PHYS 100</td>
<td>Cultural Physics (3)</td>
</tr>
</tbody>
</table>

**Required for Minor**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEG 121</td>
<td>Physical Geology (4)</td>
</tr>
<tr>
<td>GEG 122</td>
<td>Earth History (4)</td>
</tr>
<tr>
<td>GEG 217</td>
<td>Weather (4)</td>
</tr>
</tbody>
</table>

**Required Electives for Minor**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEG 315</td>
<td>Geomorphology (3)</td>
</tr>
</tbody>
</table>

**Required General Education for Minor**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 100</td>
<td>Our Natural World (4)</td>
</tr>
<tr>
<td>CHEM 100</td>
<td>Chemistry in Society (4)</td>
</tr>
<tr>
<td>PHYS 100</td>
<td>Cultural Physics (3)</td>
</tr>
</tbody>
</table>

**POLICIES/INFORMATION**

**Admission to Major.** Students enrolling in 300-400 level courses must be admitted to the program. Admission is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours,
- a minimum cumulative GPA of 2.00 (“C”).

Contact the department for application procedures.

**P/N Grading Policy.** Up to six credit hours of electives in the major may be taken as P/N grading. ECON 481 and ECON 498 must be taken as P/N grading.

**GPA Policy.** A minimum cumulative grade point average of 2.0 is required for all courses taken in the required economics core courses and required economics electives for the economics BS or BA major.

**Center for Economic Education - Dr. Ashok Chowdhury, Director.** The Center for Economic Education seeks to improve the teaching of economics in elementary and secondary schools. Working in close cooperation with the Minnesota Council...
ECONOMICS CONTINUED

on Economic Education and the National Council on Economic Education, the center provides teacher instruction, research, library lending and other services to area schools.

ECONOMICS BA
Degree completion = 120 credits

Major Common Core
Required Economics Core Courses
(26 credits)
ECON 201 Principles of Macroeconomics (3)
ECON 202 Principles of Microeconomics (3)
ECON 207 Business Statistics (4)
ECON 301 Quantitative Methods in Economics (3)
ECON 355 Intermediate Microeconomics (3)
ECON 356 Intermediate Macroeconomics (3)
ECON 462 Econometrics (3)
ECON 485W Seminar in Applied Econometrics (4)

Major Unrestricted Electives
Economics Course Electives
Choose at least 12 credits from the list of offered economics courses.
ECON 205 Money and Banking (3)
ECON 314W Current Economic Issues (3)
ECON 320W Gender Issues and Economic Globalization (3)
ECON 403 Labor Economics (3)
ECON 405 Central Banking (3)
ECON 406 Economics of Unions (3)
ECON 411 Urban Economics (3)
ECON 412 Resource and Environmental Economics (3)
ECON 416 Sports Economics (3)
ECON 420 International Economics (3)
ECON 429 Economic Education (3)
ECON 440 Public Finance (3)
ECON 450 Economic Development (3)
ECON 463 Applied Econometrics of Financial Markets (3)
ECON 472 Industrial Organization (3)
ECON 480 Seminar in Economics (1-3)
ECON 481 Readings in Economics (1-3)
ECON 491 In-Service (1-3)
ECON 498 Internship (3)
ECON 499 Individual Study (1-3)

Major Emphasis:
Labor Economics Emphasis
Emphasis is not required in Major. Emphasis used only as an advising tool. See your advisor for guidance.
ECON 403 Labor Economics (3)
ECON 406 Economics of Unions (3)
MGMT 340 Human Resource Management (3)
MGMT 442 Compensation Management (3)
MGMT 444 Organization Design (3)
MGMT 480 Human Behavior in Organizations (3)
Economics of the Public Sector Emphasis
Emphasis is not required in Major. Emphasis used only as an advising tool. See your advisor for guidance.
ECON 403 Labor Economics (3)
ECON 412 Resource and Environmental Economics (3)
ECON 420 International Economics (3)
ECON 440 Public Finance (3)
ECON 462 Econometrics (3)
ECON 472 Industrial Organization (3)

Financial Economics Emphasis
Emphasis is not required in Major. Emphasis used only as an advising tool. See your advisor for guidance.
BLAW 455 Legal Aspects of Banking and Finance (3)
ECON 305 Money and Banking (3)
ECON 405 Central Banking (3)
ECON 420 International Economics (3)
ECON 463 Applied Econometrics of Financial Markets (3)
FINA 464 Financial Institutions and Markets (3)
FINA 482 Risk Management for Financial Institutions (3)

Graduate School Preparation
These courses are recommended for students wanting to attend graduate school in economics. (Econ 301, Math 121-2, Math 247, Econ 462 and Math 354

are most important.) Emphasis is not required in Major. Emphasis used only as an advising tool. See your advisor for guidance.
ECON 301 Quantitative Methods in Economics (3)
ECON 462 Econometrics (3)
MATH 121 Calculus I (4)
MATH 122 Calculus II (4)
MATH 223 Calculus III (4)
MATH 247 Linear Algebra I (4)
MATH 321 Ordinary Differential Equations (4)
MATH 354 Concepts of Probability & Statistics (4)
MATH 417 Real Analysis I (3)

Other Graduation Requirements
Choose 8 credit(s): take one series Language
Required Minor: Yes. Any.

ECONOMICS BS
Degree completion = 120 credits

Major Common Core
Required Economics Core Courses
(29 credits)
ECON 201 Principles of Macroeconomics (3)
ECON 202 Principles of Microeconomics (3)
ECON 207 Business Statistics (4)
ECON 301 Quantitative Methods in Economics (3)
ECON 355 Intermediate Microeconomics (3)
ECON 356 Intermediate Macroeconomics (3)
ECON 420 International Economics (3)
ECON 462 Econometrics (3)
ECON 485W Seminar in Applied Econometrics (4)

Required Non-Economics Core Courses
Business Foundation Requirements (31 credits)
ACCT 200 Financial Accounting (3)
ACCT 210 Managerial Accounting (3)
BLAW 200 Legal Environment of Business (3)
FINA 362 Business Finance (3)
IT 101 Introduction to Information Systems (3)
MATH 112 College Algebra (4)
MGMT 230 Principles of Management (3)
MGMT 300 Introduction to MIS (3)
MGMT 346 Production & Operations Management (3)
NRKT 210 Principles of Marketing (3)

Major Unrestricted Electives
Economics Course Electives
Choose at least 9 credits from the list of offered courses.
ECON 305 Money and Banking (3)
ECON 314W Current Economic Issues (3)
ECON 320W Gender Issues and Economic Globalization (3)
ECON 355 Intermediate Microeconomics (3)
ECON 356 Intermediate Macroeconomics (3)
ECON 420 International Economics (3)
ECON 462 Econometrics (3)
ECON 485W Seminar in Applied Econometrics (4)

Required Non-Economics Core Courses
Business Foundation Requirements (31 credits)
ACCT 200 Financial Accounting (3)
ACCT 210 Managerial Accounting (3)
BLAW 200 Legal Environment of Business (3)
FINA 362 Business Finance (3)
IT 101 Introduction to Information Systems (3)
MATH 112 College Algebra (4)
MGMT 230 Principles of Management (3)
MGMT 300 Introduction to MIS (3)
MGMT 346 Production & Operations Management (3)
NRKT 210 Principles of Marketing (3)

Major Emphasis:
Labor Economics Emphasis
Emphasis is not required in Major. Emphasis used only as an advising tool. See your advisor for guidance.
ECON 403 Labor Economics (3)
ECON 406 Economics of Unions (3)
MGMT 340 Human Resource Management (3)
MGMT 442 Compensation Management (3)
MGMT 444 Organization Design (3)
MGMT 480 Human Behavior in Organizations (3)
Economics of the Public Sector Emphasis
Emphasis is not required in Major. Emphasis used only as an advising tool. See your advisor for guidance.
ECON 403 Labor Economics (3)
ECON 412 Resource and Environmental Economics (3)
ECON 420 International Economics (3)
ECON 440 Public Finance (3)
ECON 462 Econometrics (3)
ECON 472 Industrial Organization (3)

Financial Economics Emphasis
Emphasis is not required in Major. Emphasis used only as an advising tool. See your advisor for guidance.
BLAW 455 Legal Aspects of Banking and Finance (3)
ECON 305 Money and Banking (3)
ECON 405 Central Banking (3)
ECON 420 International Economics (3)
ECON 463 Applied Econometrics of Financial Markets (3)
FINA 464 Financial Institutions and Markets (3)
FINA 482 Risk Management for Financial Institutions (3)
ECONOMICS CONTINUED

MGMT 444  Organization Design (3)
MGMT 380  Human Behavior in Organizations (3)
Economics of Public Sector Emphasis
Emphasis is not required in Major. Emphasis used only as a advising tool. See your advisor for guidance.
ECON 403  Labor Economics (3)
ECON 412  Resource and Environmental Economics (3)
ECON 420  International Economics (3)
ECON 440  Public Finance (3)
ECON 462  Econometrics (3)
ECON 472  Industrial Organization (3)
Economics Financials Emphasis
Emphasis is not required in Major. Emphasis used only as a advising tool. See your advisor for guidance.
BLAW 455  Legal Aspects of Banking and Finance (3)
ECON 305  Money and Banking (3)
ECON 405  Central Banking (3)
ECON 420  International Economics (3)
ECON 463  Applied Econometrics of Financial Markets (3)
FINA 464  Financial Institutions and Markets (3)
FINA 482  Risk Management for Financial Institutions (3)

Graduate School Preparation
These courses are recommendation for students wishing to attend graduate school in economics. (Econ 301, Math 121-2, Math 247, Econ 462 and Math 354 are most important.) Emphasis is not required in Major. Emphasis used only as a advising tool. See your advisor for guidance.
ECON 401  Quantitative Methods in Economics (3)
ECON 462  Econometrics (3)
MATH 121  Calculus I (4)
MATH 122  Calculus II (4)
MATH 223  Calculus III (4)
MATH 247  Linear Algebra I (4)
MATH 321  Ordinary Differential Equations (4)
MATH 354  Concepts of Probability & Statistics (4)
MATH 417  Real Analysis I (3)

Required Minor: None.

ECONOMICS MINOR

Required for Minor
ECON 201  Principles of Macroeconomics (3)
ECON 202  Principles of Microeconomics (3)

Unrestricted Electives (12 credits)
Select 12 credits in consultation with an advisor.
ECON 100 - 499

COURSE DESCRIPTIONS

ECON 100 (3) An Introduction to the U.S. Economy
Brief description of the operation of the US economic system illustrated by a discussion of current economic policies, issues, and problems. No credit toward a major, minor, or area with economics as a core, or if credit has been earned in ECON 201 and/or ECON 202, or equivalent.
Fall, Spring GE-5

ECON 103W (3) The Economics of Women's Issues and Public Policy in the United States
This course will examine the gendered nature of public policy using standard microeconomic tools. It examines the impact of public policy on employment discrimination, reproductive rights, and sexual orientation.
Variable WI, GE2, GE-5
Diverse Cultures - Purple

ECON 199 (1) CLEP Economics

ECON 201 (3) Principles of Macroeconomics
Emphasis on forces influencing employment and inflation. Current problems of the economy are stressed along with tools government has to cope with them.
Fall, Spring GE-5

ECON 202 (3) Principles of Microeconomics
Examines decision making by the individual firm, the determination of prices and wages, and current problems facing business firms.
Fall, Spring GE-5

ECON 207 (4) Business Statistics
Basic statistical methods including measures of central tendency and dispersion, probability distributions, sampling, problems of estimation and hypothesis testing in the case of one and two sample means and proportions. Chi-Square, one-way analysis of variance, simple regression and correlation analysis, and brief introduction to multiple regression analysis. Use of computer statistical packages required.
Prerequisite: MATH 112 or equivalent
Fall, Spring GE2, GE-4

ECON 301 (3) Quantitative Methods in Economics
This course will introduce the student to the use of mathematics in economic analysis. Topics include optimization methods, comparative statics, and linear algebra.
Prerequisite: ECON 201, ECON 202, ECON 207, MATH 112 or equivalent
Fall, Spring

ECON 305 (3) Money and Banking
A descriptive and analytical study of the basic principles of money, banking, and finance as they are related to business and public policy.
Prerequisite: ECON 201 and ECON 202
Fall, Spring

ECON 314W (3) Current Economic Issues
Elementary economic background and analysis of housing, medical care, inflation, unemployment dilemma, pollution, poverty and affluence, balance between public and private sectors, transportation, urban problems, and other issues will be covered in this course.
Fall WI, GE-5, GE-8

ECON 320W (3) Gender Issues and Economic Globalization
This course will provide tools for analyzing the effects of economic globalization on employment, distribution of income, economic development and socio-economic issues from a gender perspective.
Prerequisite: ECON 201 or ECON 202
Spring (On Demand), Summer (On Demand)
WI Diverse Cultures - Purple

ECON 355 (3) Intermediate Microeconomics
A survey of imperfect competition, multiple-product firms, multiple-plant firms, and interest theory, designed to develop a system of economic thought.
Prerequisite: ECON 201, ECON 202 and ECON 301
Fall, Spring

ECON 356 (3) Intermediate Macroeconomics
Study of factors determining aggregate level of production, employment, inflation, and implications of monetary and fiscal policies.
Prerequisite: ECON 201, ECON 202 and ECON 301
Fall, Spring

ECON 403 (3) Labor Economics
Employment, wages, and economic security. The structure and impact of labor organizations and labor legislation.
Prerequisite: ECON 201 and ECON 202
Fall, Spring

ECON 405 (3) Central Banking
A detailed examination of the Federal Reserve System and monetary policy. The topics will include a history of the Federal Reserve and its monetary tools and strategies: Monetarism, the demand for money, the money supply process, and the impact of financial deregulation on federal policy.
Prerequisite: ECON 305
Spring

ECON 406 (3) Economics of Unions
Students examine the economics of unions, including the history of union activity, the development and impact of labor laws on labor markets, the economics of strikes and alternative dispute resolution systems, and the impact of unions on wages and price levels.
Prerequisite: ECON 201 and ECON 202
Spring
ECON 411 (3) Urban Economics
Economic forces which account for the development of cities and application of principles to some of the major problems of the modern urban community. 
Prerequisite: ECON 201 and ECON 202
Variable

ECON 412 (3) Resource and Environmental Economics
Concepts and techniques for evaluating the alternative uses, management and development of natural resources. 
Prerequisite: ECON 201 and ECON 202
Fall

ECON 416 (3) Sports Economics
This course examines the economics of professional and collegiate sports and sports institutions. Students examine the market for sports competitions, the labor market for player talent, and the role government plays in the business of sports. 
Prerequisite: ECON 202
Spring

ECON 420 (3) International Economics
The economic rationale for interregional trade: emphasis on current problems. 
Prerequisite: ECON 201 and ECON 202
Fall, Spring

ECON 429 (3) Economic Education
Fundamental ideas and structure of economics with emphasis on the application of such ideas in the K-12 school curriculum. 
Variable

ECON 440 (3) Public Finance
Public expenditures, taxes and other revenues, debts and financial administration at federal, state, and local levels. 
Prerequisite: ECON 201 and ECON 202
Fall

ECON 450 (3) Economic Development
Economic underdevelopment and the relationships between mature economies and developing nations. 
Prerequisite: ECON 201 and ECON 202
Fall

ECON 462 (3) Econometrics
The study of methods and techniques for building econometric models with the goal of forecasting and measurement of the economic relationships by integrating economic theory and statistics in it. 
Prerequisite: ECON 201, ECON 202, and ECON 207

ECON 463 (3) Applied Econometrics of Financial Markets
This course is designed to cover basic tools in time series analysis and to equip students with quantitative skills to analyze the financial market. 
Prerequisite: ECON 207
Fall

ECON 472 (3) Industrial Organization
This course is an introduction to non-competitive markets using economic models and game theory. 
Prerequisite: ECON 201, ECON 202 and ECON 207
Fall, Spring

ECON 480 (1-3) Seminar in Economics
Prerequisite: ECON 201 and ECON 202
Variable

ECON 481 (1-3) Readings in Economics
Fall, Spring

ECON 485W (4) Seminar In Applied Econometrics
Students learn how to conduct research projects in economics and related fields by using modern econometric tools and undertake a semester-long research assignment. 
Prerequisite: ECON 355, ECON 356, ECON 301, and ECON 462. In addition a student must get a minimum of a "C" grade in each prerequisite. 
Fall, Spring

ECON 491 (1-3) In-Service

ECON 498 (1-3) Internship
Prerequisite: ECON 201, ECON 202, ECON 355, ECON 356
Fall, Spring

ECON 499 (1-3) Individual Study
Prerequisite: ECON 207 and ECON 202
Fall, Spring

EDUCATIONAL LEADERSHIP COURSES

Educational Leadership

College of Education
Department of Educational Leadership
115 Armstrong Hall • 507-389-1116
Website: http://ed.mnsu.edu/edleadership/

Chair: Dr. Candace Raskin

The Department of Educational Leadership prepares professionals to enter leadership and administration roles in a variety of educational settings and positions. The department does not offer an undergraduate program, but undergraduate courses are offered on a limited basis for Experiential Education. Please contact the department or the website for more information.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

COURSE DESCRIPTIONS

EXED 202 (3) Introduction to Experiential Education
This course introduces foundations of experiential education through direct experience with various applications connected through reflection and group processing. Course topics include, but are not limited to, project-based learning, service learning, adventure education, ethics in leadership, and wilderness experience. GE-11

EXED 490 (1-3) Workshop

EXED 499 (1-3) Individual Study
Electrical Engineering

College of Science, Engineering and Technology
Department of Electrical & Computer Engineering and Technology
242 Tafton Science Center N • 507-389-3747
Website: www.cset.mnsu.edu/ecet
Email: ecet@mnsu.edu

Chair: Qun Zhang
Program Coordinator: Qun Zhang

Faculty: Gale Allen, Nan-nan He, Han-Way Huang, Muhammad Khalil, Julio Mandojana, Puteri Megat Hamari, Ryan Shirk, Vincent Winstead, Xuanhui Wu, Jianwu Zheng, Qun Zhang


Electrical Engineering (EE) encompasses research, development, design and operation of electrical and electronic systems and their components.

This program leads to a Bachelor of Science in Electrical Engineering (BSEE). The primary objective of the Electrical Engineering program is to educate engineering professionals who possess a sound design and analytical background coupled with a strong laboratory experience. This means that the department prepares its Electrical Engineering graduates for:
1. Entry into the engineering work environment with well-developed design and laboratory skills.
2. Further study toward advanced degrees in engineering and other related disciplines.
3. Advancement into managerial ranks and/or entrepreneurial endeavors.

The educational objectives for our Bachelor of Science in Electrical Engineering degree are:
1. Graduates who receive the B.S.C.E. (Graduates) will function as responsible members of society with an awareness of the social, ethical, and economic ramifications of their work.
2. Graduates will become successful practitioners in engineering and other diverse careers.
3. Graduates will succeed in full time graduate and professional studies.
4. Graduates will pursue continuing and life-long learning opportunities.
5. Graduates will pursue professional registration.
6. Graduates will gain foundational education that allows for personal growth and flexibility throughout their career.

Our metrics for determining success in meeting these objectives include:
1. Assessment of societal, economic awareness, and ethical performance of our graduates by the graduate and employer.
2. Monitoring of the success of our graduates in the work force.
3. Monitoring of the success of our graduates in graduate and professional programs.
4. Assessment of continuing and life-long learning by the graduate (and their employer as applicable).
5. Reviewing the number and success of our students completing professional registration to advance their careers.

The Electrical Engineering degree curriculum includes the following components:
1. A strong background in the physical sciences, mathematics, and the engineering sciences including extensive hands-on laboratory instruction.
2. An integrated design component including instruction in basic practices and procedures, creativity, control, economics, and synthesis. The process begins with basic instruction during the first year and concludes with a capstone design project.
3. A choice of several sub-disciplines in their senior level elective offerings (power, digital systems, controls, signal processing, communications, microelectronics design and fabrication).
4. Opportunities for students to develop sensitivity to the social and humanitarian implications of technology and motivate them to make worthy contributions to the profession and society, while upholding the highest standards of professional ethics.
5. Courses in business and economics to promote awareness of management and the economic aspects of engineering.
6. Preparation for continuing study and professional development.

The curriculum offers students the opportunity to emphasize a number of specialized areas including power, digital systems, controls, signal processing, communications, microelectronics design and fabrication. During the senior year, students must take the first step toward registration as a professional engineer by taking the Fundamentals of Engineering (FE) examination as described in the GPA Policy below.

Minnesota State Mankato offers a 3/2 program with regional Liberal Arts colleges. Contact the department for more information.

Recommended high school preparation is mathematics up to and including at least pre-calculus and a year each of physics and chemistry. Without this background it may take longer than four years to earn the degree. In the first two years, students take science and mathematics courses common to all branches of engineering (pre-engineering) as well as supporting work in English, humanities and social sciences, and the foundational electrical engineering courses in the curriculum. Second-year electrical engineering students complete remaining physics, mathematics and 200-level engineering science courses prior to starting the upper level core coursework.

All international students wishing to have transfer credits granted from non-U.S. schools will be required to use the ECE evaluation service to be completed no later than the first semester at Minnesota State University, Mankato.

**POLICIES/INFORMATION**

**Admission to Major.** Admission to the college is necessary before enrolling in 300- and 400-level courses. Minimum college requirements are:
- A minimum of 32 earned semester credit hours.
- A minimum cumulative GPA of 2.00 (“C”).

Please contact the department for application procedures.

During the spring semester of the sophomore year, students should submit an application form for admission to the Electrical Engineering program. Admission to the program is selective and, following applications to the department, subject to approval from the department chair. The department makes a special effort to accommodate transfer students. Only students admitted to the program are permitted to enroll in upper-division electrical engineering courses. No transfer credits are allowed for upper-division engineering courses except by department chair review and approval.

Before being accepted into the program and admitted to 300-level engineering courses (typically in the fall semester), a student must complete the following courses including all necessary prerequisites:
- General Physics I and II (calculus-based) (8 credits)
- Calculus I, Calculus II and Differential Equations (12 credits)
- Introduction to Electrical/Computer Engineering I and II (6 credits)
- Circuit Analysis I and II (including lab) (7 credits)
- English Composition (4 credits)
- Technical Communication (4 credits)
- Microprocessor course and lab (4 credits)

A cumulative GPA of 2.5 for all science and math courses must have been achieved for program admittance. Grades must be 1.65 (“C-”) or better for courses to be accepted.

**GPA Policy.** Students graduating with a degree in Electrical Engineering must have:
1. completed a minimum of 20 semester credit hours of upper division EE course work;
2. have a cumulative GPA of 2.25 or higher in all upper division Minnesota State Mankato EE coursework;
3. have completed their senior design sequence at Minnesota State Mankato;
4. Grades must be 1.65 (“C-”) or better for courses taken at Minnesota State Mankato to be accepted.

Petition to evaluate transfer credits must occur no later than the first semester the student is enrolled at Minnesota State Mankato.

All international students wishing to have transfer credits granted from non-U.S. schools will be required to use the ECE evaluation service to be completed no later than the first semester at Minnesota State Mankato.

**P/N Grading Policy.** A student who majors in EE must elect the grade option for all courses even if offered by another department.
Required General Education
CHEM 191 Chemistry for Engineers (3)
ENG 101 Composition (4)
ENG 271W Technical Communication (4)
MATH 121 Calculus I (4)
PHYS 221 General Physics I (4)
Economics Choose 3 Credits
ECON 201 Principles of Macroeconomics (3)
ECON 202 Principles of Microeconomics (3)

Prerequisites to the Major
EE 106 Fundamental Digital System Design for Electrical and Computer Engineers (3)
EE 107 Intro to Electrical and Computer Engineering Through Software Development (3)
EE 230 Circuit Analysis I (3)
EE 231 Circuit Analysis II (3)
EE 234 Microprocessor Engineering I (3)
EE 235 Microprocessor Engineering Laboratory I (1)
EE 240 Evaluation of Circuits (1)
MATH 122 Calculus II (4)
MATH 321 Ordinary Differential Equations (4)
PHYS 222 General Physics II (3)
PHYS 223 General Physics II Laboratory (1)

Major Common Core
EE 241 Electric Circuits Lab (1)
EE 281 Digital System Design with Testability (3)
EE 282 Digital System Design with Testability Lab (1)
EE 303 Introduction to Solid State Devices (3)
EE 304 Lab: Introduction to Solid State Devices (1)
EE 332 Electronics I (3)
EE 333 Electronics II (3)
EE 336 Principles of Engineering Design I (1)
EE 337 Principles of Engineering Design II (1)
EE 341 Signals & Systems (3)
EE 342 Electronics Laboratory (1)
EE 343 Electronics II Laboratory (1)
EE 350 Engineering Electromagnetics (3)
EE 353 Communication Systems Engineering (3)
EE 358 Control Systems (3)
EE 363 Communication Systems Laboratory (1)
EE 368 Controls Laboratory (1)
EE 450 Engineering Economics (3)
EE 467VV Principles of Engineering Design III (1)
EE 477VV Principles of Engineering Design IV (1)
EE 482 Electromechanics (3)
MATH 223 Calculus III (4)
PHYS 223 General Physics III (3)
PHYS 223 General Physics III Laboratory (1)

Major Restricted Electives
EE 334 Microprocessor Engineering II (3)
EE 344 Microprocessor II Laboratory (1)
EE 453 Advanced Communications Systems Engineering (3)
EE 471 Advanced Control Systems (3)
EE 472 Digital Signal Processing (3)
EE 473 Electrical Power Systems Analysis and Design (3)
EE 474 Power Electronics (4)
EE 475 Integrated Circuit Engineering (3)
EE 476 Antennas, Propagation, & Microwave Engineering (3)
EE 479 Superconductive Devices (3)
EE 480 Integrated Circuit Fabrication Lab (1)
EE 481 VLSI Design Laboratory (1)
EE 483 Introduction to Smart Grid (3)
EE 484 VLSI Design (3)
EE 485 ASIC Design (1)
EE 487 RF Systems Engineering (3)
EE 489 Real-time Embedded Systems (4)

Required Minor: None.
No minor or other major accepted toward degree.

Other Graduation Requirements
Choose ten (10) credits from Major Restricted Electives. Choose a minimum of twelve (12) credits from Humanities (6 credits) and Social Sciences (6 credits) courses. For a complete listing of approved Humanities and Social Science courses, please consult the department website. In general, graduation credit toward the Humanities requirement is not allowed for any course in subject areas such as communication studies, writing, art, music, or theatre that involve performance or practice of basic skills. At least three (3) credits of the courses selected to complete the above requirements must be 300-level or above. At least one 300-level course must follow a lower level course in the same subject area.

Analysis/Probability and Statistics Choose 3 Credits
MATH 354 Concepts of Probability & Statistics (3)

Business/Finance Choose 3 Credits
MRKT 210 Principles of Marketing (3)

Other Graduation Requirements
Choose ten (10) credits from Major Restricted Electives. Choose a minimum of twelve (12) credits from Humanities (6 credits) and Social Sciences (6 credits) courses. For a complete listing of approved Humanities and Social Science courses, please consult the department website. In general, graduation credit toward the Humanities requirement is not allowed for any course in subject areas such as communication studies, writing, art, music, or theatre that involve performance or practice of basic skills. At least three (3) credits of the courses selected to complete the above requirements must be 300-level or above. At least one 300-level course must follow a lower level course in the same subject area.

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Other Graduation Requirements
Choose ten (10) credits from Major Restricted Electives. Choose a minimum of twelve (12) credits from Humanities (6 credits) and Social Sciences (6 credits) courses. For a complete listing of approved Humanities and Social Science courses, please consult the department website. In general, graduation credit toward the Humanities requirement is not allowed for any course in subject areas such as communication studies, writing, art, music, or theatre that involve performance or practice of basic skills. At least three (3) credits of the courses selected to complete the above requirements must be 300-level or above. At least one 300-level course must follow a lower level course in the same subject area.

Analysis/Probability and Statistics Choose 3 Credits
MATH 354 Concepts of Probability & Statistics (3)

Business/Finance Choose 3 Credits
MRKT 210 Principles of Marketing (3)

Other Graduation Requirements
Choose ten (10) credits from Major Restricted Electives. Choose a minimum of twelve (12) credits from Humanities (6 credits) and Social Sciences (6 credits) courses. For a complete listing of approved Humanities and Social Science courses, please consult the department website. In general, graduation credit toward the Humanities requirement is not allowed for any course in subject areas such as communication studies, writing, art, music, or theatre that involve performance or practice of basic skills. At least three (3) credits of the courses selected to complete the above requirements must be 300-level or above. At least one 300-level course must follow a lower level course in the same subject area.
EE 240 (1) Evaluation of Circuits
Prerequisite: Must be taken concurrently with EE 230.
Fall

EE 241 (1) Electric Circuits Lab
This course accompanies EE 231 with labs relating to first order RIC circuit, and second order RIC circuits, source free and sinusoidal RIC response, sinusoidal steady state response, with impedance and Phasor measurement, AC superposition, AC Thevenin, AC maximum power transfer, series and parallel resonance, frequency selective circuits and active filters, transformers, two-port network characterization.
Prerequisite: EE 230 and EE 231 taken concurrently.
Spring

EE 244 (2) Introduction to Digital Systems
Simple coding schemes, Boolean algebra fundamentals, elements of digital building blocks such as gates, flip-flops, shift registers, memories, etc.; basic engineering aspects of computer architecture.

EE 253 (1) Logic Circuits Lab
Laboratory support to complement EE 244. Use of laboratory instrumentation to measure characteristics of various logic circuits and digital subsystems. Experimental evaluation of digital logic devices and circuits including logic gates, flip-flops, and sequential machines.
Prerequisite: EE 230 and concurrent with EE 244.
Spring

EE 254 (1) Digital and Circuits Lab
Laboratory support for EE 231 and EE 244. Experimental evaluation of AC and transient circuits, digital logic devices including logic gates, flip-flops, and sequential machines.
Prerequisite: EE 230, EE 240 and concurrently with EE 231 and EE 244.
Spring

EE 281 (3) Digital System Design with Testability
Introduction to representing digital hardware using a hardware description language. Introduction to implementation technologies such as PAL’s, PLAS, FPGA’s and Memories. Analysis, synthesis and design of sequential machines; synchronous, pulse mode, asynchronous and incompletely specified logic.
Prerequisite: EE 106, EE 107 or Variable

EE 282 (1) Digital System Design with Testability Lab
Laboratory support for EE 282 practical aspects of design and analysis of different types of sequential machines will be presented through laboratory experience.
Co-requisite: EE 281

EE 298 (1-4) Topics
Varied topics in Electrical and Computer Engineering. May be repeated as topics change.
Prerequisite: to be determined by course topic

EE 303 (3) Introduction to Solid State Devices
Introduction to crystal structure, energy band theory, conduction and optical phenomena in semiconductors, metals and insulators. Study of equilibrium and non-equilibrium charge distribution, generation, injection, and recombination, Analysis and design of PN-junctions, bipolar transistor, junction and MOS field-effect transistors. Introduction to transfered electron devices and semiconductor diode laser.
Prerequisite: PHYS 222, and MATH 321
Fall

EE 304 (1) Lab: Introduction to Solid State Devices
Laboratory support for EE 303. Experiments include resistivity and sheet resistance measurements of semiconductor material, probing material, probing of IC chips, PN-junction IV and CV measurements, BJT testing to extract its parameters, MOSFET testing and evaluating its parameters, CV measurements of MOS structure, and familiarization with surface analysis tools.
Fall

EE 332 (3) Electronics I
Introduction to discrete and microelectronics circuits including analog and digital electronics. Device characteristics including diodes, BJTs, JFETs, and MOSFETs will be studied. DC bias circuits, small and large signal SPICE modeling and analysis and amplifier design and analysis will be discussed.
Prerequisite: EE 231
Fall

EE 333 (3) Electronics II
The second course of the electronics sequence presenting concepts of feedback, oscillators, filters, amplifiers, operational amplifiers, hysteresis, bistability, and non-linear functional circuits. MOS and bipolar digital electronic circuits, memory, electronic noise, and power switching devices will be studied.
Prerequisite: EE 332
Spring

EE 334 (3) Microprocessor Engineering II
A more advanced study of microprocessors and microcontrollers in embedded system design. Use of C language in programming, interrupt interfaces such as SPI, I2C, and CAN. External memory design and on-chip program memory protection are also studied.
Fall

EE 336 (1) Principles of Engineering Design I
Electrical and computer engineering project and program management and evaluation techniques will be studied. Emphasis will be placed on the use of appropriate tools for planning, evaluation, and reporting on electrical and computer engineering projects.
Prerequisite: Junior Standing
Fall

EE 337 (1) Principles of Engineering Design II
Application of the design techniques in the engineering profession. Electrical engineering project and program management and evaluation including computer assisted tools for planning and reporting, design-to-specification techniques and economic constraints.
Prerequisite: EE 336
Spring

EE 341 (3) Signals & Systems
Analysis of linear systems and signals in the time and frequency domain. Laplace and Fourier transforms. Z-transform and discrete Fourier transforms.
Prerequisite: EE 230, MATH 321 and PHYS 222
Fall

EE 342 (1) Electronics Laboratory
This lab is designed to accompany EE 332. The lab covers the experimental measurement and evaluation of diode, BJT, and MOS characteristics; various feedback topologies; oscillator and opamp circuits; and rectifiers and filter circuitry.
Prerequisite: EE 231 and EE 332 taken concurrently.
Fall

EE 343 (1) Electronics II Laboratory
A more advanced study of microprocessors and microcontrollers in embedded system design. Use of C language in programming, interrupt interfaces such as SPI, I2C, and CAN. External memory design and on-chip program memory protection are also studied.
Prerequisite: EE 332
Fall

EE 344 (1) Microprocessor II Laboratory
Laboratory support for EE 334. Use of development boards and C Programming language to handle I/O devices, interrupts, and all peripheral functions. Multiple functions such as timers, A/D converters, I/O devices, interrupts, and serial modules will be used together to perform desired operations.
Prerequisite: Concurrent with EE 334
Fall

EE 350 (3) Engineering Electromagnetics
Prerequisite: EE 231, MATH 223, MATH 321 and PHYS 222
Spring
EE 353 (3) Communications Systems Engineering
Spring

EE 358 (3) Control Systems
Theory and principles of linear feedback control systems. Analysis of linear control systems using conventional techniques like block diagrams, Bode plots, Nyquist plots and root-locus plots. Introduction to cascade compensation: proportional, derivative and integral compensation. State space models. Prerequisite: EE 341
Spring

EE 363 (1) Communication Systems Laboratory
Spring

EE 368 (1) Control Systems Laboratory
Laboratory support for EE 358. Experimental evaluation of basic control system concepts including transient response and steady state performance. Analog and digital computers. Prerequisite: EE 341 and concurrent with EE 358
Spring

EE 390 (4) Smart Sensor Systems
This course explains the interfacing method between a sensor and the microcontroller, describes the features and functions of several frequently used sensors, and then proceeds to explore the subject of sensor fusion, describes the algorithms how multiple sensors are used to extract correct and more useful information than each individual single sensor; finally the course also explores how a large number of sensor nodes are connected together via the wireless or wired networking technology using one of the few possible topologies to enable the monitoring and control of our environment to improve our life. Prerequisite: EE 334, EE 344
Spring

EE 395 (3) Computer Hardware and Organization
High-level language constructs using a selected assembly language, design alternatives of computer processor datapath and control, memory hierarchy, management unit, use of HDL in describing and verifying combinational and sequential circuits. Design of Computer processor and memory system. Prerequisite: EE 234, EE 235, EE 281
Spring

EE 398 (0) CPT, Co-Operative Experience
Curricular Practical Training. Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information. Prerequisite: EE 235. At least 60 credits earned, in good standing; instructor permission; co-op contract; other prerequisites may also apply.
Fall, Spring, Summer

EE 450 (3) Engineering Economics
Overview of accounting and finance and their interactions with engineering. Lectures include the development and analysis of financial statements, time value of money, decision making tools, cost of capital, depreciation, project analysis and payback, replacement analysis, and other engineering decision making tools. Prerequisite: Advanced standing in the program.
Fall

EE 453 (3) Advanced Communications Systems Engineering
Behavior of analog systems and digital systems in the presence of noise, principles of digital data transmission, baseband digital modulation, baseband demodulation/detection, bandpass modulation and demodulation of digital signals. Channel coding, modulation and coding trade-offs, spread spectrum techniques, probability and information theory. Prerequisite: EE 353 and EE 363
Fall

EE 463 (3) Advanced Digital System Design
Design of combinational and sequential systems and peripheral interfaces. Design techniques using MSI and LSI components in an algorithmic state machine; implementation will be stresses. Rigorous timing analysis transmission-line effects and metastability of digital systems will be studied. Prerequisite: EE 244

EE 467W (1) Principles of Engineering Design III
The design and organization of engineering projects. Project proposals, reporting, feasibility studies, and interpretation. Specification preparation, interpretation, and control. Issues involving creativity, project planning and control, and intellectual property rights. Students enrolled in this course must initiate and complete a design project in a small team format. Prerequisite: EE 337 and senior standing
Fall, VI

EE 470 (3) Wireless Networking
The features, data rate, frequency range, and operation of several wireless networking protocols such as Wi-Fi, Low Energy Bluetooth, Near Field Communication, Radio Frequency Identifier (RFID), Threads, and ZigBee that can be used to implement Internet of Things (IoT) are introduced. The electrical, functional, and procedural specifications of Wi-Fi are then examined in detail. The programming and data transfer using the hardware Wi-Fi kit are carried out to demonstrate the versatility of this protocol. Prerequisite: EE 344
On Demand: Fall, Spring

EE 471 (3) Advanced Control Systems
This course is a continuation of EE 358. Techniques for the analysis of continuous and discrete systems are developed. These techniques include pole placement, state estimation, and optimal control. Prerequisite: EE 358 and EE 368
Fall

EE 472 (3) Digital Signal Processing
Develop design and analysis techniques for discrete signals and systems via Z-transforms, Discrete Fourier Transforms, implementation of FIR and IIR filters. The various concepts will be introduced by the use of general and special purpose hardware and software for digital signal processing. Prerequisite: EE 341
Spring

EE 473 (3) Electrical Power Systems Analysis and Design
Power generation, transmission and consumption concepts, electrical grid modeling, transmission line modeling, electric network power flow and stability, fault tolerance and fault recovery, economic dispatch, synchronous machines, renewable energy sources and grid interfacing. Prerequisite: EE 231 or via permission from instructor
Variable

EE 474 (4) Power Electronics
This course is designed to provide students with knowledge of the design and analysis of static power conversion and control systems. The course will cover the electrical characteristics and properties of power semiconductor switching devices, converter power circuit topologies, and the control techniques used in the applications of power electronic systems. Laboratories consist of computer-based modeling and simulation exercises, as well as hands-on laboratory experiments on basic converter circuits and control schemes. Prerequisite: EE 333
Spring

EE 475 (3) Integrated Circuit Engineering
Introduction to theory and techniques of integrated circuit fabrication processes, oxidation, photolithography, etching, diffusion of impurities, ion implantation, epitaxy, metallization, material characterization techniques, and VLSI process integration, their design and simulation by SUPREM. Prerequisite: EE 303 and EE 332
Fall

EE 476 (3) Antennas, Propagation, & Microwave Engineering
Principles of electromagnetic radiation, antenna parameters, dipoles, antenna arrays, long wire antennas, microwave antennas, mechanisms of radiowave propagation, scattering by rain, sea water propagation, guided wave propagation, periodic structures, transmission lines, microwave/millimeter wave amplifiers and oscillators, MIC & MMIC technology. Prerequisite: EE 350
Variable
EE 477W (1) Principles of Engineering Design IV
Completion of design projects and reports. Lectures on ethics, issues in contracting and liability, concurrent engineering, ergonomics and environmental issues, economics and manufacturability, reliability and product lifetimes. Lectures by faculty and practicing engineers.
Prerequisite: EE 467 and Senior Standing
Spring
WI

EE 479 (3) Superconductive Devices
Prerequisite: EE 303
Variable

EE 480 (1) Integrated Circuit Fabrication Lab
Introduction to integrated circuit fabrication processes, device layout, mask design, and experiments related to wafer cleaning, etching, thermal oxidation, thermal diffusion, photolithography, and metallization. Fabrication of basic integrated circuit elements pn junction, resistors, MOS capacitors, BJT and MOSFET in integrated form. Use of analytic tools for in process characterization and simulation of the fabrication process by SUPREM.
Prerequisite: Concurrent with EE 475
Fall

EE 481 (1) VLSI Design Laboratory
This laboratory accompanies EE 484. The laboratory covers the basics of layout rules, chip floor planning, the structure of standard cells and hierarchical design, parasitic elements, routing, and loading. Students will learn to design and layout standard cells as well as how to use these cells to produce complex circuits. The laboratory culminates with the individual design and layout of a circuit.
Prerequisite: Concurrent with EE 484
Spring

EE 482 (3) Electromechanics
Electrical power and magnetic circuit concepts, switch-mode converters, mechanical electromechanical energy conversion, DC motor drives, feedback controllers, AC machines and space vectors, permanent magnet AC machines and drives, induction motors and speed control of induction motors, stepper motors.
Prerequisite: EE 230
Fall

EE 483 (3) Introduction to Smart Grid
1. This course covers cutting-edge areas of the study in smart grid and power systems; 2. This course will cover fundamentals of power flow calculation, wind power and its integration, solar power and its integration, distributed generation sources, energy storage devices and electric vehicles;
3. The basic ideas of the integration of microgrid with distribution networks, the demand response and demand side management, and electricity market will be introduced; 4. Moderate work of programming in professional power systems software tools, PowerWorld and PSCAD will be required.
Prerequisite: EE 333
Fall; On Demand; Spring

EE 484 (3) VLSI Design
Prerequisite: EE 333
Spring

EE 485 (4) ASIC Design
This course focuses on CMOS Application Specific Integrated Circuit (ASIC) design of Very Large Scale Integration (VLSI) systems. The student will gain an understanding of issues and tools related to ASIC design and implementation. The coverage will include ASIC physical design flow, including logic synthesis, timing, floor-planning, placement, clock tree synthesis, routing and verification. An emphasis will be placed on low power optimization. The focus in this course will be Register-transfer level (RTL) abstraction using industry-standard VHDL/Verilog tools.
Prerequisite: EE 484
Spring

EE 487 (3) RF Systems Engineering
Prerequisite: EE 353 and EE 363
Variable

EE 489 (4) Real-time Embedded Systems
This course introduces students the recent advances in real-time embedded systems design. Topics cover real-time scheduling approaches such as clock-driven scheduling and static and dynamic priority driven scheduling, resource handling, timing analysis, inter-task communication and synchronization, real-time operating systems (RTOS), hard and soft real-time systems, distributed real-time systems, concepts and software tools involved in the modeling, design, analysis and verification of real-time systems.
Prerequisite: EE 107, EE 334, EE 395
Variable

EE 491 (1-4) In-Service

EE 494 (1) Global Experience in Engineering and Technology
This class provides students pursuing a minor in “Global Solutions in Engineering and Technology” with an opportunity to explore a set of topics related to achieving success in advance of and following an international experience (internship, study abroad, etc.). Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Returning students will be required to participate in mentoring of students preparing for their international experience and provide written and/or oral presentations of various topics during the semester. This course is required both before and after participation in the international experience (min. 2 cr.)
Variable

EE 497 (1-6) Internship

EE 498 (1-4) Topics
Varied topics in Electrical and Computer Engineering. May be repeated as topics change. Prerequisite: to be determined by course topic

EE 499 (1-6) Individual Study
Electronic Engineering Technology

College of Science, Engineering & Technology
Department of Electrical & Computer Engineering and Technology
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Website: www.cset.mnsu.edu/ect
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Chair: Gun Zhang
Program Coordinator: Gun Zhang
Faculty: Gale Allen, Nannan He, Han-Way Huang, Muhammad Khalidq, Julio Mandojana, Putei Megat Hamari, Ryan Shirk, Vincent Winstead, Xuanhui Wu, Jianwu Zeng, Gun Zhang


Electronic Engineering Technology is a technological field requiring the application of scientific and engineering knowledge and methods, combined with technical skills, in support of engineering activities. An electronic engineering technologist is a person who is knowledgeable in electronics theory and design and who understands state-of-the-art practices in digital and analog circuits and systems. Computers, controls, automation, robotics, instrumentation, and communications are just a few fields open to engineering technologists.

Overall the program strives to prepare students for entry into the technical workforce with well-developed skills. In particular, the department strives to ensure that its graduates have an ability to:
1. Apply knowledge of science, mathematics, and engineering
2. Design, and conduct experiments as well as analyze and interpret data
3. Design a system, component, or process to meet specified needs
4. Function effectively in teams
5. Identify, formulate, and solve engineering problems
6. Have an understanding of professional and ethical responsibilities
7. Communicate effectively

The Educational Objectives for our Bachelors Degree in Electronic Engineering Technology program area:
1. Function as responsible members of society with an awareness of the social, ethical, and economic ramifications of their work.
2. Become successful practitioners in electronic engineering technology and other diverse careers.
3. Pursue continuing and lifelong learning opportunities.
4. Provide necessary skills to advance technically and/or managerially.
5. Provide foundational education that allows for personal growth and flexibility through their career.

Our metrics for determining success in meeting these objectives will include:
1. Assessment of societal, economic awareness, and ethical performance of our graduates by the graduate and employer.
2. Monitoring of the success of our graduates in the work force.
3. Assessment of continuing and life-long learning by the graduate (and their employer as applicable).
4. Ongoing contact with graduates to determine career paths and challenges confronted.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

P/N Grading Policy. A student who majors or minors in EET must elect the grade option for all required courses including general education courses listed by number even if offered by another department.

If the credits earned for composition, technical writing and communication studies courses equal less than 9 credits, either an advanced communication studies course or a course in English language literature must be selected as a general elective.

In addition to the transfer of credit policy described in this catalog for students transferring to Minnesota State Mankato from other schools, the electronic engineering technology program has additional policies:
1. All transfer student must take EET 221.
2. For courses taken at technical colleges/vocational technical schools and pertinent courses taken in the military the student may receive up to 8 credits upon review of course materials, grades and written approval by the program coordinator. The credit can be used for EET 112, EET 113 and EET 114.
3. The student may also attempt to test out of EET 114, EET 222, and EET 223.
4. For courses taken at community colleges and four-year colleges, up to 25 credits may be accepted if the transcript is from an ABET-accredited program.
5. If the program is not accredited by ABET, up to 20 credits may be accepted.
6. Grades of transfer credits must be "C" or better to be acceptable for substitution for required courses.
7. Grades must be "C" (1.0) or better for courses taken at Minnesota State Mankato.

Petition to evaluate transfer credits must occur no later than the first semester the student is enrolled in or declared a major housed in the Department of Electrical and Computer Engineering and Technology.

All international students wishing to have transfer credits granted from non-U.S. schools will be required to use the ECE evaluation service to be completed no later than first semester at Minnesota State Mankato.

Testing for course credit will be available via prior application made with the program coordinator. Students may not apply for credit by examination for an EET course in which they were previously enrolled at Minnesota State Mankato or for any EET course above EET 223.

Grades must be 1.65 "C" or better for courses taken at Minnesota State Mankato to be accepted.

ELECTRONIC ENGINEERING TECHNOLOGY BS

Degree completion = 128 credits

Students who do not have the required background for MATH 115 may have to take additional preparatory coursework as well. Consult with your major advisor to plan your general education and major requirements.

All students must complete a minimum of 12 semester credits of mathematics starting with Precalculus math and a minimum of 24 semester credits of combined mathematics and science courses.

Required General Education

Students in this degree program must complete 21 additional general education course credit hours to meet university general education and diverse cultures requirements.

Prerequisites to the Major

EET 113 DC Circuits (3)
EET 114 AC Circuits (3)
EET 141 Integrated Computer Technology I (4)
EET 142 Integrated Computer Technology II (4)
EET 143 Integrated Computer Technology III (4)
EET 221 Electronic CAD (3)
EET 222 Electronics I (4)
EET 223 Electronics II (4)
EET 254 Microprocessors I (4)
MATH 115 Precalculus Mathematics (4)
MATH 121 Calculus I (4)
MATH 127 Calculus II for Engineering Technology: Integration (2)
PHYS 211 Principles of Physics I (4)
PHYS 212 Principles of Physics II (4)

PHYS 211 Principles of Physics I (4)
PHYS 212 Principles of Physics II (4)

POLICIES/INFORMATION

Admission to Major is granted by the department. Minimum program admission requirements are:
- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (“C”).

Contact the department for application procedures.

Graduation Policy. Students graduating with a degree in Electronic Engineering Technology must have:
1) completed a minimum of 20 semester credit hours of upper division EET courses;
2) have a cumulative GPA of 2.0 or higher for all Minnesota State Mankato EET coursework; and
3) have completed their senior design sequence [EET 461 and EET 462] at Minnesota State Mankato.
ELECTRONIC ENGINEERING TECHNOLOGY CONTINUED

Major Common Core
Three (3) credits of EET 497 may be used to satisfy common core requirements.
CHEM 104 Introduction to Chemistry (3)
EET 340 Programmable Hardware Technology (4)
EET 341 Electronic Shop Practices (2)
EET 355 Electrical Power Systems (3)
EET 452 Operational Amplifier Applications (3)
EET 456 Analog Communications (4)
EET 461 Industrial Automation I (4)
EET 462 Industrial Automation II (4)
EET 484 Microprocessors II (4)
EET 497 Internship (3)
MET 427 Quality Management Systems (3)

Major Restricted Electives
(choose a minimum of 6 credits from 300-level and 400-level courses with advisor's approval.)
EET 114 (3) AC Circuits
EET 223 Electronics II (4)
EET 341 Electronic Shop Practices (2)
EET 355 Electrical Power Systems (3)
EET 452 Operational Amplifier Applications (3)
EET 456 Analog Communications (4)
EET 461 Industrial Automation I (4)
EET 462 Industrial Automation II (4)
EET 484 Microprocessors II (4)
EET 497 Internship (3)
MET 427 Quality Management Systems (3)

Major Unrestricted Electives
(choose one of the following)
STAT 154 Elementary Statistics (4)
STAT 354 Concepts of Probability and Statistics (4)

Other Graduation Requirements
EE 450 Engineering Economics (3)

Required Minor: None.

RENEWABLE ENERGY CERTIFICATE PROGRAM
Renewable Energy certificate includes targeted courses in power systems, instrumentation and fluid power intended to supplement the contents of a technical Associate of Science (AS) degree or Technician program in Wind Turbine Technology or AS/BS degree in Renewable Energy. The certificate includes three courses for a total of nine credits.

Common Core
AET 334 Fluid Power (3)
EET 315 Programmable Instrumentation (3)
EET 355 Electrical Power Systems (3)

ELECTRONIC ENGINEERING TECHNOLOGY MINOR

Required for Minor
EET 112 Elementary Electricity and Electronics (3)
EET 113 DC Circuits (3)
EET 114 AC Circuits (3)
EET 222 Electronics I (4)

Required for Minor (Elective Options, 7-8 credits)
Digital Option
EET 254 Microprocessors I (4)
EET 141 Integrated Computer Technology I (4)

Electronics Option
EET 223 Electronics II (4)
(choose one of the following)
EET 452 Operational Amplifier Applications (3)
EET 455 Power Electronics (3)
EET 492 Integrated Circuit Technology (4)

Networking Option
EET 254 Microprocessors I (4)
EET 430 Computer Networking I (4)

Communications Options
EET 223 Electronics II (4)
EET 456 Analog Communications (4)

Power Option
EET 223 Electronics II (4)
EET 355 Electrical Power Systems (3)

COURSE DESCRIPTIONS

EET 112 (3) Elementary Electricity and Electronics
The basic elements of electricity and electronics are explored in an internet enabled, self-paced course. Laboratories make use of a Virtual Laboratory environment to provide experience with issues in wiring, power, circuits, and digital electronics. Fall, Spring
GE 3

EET 113 (3) DC Circuits
A study of DC electrical circuits, Kirchhoff’s laws, series and parallel circuits, inductors, capacitors, circuit response to RL, RC and RLC circuits. Thévenin’s equivalent circuit theorem, and other network analysis theorems. Use of dependent sources in DC circuits.
Prerequisite: MATH 115, or concurrent
Fall, Spring

EET 114 (3) AC Circuits
Prerequisite: EET 113
Fall, Spring

EET 115 (3) Understanding Computers
A self-paced, interactive, multimedia course, for non-engineering students, exploring the basics of computer hardware. The course will cover concepts behind computer design and operation, including issues such as the need for RAM, hard drive, memory, ROM, etc.
Fall, Spring
GE 13

EET 116 (3) Communications-Past, Present & Future
This is an introductory course in the use of technology for communication. During the semester students will study the evolution of communications technology from early days to the present. This course will cover wireless, analog, and digital techniques including telephony, the internet, and mobile formats. The student will study theory and principles involved in the different types of communications. Modern techniques in digital communications will be discussed and demonstrated through simulation. A consumer example of digital communication will be given.
Variable
GE 13

EET 117 (3) Introduction to Digital Electronics
Hands-on experiences in the use of digital integrated circuits and logic families. Students will study logic gates, number systems, flip flops, latches, registers, computer arithmetic and memory. A self-paced format with an open laboratory format.
Variable
GE 3, GE 8

EET 118 (3) Electricity · Generation, Usage & Green Alternatives
This course covers the development and status of electrical power as a global resource. This includes usage, generation, and impact on societies throughout the world. Finally, the course will examine many renewable generation options.
Variable
GE 3, GE 8

EET 125 (3) Perspective on Technology
Historical, cultural, ethical, philosophical, developmental, and creative aspects of engineering and technology as a discipline are explored. The course also examines concepts and events leading to important innovations of recent times: microwave ovens, FAX machines, personal computers, traffic signals, and video games. Available for general education and cultural diversity offered as self-paced online format.
Fall
GE 6, GE 8
Diverse Cultures · Purple

EET 141 (4) Integrated Computer Technology I
This course covers digital circuit and logic needed for electronic and computer engineering technology. Covers binary arithmetic, timing analysis, TTL, CMOS, logic gates, Boolean algebra, multiplexer, counter, adder, comparator, logic simulation, flip-flops, registers, and use of digital test equipment. Students design and build a complex architecture from small-scale logic components.
Prerequisite: EET 113
Fall

EET 142 (4) Integrated Computer Technology II
The course introduces syntax and semantics of C programming language, and builds C programming skills needed for electronic and computer engineering technology. The course covers basic data types including arrays and strings, program flow control, pointers, functions, and basic I/O utilities. Students will learn how to name the registers and bit fields in the registers and perform I/O programming that involves simple I/O devices such as LEDs, seven-segment displays, and DIP switches.
Prerequisite: EET 141
Spring
EET 143 (4) Integrated Computer Technology III
Sequential circuits, logic timing, clock distribution, counter, LED display, shift register, transceiver, 555 timer, 555 oscillator, D/A converter, RAM, ROM, mass memory, synchronous logic, asynchronous logic, microprocessor interfacing, testability, and simulation.
Prerequisite: EET 142
Fall

EET 221 (3) Electronic CAD
Drafting principles involving use of computer electronic CAD software in laying out block diagrams, schematic diagrams, production drawings, graphical presentation of data, and printed circuit board layout and construction.
Prerequisite: EET 113
Fall

EET 222 (4) Electronics I
An introduction to semiconductor theory and circuits: includes characteristics curves, biasing techniques and small signal analysis of FETs and MOSFETs, feedback concepts, BJT and FETs frequency response.
Prerequisite: EET 113
Fall

EET 223 (4) Electronics II
An introduction to differential amplifier, linear and nonlinear operational amplifiers, power amplifiers, linear digital ICs, oscillators, power supplies, D/A, A/D converters, four layered devices and their applications.
Prerequisite: EET 222
Co-requisite: EET 114
Spring

EET 254 (4) Microprocessors I
A study of microcomputer hardware and software fundamentals, the instruction set and the addressing modes of a microprocessor/microcontroller, assembly programming, basic I/O concepts, parallel I/O methods, asynchronous serial I/O methods, synchronous serial I/O methods, A/D conversion, timer applications, and introduction to Internet of Things (IoT) and its impact to society.
Prerequisite: EET 143
Spring

EET 298 (1-4) Topics
Varied topics in Electronic and Computer Engineering Technology. May be repeated as topics change.
Prerequisite: to be determined by course topic
Spring

EET 310 (4) Programming Tools
Several programming tools and their use in creating electronic hardware systems are covered in this course. Creating special-purpose hardware using numerical analysis programs written in C. Creating hardware utilizing Visual applications written in C. Use of scripting languages in hardware applications. Using Excel for input-output functions.
Prerequisite: EET 143, EET 222 and EET 254
Fall

EET 315 (3) Programmable Instrumentation
Instrumentation system design and integration with sensors, actuators and other electronic indicator components. Programming in a block diagram environment and with embedded C to interface different hardware components.
Prerequisite: MATH 113 or MATH 115
Variable

EET 340 (4) Programmable Hardware Technology
Create working programmable hardware using FPGA, GAL and other logic technology. Use industry standard tools such as Verilog, Xilinx, Orcad and Multisim along with development kits and extension boards to implement programmable systems. Interface LED displays, switches and I/O devices with programmable logic to create processing systems. Evolution of programmable logic and analog circuits.
Prerequisite: EET 143
Spring

EET 341 (2) Electronic Shop Practices
An introduction to tools, equipment, materials, and techniques used in fabrication of electronic projects and printed circuit boards.
Prerequisite: EET 142
Spring

EET 355 (3) Electrical Power Systems
Electrical power and magnetic circuit concepts, transformers, generators and motors (DC, synchronous, induction), special purpose motors, power electronic motor drivers, prime movers/alternatives, generation, transmission/distribution, system stability/protection.
Prerequisite: PHYS 212
Fall

EET 393 (1-4) Practicum
Elective credit for approved experience in off-campus work related to EET major.
Permission required.
Fall, Spring

EET 398 (0) CPT: Co-Operative Experience
Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.
Prerequisite: EET 223. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.
Fall, Spring, Summer

EET 430 (4) Computer Networking I
An introduction to the basic foundations of computer networking. The course will encompass telecommunications, local area networks, wide area networks and wireless communication. Topics covered include OSI model, the TCP/IP MODEL, different network topologies and associated hardware, error detection and correction, protocols, and security.
Prerequisite: EET 223, EET 254
Fall

EET 431 (4) Computer Networking II
Prerequisite: EET 430
Spring

EET 441 (4) Embedded Systems
Design and prototyping of embedded systems including both hardware and software components. A variety of hardware, software, sensors and displays will be used depending on the embedded system requirements. Issues related to hardware and software specifications will be studied as well as appropriate documentation standards.
Prerequisite: EET 143
Spring

EET 452 (3) Operational Amplifier Applications
Operational amplifier circuits utilized in filters, sensors, comparators, voltage regulators, device testing, measurement systems, multipliers, phase-locked loops, and A/D converters. Differential amplifier basics. Linear integrated circuit processing.
Prerequisite: EET 223 and MATH 121
Fall

EET 455 (3) Power Electronics
Use of solid-state switching devices in the conversion and control of electrical energy for low power and high power applications such as switched-mode regulated DC power supplies, motor speed control, lighting control, uninterruptible power supplies and HVDC transmission.
Prerequisite: EET 143
Variable

EET 456 (4) Analog Communications
Communications principles and systems. Practical engineering aspects involved in modulation-demodulation, receivers, transmitters and filters. Also included are radiation and antennas, guided waves, microwaves, and microwave systems.
Prerequisite: EET 222
Spring

EET 458 (1) Advanced Instrumentation
Experiences with electronic equipment and instrumentation including maintenance, repair, calibration, safety and component identification.
Prerequisite: 25 hours of EET courses, or consent
Spring

EET 461 (4) Industrial Automation I
Automation components and subsystems involving sensors, transistors, logic, amplifiers, software, microprocessors, PICs, actuators, encoders, stages, motors, controllers, and drives. Students design, simulate, build, test and document automation systems for Capstone projects.
Prerequisite: EET 223 and EET 254
Fall
ELECTRONIC ENGINEERING TECHNOLOGY CONTINUED

EET 462 (4) Industrial Automation II
Continues building skills in automation components and subsystems involving sensors, transistors, logic, amplifiers, software, microprocessors, PLCs, actuators, encoders, stages, motors, controllers and drives. Students design, simulate, build, test and document automation systems for Capstone projects.
Prerequisite: EET 461
Spring

EET 484 (4) Microprocessors II
A study of a high performance microprocessor architecture. Applications of a microprocessor for monitoring and controlling systems will be studied. Optimal utilization of a microprocessor resources will be stressed. PC programming in assembly and a high level language.
Prerequisite: EET 143
Fall

EET 486 (3) Digital Communications
Prerequisite: EET 142, EET 222
Variable

EET 487 (3) RF Systems Technology
Prerequisite: EET 223
Variable

EET 491 (1-4) In-Service
Semiconductor industry and overview of integrated circuit manufacturing, integrated circuit types, crystal growth and wafer manufacturing, physics of semiconductor materials, detail of major IC fabrication steps, process yield, semiconductor devices and integrated circuit formation, packaging, and semiconductor measurements, introduction to layout tools.
Prerequisite: EET 223
Spring

EET 492 (4) Integrated Circuit Technology
This class provides students pursuing a minor in “Global Solutions in Engineering and Technology” with an opportunity to explore a set of topics related to achieving success in advance of and following an international experience (internship, study abroad, etc.). Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Returning students will be required to participate in mentoring of students preparing for their international experience and provide written and/or oral presentations of various topics during the semester. This course is required both before and after participation in the international experience (min. 2 cr.) Variable

EET 497 (1-6) Internship
Should be taken at end of junior year. Permission required.
Prerequisite: 40 hrs EET credits or written permission from program coordinator.
Fall, Spring

EET 498 (1-4) Topics
Varied topics in Electronic and Computer Engineering Technology. May be repeated as topics change.
Prerequisite: to be determined by course topic
EET 499 (1-4) Individual Study
Fall, Spring

ELEMENTARY EDUCATION BS, CERTIFICATE AND MINORS

Elementary Education

College of Education
Department of Teaching and Learning: Elementary and Literacy Education
328 Armstrong Hall • 507-389-1516

Chair: Karen Colum Ph.D.
Undergraduate Coordinator Mankato:
Undergraduate Coordinator Twin Cities: David Kimori Ph.D.


Accreditation. Council for the Accreditation of Educator Preparation (CAEP) and Minnesota Board of Teaching (BOT)

The Elementary Education program strives to prepare elementary teacher candidates for twenty-first century schools. Students in the program develop necessary skills, knowledge and dispositions to create socially just classrooms for all learners. During the first two years, students complete program requirements designed to build knowledge of content across multiple disciplines. During the final two years, students are admitted into a cohort. In this cohort, students develop pedagogical knowledge and skills in elementary methods courses that focus on critical reflection, racial equity, culturally responsive teaching, and integrating technology. A key part of the Elementary Education program is completion of several extensive field experiences in elementary classrooms, which culminate in a year-long student teaching experience.

Note: Requirements related to teaching majors are subject to change as new rules governing teacher licensure are adopted by the Board of Teaching.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

Admission to the Major.
1. Completion of 30 credits.
2. Minimum grade of “B” in ENG 101 and CMST 100 or CMST 102.
3. Cumulative grade point average of 3.00 or better.

Admission to Professional Education.
1. Minimum grade of “B” (ENG 101, CMST 100 or CMST 102)
2. MATH 201; EEC 215 and EEC 222W
3. Cumulative GPA of 3.00 or higher
4. Completion of 40 credits
5. Completion of or registration for Basic Skills Examination
6. Completion of National Criminal Background Check
7. Proof of liability insurance

Admission to Blocks. Admission to Blocks is based upon an application process and is competitive based upon cumulative GPA.

While in Blocks students will be monitored for:
1. Successful completion of coursework
2. Successful completion of field experiences
3. A cumulative GPA of 3.00 or higher
4. Evaluation of professional dispositions
5. Completion and validation of application materials one year prior to student teaching semester
6. Completion of National Criminal Background Check

Admission to Student Teaching (119 Armstrong Hall)
Director of Office of Field and International Experience: Elizabeth Finsness, Ph.D.
Student teaching at Minnesota State Mankato is a results-oriented, performance based 16-week program requiring the demonstration of an acceptable level of teaching performance in the areas of planning and preparation, enhancing the learning environment, teaching for student learning, and professionalism. Multiple methods of assessment are used and evidence collected to provide a view of the teacher candidate’s skills and dispositions. These methods include direct obser-
Admission to major and Professional Education is granted by the Advising Office, in Elementary Education. Students must have a 3.0 GPA in STEM related courses.

Department Requirements:

1. A cumulative GPA of 3.00 or higher; grades of “C” or higher in all program requirements.
2. Admission to Professional Education.
3. Completion of all professional education course work.
4. Completion and validation of formal application materials one year prior to student teaching semester.
5. Approval of placement by school district administration, a mentor teacher, and Director of the Office of Field and International Experience, and completion of Minnesota State Police Background check materials.

Application material and specific deadline dates are available online at http://ed.mnsu.edu/filed/studentteaching/applications.html

EEC 463 Elementary Student Teaching I and EEC 473 Student Teaching Elementary II make up a year-long student teaching experience. Year-long student teaching placements are consecutive and take place during the last two semesters in the same one classroom. These typically take place in our professional development schools.

Study abroad experiences may be available during student teaching. Selection is based on personal interview, faculty recommendation, and grade point average. Students develop interpersonal communication skills and dispositions for living in a global society. Student participating in study abroad opportunities will be required to complete course requirements in a shorter timeframe, but they are compatible with the year-long student teaching experience. Additional fees will be incurred with participation in student teaching abroad programs.

Teacher Licensure (118 Armstrong Hall)

Coordinator: Marisel Riquelme

The University recommends licensure to a state upon satisfactory completion of a licensure program. However, licensure does not occur automatically through graduation and the awarding of a diploma. Students need to make application for a Minnesota teaching license at the close of the term in which they graduate. The College of Education, 118 Armstrong Hall, coordinates the licensure process. In addition to meeting all program requirements, the Basic Skills examination in reading, writing, and mathematics needs to be successfully completed, as well as the Elementary Pedagogy and Content examinations. Minnesota State Law requires that all candidates applying for initial licensure in this state be fingerprinted for national background checks. A conduct review statement will also need to be completed and signed. There is a $31 fee for the criminal background check. The fee for the issuance of a Minnesota teaching license is $57.

GPA Policy: All coursework listed in the elementary Education degree requires a cumulative GPA of 3.00 and a grade of “C” or higher. Students must achieve at least a 3.00 GPA in Professional Education courses.

University Requirements: University Requirements: A student may apply for admission to a combined undergraduate/graduate program. The student must complete at least 60 undergraduate credits before applying to a graduate program. A max of 12 credits at the 400/500-level may be double-counted toward both an undergraduate and graduate program. The graduate program advisor will authorize the double-counted courses for which a student may register. A student pays graduate tuition for a double-counted course. A student must be registered for a double-counted course in the same semester (e.g., no backdating of a 400-level to a 500-level is permitted).

Department Requirements: This is for undergraduates pursuing a STEM Certificate in Elementary Education. Students must have a 3.0 GPA in STEM related courses.

Admission to major and Professional Education is granted by the Advising Office, 117 Armstrong Hall.

FIELD EXPERIENCES. A major component of professional education coursework involves field experiences in area schools. These experiences are sequential in development, time commitment, and skills practice. Field experiences are required for EEC 215 and EEC 222W. During blocks students will have extensive field experience, Monday through Friday. Multiple methods of assessment are used to document competencies. These methods include direct observations of teaching activities by public school and University faculty, the use of videotaped lessons and activities for self-assessment, use of logs, participation in on-line activities, and participation in activities reflective of the professional responsibilities of teachers. The successful completion of each field experience is necessary for progression in the program. All field placements are initiated by the Office of Field Experience.

Background Checks. All field placements are initiated by the Office of Field Experience. Students involved in any field experience need to undergo a national criminal background check prior to admittance to professional education and prior to student teaching. Students are responsible for the fees associated with the background checks. This information is provided to districts for their determination of suitability for placement. The Office of Field Experience coordinates the background check process.
Variable for the elementary classroom

### Introduction to the role of standards in education, overview of general methodology

An early course for elementary education majors. Exploration of the career field, introduction to the role of standards in education, overview of general methodology and materials for teaching health.

### Minor Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEC 494</td>
<td>4</td>
</tr>
<tr>
<td>EEC 451</td>
<td>2</td>
</tr>
</tbody>
</table>

*EEC 451 is for students who hold a K-6 initial license.

### Mathematics Courses (Choose 3 - 4 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 112</td>
<td>College Algebra</td>
</tr>
<tr>
<td>MATH 203</td>
<td>Elements of Math III</td>
</tr>
<tr>
<td>STAT 154</td>
<td>Elementary Statistics</td>
</tr>
</tbody>
</table>

### COURSE DESCRIPTIONS

#### ED 101 (3) Introduction to Critical Race Theory in Education

This course will introduce students to the “Courageous Conversations” protocol designed to facilitate healthy conversations about race, racial equity and social justice. Students will be introduced to the five tenets of Critical Race Theory (CRT) and learn how to isolate race, as they reflect on their own personal life experiences. Students will read relevant articles, discuss current events and examine common historical practices within the United States. Students will actively engage in dialogue focused on the role race and racism have in perpetuating social disparities between dominant and marginalized racial groups, and actively engage in small and large group discussions.

Fall, Spring

#### EEC 092 (2) Reading Strategies

This course is designed to assist students in the development of specific reading strategies necessary for success with the literacy demands of the university classroom and beyond.

Fall, Spring

#### EEC 200 (3) Early Clinical Experience: Elementary School

A first course for elementary education majors. Experience in elementary classrooms, understanding children as learners, levels of instruction, general methods, and the teaching role.

Fall, Spring

#### EEC 205 (3) Service Learning: Society and the Environment

Community-based field experience to increase understanding for elementary education teachers about today’s complex environmental challenges. Students examine the interrelatedness of human society and the natural environment through a service learning experience at an area public school.

GE-10

#### EEC 210 (1-2)

Introduction to Elementary Education

An early course for elementary education majors. Exploration of the career field, introduction to the role of standards in education, overview of general methodology for the elementary classroom.

Variable

#### EEC 215 (4) Introduction to Educational Psychology and Instruction in the Elementary

This course provides students opportunities to: 1, understand the theories and contributions of major educational psychologist and theorists; 2, develop and demonstrate skills in educational technologies; 3, develop context for the knowledge and skills described above through activities/field experience.

Fall, Spring

#### EEC 220 (1-4) Field Study

This experience is designed jointly between student, advisor and a classroom teacher for the student to gain insight into the workings of the elementary classroom.

Variable

#### EEC 222W (3) Human Relations in a Multicultural Society

Study of interpersonal skills, motivation and group skills. Applied to educational settings. Meets State of Minnesota human relations requirement for teacher licensure.

Fall, Spring

#### EEC 225 (2) Technology Applications in Education

Provides the necessary knowledge base and instructional applications for using technology in the classroom.

#### EEC 230 (1-4) Individual Study

An experience/project designed by the student and advisor to provide for further study of a topic or component within the realm of elementary education. Could be exploratory in nature.

Variable

#### EEC 235 (1-4) Independent Study

Student directed learning, project jointly determined between student and advisor.

Variable

#### EEC 240 (1-4) Research

An opportunity to truly research an area within elementary education to provide a more in depth understanding.

Variable

#### EEC 250 (1-4) Internship

An opportunity to work in an elementary classroom under the direction of the classroom teacher.

Variable

#### EEC 300 (1-4) Seminar: Children’s Literature

Introduction to children’s literature, both current and classic works. Exploration of authors, genres, and illustrations. Selection, evaluation, and use with K-6 children.

Variable

#### EEC 301 (1-2) September School Experience

#### EEC 302 (1) Extended School Experience

Individually-designed field experience in an elementary education classroom. Variable credits for 30 hours of practical experience in consultation with academic advisor and cooperating classroom teachers.

#### EEC 303 (1) Classroom Methods

Presentation and experience of creative, active learning methods for teaching in the elementary education classroom.

#### EEC 310 (1-4) Individual Studies: Health for Elementary Teachers

The course is designed to prepare the elementary classroom teacher with methods and materials for teaching health.

Variable

#### EEC 315 (1-4) Individual Study: Drug/Alcohol Education

This is a course jointly designed by the student and advisor to address the State of Minnesota requirements concerning drug/alcohol education for licensure.

Variable

#### EEC 316 (1-4) Field Study: Math for Elementary Students

The purpose of this course is to prepare elementary level mathematics teachers to use appropriate content, materials, and methods in teaching.

Variable

#### EEC 317 (1-4) Field Study: Math Grades 1-6

This course is designed to provide students with the necessary math content for successful math instruction in the elementary classroom.

Variable
EEC 318 (1-4) Field Studies: Math Grades 7-8
This course is designed to provide math content to assist the middle school level math educator.
Variable

EEC 321 (1) Literacy Field Experience
Experiences in elementary classrooms.
Co-requisite: EEC 320, EEC 334, EEC 355
Fall, Spring

EEC 322 (3) Science/Health in the Elementary School
Designed to help future teachers understand the role of science education in the school curriculum and to become familiar with some of the trends, issues and problems associated with it.
Prerequisite: EEC 333
Fall, Spring

EEC 325 (1) Classroom Management I
Basic methods and approaches for organizing the classroom for instruction and for addressing minor misbehaviors.
Fall, Spring

EEC 330 (1-4) Individual Study: Social Studies in the Elementary School
This course is designed to prepare the elementary classroom teacher to select and organize content, materials, activities, procedures for effective instruction in the area of social studies.
Variable

EEC 331 (1-4) Individual Study: History for Elementary Teachers
This course is designed to prepare the elementary classroom teacher with the necessary content to teach American History.
Variable

EEC 332 (2) Developmental Reading
Principles and organization of the reading program. Instructional materials and procedures. This course does not meet requirement for elementary education.
Fall

EEC 333 (2) Classroom Learning Theory
Focus on principles of psychology and techniques of learning—behavioristic, cognitive, and humanistic.
Fall, Spring

EEC 336 (1-4) Individual Study: Geography for Elementary Teachers
This course is designed to prepare students with the necessary content knowledge to teach geography in the elementary classroom.
Variable

EEC 340 (1-4) Research: Science Elementary Teaching
This course is designed to prepare the elementary classroom teacher to use appropriate content, materials, and methods in teaching.
Variable

EEC 350 (1-4) Internship: Trends/Issues in Education
An opportunity to explore in an extended manner many of the current trends and issues within the elementary school setting to gain a more in-depth understanding.
Variable

EEC 352 (2) Reading in the Middle School
Development and definition of literacy in the middle school.
Prerequisite: EEC 333
Variable

EEC 368 (4) Preprimary Methods and Materials
Instructional strategies, theories of curriculum and development, integrated curriculum for 3, 4, and 5 year olds.
Co-requisite: EEC 369
Fall, Spring

EEC 369 (1) Preprimary Field Experience
Clinical experience to accompany EEC 368.
Co-requisite: EEC 368
Fall, Spring

EEC 400 (1-4) Seminar: Music Fundamentals
To provide the background content necessary for the elementary classroom teacher.
Variable

EEC 401 (1) Music for Elementary Teachers
To provide the methods and materials necessary to teach music in the elementary classroom.

EEC 402 (3) Introduction to Teaching the LEP Student
For teachers of students whose dominant language is other than English.
Variable

EEC 405 (1) Art for Elementary Teachers
This course is designed to provide necessary methods and materials for use in teaching art in the elementary classroom.
Variable

EEC 410 (3) Philosophy & Practices in the Middle School
The middle school concept, curriculum, and teaching methods.
Prerequisite: EEC 333
Fall, Spring

EEC 411 (2) Elementary Math Methods Primary
This course is designed to develop elementary teacher candidates' understanding of mathematics content, children's mathematical thinking, and creating high-cognitive demand tasks as well as cultivating an equity mindset that is needed to teach mathematics to increasing diverse student populations. This course will strengthen teacher candidates' understanding of number sense, place value, addition, and subtraction concepts taught in primary grade classrooms.
Fall, Spring

EEC 412 (3) Kindergarten Methods and Materials
Instructional strategies, theories of curriculum and development, integrated curriculum for kindergarten children.
Co-requisite: EEC 413 for early childhood education major only.
Fall, Spring

EEC 413 (1) Kindergarten Methods and Materials: Lab
Clinical experience to accompany EEC 412.
Co-requisite: EEC 413 for early childhood education majors only.
Fall

EEC 414 (2-4) Diagnosis and Corrective Instruction in Elementary Mathematics
Diagnostic teaching, evaluating deficiencies, skill analysis, use of case studies and tools of diagnosis.
Prerequisite: EEC 324
Variable

EEC 415 (1) Physical Education for Elementary Teachers
This course is designed to prepare the elementary classroom teacher with methods and materials for teaching physical education.
Variable

EEC 417 (3) Teaching Reading to ESL Students
This course presents the theoretical base for the reading process, strategies for vocabulary development, and methods for content area learning as applied to second language learners.
Spring

EEC 418 (2) Elementary School Science Activities
Identification of appropriate science equipment, process skills, concepts and instructional attitudes for science in the elementary school.
Prerequisite: EEC 322
Variable

EEC 420 (3) Reading Difficulties
Foundation level of knowledge concerning the characteristics, causes, diagnosis and treatment of reading difficulties.
Prerequisite: EEC 332 or EEC 334
Variable

EEC 421 (4) Multi-Tiered Systems of Support: Assessment & Interventions
Assessment (benchmarking, progress monitoring & diagnostic) and strategies for assisting struggling learners in reading and mathematics within the Response to Intervention (RTI) framework.
Co-requisite: EEC 424 and ENG 491
Fall, Spring
**ELEMENTARY EDUCATION CONTINUED**

**EEC 422W (4-5) Literacy Fundamentals**
This course explores young children’s (birth to age 8) development of emergent literacy skills related to reading, writing, visual representation, speaking, listening, and viewing. The role of parents and early childhood learning environments are included. Observation, assessment, and strategies to promote emergent literacy are discussed. The use of appropriate children’s literature is promoted.
Fall, Spring

**EEC 423 (1) Field Experience for the Diverse Classroom I**
A field experience focused on diagnosis and remediation of the struggling reader.
Fall, Spring

**EEC 424 (3) Special Education and Behavioral Needs in Elementary Education**
Provides elementary education majors with information about special needs students in the regular classroom. Includes strategies for effectively teaching and managing behavior of these students.
Fall, Spring

**EEC 425 (1-4) Individual Study: Reading for Elementary**
This course is designed to prepare the elementary classroom teacher with the methods and materials for teaching reading to the K-6 student.
Variable

**EEC 426 (1-4) Research: Utilizing Media for Teaching**
This course is designed to prepare the elementary classroom teacher to use media effectively for instruction.
Variable

**EEC 427 (2) Instructional Planning and Assessment**
Students will develop the knowledge they need to understand the difference between assessment and evaluation; what validity, reliability and bias mean; the uses, advantages and limitations of different types of assessments and how to interpret their results. Students will also design assessments and scoring instruments.
Prerequisite: EEC 333
Corequisite: EEC 320, EEC 321, EEC 334, EEC 355
Fall, Spring

**EEC 428 (3) Teaching Reading and Writing in the Content Areas**
Present strategies for teaching reading and writing knowledge, attitudes and skills in the various teaching content areas.
Fall

**EEC 430 (2) The Elementary Classroom**
Historical foundations, influencing factors, issues. Projects in curricular organization. Deals with educational values. Awareness of current elementary school issues.
Prerequisite: Admission to Professional Education
Variable

**EEC 431 (3) Elementary Math Methods Intermediate**
This course is designed to develop elementary teacher candidates’ understanding of mathematics content, children’s mathematical thinking, and high-leverage practices as well as cultivating an equity mindset that is needed to teach mathematics to increasing diverse student populations. This course will strengthen teacher candidates’ understanding of multiplication, division, fraction, decimal and algebraic concepts taught in intermediate classrooms.
Fall, Spring

**EEC 432 (3) Social Studies in Elementary School**
Selection and organization of content, materials, activities, and procedures for the elementary classroom.
Prerequisite: Admission to Professional Education, EEC 333
Corequisite: EEC 321, EEC 334, EEC 335, EEC 355
Fall, Spring

**EEC 436 (3) Engineering for Elementary Teachers**
This course provides hands-on experiences through which students learn the basics of engineering. Topics include the engineering design process, reverse engineering, and engineering fields/professions. The course focuses on the engineering strand of the K-6 Minnesota State Science Standards.
Summer

**EEC 437 (1) Field Experience for the Diverse Classroom II**
Science/Health/Sp Ed experience in elementary classrooms.
Corequisite: EEC 322, EEC 324, EEC 407, EEC 421, EEC 444
Fall, Spring

**EEC 438 (1) Creating Environments for Learning**
Teacher candidates will identify specific strategies for creating classroom environments that support all children. Emphasis will be placed on establishing classroom procedures, routines, and practices that align with, and provide a foundation for, racial equity, social justice, and cultural competence.
Fall, Spring

**EEC 443 (1) Primary Grade Mathematics and Science Lab**
Clinical field experience to accompany EEC 442. Students will observe and teach primary age children. Requires 30 contact hours in an primary grade classroom.
Prerequisite: EEC 440, EEC 441, EEC 442
Fall

**EEC 444 (4) Elementary Science I**
This course is designed to provide students with a variety of experiences and teaching methodologies for teaching life science topics in the elementary classroom.
Prerequisite: BIOL 100
Variable

**EEC 445 (4) Literacy Methods for the Intermediate Classroom**
A theoretical and practical methods course pertaining to children’s intermediate literacy development.
Fall, Spring

**EEC 446 (3) Educational Technology-STEM**
Elementary education teacher candidates will study the technology skills needed in order to become effective STEM teachers.
Variable

**EEC 450 (1-14) Internship: Elementary Student Teaching**
Student teaching in the elementary school. Includes weekly seminar.
Variable

**EEC 451 (1-2) Middle Level Practicum**
The practicum consists of a minimum of four weeks during which candidates teach in the specific academic subject for the new licensure field. Those holding a license at the elementary level complete the experience with students in grades 7 or 8. Those who hold a license at the secondary level complete the experience with students in grades 5 or 6. The focus is on applying the standards of effective practice in teaching students, demonstrating both knowledge of the academic subject and students as well as the pedagogical skills required at the middle level. Candidates for licensure at the middle school level will apply the Standards of Effective Practice in a new academic subject when working with learners in grades 5 - 6 (for those who hold a secondary license) or in grades 7 - 8 (for those who hold an elementary license).

**EEC 454 (4) Elementary Science II**
This course is designed to provide students with a variety of experiences and teaching methodologies for teaching physical science topics in the elementary classroom.
Prerequisite: PHYS 101
Variable

**EEC 456 (1) Special Topics: STEM for Elementary Teachers**
This course provides students with familiarity in regard to emerging topics of importance in elementary STEM education.
Variable

**EEC 463 (1) Elementary Student Teaching I**
This course is the first semester of elementary (K-6) student teaching. It includes lesson planning, small and whole group teaching, designing assessments and planning interventions.
Fall, Spring

**EEC 467 (3) Integrating Science, Technology, Engineering, and Math for Elementary Teachers**
In this pedagogy course, elementary teachers will learn to integrate the four disciplines of STEM: science, technology, engineering, and math.
Prerequisite: EEC 436
Variable

**EEC 470 (1) Field Experience in Reading and STEM**
Field experience focusing on the struggling reader and instruction in an integrated approach to teaching science, technology, engineering, and math (STEM).
Fall, Spring
Corequisite: EEC 421, EEC 424, EEC 491
ENGLISH BFA, BA, BS, CERTIFICATE AND MINORS

The department’s undergraduate programs prepare graduates for a wide variety of careers, including middle and high school English teaching, freelance writing, literary publishing and editing, and technical and professional writing, publishing, and editing. Some English majors choose to go on for master’s or doctoral degrees that will qualify them to teach at the college level. Others find careers in a wide range of fields in business, government, and nonprofit organizations. Still others find that their English degrees are ideal gateways into training for professions such as law.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

Admission to Major is granted by the department. ENG 101: Composition must be completed before admission to the major.

GPA Policy. Candidates for the major degrees in the department must maintain a 2.5 grade-point average in all coursework in the major field, in addition to the 2.0 overall average required by the university for graduation. Students must earn a “C” or better for a course to apply to their major or minor.

P/N Grading Policy. Courses leading to a major or minor in English may not be taken on a P/N basis, except where P/N is mandatory.

Supporting Coursework. Since the different programs in English complement a wide range of different fields of study, English majors should consult regularly with their faculty advisors regarding choice of a minor and other elective courses beyond the major or minor. In consultation with faculty advisors, students may choose a second major instead of a minor.

English Majors and Minors. Students majoring in English may also elect one of the following minors: film studies, linguistics, and technical communication. However, a course used to meet the requirements of an English major, or certificate cannot also be used to meet the requirements of another English major, minor, or certificate. Consequently, because the technical communications programs share so many required courses, students may elect only one of them. BA English Studies Tech-
nical Communications Emphasis, BS English Technical Communications Option, the Certificate in Technical Communications, or the Technical Communications Minor.

Residency Requirements. Students pursuing a major and/or minor in the Department of English must complete at least 50% (half) of the required credits for the major and/or minor at Minnesota State Mankato. Programs within the Department may establish more stringent residency requirements.

Credit for Prior Learning. Students pursuing a major and/or minor in the Department of English may receive no more than 33% (one-third) of the required credits for the major and/or minor through credit for prior learning. Programs within the Department may establish more stringent credit for prior learning requirements.

Independent Work. Students pursuing a major or minor in the Department of English may earn no more than 33% (one-third) of the required credits through supervised independent work such as independent studies or internships, not including capstone experiences. Programs within the Department may establish more stringent independent work requirements.

COMMUNICATION ARTS AND LITERATURE EDUCATION BS

Required General Education
CMST 102 Public Speaking (3)
CMST 310 Performance of Literature (4)
HITH 240 Drug Education (3)
KSP 220W Human Relations in a Multicultural Society (3)
MASS 110 Introduction to Mass Media (4)

Literature, Humanities, Film (choose 4 credits)
Choose one course in literature, or in humanities, or in film from the following list:
ENG 110 Introduction to Literature (4)
ENG 112W Introduction to Poetry and Drama (4)
ENG 113W Introduction to Prose Literature (4)
ENG 118 Diverse Cultures in Literature and Film (4)
ENG 125 International Children's Literature (4)
ENG 146 Introduction to Shakespeare (4)
ENG 211W Perspectives in Literature and Human Diversity (4)
ENG 212W Perspectives in World Literature (4)
ENG 213W Perspectives: Ethics and Civic Responsibility in Literature (4)
ENG 215 Topics in Literature (2-4)
ENG 242W Introduction to Creative Writing (4)

Any 100-200 Film course. Any 100-200 Humanities course.

Major Common Core
Only two credits of CMST 201 are required. Total Major Common Core credits: 34. Total Major Restricted Elective credits: 13. Total credits in program: 47.
CMST 101W Interpersonal Communication (4)
CMST 201 Small Group Communication (2-4)
CMST 215 Effective Listening (2)
CMST 421 Communication Studies Teaching and Coaching Methods (1-4)
ENG 275W Introduction to Literary Studies (4)
ENG 285 Practical Grammar (2)
ENG 327 American Literature to 1865 (4)
ENG 321 British Literature: 1785-Present (4)
ENG 362 Teaching English: Writing, Grades 5-12 (4)
ENG 381 Introduction to English Linguistics (4)

Major Restricted Electives
British literature (choose 4 credits)
ENG 320 British Literature to 1785 (4)
ENG 321 British Literature: 1785-Present (4)
World literature (choose 2 credits)
Only two credits of world literature are required.
ENG 433W Selected Studies in World Literature (4)
ENG 435 The World Novel (2-4)
ENG 461 World Literature for Children and Young Adults (2-4)
Young Adult literature (choose 3 credits)
Only three credits of young adult literature are required.
ENG 463 Adolescent Literature (3)
ENG 464 Teaching Literature in the Middle School (3)
Shakespeare (choose 2 credits)
ENG 405 Shakespeare: Comedies and Histories (2)
ENG 406 Shakespeare: Tragedies (2)

Major Unrestricted Electives
Literature Elective (3-4 credits). Choose a course from the list below in consultation with an advisor. Courses may not be double-counted from other categories.
ENG 316 Topics in Literature (1-4)
ENG 318 Multicultural Literature (2-4)
ENG 320 British Literature to 1785 (4)
ENG 321 British Literature: 1785-Present (4)
ENG 325 Children's Literature (3)
ENG 328 American Literature: 1865 to the Present (4)
ENG 402W Gender in Literature (4)
ENG 403W Selected Authors (4)
ENG 405 Shakespeare: Comedies and Histories (2)
ENG 406 Shakespeare: Tragedies (2)
ENG 410 21st Century Literature (1-4)
ENG 425 Topics in Children's Literature (2-4)
ENG 426 Selected Periods (2-4)
ENG 432 Selected Studies in the Novel (2-4)
ENG 433W Selected Studies in World Literature (4)
ENG 435 The World Novel (2-4)
ENG 436W Native American Literature (4)
ENG 437W Latina/o Literature (2-4)
ENG 438W African American Literature (4)
ENG 461 World Literature for Children and Young Adults (2-4)
ENG 463 Adolescent Literature (3)
ENG 464 Teaching Literature in the Middle School (3)
ENG 492 Selected Topics (2-4)
ENG 495 Special Studies (1-4)

Other Graduation Requirements
See the Secondary 5-12 & K-12 Professional Education section of the bulletin for admission requirements for professional education and for a list of required professional education courses. Students will take two credits of general electives to meet the 120-credit degree requirement.

Required Minor: None.

CREATIVE WRITING BA

Major Common Core
Required Writing and Reading courses
Choose 20 Credit(s).
English 242W is a prerequisite for ENG 340 or 341. ENG 340 or 341 is a prerequisite for any 300-level workshop. ENG 344 and either 342 or 343 are prerequisites for a 400-level practicum course. A 400-level practicum is a prerequisite for ENG 447 Creative Writing Capstone.

ENG 242W Introduction to Creative Writing (4)
ENG 275W Introduction to Literary Studies (4)
ENG 344 Beginning Poetry Workshop (4)
ENG 447 Creative Writing Capstone (4)
ENG 448 Contemporary Writers (4)

Major Restricted Electives
British literature (choose 4 credits)
ENG 320 British Literature to 1785 (4)
ENG 321 British Literature: 1785-Present (4)
American literature (choose 4 credits)
ENG 327 American Literature to 1865 (4)
ENG 328 American Literature: 1865 to the Present (4)
World literature (choose 4 credits)
ENG 433W Selected Studies in World Literature (4)
ENG 435 The World Novel (2-4)
Major Author courses (choose 4 credits)
Emphasis must be on three or fewer authors.
ENG 403W Selected Authors (4)
ENG 405 Shakespeare: Comedies and Histories (2)
ENG 406 Shakespeare: Tragedies (2)
ENG 449 Topics in Creative Writing Form and Technique (2-4)
Theory/Criticism or linguistics (choose 4 credits)
ENG 381 Introduction to English Linguistics (4)
ENG 441 Literary Theory and Criticism (4)
FILM 416 Film Theory and Criticism (4)
Form and Technique courses (choose 4 credits)
ENG 340 or 341 must be taken before any 300-level workshop.
ENG 340 Form and Technique in Prose (4)
ENG 341  Form and Technique in Poetry [4]

Elective Beginning Workshops (choose 4 credits)
Along with ENG 344, ENG 342 or 343 must be taken before a 400-level practicum course.
ENG 342  Beginning Creative Nonfiction Workshop [4]
ENG 343  Beginning Fiction Workshop [4]

Practicum courses (choose 4 credits)
Acceptable sections of 449, 494, and 495 will be workshops.
ENG 446  Screenwriting Workshop [4]
ENG 449  Topics in Creative Writing Form and Technique [2-4]
ENG 494  English Workshop [1-6]
ENG 495  Special Studies [1-4]

Other Graduation Requirements
The BFA in creative writing requires 8 credits of a single modern language.

CREATIVE WRITING BA

Major Common Core
Required Writing and Reading courses (choose 44 Credits)
English 242W is a prerequisite for ENG 340 or 341. ENG 340 or 341 is a prerequisite for any 300-level workshop. ENG 344 and either 342 or 344 are prerequisites for a 400-level practicum course. A 400-level practicum is a prerequisite for ENG 447 Creative Writing Capstone.

ENG 242W  Introduction To Creative Writing [4]
ENG 275W  Introduction to Literary Studies [4]
ENG 320  British Literature to 1785 [4]
ENG 327  American Literature to 1865 [4]
ENG 328  American Literature: 1865 to the Present [4]
ENG 340  Form and Technique in Prose [4]
ENG 341  Form and Technique in Poetry [4]
ENG 344  Beginning Poetry Workshop [4]
ENG 447  Creative Writing Capstone [4]
ENG 448  Contemporary Writers [4]

Major Restricted Electives
World Literature (choose 4 credits)
ENG 435  The World Novel [2-4]

Major Author courses (choose 8 credits)
Emphasis must be on three or fewer authors.
ENG 403W  Selected Authors [4]
ENG 405  Shakespeare: Comedies and Histories [2]
ENG 406  Shakespeare: Tragedies [2]
ENG 449  Topics in Creative Writing Form and Technique [2-4]
Theory/Criticism or Linguistics (4 credits required)
ENG 381  Introduction to English Linguistics [4]
ENG 441  Literary Theory and Criticism [4]

Film 416  Film Theory and Criticism [4]
Elective Beginning Workshops (4 credits required)
Along with ENG 344, ENG 342 or 343 must be taken before a 400-level practicum course.
ENG 342  Beginning Creative Nonfiction Workshop [4]
ENG 343  Beginning Fiction Workshop [4]

Practicum courses (4 credits required)
Acceptable sections of 449, 494, and 495 will be workshops.
ENG 446  Screenwriting Workshop [4]
ENG 449  Topics in Creative Writing Form and Technique [2-4]
ENG 494  English Workshop [1-6]
ENG 495  Special Studies [1-4]

Other Graduation Requirements
The BFA in creative writing requires 8 credits of a single modern language.

CREATIVE WRITING MINOR

Core
Form & Technique
Choose 4 Credit(s)
ENG 340  Form and Technique in Prose [4]
ENG 341  Form and Technique in Poetry [4]

Writing Workshops
Choose 8 Credit(s).
(To count in this category, ENG 449 must be offered as a workshop.)
ENG 342  Beginning Creative Nonfiction Workshop [4]
ENG 343  Beginning Fiction Workshop [4]
ENG 344  Beginning Poetry Workshop [4]
ENG 442  Advanced Creative Nonfiction Workshop [4]
ENG 443  Advanced Fiction Workshop [4]
ENG 444  Advanced Poetry Workshop [4]
ENG 446  Screenwriting Workshop [4]
ENG 449  Topics in Creative Writing Form and Technique [2-4]

Electives
Other Creative Writing and Literature Courses
Choose 8 Credit(s).
Courses may not be double-counted in different categories. Courses must be at the 300/400 level.
ENG 316  Topics in Literature [1-4]
ENG 318  Multicultural Literature [2-4]
ENG 320  British Literature to 1785 [4]
ENG 325  Children's Literature [3]
ENG 327  American Literature to 1865 [4]
ENG 328  American Literature: 1865 to the Present [4]
ENG 340  Form and Technique in Prose [4]
ENG 341  Form and Technique in Poetry [4]
ENG 342  Beginning Creative Nonfiction Workshop [4]
ENG 343  Beginning Fiction Workshop [4]
ENG 344  Beginning Poetry Workshop [4]
ENG 381  Introduction to English Linguistics [4]
ENG 402  Gender in Literature [2-4]
ENG 403  Selected Authors [2-4]
ENG 405  Shakespeare: Comedies and Histories [2]
ENG 406  Shakespeare: Tragedies [2]
ENG 410  21st Century Literature [1-4]
ENG 425  Topics in Children's Literature [2-4]
ENG 426  Selected Periods [2-4]
ENG 432  Selected Studies in the Novel [2-4]
ENG 435  The World Novel [2-4]
ENG 436  Native American Literature [2-4]
ENG 437  Latina/o Literature [4]
ENG 438  African American Literature [2-4]
ENG 441  Literary Theory and Criticism [4]
ENG 442  Advanced Creative Nonfiction Workshop [4]
ENG 443  Advanced Fiction Workshop [4]
ENG 444  Advanced Poetry Workshop [4]
ENG 446  Screenwriting Workshop [4]
ENG 448  Contemporary Writers [4]
ENG 449  Topics in Creative Writing Form and Technique [2-4]
ENG 461  World Literature for Children and Young Adults [2-4]
ENG 463  Adolescent Literature [3]
ENG 481  History of the English Language [4]
ENG 492  Selected Topics [2-4]
ENG 495  Special Studies [1-4]

ENGLISH LITERATURE BA

Major Common Core
ENG 275  Introduction to Literary Studies [4]

Major Restricted Electives
Theory (choose 4 credits)
ENG 441  Literary Theory and Criticism [4]
Film 416  Film Theory and Criticism [4]
Shakespeare (choose 2-4 credits)
ENG 405  Shakespeare: Comedies and Histories [2]
ENG 406  Shakespeare: Tragedies [2]

Cultural Diversity (choose 2-4 credits)
ENG 318  Multicultural Literature [2-4]
ENG 412W  Arab American Literature [4]
ENG 436W  Native American Literature [2-4]
ENG 437W  Latina/o Literature [2-4]
ENG 438W  African American Literature [2-4]
Choose an additional 8 credits from any 300/400 English courses (except ENG 325, ENG 362, ENG 463, or ENG 464)

Other Graduation Requirements

Language (8 credits)

Total 40 credits required for major.

Minor

Yes. See your faculty advisor.

ENGLISH MINOR

Core

ENG 275W Introduction to Literary Studies (4)

Elective

Literature Surveys

Students must take a minimum of 8 credits (two courses) from 2 of the 3 categories (British, American, and World).

British Literature Survey (choose 0-4 credits)

ENG 320 British Literature to 1785 (4)
ENG 321 British Literature: 1785-Present (4)

American Literature Survey (choose 0-4 credits)

ENG 327 American Literature to 1865 (4)
ENG 328 American Literature: 1865 to the Present (4)

World Literature Survey (choose 0-4 credits)

ENG 433W Selected Studies in World Literature (4)
ENG 435 The World Novel (2-4)

Choose an additional 8 credits from any 300/400 English courses (except ENG 325, ENG 362, ENG 463, or ENG 464)

TEACHING ENGLISH AS A SECOND LANGUAGE MINOR

Minor Core

ENG 381 Introduction to English Linguistics (4)
ENG 482 Teaching English Pronunciation and Discourse (4)
ENG 484 Pedagogical Grammar & Academic English (4)
ENG 485 Language and Culture in TESL (4)
ENG 486 Theories of Teaching ESL (4)
ENG 487 Methods of Teaching ESL (4)
ENG 489 Policies and Programs in ESL (4)

A teaching licensure student must also complete the professional education requirements in order to get a K-12 teaching license. Please see the ESL licensure advisor for the appropriate licensure program.

Required for Minor: None.

Required Minor: None.
satisfactorily complete a student teaching component of full-day experiences for one academic semester, or its equivalent, including both elementary and secondary education levels with students of limited English proficiency.

**TEACHING ENGLISH AS A SECOND LANGUAGE, NON-LICENSURE MINOR**

**Minor Core**

- ENG 381 Introduction to English Linguistics (4)
- ENG 482 Teaching English Pronunciation and Discourse (4)
- ENG 484 Pedagogical Grammar & Academic English (4)
- ENG 485 Language and Culture in TESL (4)
- ENG 486 Theories of Teaching ESL (4)
- ENG 487 Methods of Teaching ESL (4)

A teaching licensure student must also complete the professional education requirements in order to get a K-12 teaching license. Please see the ESL licensure advisor for the appropriate licensure program.

**LINGUISTICS MINOR**

**Restricted Electives** (choose 8-16 credits from the following)

- ENG 381 Introduction to English Linguistics (4)
- ENG 481 History of the English Language (4)
- ENG 482 Teaching English Pronunciation and Discourse (4)
- ENG 484 Pedagogical Grammar and Academic English (4)
- ENG 485 Language and Culture in TESL (4)
- ENG 494 English Workshop (selected sections, 1-6)
- ENG 495 Special Studies (1-4)

ENG 494 or 495 may count when topic is appropriate (consult with your advisor).

**Unrestricted Electives** (0-8 credits)

(choose up to 8 credits from the following courses)

- CDIS 201 Observation of Human Communication (3)
- CDIS 290 Introduction to Communication Disorders (3)
- CDIS 312 Speech and Language Development (3)
- CDIS 392 Phonetics (3)
- CDIS 402 Child Language Disorders (2)
- CDIS 403 Child Language Disorders Lab (1)
- CDIS 438 Speech Sound Disorders (3)
- ENG 285 Practical Grammar (2)
- FREN 323 French Phonetics & Applied Linguistics (2-4)
- FREN 404 French Syntax (2-4)
- GER 445 Topics in German Linguistics (1-4)
- SPAN 301 Topics in Language (1-4)
- SPAN 401 Topics in Linguistics (1-4)

**TECHNICAL COMMUNICATION BS**

**Major Core**

**Required Introductory Course** (choose 4 credits)

- ENG 271W Technical Communication (4)
- ENG 272W Business Communication (4)

**Required Courses**

- ENG 474W Research and Writing Technical Reports (4)
- ENG 475VW Editing Technical Publications (4)
- ENG 498W Internship (3-4)

**Documentation** (choose 4 credits)

- ENG 476 Online Documentation (4)
- ENG 477W Technical Documentation, Policies, and Procedures (4)

**Major Restricted Electives** (18-19 credits)

(Choose 8 credits, may not include the advanced course chosen above.)

- ENG 462 Document Design (4)
- ENG 466 Usability (4)
- ENG 467 International Technical Communications (1-4)
- ENG 469 Project Management in Technical Communication (4)
- ENG 471 Visual Technical Communication (4)
- ENG 472 Topics in Technical Communication (1-4)
- ENG 473 Desktop Publishing (4)
- ENG 474W Research and Writing Technical Reports (4)
- ENG 476 Online Documentation (4)
- ENG 477W Technical Documentation, Policies, and Procedures (4)
- ENG 478 Technical and Scientific Literature (4)

**Other Graduation Requirements**

English Department policy does not permit double-counting of courses for any English major or minor.

**TECHNICAL COMMUNICATION CERTIFICATE**

This certificate program prepares participants for careers in technical communication, emphasizing current industry practice in the researching, writing, editing, and publishing of print or online technical documents. Required coursework emphasizes the development of student skills in audience analysis, problem solving, and collaboration within the workplace as well as the production of test and graphics for print and online publication. Special topics courses focus on industry practice in standards and document design, document design, web development, usability testing, international communication, and other topics of importance to technical communicators.

**Major Common Core**

- ENG 471W Visual Technical Communication (4)
- ENG 475 Editing Technical Publications (4)
- ENG 476W Technical Documentation, Policies, and Procedures (4)

**Major Restricted Electives** (choose 12 credits)

- ENG 462 Document Design (4)
- ENG 466 Usability (4)
- ENG 469 Project Management in Technical Communications (4)
- ENG 472 Topics in Technical Communication (1-4)
- ENG 473 Desktop Publishing (4)
- ENG 474W Research and Writing Technical Reports (4)
- ENG 476 Online Documentation (4)
- ENG 477W Technical Documentation, Policies, and Procedures (4)
- ENG 480 Proposals (4)

**Other Graduation Requirements**

English Department policy does not permit double-counting of courses for any English major or minor.

**TECHNICAL COMMUNICATION MINOR**

**Minor Core**

**Required introductory course for minor** (choose 4 credits)

- ENG 271W Technical Communication (4)
- ENG 272W Business Communication (4)

**Required advanced course for minor** (choose 4 credits)

- ENG 474W Research and Writing Technical Reports (4)
- ENG 475 Editing Technical Publications (4)
- ENG 476 Online Documentation (4)
- ENG 477W Technical Documentation, Policies, and Procedures (4)

**Electives for Minor**

(Choose 8 credits, may not include the advanced course chosen above.)

- ENG 462 Document Design (4)
- ENG 466 Usability (4)
- ENG 469 Project Management in Technical Communication (4)
- ENG 471W Visual Technical Communication (4)
- ENG 472 Topics in Technical Communication (1-4)
- ENG 473 Desktop Publishing (4)
- ENG 474W Research and Writing Technical Reports (4)
- ENG 475 Editing Technical Publications (4)
- ENG 476 Online Documentation (4)
- ENG 477W Technical Documentation, Policies, and Procedures (4)
- ENG 478 Technical and Scientific Literature (4)
- ENG 479 Rhetorical Theory Applied to Technical Documents (4)
- ENG 480 Proposals (4)
Fall

This course helps students develop a flexible writing process, increase their rhetorical awareness, research effectively, compose argument-driven texts, represent others’ ideas in multiple ways, reflect on their writing development, and polish their work.

Spring

ENG 104 (4) Stretch Composition II
This course helps students gain greater facility with the writing process, expand their rhetorical awareness, research effectively, compose argument-driven texts, represent others’ ideas in multiple ways, reflect on their writing development, and polish their work.

ENGLISH CONTINUED

WRITING STUDIES MINOR

Minor Common Core
ENG 201W Intermediate Writing (4)
ENG 301W Advanced Writing (4)

Minor Electives
[choose 12 credits from the following courses]
ENG 285 Practical Grammar (2)
ENG 430 Independent Reading (1-4)
ENG 442 Advanced Creative Nonfiction Workshop (4)
ENG 453 Topics in Rhetoric and Composition (4)
ENG 454 Persuasive Writing on Public Issues (4)
ENG 455 Advanced Writing Workshop (4)

INTERDISCIPLINARY MINOR IN COMMUNICATIONS

This interdisciplinary minor is for students who wish to enhance their communication skills for use in business and other professional settings. Students completing this minor will develop an understanding of contexts and rhetorical strategies for oral and written communication among professionals. Students will also develop their own ability to communicate through written texts, oral communication, and electronic formats. These skills are highly desired by employers in a wide range of business, government, and nonprofit organizations. Students may major in any of the programs affiliated with this minor, but the courses taken for the minor will not count toward the major. Students must earn a “C” or better in English courses in order to apply them to the minor.

Minor Core
CMST 312 Professional Communication & Interviewing (4)
CMST 412 Organizational Communication (4)
ENG 271W Technical Communication (4)
ENG 474 Research and Writing Technical Reports (4)

Minor Electives
Choose 11 credits from the following programs. At least one course must be at the 3/400 level.
CMST 225 Communicating With/Through Technology (4)
CMST 333 Communication & Community (4)
CMST 333 Advanced Public Communication (4)
CMST 445 Conflict Management (4)
ENG 201W Visual Technical Communication (4)
ENG 271W Technical Communication (4)
ENG 474 Research and Writing Technical Reports (4)
ENG 475 Editing Technical Publications (4)
IT 100 Introduction to Computing and Applications (4)
RPS 377 Public Relations (3)
RPS 465 Event Management (3)
URBS 150 Sustainable Communities (3)
URBS 230 Community Leadership (3)
URBS 412 Public Information and Involvement (3)

COURSE DESCRIPTIONS

ENG 098 (2-4) Integrated Reading and Writing (P/N Only)
This course offers instruction in, and practice with, critical reading and writing strategies. Credit does not apply toward graduation. P/N only.

ENG 100 (4) Introduction to Composition
A writing course that progresses from personal writing to composing essays, learning about Shakespeare’s language, historical situations, and world views. Credit does not apply toward graduation. P/N only.

ENG 101 (4) Composition
This course helps students develop a flexible writing process, practice rhetorical awareness, read critically to support their writing, research effectively, represent others’ ideas in multiple ways, reflect on their writing practices, and polish their work. GE-1A

ENG 103 (4) Stretch Composition I
This course helps students develop a flexible writing process, increase their rhetorical awareness, acquire critical reading skills to support their writing, represent others’ ideas in multiple ways, reflect on their writing development, and polish their work. Fall

ENG 104 (4) Stretch Composition II
This course helps students gain greater facility with the writing process, expand their rhetorical awareness, research effectively, compose argument-driven texts, represent others’ ideas in multiple ways, reflect on their writing development, and polish their work. Fall

EN 107 (1-4) English Writing for Academic Purposes
This writing course focuses on the processes and products of writing for academic purposes in the American context, with particular interest in the structural variation among academic genres. This course is intended for non-native speakers of English. This course does not meet General Education requirements.
Prerequisite: TOEFL iBT score of 89 or above, or completed ESL 136 with a “C” or higher, or the equivalent.
On Demand: Fall, Spring, Summer

ENG 110 (4) Introduction to Literature
Study and analysis of elements of prose, poetry and drama in English from earlier periods through contemporary. Emphasizes critical reading of literature. May include such genres as short story, novel, memoir, nonfiction, biography, autobiography, poem, play, screenplay.
GE-6

ENG 112W (4) Introduction to Poetry and Drama
Study and analysis of elements of poetic and dramatic literature in English, including translations, from earlier periods through contemporary. Emphasizes critical reading of and writing about literature.
Prerequisite: ENG 101
WI, GE-6

ENG 113W (4) Introduction to Prose Literature
Study and analysis of prose literature in English from earlier periods through contemporary. Emphasizes critical reading of and writing about literature.
Prerequisite: ENG 101
WI, GE-6

ENG 118 (4) Diverse Cultures in Literature and Film
Students in this course learn about diverse peoples and societies by reading and writing about novels, non-fiction, poetry, and/or films.
Variable
GE-6, GE-7
Diverse Cultures - Purple

ENG 125 (4) International Children’s Literature
The course purpose is to increase students’ knowledge of international children’s literature that is written in English or translated into English. Students will be introduced to individual books, authors, and methods of responding to literature. This course studies children’s literature set in countries such as Afghanistan, WWVII Germany, and the Dominican Republic.
Variable
GE-6, GE-8
Diverse Cultures - Purple

ENG 146 (4) Introduction to Shakespeare
This course will introduce students to Shakespeare’s plays (histories, tragedies, and comedies) and sonnets. Students will read, analyze, and develop interpretations of these works, learning about Shakespeare’s language, historical situations, and world views.
Variable
GE-6, GE-8

ENG 201W (4) Intermediate Writing
Work on developing mastery of the rhetorical principles of planning, executing, and revising written texts. Emphasis on strengthening analytical writing, both expository and argumentative; valuable for writing on the job.
Prerequisite: ENG 101
WI, GE-2

ENG 207 (1-4) Special Topics in ESL
Special interest courses devoted to specific topics within the field of English as a Second Language. Topics vary, and the course may be retaken for credit under different topic headings.
Variable
ENG 211W (4) Perspectives in Literature and Human Diversity
Courses will explore various specialized topics in literature to increase understanding of literary contributions made by under-represented peoples, to develop critical thinking, reading, and writing skills, and to increase appreciation of the diversity of human experience. Typical courses include: Multicultural Literature, Women's Literature. May be repeated as topics change. 
Prerequisite: ENG 101
WI, GE-6, GE-7
Diverse Cultures - Purple

ENG 212W (4) Perspectives in World Literature
Courses will introduce students to works of literature from a variety of world cultures. Designed to increase knowledge of world cultures and appreciation and understanding of cultural differences in representation, and in seeing, believing, and being. Emphasizes critical thinking, reading, and writing. May be repeated with different topics.
Prerequisite: ENG 101
WI, GE-6, GE-8

ENG 213W (4) Perspectives: Ethics and Civic Responsibility
Courses will focus on some characteristic ways in which literature addresses and explores the ethical dimensions of citizenship and the relationships between works and their cultural contexts. Emphasizes critical thinking, reading and writing. Typical courses include: War and Peace, Utopias and Dystopias. May be repeated as topics change.
Prerequisite: ENG 101
WI, GE-6, GE-9

ENG 215 (2-4) Topics in Literature
Course will explore specialized topics in literature, may be repeated under a different topic.
GE-6

ENG 219 (1) Visiting Writers Series
This course operates as an independent study of those writers visiting campus for the Good Thunder Reading Series.

ENG 242W (4) Introduction To Creative Writing
An introduction to writing poetry and short prose. This course does not assume previous creative writing experience on the part of the student. ENG 242W is a prerequisite for ENG 340 or 341.
Prerequisite: ENG 242W
WI, GE-11

ENG 271W (4) Technical Communication
Introduction to learning the written and oral communication of technical information. Assignments include writing and presenting proposals, reports, and documentation. Emphasis on use of rhetorical analysis, computer applications, collaborative writing, and usability testing to complete technical communication tasks in the workplace.
Prerequisite: ENG 101
WI, GE-2, GE-13

ENG 272W (4) Business Communication
Introduction to business communications. Assignments include writing and presenting proposals, reports, and documentation typical to a business/industry setting. Emphasis on use of rhetorical analysis, software applications, collaboration, and usability testing to complete business communication tasks.
Fall, Spring
WI, GE-2, GE-13

ENG 275W (4) Introduction to Literary Studies
An introduction to literary genres and to the techniques of writing about literature.
Prerequisite: ENG 101
WI

ENG 285 (2) Practical Grammar
A review of traditional grammar designed to prepare students for advanced work in language and grammar. This course will run for a half-semester.

ENG 301W (4) Advanced Writing
Expressive expository and argumentative writing. For anyone interested in developing advanced rhetorical skills such as invention, arrangement, and style in discourse. Especially recommended for students who plan to write as part of their careers or pursue graduate study.
Prerequisite: ENG 101 and permission of instructor
WI, GE-2

ENG 316 (1-4) Topics in Literature
Topic-oriented course in literature. May be repeated with change of topic.
Variable

ENG 318 (2-4) Multicultural Literature
Specific topics in multicultural literature with detailed study of a particular period, region, or group in the United States and their contributions to a diverse literature. Topics include African American Literature, American Indian Literature, Southern Writers of Color, and others. May be repeated as topics change.
Diverse Cultures - Purple

ENG 319 (3) B Animals and Literature
"Animals and literature" is a required class for the Human-Animal Studies minor. The course examines literature focusing on animals from various time periods, genres, and geographical locations. By analyzing the role of animals in various literary texts, students will develop a greater understanding of human-animal interactions and relationships, will be exposed to ethical issues surrounding human-animal relationships, and will understand and engage in theoretical issues central to Human-Animal Studies. Topics may vary and the course can be repeated with change in content.
Fall, Spring, Summer

ENG 320 (4) British Literature to 1785
Representative works from British literature encompassing Beowulf through the Eighteenth Century.
Prerequisite: ENG 275W
Fall

ENG 321 (4) British Literature: 1785-Present
Representative works from British literature, the Romantic Period, to the present.
Prerequisite: ENG 275W
Spring

ENG 325 (3) Children's Literature
Introduction to authors, genres, illustrations, and works of literature published for elementary age children. Current and classic works.

ENG 327 (4) American Literature to 1865
A survey of American literature from its beginnings to the end of the Civil War.
Prerequisite: ENG 275W
Fall

ENG 328 (4) American Literature: 1865 to the Present
A survey of American literature from the end of the Civil War to the present.
Prerequisite or Co-requisite: ENG 275W
Spring

ENG 340 (4) Form and Technique in Prose
Study of the technical underpinnings of fiction and nonfiction genres. This course or ENG 341 is a prerequisite for any 400-level creative writing workshop.
Prerequisite: ENG 242W
On Demand: Fall, Spring, Summer

ENG 341 (4) Form and Technique in Poetry
Study of the technical underpinnings of poetry. This course or ENG 340 is a prerequisite for any 400-level creative writing workshop.
Prerequisite: ENG 242W
On Demand: Fall, Spring, Summer

ENG 342 (4) Beginning Creative Nonfiction Workshop
Introduction to writing personal essays and literary journalism. ENG 344 and one course from either ENG 342 or 343 are prerequisites for a 400-level practicum course.
Prerequisites: ENG 340, ENG 341

ENG 343 (4) Beginning Fiction Workshop
Introduction to writing short stories. ENG 344 and one course from either ENG 342 or 343 are prerequisites for a 400-level practicum course.
Prerequisites: ENG 340, ENG 341
On Demand

ENG 344 (4) Beginning Poetry Workshop
Introduction to writing poems. ENG 344 and one course from either ENG 342 or 343 are prerequisites for a 400-level practicum course.
Prerequisites: ENG 340, ENG 341
Variable

ENG 359 (4) Topics and Research
Topics and Research is a variable topics course giving students the opportunity to work closely with a professor to study a specific aspect of English and do research in a specialized area.
Variable
ENG 361 (4) Teaching English: Literature, Grades 5-12
Theory, practice, and materials for teaching English language arts in middle school and high school, with particular attention to literature. 
Fall (On Demand), Spring (On Demand)

ENG 362 (4) Teaching English: Writing, Grades 5-12
Theory, practice and materials for teaching English language arts in middle school and high school, with particular attention to language and writing.
Fall

ENG 381 (4) Introduction to English Linguistics
The English language considered structurally (phonology, morphology, syntax, semantics) and sociolinguistically (geographical and social dialects, gender issues, acquisition of first and second language, standard and nonstandard forms).
Fall

ENG 402W (4) Gender in Literature
Selected topics course on literature about gender and gendered experiences.
Diverse Cultures - Purple

ENG 403W (4) Selected Authors
Studies in selected authors. Specific authors change. May be repeated with content changes.

ENG 405 (2) Shakespeare: Comedies and Histories
A study of Shakespeare’s comedies and histories. This course will run for a half-semester.
Spring

ENG 406 (2) Shakespeare: Tragedies
A study of Shakespeare’s tragedies. This course will run for a half-semester.
Spring

ENG 410 (1-4) 21st Century Literature
Study of literature from the 21st century, with an emphasis on how these works reflect contemporary concerns.
Prerequisite: ENG 275W
Variable

ENG 412W (4) Arab American Literature
This course critically examines a wide array of literature, non-fiction essays and articles, film and art to explore the historical experiences of diverse Arab American communities. The course will begin by discussing major issues in the field, the history of immigration and citizenship, and developments in Arab American writing. Students will learn about waves of immigration from the 1880s onward, the literary communities that formed, and their contemporary legacy. The course will enable the students to better comprehend the historical and cultural contexts in which Arab American literature has evolved and the diverse perspectives of individual writers and artists.
On Demand: Fall, Spring, Summer
Diverse Cultures - Purple

ENG 411W (4) African American Literature
This writing-intensive course surveys the earliest African American literary works, including slave narratives, poetry, folklore, and oration, through the 20th century movements such as the Jazz Age, Harlem Renaissance, and the Black Arts Movement of the 1960s, to contemporary works and authors.
Diverse Cultures - Purple

ENG 414 (4) Literary Theory and Criticism
Theories of literature and its production and use.
Prerequisite: 6 semester credits in literature
Variable

ENG 415 (4) Creative Writing Workshop
An advanced course in writing short stories and novels. May be repeated.
Prerequisite: ENG 340 or ENG 343
ALT-Fall

ENG 416 (4) Advanced Poetry Workshop
An advanced course in writing poems. May be repeated.
Prerequisite: ENG 341 or ENG 344
ALT-Spring

ENG 417 (4) Contemporary Writers
An advanced course in writing critical essays. May be repeated.
Prerequisite: Writing course or consent
Variable

ENG 418 (4) Screenwriting Workshop
Introduction to writing for the screen. May be repeated with new content. This course serves as a practicum course for the BA and BFA majors in Creative Writing and will serve as a prerequisite for ENG 447 Creative Writing Capstone.
Prerequisite: Writing course or consent: Choose from either FILM 114, ENG 342, ENG 343, or ENG 344.
Spring

ENG 419 (4) Creative Writing Capstone
This course enables BA and BFA Creative Writing students to bring their previous critical and creative study to bear in a final program project. All required, elective, and practicum creative writing workshops must be completed before taking this course.
Prerequisites: Choose from either ENG 446, ENG 449, ENG 494, or ENG 495.
Spring

ENG 420 (4) Contemplative Writers
This course approaches works of fiction, poetry, and creative nonfiction from the past 30 years with a special focus on the craft issues that are central components of each work’s success. English 448 is a required course for BA and BFA majors in creative writing.
Spring
Diverse Cultures - Purple

ENG 421 (4) Topics in Creative Writing Form and Technique
Topics in Creative Writing Form and Technique is a variable-title course that explores special topics relating to the technical mastery of one or more creative genres, or the technical achievement of one or more practitioners. May be repeated with different topics.
WHEN OFFERED AS A CREATIVE WRITING WORKSHOP, this course serves as a practicum course for the BA and BFA majors in Creative Writing and will serve as a prerequisite for ENG 447 Creative Writing Capstone.
Fall, Spring, Summer
ENG 453 (4) Topics in Rhetoric and Composition
Topics in Rhetoric and Composition will be a variable title course that explores special topics relating to the theory, history, and practice of one or more areas within rhetoric and composition.
Prerequisite: ENG 201W, ENG 301W
Variable

ENG 454 (4) Persuasive Writing on Public Issues
Advanced writing course emphasizing major contemporary public issues. Practice in and study of: the logic by which writers construct arguments; the various means that writers use to persuade an audience; the conventions of evidence, claims and arguments in persuasive discourses.
Prerequisite: ENG 201W, ENG 301W
Variable

ENG 455 (4) Advanced Writing Workshop
Advanced interdisciplinary writing emphasizes critical reading and thinking, argumentative writing, library research, and documentation of sources in an academic setting. Practice and study of selected rhetorics of inquiry employed in academic disciplines preparing students for different systems of writing.
Prerequisite: ENG 201W, ENG 301W
Variable

ENG 461 (2-4) World Literature for Children and Young Adults
Selected works of literature for students in grades 5-12 from a variety of countries and cultures.
On Demand: Fall, Spring, Summer

ENG 462 (4) Document Design
Addresses theories of design and teaches students design strategies in typography, graphics, tables, color, and information architecture that will subsequently be applied to documents.
Prerequisite: ENG 271W or ENG 272W
Variable

ENG 463 (3) Adolescent Literature
A survey of literature for students in grades 5-12, fiction and non-fiction, and methods of teaching this literature.
Fall

ENG 464 (3) Teaching Literature in the Middle School
Survey of books suitable for the middle school classroom, covering a variety of topics and genres.
Spring

ENG 466 (4) Usability
Introduces students to theories of usability and teaches students various methods to evaluate design for usability including heuristic evaluations, card-sorting, task-based evaluations, and fieldwork.
Prerequisite: ENG 271W or ENG 272W
Variable

ENG 467 (1-4) International Technical Communication
Students learn how to research and write technical information for multiple cultures, both locally and internationally.
Variable

ENG 469 (4) Project Management in Technical Communication
This course is designed to introduce students to technical project management. This introduction is achieved through participation in a simulated project management experience. Assignments include standard documentation associated with project management and reflective writing.
Prerequisite: ENG 271W
Fall, Spring

ENG 470 (1-4) Independent Writing
Writing in an area and of a type for which the student has demonstrated ability. May be repeated.
Prerequisite: Consent

ENG 471 (4) Visual Technical Communication
This course provides analysis and training focused on concepts and practices of visual design as they relate to technical and professional communication.

ENG 472 (1-4) Topics in Technical Communication
Overview of technical communication theory with emphasis on contemporary approaches. Hands-on workshop which implements the theories discussed.

ENG 473 (4) Desktop Publishing
Brief history of publishing and typography, conventions of desktop publishing, and hardware and software application tools for desktop publishing. Students need not have prior experience with DTP, but some word processing and microcomputer experience will be helpful.

ENG 474W (4) Research and Writing Technical Reports
Practice in writing various types of reports for a variety of purposes and audiences. Includes primary and secondary research methods, and data analysis of information to be used in reports.
Prerequisite: ENG 271W or ENG 272W
VI

ENG 475 (4) Editing Technical Publications
Editing the content, organization, format, style, and mechanics of documents; managing the production cycle of documents; and discovering and learning computer and software applications for technical editing tasks.
Spring

ENG 476 (4) Online Documentation
This course serves as an introduction to the conventions and strategies for publishing online documentation and for managing online documentation projects. Topics will include:
1. analyzing users and tasks;
2. designing and writing documents to be published online;
3. testing online documents; and
4. managing online documentation projects.

ENG 477W (4) Technical Documentation, Policies, and Procedures
Creating both online and print documentation for products, with emphasis on computer software and hardware documentation for users. Attention also to policies and procedures as written for a range of uses (e.g., employee handbooks, manufacturing processes, usability testing).
Fall
VI

ENG 478 (4) Technical and Scientific Literature
Reading and analysis of stories, novels, poems, essays, and nonfiction accounts that deal with scientific and technological topics. Focus on the role of technology in communication forms and tools.

ENG 479 (4) Rhetorical Theory Applied to Technical Documents
Overview of prominent rhetorical theories, from classical to contemporary, which are applicable to technical communication. Practical application and implications of the theories emphasized. Additional attention given to current issues such as risk communication and ethics.
ALT-Spring

ENG 480 (4) Proposals
Practice in the development and production of proposals, focusing on the research, writing, and management of proposals by technical communicators.

ENG 481 (4) History of the English Language
The development of English from its origins as a dialect of Proto-Indo-European to its current form, with consideration of its social history as well as its formal development.

ENG 482 (4) Teaching English Pronunciation and Discourse
The English sound system and English discourse structures studied for the purpose of discovering how they can be taught to students of English as a second or foreign language.
Fall

ENG 484 (4) Pedagogical Grammar and Academic English
Investigation of English grammatical structures and the features of Academic English for the purposes of understanding their use and of teaching them to speakers of English As A Second Language.
Spring

ENG 485 (4) Language and Culture in TESL
A consideration of the cultural issues encountered by teachers of English as a second or foreign language in the US and abroad.
Spring
Diverse Cultures - Gold
ENG 486 (4) Theories of Teaching ESL
Introduction to theories of second language acquisition, focusing on some of the major theories in this field, including individual and sociocultural factors in language learning, as well as practical issues and applications of theory in a wide range of settings.
Fall

ENG 487 (4) Methods of Teaching ESL
Examines the integration of skills, including listening, speaking, reading, writing, and vocabulary use in a variety of contexts, e.g. K-12, adult, higher education, ESL, EFL.
Spring

ENG 489 (4) Policies and Programs in ESL
This course describes state and federal legislation affecting ESL; identification, assessment, placement, and tracking of English Language Learners in the K-12 context; current models of ESL program delivery; and Minnesota State Standards and standardized testing.
Spring

ENG 490 (1-4) Topics in TESL
Topics in learning and teaching English as a Second/Foreign Language. May be repeated for credit.
Variable

ENG 491 (4) Teaching English Language Learners in the Mainstream Classroom
This course introduces education majors to teaching ELLs. Included in this course is an investigation of the attendant orthography, morphology, and syntax of English, and exposure to lesson planning, assessment, and differentiated instruction appropriate for ELLs in the mainstream classroom.
Fall, Spring

GPA Policy.
A grade of "C" (2.0) or better must be earned in these courses.

ENGLISH FOR MULTILINGUAL LEARNERS: INTENSIVE ENGLISH PROGRAM AND ENGLISH FOR ACADEMIC PURPOSES

Courses in English for English for Multilingual Learners: Intensive English Program and English for Academic Purposes are intended to help international students and other students who are non-native speakers of English. These courses are advanced level second language courses that prepare students to meet the language demands of academic study. Placement into these courses occurs at the beginning of each semester for newly admitted students, including students who have transferred to Minnesota State Mankato from other institutions. International students must register for and complete any required courses as determined by placement exams. Specific information regarding the testing and placement process may be secured from the Office of International Students and Scholars or the Kearney International Center.

ENGLISH CONTINUED
ENTREPRENEURSHIP AND INNOVATION MINOR

Entrepreneurship and Innovation

College of Business
150 Morris Hall • 507-389-2966
Coordinator: Kathleen Dale, Ph.D.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION


Students who are business minors, non-business majors or those who are not seeking a four year degree may take up to 24 credits in the College of Business. However, prerequisites are enforced.

GPA Policy. Students must earn a minimum grade point average of 2.0 (C) on the total courses taken in the College of Business.

Residency. Transfer students pursuing a minor in the College of Business must complete at least 50% (one-half) of their minor coursework at Minnesota State Mankato.

Assessment Policy. The College of Business believes that the ongoing assessment of its programs makes a vital contribution to the quality of those programs and to student learning. Student participation is an important and expected part of the assessment process.

The Entrepreneurial studies minor is designed to expose, engage and support students in thinking and experiencing the processes, challenges, and opportunities associated with the interdisciplinary and team-based nature of beginning a new venture.

Core

The core for the Entrepreneurship and Innovation Minor consists of the required Integrated Business Experience (IBE) (12 credits) and an additional two courses (6 credits) which include MGMT 332 Creativity and Innovation and MGMT 443 Entrepreneurship. The Entrepreneurship course involves a major project that requires the development of a business plan related to the students major.

BUS 397 IBE Practicum (3)
FINA 362 Business Finance (3)
MGMT 230 Principles of Management (3)
MGMT 332 Creativity and Innovation (3)
MGMT 443 Entrepreneurship (3)
MRKT 210 Principles of Marketing (3)
Environmental Sciences

Environmental Sciences is an applied science designed to study interactions among biological, chemical and physical components of the environment. Major areas of focus include water quality, climate change, biodiversity, and environmental assessment with an emphasis on experiential learning through research and/or internships. This program is orientated towards helping students develop skills for leadership positions in industry, consulting firms, government and environmental groups, as well as providing a foundation for individual community involvement as an informed citizen.

POLICIES/INFORMATION
Admission to Major is granted by the department. Admission requirements are: 32 earned credit hours including BIOL 105 and BIOL 106 with a grade of “C” in both BIOL 105 and BIOL 106 plus a minimum cumulative GPA of 2.00.

P/N Grading Policy. All courses leading to a major or a minor in environmental sciences must be taken for letter grades.

Residency Requirement. At least 20 credits of 300-400 level courses required for the Environmental Science major must be taken at Minnesota State Mankato. Fourteen of these 20 credits must include ENVR 440 (3 credits), ENVR 450 (3 credits), ENVR 460 (4 credits), ENVR 470 (3 credits) and 1 credit for ENVR 498 (internship) OR ENVR 480 (Research).

GPA Policy. A minimum grade of “C” is required in all courses applied to the Environmental Sciences BS degree.

In addition to the specific requirements of the major, all university requirements must be met for graduation. This includes 120 credits of course work, 40 credits of upper division courses (including those in the major), purple and gold course requirements, and two writing intensive courses.

Several scholarships in the Department of Biological Sciences are available for entering first year students and currently enrolled Minnesota State Mankato students who meet the requirements. Application deadline is in early February of each year.

ENVR 460 Analysis of Pollutants (4)
ENVR 470 Environmental Assessment (3)

Major Restricted Electives
Select one of the following classes (choose 1-6 credits).
ENVR 480 Senior Research (1-6)
ENVR 498 Internship (1-6)
Select One of the Following Classes (choose 3 credits).
HLTH 475 Biostatistics (3)
STAT 154 Elementary Statistics (4)
Select one of the following classes (choose 5 credits).
CHEM 111 Chemistry of Life Process Part II (Organic & Biochemistry) (5)
CHEM 202 General Chemistry II (5)

CHOOSE 1 CLUSTER
Select TWO courses from ONE of the following 6 Areas.

Aquatic Ecology
BIOL 402 Stream Ecology (4)
BIOL 404 Wetlands (4)
BIOL 405 Fisheries Biology (3)
BIOL 432 Lake Ecology (4)

Vertebrate Ecology
BIOL 316 Animal Diversity (3)
BIOL 405 Fisheries Biology (3)
BIOL 408 Vertebrate Ecology (4)
BIOL 409 Advanced Field Ecology (4)
BIOL 412 Soil Ecology (4)
BIOL 431 Comparative Animal Physiology (3)
BIOL 436 Animal Behavior (4)

Ecology
BIOL 316 Animal Diversity (3)
BIOL 403 Conservation Biology (3)
BIOL 405 Fisheries Biology (3)
BIOL 412 Soil Ecology (4)
BIOL 421 Entomology (3)
BIOL 443 Plant Ecology (4)

Toxicology
BIOL 460 Introduction to Toxicology (3)
BIOL 461 Environmental Toxicology (4)
BIOL 464 Methods of Applied Toxicology (3)
BIOL 465 Applied Toxicology Project (3)
BIOL 467 Industrial Hygiene (3)

Plant Science
BIOL 217 Plant Science (4)
BIOL 412 Soil Ecology (4)
BIOL 441 Plant Physiology (4)
BIOL 442 Flora of Minnesota (4)
BIOL 443 Plant Ecology (4)

Microbiology
BIOL 270 Microbiology (4)
BIOL 420 Diagnostic Parasitology (3)
BIOL 475 Medical Microbiology (4)
BIOL 476 Microbial Physiology and Genetics (5)
BIOL 478 Food Microbiology and Sanitation (4)

CHOOSE 1 CLUSTER
Select TWO courses from ONE of the following 6 areas. These electives cannot be used in the minor and are in addition to the two courses selected from one of the 6 areas in Biology.

Geography
GEOG 370 Cartographic Techniques (4)
GEOG 373 Introduction to Geographic Information Systems (4)
GEOG 410 Climatic Environments (3)
GEOG 420 Conservation of Natural Resources (3)
GEOG 471 Digital Field Mapping with GIS (4)
GEOG 473 Intermediate GIS (4)
GEOG 474 Introduction to Remote Sensing (4)
GEOG 475 Applied Remote Sensing & GIS (4)

Urban and Regional Studies
URBS 402 Urban Analysis (3)
URBS 411 Urban Policy and Strategic Analysis (3)
<table>
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<th>COURSE DESCRIPTIONS</th>
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<td><strong>ENVIRONMENTAL SCIENCES CONTINUED</strong></td>
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<td><strong>ENVIRONMENTAL STUDIES MINOR</strong></td>
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<td><strong>Minor Core</strong></td>
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<tr>
<td>ENVR 440</td>
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<td>ENVR 450</td>
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<td>ENVR 460</td>
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<tr>
<td>ENVR 470</td>
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<tr>
<td>*Requires 2 semesters of chemistry</td>
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<tr>
<td><strong>Minor Electives</strong></td>
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<tr>
<td>Select one of the following: CHEM 106 and CHEM 111 OR CHEM 201 and CHEM 202</td>
</tr>
<tr>
<td><strong>COURSE DESCRIPTIONS</strong></td>
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<tr>
<td><strong>ENVIRONMENTAL 101 (4) Perspectives in Environmental Science</strong></td>
</tr>
<tr>
<td>This course is designed to introduce students to the complex field of environmental science. Reading assignments, lectures, discussions and other class assignments will introduce students to the structure and functions of ecosystems, the concept of sustainability, issues in environmental protection with an emphasis on global commons, the interrelationships between environment, culture, government and economics and what individuals or groups can do to influence environmental policy/rules. Fall, Spring GE-8, GE-10</td>
</tr>
<tr>
<td><strong>ENVIRONMENTAL 440 (3) Environmental Regulations</strong></td>
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<tr>
<td>This is a lecture course introducing students to major federal environmental laws and regulations. Discussions include the cause(s) that prompted the enactment of various environmental legislation as well as intent and implementation of the legislation. Both Federal and State of MN environmental statutes will be discussed. Fall</td>
</tr>
<tr>
<td><strong>ENVIRONMENTAL 450 (3) Environmental Pollution &amp; Control</strong></td>
</tr>
<tr>
<td>This is a lecture course that introduces students to sources and controls for pollutants in air, water, and soils including hazardous waste. Chemical and biological mechanisms that are important in nature and used to control/treat various types of pollutants are emphasized. Strongly recommended that this course be taken immediately after completing 1 year of Chemistry. Prerequisite: 1 year CHEM Fall</td>
</tr>
<tr>
<td><strong>ENVIRONMENTAL 460 (4) Analysis of Pollutants</strong></td>
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<tr>
<td>The purpose of this lecture/lab class is to introduce students to standard practices and procedures used in sampling and analysis of environmental matrices and to develop an environmental research project. Standard quality control/quality assurance procedures per EPA are emphasized. Spring</td>
</tr>
<tr>
<td><strong>ENVIRONMENTAL 470 (3) Environmental Assessment</strong></td>
</tr>
<tr>
<td>Introduces students to National Environmental Policy Act and requirements for Environmental Impact Statements and Environmental Assessment Worksheets. Phase I Environmental Assessment of land and buildings, an international perspective on environmental assessments, and economic and social impact assessment are discussed. Prerequisite: ENVR 440 Fall</td>
</tr>
<tr>
<td><strong>ENVIRONMENTAL 480 (1-6) Senior Research</strong></td>
</tr>
<tr>
<td>Participate in an independent research project with advisory support and with a focus on the student's career objectives. Fall, Spring</td>
</tr>
<tr>
<td><strong>ENVIRONMENTAL 498 (1-6) Internship</strong></td>
</tr>
<tr>
<td>Only three credits can be counted toward major. Experience in applied Environmental Sciences according to a prearranged training program. Fall, Spring</td>
</tr>
<tr>
<td><strong>ENVIRONMENTAL 499 (1-6) Individual Study</strong></td>
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<tr>
<td>Individual Research Project. Fall, Spring</td>
</tr>
</tbody>
</table>
ETHICS MINOR

Ethics Minor
College of Arts & Humanities
Department of Philosophy
227 Armstrong Hall • 507-389-2012
Chair: Brandon Cooke
Faculty: Brandon Cooke, John Humphrey, Richard Liebendorfer, Craig Matarrese, Joshua Preiss, Bekka Williams, Julie Wulfemeyer, Sun Kyeong Yu
Academic Map/Degree Plan at www.mnsu.edu/programs/#All

ETHICS MINOR

Ethics is concerned with some of our deepest values and commitments. Considerations of right and wrong, of good and bad, permeate our public and private lives. The Ethics Minor provides the opportunity to investigate theoretical and applied ethics in a rigorous and deep way. This minor will be of special interest to students planning careers in the professions, including business, medicine, law, and others. Students completing the minor will develop a deeper reflective understanding of ethical values, an awareness of the history of ethical thought, an enhanced sense of our shared human values, and the ability to understand and critically evaluate the complex ethical issues of our time.

Required Core
Group 1
PHIL 120W Introduction to Ethics (3)
PHIL 322W Ethical Theory (3)
[choose one from the following 3 credits]
PHIL 115W Philosophy of Race, Class and Gender (3)
PHIL 205W Culture, Identity, and Diversity (3)
PHIL 222W Medical Ethics (3)
PHIL 224W Business Ethics (3)

Group 2 Choose 6 Credits
PHIL 226W Environmental Ethics (3)
PHIL 201W Social & Political Philosophy (3)
PHIL 323W Philosophy of Economics (3)
PHIL 334W History of Philosophy: Classical Philosophy (3)
PHIL 337 19th Century Philosophy (3)
PHIL 358W Topics in Asian Philosophy (3)
PHIL 361 Philosophy of Religion (3)
PHIL 440 Philosophy of Law (3)
PHIL 445 Feminist Philosophy (3)
PHIL 455 Existentialism & Phenomenology (3)
PHIL 460 Philosophy of the Arts (3)

ETHNIC STUDIES BS AND MINOR

Ethnic Studies
College of Social & Behavioral Sciences
Department of Ethnic Studies
109 Morris Hall • 507-389-2708
Fax 507-389-6377
Website: www.mnsu.edu/dept/ethnic
Chair: Kebba Darboe
Faculty: Wayne Allen, Hanh Huy Phan

The Department of Ethnic Studies (ES) is an interdisciplinary program, academically committed to promoting multicultural and ethnic knowledge, skills and values both within and outside the United States and to preparing our students for effective participation in culturally diverse global communities. A major in ethnic studies gives students exposure to and understanding of those historical, economic, social and political forces which have contoured the cross-cultural and ethnic experience in and outside the United States. This program prepares students to identify social injustice issues (e.g., racism, discrimination, oppressing social conflict) effectively and also aims to provide students with multicultural/ethnic knowledge, multicultural/ethnic values and skills (e.g., cultural competency skills and other professional skills). The ES majors is academically sound and competitive on the market. ES majors must take both ES core courses and skill-oriented or applied courses focusing on one of the following areas of emphasis: Governmental/Public, Business/Corporate, local Community and Human Services, International Community and Human Services and Extended Program.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
Admission to Major. Students enrolling in 300-400 level courses must be admitted to the program. Admission to Major is granted by the department. Minimum University admission requirements are:
- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (“C”).
Contact the department for application procedures.

GPA Policy. 2.0 GPA.
P/N Grading Policy. No more than 1/4 of total undergraduate credits may be taken as P/N.

ETHNIC STUDIES BS
Degree completion = 120 credits

Prerequisites to the Major - General Education
(choose one of the following 3 credit courses)
ETHN 100 American Racial Minorities (3)
ETHN 101 Introduction to Multicultural & Ethnic Studies (3)

Major Common Core
Research Methods/Skills Course
(choose one of the following 2 credit courses)
ETHN 401 Applied Cultural Research (3)
ETHN 402W Ethnic Research Methods/Skills (3)
Students must be admitted to a major at Minnesota State University. Required Minor: Yes. Any.

**MAJOR EMPHASIS: LOCAL COMMUNITY AND HUMAN SERVICES**
(Students are encouraged to minor in Psychology, Social Work, and Counseling/Education.) (choose at least 15 credits)

**MAJOR EMPHASIS: PUBLIC/GOVERNMENT**
(Students are encouraged to minor in Political Science, Law Enforcement or Urban Studies.) (choose at least 15 credits)

**EXTENDED PROGRAM COURSES (SUBJECT TO AGREEMENT)**
One computer skills course or quantitative/statistical skills course (3)
Four multicultural electives are to be taken within or outside Department of Ethnic Studies but subject to the approval of ES advisors.*

* [Example of multicultural electives outside the ES Department may include but are not limited to: the curricula of social/behavioral sciences, arts/humanities, education or other academic areas—e.g., Anthropology (ANTH 240: Language and Culture), Gender and Women's Studies (GWS 220: Perspectives on Women and Change or GWS 251: Coming Age: Gender and Culture), Geography (GEOG 103: Introductory Cultural Geography), History [one Advanced African American History—HIST 437 or HIST 477, or Asian History—HIST 434 or Latin American History—HIST 442], Music (MUS 125 or MUS 126: Pop Music USA, Jazz or R&B) Philosophy (PHIL 115W: Race, Class and Gender; or PHIL 205W: Culture, Identity and Diversity), Sociology (SOC 446: Race, Culture and Ethnicity), Theatre (THEA 285W Theatre of Diversity) All these are just examples subject to the approval of ES advisors.]

**Required Minor:** Yes. Any.

**ETHNIC STUDIES MINOR ONLINE**
(18 credits required)

This Online Ethnic Studies Minor Program requires a total of 18 credits—semester hours. Faculty teach courses via the Desire2Learn. The Desire2Learn (D2L) is Minnesota State Mankato’s web-based management system, which manages the delivery of the online courses. All registered students have immediate access to D2L via its link on the Minnesota State Mankato homepage. Upon completion, students can transfer the coursework to the baccalaureate degree at Minnesota State Mankato or other universities.

**Admission requirements.** Students must be admitted to a major at Minnesota State Mankato or other universities and must have a minimum cumulative GPA of 2.00 or higher.

**Prerequisites to the Minor Core**
(choose at least three credits from the following)

**Minor Core**
Writing Intensive
(choose at least three credits from the following)
ETHNIC STUDIES CONTINUED

Research Methods/Skills
(choose at least three credits from the following)
ETHN 401 Applied Cultural Research (3)
ETHN 402 Ethnic Research Method/Skills (3)
Critical Thinking/Theoretical Course
(choose at least three credits from the following)
ETHN 400 Cultural Pluralism (3)
ETHN 410 Foundations of Oppression (3)

Major Restricted Electives
(choose at least six credits from the following)
ETHN 150 Multicultural/Ethnic Experience (3)
ETHN 200 Interracial/Interethnic Dating/Marriage (3)
ETHN 300 American Indian Leaders (3)
ETHN 330 Immigration/Ethnicity (3)
ETHN 420 African American Studies (3)
ETHN 430 American Indian Studies (3)
ETHN 440 Asian American Studies (3)
ETHN 450 Latino/Hispanic Studies (3)
ETHN 460 Urban Minority Problems (3)
ETHN 470 Women of Color (3)
ETHN 480 Social Justice in Ethnicity and Gender (3)
ETHN 486 Racial and Ethnic Politics (3)

COURSE DESCRIPTIONS

ETHN 100 (3) American Racial Minorities
A study of American racial/ethnic minorities, especially the histories of Native Americans, African Americans, Hispanic Americans, and Asian Americans. Their roles and contributions to American society will be emphasized.
Fall, Spring
GE-5, GE-7
Diverse Cultures - Purple

ETHN 101 (3) Introduction to Multicultural & Ethnic Studies
This course introduces students to multicultural and ethnic knowledge and values in and outside the United States. Students are exposed to such issues as race, culture, ethnicity, dominance, immigration, stereotypes, discrimination, and intergroup relations through interdisciplinary approaches - anthropological, economic, historical, political, psychological and/or sociological.
Fall, Spring
GE-5, GE-7
Diverse Cultures - Purple

ETHN 150 (3) Multi-Cultural/Ethnic Experience
Students will participate in field trips, activities, and guest discussions that will enable them to interact with people ethnically (race, religion, lifestyle, etc.) different from themselves, to understand their perspectives and appreciate their unique experiences and/or contributions to the U.S. pluralistic society. Students are expected to learn actively in and outside the classroom by experiencing events or people from diverse cultural groups.
Fall
GE-7
Diverse Cultures - Gold

ETHN 200 (3) Interracial/Interethnic Dating/Marriage
This course deals with the history of interracial/interethnic and intergroup (sex, age, religion, etc.) dating and marriage in the U.S. It will explore dating patterns, mate selection theories, and impacts on multi-racial children in the area of identity and adjustment.
Variable
GE-7

ETHN 201W (3) Perspectives on African Americans
This course will explore the historical, social, political, and cultural experience of African Americans. It will also examine the contributions of African Americans to the growth and development of the United States.
WI, GE-5, GE-7
Diverse Cultures - Purple

ETHN 202W (3) Perspectives on American Indians in Ethnic Studies
This course is an examination of the historical and contemporary issues and forces affecting American Indian peoples.
WI, GE-5, GE-7

ETHN 203W (3) Perspectives on Asian Americans
Introduction to the history and cultures of the major Asian American ethnic groups with a comparative approach to their similarities and differences.
WI, GE-5, GE-7
Diverse Cultures - Purple

ETHN 204W (3) Perspectives on Latinos/Hispanics
A survey of the history and present status of Hispanics/Latinos in the United States from 1848. Emphasis will be on culture, history, and socio-political patterns.
WI, GE-5, GE-7
Diverse Cultures - Purple

ETHN 220W (3) Civil Rights in the U.S.
This course will focus on the struggle for civil rights by diverse groups in the United States. Emphasis will be on how these struggles have impacted their communities and cultural pluralism in the U.S.
Variable
WI, GE-5
Diverse Cultures - Purple

ETHN 295 (1-4) Selected Topics
The course is offered according to student demand and instructor availability/expertise. A variety of topics related to ethnic and cultural areas will provide curriculum enrichment on an ongoing, but irregular basis.
Variable

ETHN 296 (1-3) Workshop
Courses will employ changing topics from year to year and will deal with cogent issues of current interest to ethnic and minority communities.
Variable

ETHN 299 (1-3) Individual Study
Exploratory independent study and research. Areas of interest not addressed in regular courses are given priority. Maximum three credits toward the major; one credit toward the minor.
Prerequisite: Two other ETHN courses.
Fall, Spring

ETHN 300W (3) American Indian Leaders
This course surveys the social and cultural dimensions of traditional and contemporary American Indian leadership. This leadership is understood through a study of the lives, strategies, and words of American Indian leaders who played significant roles in the history of contact between Euro-American and indigenous North American peoples.
Prerequisite: Consent
Variable
WI

ETHN 330 (3) Immigration and Ethnicity
Examines the history, identity, conflict and ethnic relations related to immigration as explored from an Ethnic Studies perspective as well as from American and global perspectives.

ETHN 400 (3) Cultural Pluralism
This course will examine issues confronting in a multicultural society. It will study ethnic/minority groups not usually included in mainstream society, including their uniqueness and harmonious coexistence with other ethnic groups.
Fall, Spring

ETHN 401 (3) Applied Cultural Research
This course introduces concepts and methods of applying socio-cultural understanding to contemporary problems to bring about the empowerment of affected people. Case/field studies and other research methods in social sciences will be used to illustrate the impact and problems of cultural change with special attention to its effect on disadvantaged groups of people. Students will also design their own applied projects.
Prerequisite: ANTH 101, ANTH 230 or consent; ETHN 100, ETHN 101 or ETHN 150 or consent
Variable
Diverse Cultures - Gold
ETHN 402W (3) Ethnic Research Methods/Skills
This is a comprehensive course, which introduces students to qualitative, quantitative and evaluation social research methods. It provides students with hands-on experience of collecting and analyzing data, from any given diverse ethnic community through participant observation and needs assessment.
Prerequisite: ETHN 100 or ETHN 101, or ETHN 150, or Consent
WI
Diverse Cultures - Gold

ETHN 403 (3) Chicana Feminisms
This course examines the different forms of Chicana Feminisms produced by Chicana scholars and activists. It demonstrates how Chicana Feminisms challenge social inequalities, and focuses on the construction of Chicana identities regarding the intersections of gender, race/ethnicity, sexuality and culture.
Diverse Cultures - Purple

ETHN 405 (3) Perspectives on New Immigrants
The purpose of this course is to examine the challenges and opportunities of the new immigrants, refugees, families, and specifically their children, in the United States.
Fall

ETHN 410 (3) Foundations of Oppression
Students will examine the forces which create and maintain prejudice, discrimination and racism within global perspectives. Special attention will be given to the work of Paulo Freire.
Prerequisite: ETHN 100 or ETHN 400
Fall
Diverse Cultures - Purple

ETHN 420 (3) African American Studies
This course will provide students with an in-depth examination of the issues affecting present-day Africans, and those of the Black Diaspora. Possible topics are fair representation in the media, education, cross-cultural interactions, economics, politics, law, and racial identity.
Prerequisite: ETHN 110 or ETHN 400 or consent
Variable

ETHN 430 (3) American Indian Studies
This course will provide multiple perspectives about the issues facing American Indian peoples today. Topics to be considered are education, health care, gender, land rights, religious freedom, cultural identity, natural resource management, law enforcement, economic development, self-determination, and mass media images.
Prerequisite: ETHN 400, or consent
Variable

ETHN 440 (3) Asian American Studies
Examination of current issues affecting the status of Asian Americans. The focus of this course will vary to reflect students' interests in the area of politics, education, economics, social and/or cultural dealing with Asian Americans.
Prerequisite: ETHN 400, or consent
Variable
GE-5

ETHN 450 (3) Latino/Hispanic Studies
Thematic examination of major issues surrounding Latino/Hispanic communities in the United States. Emphasis will be on education, labor, politics, social welfare and migration.
Prerequisite: ETHN 400, or consent
Variable

ETHN 460 (3) Urban Minority Problems
This course is concerned with racial/ethnic minorities who live in large urban (inner city) areas. It is especially concerned with the roles that culture and discrimination play in the shaping of America's ghettos, barrios, reservations, and Chinatowns.
Spring
Diverse Cultures - Purple

ETHN 470 (3) Women of Color
Examines the effects of sexism and racism on women of color and provides an understanding of the significant contributions they have made in their struggle against oppression.
Prerequisite: ETHN 400, or consent
Spring
Diverse Cultures - Purple

ETHN 480 (3) Social Justice in Ethnicity & Gender
Survey of institutional sexism and racism including their impact on U.S. society. Special attention will be given to their interconnectedness.
Prerequisite: ETHN 400 or consent
Variable

ETHN 482 (3) African American Civil Rights Movement
This course will take an interdisciplinary ethnic studies approach to examine the past, present and future implications of the African American civil rights movement on race relations in the United States.
Fall

ETHN 486 (3) Racial and Ethnic Politics
The course examines racial and ethnic minorities, and the mutual influences between these groups and the structures, procedures and issues of US politics. Major topics include: opinion on racial issues, the representation of minorities in elective and appointive offices, and the nature of value conflicts underlying contemporary racial issues, including affirmative action, immigration, welfare, language policies and Native American tribal issues.
Variable
Diverse Cultures - Purple

ETHN 490 (3) Racial/Ethnic Families in the U.S.
This course will examine the different definitions of “family” through time in the United States. It will focus on changes in the African, Native, Hispanic/Latino, and Asian-American families. It will compare and contrast differences and similarities among ethnic minority families as well as between them and white ethnic families.
Prerequisite: ETHN 400, or consent
Variable

ETHN 495 (3) Selected Topics
Multiple perspectives on the selected topic(s) will be addressed. Student scholars may contribute to the selection and/or refinement of the topic(s). Highly motivated seniors will join with graduate students in a graduate-type seminar.
Prerequisite: ETHN major
Variable

ETHN 496 (1-3) Workshop
Courses will employ changing topics from year to year and deal with cogent issues of current interest to one or more minority communities.
Variable

ETHN 497 (1-10) Internship
Supervised, scholarly experience to which the theories and methodologies of ethnic studies can be applied. Opportunities may be on-campus and/or off-campus, including work in other countries.
Prerequisite: ETHN major or minor
Fall, Spring

ETHN 498 (1-6) College Teaching Internship
Students assist a faculty member in teaching an ETHN 100 or ETHN 101.

ETHN 499 (1-3) Individual Study
Advanced independent study and research. Maximum of three credits toward the major; one credit toward the minor.
Prerequisite: 2 ETHN courses at 300/400 level
Fall, Spring
EXERCISE SCIENCE

Exercise Science

College of Allied Health & Nursing
Department of Human Performance
1400 Highland Center • 507-389-6313
Website: ahn.mnsu.edu/hp/

Chair: Lynnette M. Engeswick
Program Coordinator: Jessica Albers
Faculty: Jessica Albers, Mary Visser

The Exercise Science major is recognized by the National Strength and Conditioning Association for successfully meeting established educational criteria in strength and conditioning. It is a broad-based, science-oriented major that prepares students to create effective exercise prescriptions and to oversee exercise programs for normally healthy individuals. An Exercise Science major also prepares students for admission to graduate programs in Exercise Physiology, Cardiac Rehabilitation, Sports Psychology, and related areas. Students who have also completed the pre-physical or pre-occupational therapy concentrations in addition to this major have successfully gained admission to graduate programs in those areas.

Exercise science students are not required to complete a minor but may choose to obtain one to gain additional training or expertise.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

Policies/Information

Admission to Program. Admission to the Exercise Science major is selective. Applications will be evaluated in October, March, and August. Minimum requirement for application are as follows:

1. Completion of at least 32 credits.
2. A minimum cumulative GPA of 2.75.
3. A minimum grade of C- in BIO 220.
4. A minimum grade of C- in CHEM 111 or CHEM 201.
5. A minimum grade of C- in MATH 112 or MATH 115.
6. Completed or currently enrolled in HP 291 and HP 160 or HP 265.

EXERCISE SCIENCE BS

Required General Education

ENG 101 Composition (4)
IT 100 Introduction to Computing and Applications (4)

Major Common Core

Students may take HP 466W instead of HP 466.

BIOL 220 Human Anatomy (4)
BIOL 330 Principles of Human Physiology (4)
HP 348 Structural Kinesiology and Biomechanics (3)
HP 414 Physiology of Exercise (3)
HP 439 Nutrition for Physical Activity and Sport (3)
HP 456 Athletic Testing and Conditioning (2)
HP 465 Legal Aspects of Physical Education and Sport (3)
HP 466 Graded Exercise Testing and Exercise Prescription (3)

Major Restricted Electives

Please select 2 credits from these activity classes

HP 103 Fitness for Living (1)
HP 104 Adult Fitness (1)
HP 105 Beginner and Advanced Beginner Swimming (1)
HP 107 Orienteering (1)
HP 114 Billiards and Bowling (1)
HP 117 Aerobic Conditioning (1)
HP 130 Self-Defense for Women (1)
HP 138 Beginning Horsemanship (1)
HP 139 Winter Survival (1)
HP 143 Aqua Exercise (1)
HP 145 Aquatic Conditioning and Water Polo (1)
HP 146 Intercollegiate Bowling (1)
HP 147 Intercollegiate Cross Country (1)
HP 149 Intercollegiate Softball (1)
HP 150 Intercollegiate Wrestling (1)
HP 152 Intercollegiate Track and Field (1)
HP 153 Intercollegiate Swimming (1)
HP 154 Intercollegiate Football (1)
HP 155 Intercollegiate Basketball (1)
HP 156 Intercollegiate Baseball (1)
HP 157 Intercollegiate Golf (1)
HP 158 Intercollegiate Tennis (1)
HP 159 Intercollegiate Hockey (1)
HP 160 Introduction to Human Performance Studies (2)
HP 161 Intercollegiate Soccer (1)
HP 166 Team Game Skills (1)
HP 174 Individual/Dual Activities (1)
HP 175 Fitness Activities (1)
HP 176 Lifetime Activities (1)
HP 177 Lifetime Activities II (1)
HP 178 Social, Folk and Square Dance Techniques (1)
HP 179 Winter Activities (1)
HP 180 Introduction to Handball (1)
HP 181 Advanced Handball (1)
HP 182 Aquatic Skills (1)
HP 190 Sport Activities (1)

Major Unrestricted Electives

Elective courses (choose 3-6 credits)

Pre-Physical Therapy emphasis requires 3 credits. The General Exercise Science emphasis requires 6 credits. Electives may not be double counted for courses required in the emphases.

BIOL 320 Cell Biology (4)
BIOL 324 Neurobiology (3)
BIOL 380 Blood Banking/Urinalysis (3)
BIOL 417 Biology of Aging and Chronic Diseases (3)
BIOL 433 Cardiovascular Physiology (3)
BIOL 466 Principles of Pharmacology (3)
BIOL 474 Immunology (4)
CHEM 360 Principles of Biochemistry (4)
FCS 440 Nutrition II (3)
FCS 446 Lifespan Nutrition (3)
HLTH 210 First Aid & CPR (3)
HLTH 321 Medical Terminology (3)
HLTH 451 Emotional Health and Stress (3)
HLTH 455 Health and Aging (3)
HP 340 Prevention and Care (2)
HP 411 Athletic Training Techniques (3)
HP 413 Lifespan Motor Development (2)
HP 415 Advanced Sports Medicine (2)
HP 417 Intercultural Competence for Allied Health Professionals (3)
HP 421 Teaching Sport to Individuals with Disabilities (2)
HP 440 Medical Aspects of Athletic Training (3)
HP 441 Organize & Administer (2)
HP 451 Principles of Coaching (3)
HP 457 Worksite Wellness Program Development (3)
HP 470 Psychology of Coaching (3)
HP 472 Psychology of Sport and Athletic Injury (3)
PSYC 433 Child Psychology (4)
PSYC 436 Adolescent Psychology (4)
PSYC 455 Abnormal Psychology (4)
PSYC 460 Psychology of Women (3)
PSYC 466 Psychology of Aging (3)

Required Minor: None.

Major Emphasis: General Exercise Science

The General Exercise Science emphasis requires a minimum of 3 credits of HP 406 which can be split across semesters. One credit = 50 hours. Students commonly
use physical therapy observation hours to fulfill the internship requirement.

**Required General Education**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>Chemistry of Life Process Part II (Organic &amp; Biochemistry) (5)</td>
</tr>
<tr>
<td>FCS 140</td>
<td>Introduction to Nutrition</td>
</tr>
<tr>
<td>HLTH 210</td>
<td>First Aid &amp; CPR (3)</td>
</tr>
<tr>
<td>MATH 112</td>
<td>College Algebra</td>
</tr>
</tbody>
</table>

**General Exercise Science Core**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP 160</td>
<td>Introduction to Human Performance Studies (2)</td>
</tr>
<tr>
<td>HP 290</td>
<td>Psycho-Social Aspects of Sport (3)</td>
</tr>
<tr>
<td>HP 291</td>
<td>Concepts of Fitness (2)</td>
</tr>
<tr>
<td>HP 392</td>
<td>Group Exercise Instruction (3)</td>
</tr>
<tr>
<td>HP 403W</td>
<td>Research Methods &amp; Statistics in Exercise Science (3)</td>
</tr>
<tr>
<td>HP 477</td>
<td>Behavior Change Strategies and Foundations (3)</td>
</tr>
<tr>
<td>HP 486</td>
<td>Small Group Personal Training (3)</td>
</tr>
<tr>
<td>HP 487</td>
<td>Applied Exercise Science (3)</td>
</tr>
</tbody>
</table>

**General Exercise Science Capstone** (choose 3-10 credits)

The General Exercise Science emphasis requires a minimum of 3 credits of HP 496 which can be split across semesters. One credit = 50 hours.

**Major Emphasis: Pre-Physical Therapy**

The Pre-Physical Therapy emphasis requires a minimum of 3 credits of HP 496 which can be split across semesters. One credit = 50 hours. Students commonly use physical therapy observation hours to fulfill the internship requirement.

**Pre-PT Core (choose 34 credits)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 201</td>
<td>General Chemistry I (5)</td>
</tr>
<tr>
<td>MATH 115</td>
<td>Precalculus Mathematics (4)</td>
</tr>
<tr>
<td>PHYS 211</td>
<td>Principles of Physics I (4)</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>Introduction to Psychological Science (4)</td>
</tr>
<tr>
<td>STAT 154</td>
<td>Elementary Statistics (4)</td>
</tr>
</tbody>
</table>

**Pre-PT Capstone (choose 3-10 credits)**

The Pre-Physical Therapy emphasis requires a minimum of 3 credits of HP 496 which can be split across semesters. One credit = 50 hours. Students commonly use physical therapy observation hours to fulfill the internship requirement.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP 496</td>
<td>Internship [1-10]</td>
</tr>
</tbody>
</table>

**FAMILY CONSUMER SCIENCE BS AND MINOR**

Family Consumer Science

College of Allied Health & Nursing  
Department of Family Consumer Science  
102 Wiecking Center • 507-389-2421  
Website: [http://ahn.mnsu.edu/fcs/](http://ahn.mnsu.edu/fcs/)

Chair: Heather Von Bank

Faculty: David Bissonnette, Joyce Bond, Jill Conlon, Jae Min Lee, Dan Moen, Maureen (Molly) Timlin

Accreditation. Academy of Nutrition and Dietetics (ACEND), National Council on Family Relations (NCFR). Council for the Accreditation of Educator Preparation (CAEP) and MN Board of Teaching (BOT)

The mission of the Department of Family Consumer Science is to promote the well-being of people, the enrichment of quality environments, and to prepare men and women to assume essential professional roles in a culturally diverse global society. The comprehensive program provides training for professional roles within dietetics, family and consumer sciences education, child development and family studies, and food and nutrition.

P/N Policy. All FCS courses required for an option must be taken for a grade, except where P/N grading is mandatory.

**FAMILY CONSUMER SCIENCE BS**

Degree completion = 120 credits

Required for Major (Option). Select one of the following options to correspond with personal and professional objectives:

**CHILD DEVELOPMENT AND FAMILY STUDIES OPTION**

This option helps prepare students to work with children, adults and families in a variety of human services, educational and community settings.

Required General Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCS 100</td>
<td>Personal &amp; Family Living (3)</td>
</tr>
</tbody>
</table>

**Major Common Core**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCS 101</td>
<td>Introduction to Family Consumer Science (3)</td>
</tr>
</tbody>
</table>

**Major Restricted Electives**

Family Consumer Science Electives

(choose 6 credits from the following FCS courses)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCS 120</td>
<td>Clothing and People (2)</td>
</tr>
<tr>
<td>FCS 140</td>
<td>Introduction to Nutrition (3)</td>
</tr>
<tr>
<td>FCS 150</td>
<td>Food, Culture and You (3)</td>
</tr>
<tr>
<td>FCS 280</td>
<td>Orientation to Family Consumer Science Education (2)</td>
</tr>
<tr>
<td>FCS 331</td>
<td>Clothing Construction and Textiles (4)</td>
</tr>
<tr>
<td>FCS 473</td>
<td>Consumer Protection (3)</td>
</tr>
</tbody>
</table>

Child Development and Family Studies Electives

(choose 18 credits from the following)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCS 260</td>
<td>Child Health, Safety, and Nutrition (3)</td>
</tr>
<tr>
<td>FCS 270</td>
<td>Family Housing (3)</td>
</tr>
<tr>
<td>FCS 360</td>
<td>Romantic Relationships (3)</td>
</tr>
<tr>
<td>FCS 402</td>
<td>Play and Child Development (3)</td>
</tr>
<tr>
<td>FCS 403</td>
<td>Parents and Peers and Adolescent Development (3)</td>
</tr>
<tr>
<td>FCS 446</td>
<td>Lifespan Nutrition (3)</td>
</tr>
<tr>
<td>FCS 474</td>
<td>Community Resources and Family Support (3)</td>
</tr>
<tr>
<td>FCS 478</td>
<td>Family Finance (3)</td>
</tr>
<tr>
<td>FCS 483</td>
<td>Adult and Technical Education in Family Consumer Science (3)</td>
</tr>
</tbody>
</table>
Major Emphasis: Child Development and Family Studies

**FCS 275** Consumers in the Economy (3)
**FCS 301** Lifespan Development (3)
**FCS 303** Working With Families (3)
**FCS 400** Culturally Diverse Family Systems (3)
**FCS 401** Family Life Development (3)
**FCS 414** Family Policy and Ethics (3)
**FCS 482** Family Life Education (3)
**FCS 488** Parenting Education (3)
**FCS 496** Selected Topics: CDFS (2-3)
**HLTH 311** Family Life & Sex Education (3)

Minor
Choose 16-36 credits from any minor

**FOOD AND NUTRITION OPTION**

Major Emphasis: Dietetics

**CHEM 106** Chemistry of Life Process Part I (General) (3)
**CHEM 111** Chemistry of Life Process Part II (Organic & Biochemistry) (5)
**ENG 101** Introduction to Family Consumer Science (3)

**FOOD AND NUTRITION OPTION**

Major Emphasis: Dietetics

The Dietetics Option* promotes growth among students wanting to become competent dietetics professionals by providing the 'highest practicable quality' advising, academic, real-life and interactive opportunities while at Minnesota State Mankato, and by developing confidence and competence to advance after graduation to Dietetics Internship, graduate programs and/or related employment.

A student who chooses to become a Registered Dietitian Nutritionist (RDN) upon graduation from Minnesota State Mankato will also need to:

- Meet published requirements to receive a Verification Form from the Dietetics Director.
- Apply, be accepted, and complete a supervised practice program (Dietetic Internship).
- Pass a national registration examination.

Minnesota State Mankato faculty are committed to positioning majors for successful transition from Minnesota State Mankato to Dietetic Internship and beyond. Regular and continuous advising is recommended to be successful.

Graduates are employed as RDNs and non-RD to non-RDN nutritionists in health care; community, public health, and corporate fitness settings as or members of food management teams.

* The Dietetics Option, a Didactic Program in Dietetics (DPD) is accredited by the Accreditation Council for Education in Dietetics, the accrediting agency for the Academy of Nutrition and Dietetics. Academy of Nutrition and Dietetics. Academy of Nutrition and Dietetics 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606. (800-877-1600 ext. 5400) www.eatright.org/ACEND.

**Required General Education**

**BIOL 270** Microbiology (4)
**CHEM 106** Chemistry of Life Process Part I (General) (3)
**ENG 101** Composition (3)
**FCS 275** Consumers in the Economy (3)
**FCS 301** Lifespan Development (3)
**FCS 303** Working With Families (3)
**FCS 400** Culturally Diverse Family Systems (3)
**FCS 401** Family Life Development (3)
**FCS 414** Family Policy and Ethics (3)
**FCS 482** Family Life Education (3)
**FCS 488** Parenting Education (3)
**FCS 496** Selected Topics: CDFS (2-3)
**HLTH 311** Family Life & Sex Education (3)

**Major Emphasis: Dietetics**

(2 credits from FCS 497 required)

**CHEM 106** Chemistry of Life Process Part I (General) (3)
**CHEM 111** Chemistry of Life Process Part II (Organic & Biochemistry) (5)
**ENG 271W** Technical Communication (4)
**HLTH 321** Medical Terminology (3)
**HLTH 475** Biostatistics (3)
**HLTH 477** Behavior Change Foundations and Strategies (3)
**PSYC 101** Introduction to Psychological Science (4)

Minor
Choose 16-36 credits from any minor

**DIETETICS OPTION**

This option prepares graduates for various careers in health promotion, wellness, food service, and/or nutrition, (such as restaurant or school lunch management); research and development or quality assurance in the food industry; and/or in corporate food distribution, production, sales and service. A supervised internship during the major allows students to gain experience in a particular area of interest. While a minor is not required, it is strongly recommended in order to improve employment opportunities.

**Required General Education**

**CHEM 106** Chemistry of Life Process Part I (General) (3)
**CHEM 111** Chemistry of Life Process Part II (Organic & Biochemistry) (5)
**ENG 271W** Technical Communication (4)
**HLTH 321** Medical Terminology (3)
**HLTH 475** Biostatistics (3)

**Major Common Core**

**FCS 101** Introduction to Family Consumer Science (3)

**Major Emphasis: Dietetics**

(2 credits from FCS 497 required)

**FCS 150** Food, Culture and You (3)
**FCS 242** Nutrition for Healthcare Professionals (3)
**FCS 252** Food Service Systems I (3)
**FCS 340** Food Science (4)
**FCS 342** Food Production Management (3)
**FCS 350** Food Service Systems II (3)
**FCS 420** Nutrition Assessment (3)
**FCS 440** Nutrition II (3)
**FCS 442** Medical Nutrition Therapy I (3)
**FCS 444** Experimental Food Science (3)
**FCS 446** Lifespan Nutrition (3)
**FCS 447** Food Policy (3)
**FCS 448** Medical Nutrition Therapy II (3)
**FCS 483** Adult and Technical Education in Family Consumer Science (3)

**Prerequisites to the Major**

**BIOL 220** Human Anatomy (4)
**BIOL 330** Principles of Human Physiology (4)
**CHEM 111** Chemistry of Life Process Part II (Organic & Biochemistry) (5)
**ENG 271W** Technical Communication (4)
**HLTH 475** Biostatistics (3)

**Major Common Core**

**FCS 101** Introduction to Family Consumer Science (3)

**Major Unrestricted Electives**

(choose 8 credits; at least 3 credits must be from 3-400 level courses)

**BIOL 220** Human Anatomy (4)
**BIOL 330** Principles of Human Physiology (4)
**CHEM 111** Chemistry of Life Process Part II (Organic & Biochemistry) (5)

**Prerequisites to the Major**

**BIOL 220** Human Anatomy (4)
**BIOL 330** Principles of Human Physiology (4)
**CHEM 111** Chemistry of Life Process Part II (Organic & Biochemistry) (5)
**ENG 271W** Technical Communication (4)
FAMILY CONSUMER SCIENCE CONTINUED

Required Minor: None

FAMILY CONSUMER SCIENCE MINOR

The Department of Family Consumer Science offers a flexible minor consisting of 20 semester hours of approved FCS courses or other courses approved by advisor. Students may work with an FCS advisor to select the courses that will be most helpful. However, most students will benefit from a minor with one of three focus areas below.

Core

The Department of Family Consumer Science offers a flexible minor consisting of 20 semester hours of approved FCS courses or other courses approved by advisor. Students may work with an FCS advisor to select the courses that will be most helpful. However, most students will benefit from a minor with one of three focus areas below.

Restricted Electives

FOOD AND NUTRITION EMPHASIS

Students majoring in Nursing, Human Performance, Dental Hygiene, Food Science technology, Health Science, or other similar majors can benefit from a Food and Nutrition Minor.

Required Courses

FCS 120 (2) Clothing and People
FCS 140 (3) Introduction to Nutrition
FCS 150 (3) Food, Culture, and You

Electives

Choose 2 Credit(s).

FCS 300 - 499 Choose 2 credits from any 300-400 level FCS courses.

CHILD DEVELOPMENT AND FAMILY STUDIES EMPHASIS

A minor with a focus in Child Development and Family Studies is useful to a variety of students going into professions related to health and human services, especially those who will work with children and families. Students may choose any combination of 20 credits from the list of courses below for a minor. Other courses may be chosen with advisor approval. A minor in this area can enable students to become certified Family Life Educators through National Council on Family Relations.

Electives Choose 20 Credits

FCS 100 (3) Personal & Family Living
FCS 101 (3) Introduction to Family Consumer Science
FCS 270 (3) Family Housing
FCS 275 (3) Consumers in the Economy
FCS 301 (3) Lifespan Development
FCS 303 (3) Working With Families
FCS 360 (3) Romantic Relationships
FCS 400 (3) Culturally Diverse Family Systems
FCS 401 (3) Family Life Development

FCS 402 (3) Play and Child Development
FCS 403 (3) Parents and Peers and Adolescent Development
FCS 414W (3) Family Policy and Ethics
FCS 446 (3) Lifespan Nutrition
FCS 474 (3) Community Resources and Family Support
FCS 478 (3) Family Finance
FCS 482 (3) Teaching Family Life/Parenting Education
FCS 483 (3) Adult and Technical Education in Family Consumer Science
FCS 488 (3) Parenting Education
FCS 494 (3) Family Life Education Practicum
FCS 496 (3) Selected Topics: FICD
FCS 497 (3) Internship
HITH 311 (3) Family Life & Sex Education
PSYC 230 (3) Child Care Psychology

CONSUMER STUDIES EMPHASIS

Professionals in this business related area usually work with people in professions such helping consumers get the best product or service for their money, advocating for a good availability of choices, resolving consumer complaints to achieve fair solutions, and helping consumers with a variety of money management issues.

Core

FCS 101 (3) Introduction to Family Consumer Science

Consumer-Related Courses (Required)

FCS 275 (3) Consumers in the Economy
FCS 414W (3) Family Policy and Ethics
FCS 473 (3) Consumer Protection
FCS 474 (3) Community Resources and Family Support
FCS 478 (3) Family Finance

Consumer Elective Course

Choose 2 or 3 Credits

Select One Course

FCS 120 (3) Clothing and People
FCS 140 (3) Introduction to Nutrition
FCS 270 (3) Family Housing
FCS 303 (3) Working With Families
FCS 483 (3) Adult and Technical Education in Family Consumer Science
FCS 496 (3) Selected Topics: FICD
FCS 498 (3) Undergraduate Internship

Strongly Recommended Electives

MRKT 210 (3) Principles of Marketing
MRKT 316 (3) Consumer Behavior

COURSE DESCRIPTIONS

FCS 100 (3) Personal & Family Living

Emphasizes individual growth and interpersonal relationships within our diverse society. Focuses on issues such as interpersonal communication, conflict resolution, mate selection, marriage and family issues, family strengths, stress and crises, parenting decision-making and parent-child relationships, resource management, and personal and family financial issues.

Fall, Spring
GE-5

FCS 101 (3) Introduction to Family Consumer Science

An overview of the scope of family consumer sciences and the career potentials of the profession.

Fall, Spring

FCS 120 (3) Clothing and People

Relationship of clothing to people from cultural, social, psychological, economic and aesthetic perspectives.

Fall

Diverse Cultures - Purple

FCS 140 (3) Introduction to Nutrition

An introductory nutrition class which emphasizes the scientific method and natural science principles from biochemistry, physiology, chemistry, and other sciences to explain the relationships between food and its use by the human body for energy, regulation, structure, and optimal health.

Fall, Spring

GE-3 non-lab
FCS 150 (3) Food, Culture, and You
Introduces students to basic food preparation and culinary techniques. Students look at different cultures and the roles of individuals and nations in a global context using food habits as a model.
Fall, Spring

FCS 242 (3) Nutrition for Healthcare Professionals
The science of six nutrition classes, including digestion through metabolism, and application of nutrition knowledge to clinical care, including weight control and common chronic conditions requiring nutrition therapy.
Prerequisite: BIOL 220, CHEM 106 or CHEM 111
Fall, Spring

FCS 252 (3) Food Service Systems I
Principles of food services operations related to menu planning, standardized recipes, production, and service in for profit and nonprofit settings. Includes the NRA ServSafe certification.
Fall

FCS 260 (3)
Child Health, Safety, and Nutrition
This course will provide students with knowledge of appropriate health, safety, and nutrition practices implemented in developmentally appropriate educational programs for children ages birth through eight years. Emphasis includes childhood acute and chronic illness, social, emotional and environmental health, health appraisals, health practices, safety promotion and first aid.
Summer

FCS 270 (3) Family Housing
Curriculum development, implementation, and administration of family consumer science educational programs for youth of varied abilities, interests, and socioeconomic levels. 12 hour program clinical required. For FCS Education majors only; unless permission from instructor.
Spring

FCS 275 (3) Consumers in the Economy
Economic decision making related to achieving maximum satisfaction from resources spent in the marketplace on housing, food, clothing, transportation, and other dimensions of the family. Basic information about the functions and responsibilities of the consumer, laws and agencies affecting consumer well-being and sources of help.
Fall

FCS 284 (3) Foundations of FCS Education
Nature and scope of Family and Consumer Sciences (FCS) education for grades 5-12. Principles and application of traditional, career/technical and critical science FCS Education perspectives studied. Presentation of varied FCS teaching methods and techniques.
Fall

FCS 301 (3) Lifespan Development
Study of the family from a historical perspective, in terms of the family system and the broader ecological system, in terms of stresses faced and coping responses. This course will address issues at each of four life stages: infancy and early childhood; the school years; transition from school to adult life; and the adult years.
Fall

FCS 303 (3) Working With Families
Study of the role of the family in the development of the young child. Provide teachers and care providers with knowledge and understanding of family systems and appropriate interactions with families. Students will participate in a service learning activity.
Fall, Spring

FCS 331 (4) Clothing Construction and Textiles
Introduction to principles and hands-on application of construction techniques for clothing and home furnishings. Emphasis on terminology, equipment, application and practice of sewing skills. Emphasis on consumer aspect of textiles and applications. Student projects will be aligned with sewing skills and experience.
Spring

FCS 340 (4) Food Science
Study of why, how, and when physical and chemical phenomena occur during the preparation of food and its products. Includes discussion and laboratory experience demonstrating how preparation methods affect food quality, composition, and nutritive value.
Prerequisite: FCS 150
Fall

FCS 342 (3) Food Production Management
Planning, preparing and serving meals with emphasis on effective management, nutritive needs, purchasing, and equipment. Includes quantity food service laboratory.
Prerequisite: FCS 252, FCS 340, FCS 350
Spring

FCS 350 (3) Food Service Systems II
Principles of food services management related to budgeting, food safety and operational sanitation, analysis and control of quality and quantity in institutional and public food service operations.
Prerequisite: FCS 252
Spring

FCS 360 (3) Romantic Relationships
This course is an in-depth examination and discussion of the many complex dynamics that make up romantic relationships. A diverse set of relationship topics are covered, including attachment, intimacy building and conflict diffusing strategies. Open discussion, critical thought, and application are encouraged via classroom and online opportunities.
Summer (On Demand)

FCS 400 (3) Culturally Diverse Family Systems
An analysis of culturally diverse family systems in America; emphasis on relationships within the family and with the larger community across the family life cycle.
Fall

Diverse Cultures - Purple

FCS 401 (3) Family Life Development
The course is a study of development through the family life cycle. Emphasis on developmental interaction and systems theory.
Spring

FCS 402 (3) Play and Child Development
An examination of the important role that play has in the cognitive, emotional, physical, and social development of the child from birth to adolescence.
Summer

FCS 403 (3) Parents and Peers and Adolescent Development
Examination of how adolescents’ development are affected by their relationships with their parents and with their peers.
Spring

FCS 414W (3) Family Policy and Ethics
An examination, analysis, and application of the impact of law, public policy, and ethical principles on family life.
Fall, Spring

FCS 417 (3) Principles of Wellness Coaching
This course contains content associated with challenging entry-level certifications for wellness coaching. Health behavior change strategies are emphasized within the context of the health coaching theory, coaching relationship skills, wellness assessment, and goal setting.
Fall, Spring

FCS 420 (3) Nutrition Assessment
In-depth study and practice of nutrition assessment techniques including dietary histories, anthropometrics, physical signs and symptoms, and laboratory interpretation in various age groups and conditions. Students will use findings to determine nutritional needs and make nutritional diagnoses.
Prerequisite: FCS 242

FCS 439 (3) Nutrition for Physical Activity and Sport
Provides in-depth exploration of the dietary needs of physically active individuals across the lifespan. Its laboratory component will focus on performance and interpretation of assessments commonly used to determine dietary and physiological status.
Prerequisite: FCS 140 or FCS 242
Fall, Spring

FCS 440 (3) Nutrition II
An advanced nutrition course in human metabolism, emphasizing the function and interaction of nutrients in metabolic and physiological processes. A grade of “C” must be attained in CHEM 111 and BIOL 330 before taking this course.
Prerequisite: BIOL 330, CHEM 111, FCS 242
Spring
FCS 442 (3) Medical Nutrition Therapy I
The role and influence of dietetics in society, nutritional assessment and care plans, dietetic principles applied to normal and malnourished states. Case-based approach.
Prerequisite: FCS 420, FCS 440, HLTH 321
Fall

FCS 444 (3) Experimental Food Science
Food quality, safety, formulation, processing, preservation, and biotechnology are explored. Original food science experiments are planned, executed, interpreted, and presented using appropriate scientific techniques.
Prerequisite: ENG 271W, FCS 340, HLTH 475
Spring

FCS 446 (3) Lifespan Nutrition
Study of nutritional needs of pregnancy, infancy, childhood, and adulthood. Experience in group dynamics in providing nutritional education to a target population.
Prerequisite: FCS 140 or FCS 242
Fall

FCS 447 (3) Food Policy
The development, establishment, and execution of personal, local, federal, and global food issues are studied. A previous nutrition course is not required. Graduate students, with the instructor, will develop an additional project, relating the student’s major interest to food policy.
Prerequisite: FCS 242 and FCS 340
Spring and Summer

FCS 448 (3) Medical Nutrition Therapy II
The pathophysiological, nutrient assessment, planning and counseling aspects of biliary, surgical, endocrine, cardiovascular and renal conditions. Case-based approach.
Prerequisite: FCS 442
Spring

FCS 454 (3) Sensory Evaluation and Food Product Development
Principles of sensory evaluation and application of those principles and other food science by selecting, planning, conducting, and reporting on a food product development project.
Spring

FCS 473 (3) Consumer Protection
Emphasizes the analyses and assessment of the effectiveness of consumer protection efforts. Emphasis will be placed on government laws, regulations, and agencies at the federal, state and local levels.
Variable

FCS 474 (3) Community Resources and Family Support
The system approach to analyzing family situations to make decisions and correlate resources in the resolution of family managerial problems. Emphasis on the application of managerial skills to lifestyle situations: young families, older adults, special needs, singles, and low income.
Spring

FCS 478 (3) Family Finance
Introduce students to the how’s and why’s of family financial management to reduce mistakes made in successfully managing financial aspects of life. For non-business majors.
Variable

FCS 482 (3) Family Life Education
Analyze issues and concerns related to family life education. Investigate teaching strategies and methods of evaluation. Preparation of appropriate lesson plans.
Fall

FCS 483 (3) Adult and Technical Education in Family Consumer Science
Study of the philosophy, objectives, and implementation of adult and technical education for family consumer science professionals. Emphasis is placed on the knowledge and skills which are necessary for the process and preparation of delivering effective leader-led individual and group learning with concentration on methods, tools, and techniques employed in facilitating adult learning.
Fall, Spring

FCS 484 (3) Program Development in Family Consumer Science
Philosophy, scope/sequence, curriculum, evaluation and administration of family consumer science educational programs for youth of varied abilities, interests, and socioeconomics levels. 12 hour program clinical required.
Fall

FCS 487 (1-3) Topic: Family Consumer Science Education
Current issues and/or research findings to be announced as offered. May be repeated.
Variable

FCS 488 (3) Parenting Education
A systems perspective on parent-child relationship. This course covers parent-child issues during the stages of human development. It also focuses on special needs children and families, cross-cultural issues and family violence. Emphasis is on research and theory and parenting education strategies.
Fall

FCS 490 (1-3) Workshop
Workshop topics vary as announced in class schedule. May be repeated.
Variable

FCS 491 (1-4) In-Service
May be repeated on each new topic.
Variable

FCS 492 (2) Dietetics Seminar
Preparation for advancement in a career as a registered dietitian, including a first draft of the dietetic internship application.
Prerequisite: Graduation by the following May to December; FCS 497 or concurrent
Fall

FCS 494 (1-3) Family Life Education Practicum
A scheduled, supervised work assignment that includes preparation and delivery of family life education materials within a community/organizational/corporate setting.
Fall, Spring, Summer

FCS 495 (3-4) Intern: Early Child Family
A scheduled work assignment that will include on-site experiences with parents in early childhood family education.
Fall, Spring

FCS 496 (2-3) Selected Topics: CDFS
Topics announced as offered. May be repeated.

FCS 497 (1-6) Internship
A scheduled work assignment with supervision in private business, industry and government agency appropriate to each area of concentration.
Prerequisite: Consent
Fall, Spring

FCS 498 (1-6) Undergraduate Internship
A scheduled work assignment with supervision in private business, industry, and government agency appropriate to each area of concentration.
Prerequisite: Consent
Fall, Spring

FCS 499 (1-6) Individual Study
Arranged with the instructor.
Prerequisite: Consent
Fall, Spring
Family Consumer Science Education

College of Allied Health & Nursing
Department of Family Consumer Science
102 Wreking Center • 507-389-2421
Website: http://ahn.mnsu.edu/fcs/

Chair: Heather Von Bank
Faculty: David Bissonnette, Joye Bond, Jill Cortlon, Jae Min Lee, Daniel Moen

Academic Map/Degree Plan at www.mnsu.edu/programs/#ALL

POLICIES/INFORMATION
Declaring an FCS Major. Students may declare an FCS major at any point in their academic program. Upon declaring an FCS major, an advisor is assigned. Full admission to the department and major requires:
- A minimum of 32 earned semester credit hours.
- A cumulative GPA of 2.5. FCS Education majors need a minimum GPA of 2.75.

Contact the department for application procedures.

GPA Policy. All courses required for major or minor option must be at "C" level or higher.

Course Policy. For those options requiring FCS 440 (dietetics, food and nutrition major and minor): CHEM 111 and BIOL 330 must both be completed at "C" level or higher in order to receive permission to register.

FAMILY CONSUMER SCIENCE EDUCATION BS TEACHING

Required General Education (35 credits)
- FCS 100 Personal & Family Living (3)
- FCS 140 Introduction to Nutrition (3)
- HLTH 240 Drug Education (3)

Major Common Core
- FCS 101 Introduction to Family Consumer Science (3)
- FCS 120 Clothing and People (2)
- FCS 150 Food, Culture and You (3)
- FCS 270 Family Housing (3)
- FCS 275 Consumers in the Economy (3)
- FCS 284 Foundations of FCS Education (3)
- FCS 301 Lifespan Development (3)
- FCS 331 Clothing Construction and Textiles (4)
- FCS 340 Food Science (4)
- FCS 400 Culturally Diverse Family Systems (3)
- FCS 414W Family Policy and Ethics (3)
- FCS 478 Family Finance (3)
- FCS 484 Program Development in Family Consumer Science (3)
- FCS 488 Parenting Education (3)
- HLTH 311 Family Life & Sex Education (3)

Other Graduation Requirements
See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

Required Minor: None

COURSE DESCRIPTIONS SEE FAMILY CONSUMER SCIENCE

FILM AND MEDIA STUDIES BA AND MINOR

Film and Media Studies

College of Arts and Humanities
Department of English
230 Armstrong Hall • 507-389-2117

Program Director (Film Studies): Steven Rybin
Program Director (Media Studies): Rachael Hanel
Chair: Matthew Sewell (English)
Chair: Amy Lauters (Mass Media)
Faculty:
Film Studies: Matthew Connolly, Brandon Cooke, Najda Kramer, Steven Rybin, Matthew Sewell
Media Studies: Rachael Hanel, Amy Lauters, Chuck Lewis, Jane McConnell, Heather McIntosh, Ellen Mrja, Jennifer Tiernan

The Film and Media Studies Major is an undergraduate liberal arts program in the College of Arts and Humanities that teaches students to look at all aspects of film and media. Students in the program will explore these disciplines through aesthetic, creative, cultural, historical, technical, and theoretical perspectives. The program prepares students for careers as communicators, innovative creators of film and other media texts, and competent professionals in such fields as broadcast news, digital media, film production, or other media-related fields. The degree also prepares students for graduate work in film and media studies.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
Admission to the Major is granted by the Program Directors. Please see one of the directors for information on admission procedures.

GPA Policy. Majors must earn a cumulative GPA of 2.5 or better in their major, in addition to the 2.0 overall GPA required by the University for graduation. A student must earn a "C" or better for a course to apply to their major; this includes the required general electives.

P/N Grading Policy. A course leading to a Film and Media Studies major may not be taken on a P/N basis, unless it is an Internship or an Independent Study not connected to the student's Capstone Project.

Transfer Credit. The program accepts no more than 16 credits from other colleges and universities as transfer credits to be applied toward the major. They must be taken in courses that match or are the equivalent of courses that are offered in the program. Please consult the Program Directors on any transfer issues.

POLICIES/INFORMATION
Admission to the program requires the completion of a GPA of 2.5 or higher.
**FILM STUDIES MINOR**

**Required General Education**

These credits do not count towards the major.
- FILM 114 Introduction to Film (4)
- MASS 110 Introduction to Mass Media (4)

**Major Common Core**

- FILM 210W Film Genres (4)
- FILM 329 Film History (4)
- FILM 416 Film Theory and Criticism (4)
- MASS 221W Basic Writing for Mass Media (4)
- MASS 411 Mass Media Ethics and Criticism (4)
- MASS 412 Mass Media History (4)

**Capstone (choose 2 credits)**

The 2-credit Capstone Project may be an internship either in film production or a mass media field, or an individual study involving either a creative portfolio (for example: short film, screenplay, multimedia web design) or a written critical paper of no less than 10 pages using the type of research and critical thinking expected in the student’s upper-division major classes. Students must consult one of the program directors about the design of their chosen project which typically is completed in their junior or senior year. Choose 2 credits of one of the following:
- FILM 498 Internship (1-6)
- FILM 499 Individual Study (1-4)
- MASS 498 Mass Media Internship (2-4)
- MASS 499 Individual Study in Mass Media (1-2)

**Major Restricted Electives**

**Group A (choose 8 credits)**

- MASS 312 Mass Media Law (4)
- MASS 325W Media Reporting and Editing (4)
- MASS 330W Writing for Digital Multimedia (4)
- MASS 334 Writing & Speaking for Broadcast (4)
- MASS 436W Specialized Writing (4)

**Group B (choose 8 credits)**

- ENGL 446 Screenwriting Workshop (4)
- FILM 216W Writing About Film (4)
- FILM 217 Introduction to Film Production (4)
- FILM 217 Advanced Film Production (4)

**Group C (choose 4 credits)**

- MASS 233 Public Relations Principles (4)
- MASS 260 Principles of Visual Mass Media (4)
- MASS 351 Digital Imaging for Mass Media (4)
- MASS 360 Digital Design for Mass Media (4)
- MASS 434W Specialized Writing (4)

**Group D (choose 4 credits)**

Students taking PHIL 465 must add 1 credit of PHIL 499 (Individual Study) at the time they take this course in order to meet the 4 credit requirement for Group D.
- FILM 214 Topics in Film (1-4)
- FILM 334W International Cinema (4)
- FILM 493 Topics in Film Studies (1-4)
- GER 460 Topics in German Cinema (4)
- PHIL 465 Philosophy of Film (3)

**Other Graduation Requirements** - Language (8 credits)

**FILM STUDIES MINOR**

**Minor Electives**

(choose 8 credits: 4 credits must be a 300 or 400 level International film course)
- FILM 210W Film Genres (4)
- FILM 214 Topics in Film (1-4)
- FILM 216W Writing About Film (4)
- FILM 217 Introduction to Film Production (4)
- FILM 317 Advanced Film Production (4)
- FILM 334W International Cinema (4)
- FILM 493 Topics in Film Studies (1-4)
- GER 460 Topics in German Cinema (4)
- PHIL 465 Philosophy of Film (3)

**COURSE DESCRIPTIONS**

**FILM 110 (4) Film Appreciation**

Promotes appreciation and understanding of cinema through the study of film style, film history, film genres, and the cultural impact of films.
Variable
GE-6

**FILM 114 (4) Introduction to Film**

Study and analysis of the elements basic to a critical understanding of film: story elements; visual design; cinematography and color; editing and special effects; functions of sound and music; styles of acting and directing; and functions of genre and social beliefs.
GE-6

**FILM 210W (4) Film Genres**

Study and analysis of the techniques, thematic conventions, and cultural and historical contexts of major film genres including the western, the musical, crime, melodrama, science fiction, and gangster. Films will include a mix of classic and contemporary examples.
Fall
WI, GE-6

**FILM 214 (1-4) Topics in Film**

Courses will explore specialized topics in film. May be repeated as topics change.
GE-6

**FILM 216W (4) Writing About Film**

Studies analytical film language in several different film writing forms, including short and long-form reviews, collaborative analysis, and formal critical essays. Emphasizes social and critical contexts needed for film analysis and practice of writing in these film forms.
Variable
WI, GE-6

**FILM 217 (4) Introduction to Film Production**

Introduces fundamentals of film production: writing, producing, directing, lighting, shooting, and editing, through lecture, critiquing the work of other filmmakers, and hands on production. By the end of this course students will be ready to pursue their own film projects.
Fall, Spring
GE-6, GE-11

**FILM 317 (4) Advanced Film Production**

Designed for students who have prior experience and want to make an experimental, narrative, and/or documentary film. Students will move from screenplay/proposal to production and post production of short films. May be repeated
Prerequisite: FILM 217 or permission of instructor
Fall, Spring

**FILM 329 (4) Film History**

The course is designed to give students a foundation in film history. The course focuses on major directors, genres, and periods in film history with an emphasis on social technological and critical context in order to provide an analytical framework that will support subsequent work.

**FILM 334W (4) International Cinema**

Introduces students to film from a variety of world cultures. Designed to increase knowledge of world cultures and appreciation and understanding of cultural differences in representation. Emphasizes history of national cinemas, film analysis, and writing.
Variable
WI, GE-6, GE-8
Diverse Cultures – Purple
FILM AND MEDIA STUDIES CONTINUED

FILM 416 (4) Film Theory and Criticism
Trends in film theory and criticism. Practice in critical analysis.
Prerequisite: FILM 329 or permission of instructor
Variable

FILM 493 (1-4) Topics in Film Studies
Topic-oriented course in film studies. May be repeated with change in topic.
Variable

FILM 498 (1-6) Internship
On-site field experience, the nature of which is determined by the specific needs of
the student's program option. May be repeated with change in topic.
Prerequisite: Consent of instructor
Fall, Spring, Summer

FILM 499 (1-4) Individual Study
Extensive reading, research, writing and/or film production in an area for which
the student has had basic preparation. May be repeated with change in topic.
Prerequisite: Consent of instructor
Fall, Spring, Summer

Mass Media Courses

MASS 110 (4) Introduction to Mass Media
Nature, functions, responsibilities and effects of the media in contemporary society.
GE-9
Diverse Cultures: Purple

MASS 221W (4) Basic Writing for Mass Media
Basic techniques of gathering information and writing readable and accurate
media stories.
Prerequisite: ENG 101, MASS 110
Fall, Spring

MASS 233 (4) Public Relations Principles
Survey of current practices and problems in the field of public relations. Emphasizes
successful case histories and planning techniques.
Prerequisite: MASS 221
Variable

MASS 260 (4) Principles of Visual Mass Media
Exploration of the basic principles of visual media design, stressing the significance
of images in a mass media society. Special focus on contextualizing historical and
technological changes affecting image production for mass media.
Variable
GE-6, GE-7
Diverse Cultures: Purple

MASS 312 (4) Mass Media Law
Principles of the First Amendment, libel, fair trial, privacy, access to news, pornog-
raphy, and regulation of radio and television.
Prerequisite: MASS 221
Fall, Spring

MASS 325W (4) Media Reporting and Editing
Discussion of and practice in reporting about public affairs and social issues, plus
examination of copy editing and headline writing for traditional and new media.
Prerequisite: MASS 221
Variable
WI

MASS 330W (4) Writing for Digital Multimedia
Reporting, writing and packaging news for online audiences with an emphasis on
multimedia platforms; includes evaluation of news sites and critical consideration
of best practices, and economic, ethical and legal issues.
Prerequisite: MASS 221
Variable
WI

MASS 334 (4) Writing & Speaking for Broadcast
Planning, writing and delivering of broadcast news.
Prerequisite: MASS 221
Variable

MASS 351 (4) Digital Imaging for Mass Media
Instruction in the fundamental concepts, terminology, techniques and applications
of digital imaging in mass media. Development of the basic skills necessary to
design, create, manage and distribute photographic and video digital images
in mass media communication. Students must provide own camera equipment.
Prerequisite: MASS 221
Variable

MASS 360 (4) Digital Design for Mass Media
Practicum in typography, design, layout and production processes, including job
budgeting and estimating, for newspapers, magazines, newsletters, brochures,
posters, annual reports, direct mail and related print materials used public relations
and journalism. Emphasis on graphic design software.
Prerequisite: MASS 221

MASS 411 (4) Mass Media Ethics and Criticism
Study, analysis and criticism of the mass media, their ethics and performance.
Prerequisite: MASS 221
Fall, Spring

MASS 412 (4) Mass Media History
Survey of the social, cultural, intellectual and technological development of adver-
tising, public relations and print, broadcast and electronic journalism in the United
States. Open to non-major/minors.

MASS 434W (4) Public Relations Writing
Practical skill in the development of public relations writing including news releases,
brochures, PSA's, pitch letters, annual reports.
Prerequisite: MASS 233
Variable
WI

MASS 436W (4) Specialized Writing
Techniques and practicum in writing of features, reviews, editorials, opinion columns
and other specialized fields for print and electronic media.
Prerequisite: MASS 221
Variable
WI

MASS 498 (2-4) Mass Media Internship
Practical mass media experience in a professional setting.
Prerequisites: MASS 221, MASS 312, and MASS 411, plus two additional
300/400 level MASS courses, one of which must be MASS 325, MASS 330,
MASS 334, MASS 431, MASS 434 or MASS 436
Fall, Spring

MASS 499 (1-2) Individual Study in Mass Media
Directed research on a mass media topic chosen by the student.
Prerequisite: MASS 221
Fall, Spring
FINANCE BS, MINOR AND CERTIFICATE

Finance

College of Business
Department of Finance
150 Morris Hall • 507-389-1319
Website: cob.mnsu.edu/finnc/

Chair: Harold Thiewes, Ph.D.
Faculty: Yilin (Leon) Chen, Daniel Hiebert, Puneet Jaiprakash, Joseph Reising, Roger Severns, Stephen Wilcox

The objective of the department is to prepare students for entry-level positions in the field of finance. Four areas of emphasis are available within this major.

The undergraduate finance program deals with the theory, organization and operations of the financial system from both the social and managerial perspectives. Students are expected to develop expertise in making organizational and personal judgements and decisions involving financial data. Additionally, students present their analyses in both written and oral form.

Students may select and complete one or more of the following emphases: Corporate Finance, Financial Planning and Insurance, General Finance, and Investment Analysis. In addition an interdisciplinary Certificate in Business Analytics is available through the department.

Accreditation. The Finance program is accredited by the Association to Advance Collegiate Schools of Business (AACSB).

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

Admission to a Major in the College of Business. Admission to a major in the College of Business typically occurs at the beginning of the student’s sophomore year. Once admitted, students may choose to pursue a degree in one or more of the following majors: Accounting, Finance, International Business, Management, or Marketing. Multiple criteria will be considered for admission to a major in the College of Business. Admission is competitive; meeting minimum requirements does not guarantee admission. Deadlines for application are: October 1 for Spring Semester and March 1 for Fall Semester.

Criteria Considered for Admission to the Finance Major
1. Minimum cumulative (including Transfer) Grade Point Average of 2.5.
2. Completion of the following courses with a minimum grade of C (2.0): IT 101, MATH 130, ACCT 200, BUS 295, ECON 201.

Requirements for the Financial Planning Minor
1. Students must be admitted to a major at Minnesota State Mankato, and
2. Students must have a cumulative GPA of 2.0 or higher when starting the Financial Planning minor.

Academic Advising. Students will initially receive their advising from the professional advisors in the College of Business Student Center. When a student applies to the College of Business (which is done during BUS 295), he/she will be assigned a faculty advisor in the major area of study. Questions regarding the assignment of advisors can be answered in the College of Business Advising Center, 151 Morris Hall, 389-2963.

College of Business Policies. Students who are business minors, non-business majors or those who are not seeking a four-year degree may take up to 24 credits in the College of Business.

Students must be admitted to a major to take upper division (300/400) courses in the College of Business.

Students must be admitted to the College of Business major to be granted a Bachelor of Science degree in any College of Business major.

Residency. Transfer students must complete a minimum of 30 resident credits at the upper division (300-400) level in the College of Business at Minnesota State Mankato.

Transfer students pursuing a major or minor in the College of Business must complete at least 50% (one-half) of their major or minor coursework at Minnesota State Mankato.

GPA Policy. Students must earn a minimum grade point average of 2.0 (“C”) on the total courses taken in the College of Business and a 2.25 overall GPA to meet graduation requirements.

P/N Grading Policy. No more than one-fourth of a student’s major shall consist of P/N grades.

Assessment Policy. The College of Business believes that the ongoing assessment of its programs makes a vital contribution to the quality of those programs and to student learning. Student Participation is an important and expected part of the assessment process.

Internships. Students are strongly encouraged to participate in one or more internship programs related to their field of study before graduation. Qualifying internships may receive academic credit counting towards a student’s major, but are not required to be taken for credit. To receive academic credit, students must be registered during the semester the internship takes place. Registration instructions and other business internship resources can be found at: cob.mnsu.edu/internship/

FINANCE BS
Degree completion = 120 credits

Required General Education
ECON 201 and MATH 130 are required for admission to the major.

ECON 201 Principles of Macroeconomics (3)
MATH 130 Finite Mathematics and Introductory Calculus (4)

Ethics (choose 3 Credits)
PHIL 120W Introduction to Ethics (3)
PHIL 205W Culture, Identity, and Diversity (3)
PHIL 222W Medical Ethics (3)
PHIL 224W Business Ethics (3)
PHIL 226W Environmental Ethics (3)
PHIL 240W Law, Justice & Society (3)

Prerequisites to the Major
ACCT 200 Financial Accounting (3)
BUS 295 Professional Preparation for Business Careers (2)
IT 101 Introduction to Information Systems (3)

Major Common Core (Required of all College of Business Majors)
Choose 34 Credits.

ACCT 210 Managerial Accounting (3)
BLAW 200 Legal Environment of Business (3)
ECON 202 Principles of Microeconomics (3)
ECON 207 Business Statistics (4)
FINA 362 Business Finance (3)
IBUS 380 Principles of International Business (3)
MGMT 300 Introduction to MIS (3)
MGMT 230 Principles of Management (3)
MGMT 346 Production & Operations Management (3)
MGMT 481 Business Policy & Strategy (3)
MRKT 210 Principles of Marketing (3)

Required of all Finance majors (choose 12 credits).
FINA 460 Investments (3)
FINA 462 Strategic Financial Management (3)
FINA 464 Financial Institutions and Markets (3)
FINA 467 Insurance and Risk Management (3)

Major Emphasis - CORPORATE FINANCE
Choose two of the following, at least one being FINA, for a total of at least 6 credits. Students who register for FINA 493 should register for 3 credits each time they register for the course.

ACCT 300 Intermediate Financial Accounting I (3)
ACCT 310 Management Accounting I (3)
FINA 461 Advanced Corporate Finance (3)
Electives (choose 6-12 credits)
Major Emphasis - FINANCIAL PLANNING AND INSURANCE

ACCT 330 Individual Income Tax (3)
FINA 459 Personal Financial Planning (3)
FINA 470 Personal Insurance (3)

ECON 463 Applied Econometrics of Financial Markets (3)
FINA 458 Estate Planning (3)
FINA 463 Security Analysis (3)
FINA 466 Retirement Planning (3)
FINA 477 Real Estate (3)
FINA 478 Real Estate Investment (3)
FINA 480 Options and Futures (3)
FINA 493 Maverick Fund (1-6)
FINA 498 Internship (3)
MRKT 412 Professional Selling (3)

Major Emphasis - GENERAL FINANCE

Choose five of the following, three of which must be FINA courses, for a total of at least 15 credits. Students who register for FINA 493 should register for 3 credits each time they register for the course.

ACCT 300 Intermediate Financial Accounting I (3)
ACCT 301 Intermediate Financial Accounting II (3)
ACCT 310 Management Accounting I (3)
ACCT 311 Management Accounting II (3)
ACCT 330 Individual Income Tax (3)
ACCT 410 Business Income Tax (3)
FINA 458 Estate Planning (3)
FINA 461 Advanced Corporate Finance (3)
FINA 463 Security Analysis (3)
FINA 466 Retirement Planning (3)
FINA 469 International Business Finance (3)
FINA 470 Personal Insurance (3)
FINA 477 Real Estate (3)
FINA 478 Real Estate Investment (3)
FINA 480 Options and Futures (3)
FINA 482 Risk Management for Financial Institutions (3)
FINA 492 Study Tour (1-3)
FINA 493 Maverick Fund (1-6)
FINA 498 Internship (3)
MRKT 312 Professional Selling (3)

FINANCIAL PLANNING MINOR

Minor Core
FINA 459 Personal Financial Planning (3)
FINA 470 Personal Insurance (3)

(Choose 3 credits)
FINA 100 Personal Financial Management (3)
FINA 362 Business Finance (3)

Minor Electives (Choose 9 credits)
(Choose at least three of the following courses)
ACCT 330 Individual Income Tax (3)
FINA 458 Estate Planning (3)
FINA 460 Investments (3)
FINA 463 Security Analysis (3)
FINA 464 Financial Institutions and Markets (3)
FINA 466 Retirement Planning (3)
FINA 467 Insurance and Risk Management (3)
FINA 498 Internship (3)
FINA 499 Individual Study (1-3)
MRKT 312 Professional Selling (3)

BUSINESS ANALYTICS CERTIFICATE

This Certificate will provide a basic understanding of the analytic techniques moving business from hindsight to foresight. Using multidisciplinary data the Certificate covers structuring inputs, crafting descriptive analytics, generating diagnostics, making business predictions, and developing prescriptive models. Some of the topics to be covered include visualization, descriptive data mining, forecasting, and optimization. Students working toward a Business Analytics certificate need not be admitted to the College of Business, but must be admitted to the University, and College of Business upper division permission, and have at least a 2.0 grade point in all courses in the Certificate. Transfer students working toward this certificate must complete at least 50% (one-half) of their coursework at Minnesota State Mankato.

Required Courses
MATH 112 College Algebra or equivalent (4)
ECON 207 Business Statistics (4)
FINA 375 Business Analytics (3)

And at least two of the following:
ECON 463 Applied Econometrics of Financial Markets (3)
COURSE DESCRIPTIONS

BUS 100 (3) Introduction to Business and Business Careers
This course prepares students for success by exposing them to the requirements, expectations, resources and opportunities of the COB. Students will have business experiences and will develop professional skills.
Variable

BUS 397 (3) IBE Practicum
An applied course that entails developing, launching, managing, and closing a business with the cohort of students enrolled in the class. Students write and present a business plan as they seek financing for their startup company. The business start-up experience creates a real-world context in which students can practice the concepts introduced in MGMT 230, MRKT 210, and FINA 362. BUS 397 is part of the United Prairie Bank Integrated Business Experience, and students must enroll concurrently in BUS 397 and sections of FINA 362, MGMT 210, and MRKT 210 that are designated for IBE students.
Prerequisite: Must be admitted to a major.
Corequisite: FINA 362, MGMT 230, MRKT 210
Fall, Spring

FINA 100 (3) Personal Financial Management
Fundamental concepts of managing cash flows: preparation of personal budget, personal debt management, financial goal establishment, savings and investments, insurance.
Variable

FINA 362 (3) Business Finance
An introduction to finance relating to problems, methods, and policies in financing business enterprise.
Prerequisite: ACCT 200
Fall, Spring

FINA 372 (3) Special Topics in Finance
Current topics of significance in Finance. May be repeated for credit.
Fall (On Demand), Spring (On Demand), Summer (On Demand)

FINA 375 (3) Business Analytics
Introduction to analytic tools and techniques using business applications.
Prerequisite: ECON 207
Fall (On Demand), Spring

FINA 398 (0) CPT: Co-Operative Experience
Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.
Prerequisite: At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.
Fall, Spring, Summer

FINA 458 (3) Estate Planning
Principles and techniques for estate planning. Examination of various retirement plans available, and the legal and tax environment impacting an estate’s portfolio.
Prerequisite: FINA 100 or FINA 362
Fall

FINA 459 (3) Personal Financial Planning
Fundamental concepts of personal financial management: insurance, budgeting, credit, savings, investments, retirement and estate planning, and consumer debt management.
Prerequisite: FINA 470, FINA 100 or FINA 362
Spring

FINA 460 (3) Investments
Formulation of investment policy of individuals and institutions, factors influencing the values of securities, and techniques of portfolio selection and management.
Prerequisite: FINA 362
Fall, Spring

FINA 461 (3) Advanced Corporate Finance
This course encompasses advanced principles and concepts concerning the nature and types of debt financing, the valuation and use of leases, the process and tools of risk management, the calculation and estimation of financial ratios, the financial planning and forecasting processes, and the understanding of working capital.
Prerequisite: FINA 362
Fall

FINA 462 (3) Strategic Financial Management
Applications of financial principles and analytical tools through the use of case studies and problems from local businesses.
Prerequisite: FINA 362
Fall, Spring

FINA 463 (3) Security Analysis
Tools and techniques to aid in individual and institutional portfolio management.
Prerequisite: FINA 362 and FINA 460
Spring

FINA 464 (3) Financial Institutions and Markets
Introduction to money and capital markets, instruments and institutions. Consideration of the management problems of financial institutions.
Prerequisite: FINA 362
Fall, Spring

FINA 466 (3) Retirement Planning
Fundamental concepts of employee benefits in relation to pertinent legislation, modern management techniques, and financial constraints that affect the formulation and implementation of a benefit plan.
Prerequisite: FINA 100 or FINA 362
Spring

FINA 467 (3) Insurance and Risk Management
Examination of the fundamentals of the insurance industry; the risk management process; and commercial insurance exposures and policies including commercial property, general liability, and workers’ compensation.
Fall, Spring

FINA 468 (3) Commercial Property/Liability Insurance
Principles and practices of risk management in the recognition and treatment of exposure to potential financial loss and with primary emphasis on property and liability insurance for individuals and families.
Prerequisite: FINA 467
Variable

FINA 469 (3) International Business Finance
Financing investments and working capital management problems in multi-national environments.
Prerequisite: FINA 362
Variable

FINA 470 (3) Personal Insurance
Examination of personal insurance exposures and policies including auto, health, home, and life.
Fall

FINA 476 (3) Real Estate Appraisal
Principles and techniques of real estate valuation. The market, cost and income methods for the basic structure of the course. A professional appraisal report is required.
Prerequisite: FINA 362
Variable

FINA 477 (3) Real Estate
Fundamental principles: valuation, brokerage, financing, law, property management, land descriptions and basic investment.
Prerequisite: FINA 100 or FINA 362
Variable

FINA 478 (3) Real Estate Investment
Property productivity analysis utilizing discount cash flow methodology, urban growth and taxation factors, and economic base analysis.
Prerequisite: FINA 362
Variable
FINA 479 (3) Executive Lectures
Guest lecturers and discussions with students by visiting senior executives of major companies coordinated by faculty. The course will include analysis of several individual companies. May be repeated.

FINA 480 (3) Options and Futures
Trading practices and procedures utilizing these contracts in hedging and risk management policies for business.
Prerequisite: FINA 362
Fall

FINA 482 (3) Risk Management for Financial Institutions
Prerequisite: FINA 362
Spring

FINA 491 (1-4) In-Service
Fall, Spring

FINA 492 (1-3) Study Tour
Study tours are led by Minnesota State University, Mankato faculty and provide students with opportunities to visit companies and attend lectures by renowned experts from key sectors of economy, government, and business.
Prerequisite: Permission Required
Variable

FINA 493 (1-6) Maverick Fund
Students are responsible for generating investment ideas consistent with the Maverick Fund Investment Policy Statement.
Prerequisite: FINA 362
Corequisite: FINA 460
Fall, Spring

FINA 497 (1-9) Internship
Supervised experience in business, industry, state or federal institutions.
Prerequisite: Permission Required
Fall, Spring

FINA 498 (3) Internship
Supervised experience in business, industry, state or federal institutions.
Prerequisite: Permission Required
Fall, Spring

FINA 499 (1-3) Individual Study
Prerequisite: Permission Required
Fall, Spring

FIRST YEAR EXPERIENCE COURSE

First Year Experience
103 Preska Residence Community • 507-389-5498
Director: Nicole Stock

FOOD SCIENCE TECHNOLOGY BSR

Food Science Technology
College of Science, Engineering & Technology
Department of Biological Sciences
242 Trafton Science Center S • 507-389-2786
Website: cset.mnsu.edu/biology/programs/ugrad/
Biological Sciences, Chair: Penny Knoblich
Program Director: Timothy Secott PhD
Faculty: Joye Bond PhD; Mary Hadley PhD; Gregg Marg PhD

Recent outbreaks of food borne disease and concern for safe food products for consumers is driving the market for individuals with a degree in Food Science Technology. Graduates can expect to find employment within the food industry and testing laboratories or government laboratories. These positions require a diversified training in both foods and sciences, especially microbiology, nutrition, and chemistry. This undergraduate major is easily adapted for students wanting to continue into graduate education.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
Admission to major is granted by the Department of Biology and follows minimum University admission requirements:
- a minimum of 32 earned semester credits hours
- a minimum cumulative GPA of 2.00

GPA Policy. A minimum GPA of 2.00 must be maintained in the major.
P/N Grading Policy. All courses in the major must be taken for grade.

In addition to the specific requirements of the major, all university requirements must be met for graduation. This includes 120 credits of coursework, 40 credits of upper division courses (including those in the major), purple and gold course requirements, and two writing intensive courses.

Required General Education
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 105</td>
<td>General Biology I (4)</td>
</tr>
<tr>
<td>STAT 154</td>
<td>Elementary Statistics (4)</td>
</tr>
<tr>
<td>MATH 112</td>
<td>College Algebra (4)</td>
</tr>
<tr>
<td>MATH 115</td>
<td>Precalculus Mathematics (4)</td>
</tr>
<tr>
<td>MATH 121</td>
<td>Calculus I (4)</td>
</tr>
</tbody>
</table>

Prerequisites to the Major
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 106</td>
<td>General Biology II (4)</td>
</tr>
<tr>
<td>BIOL 270</td>
<td>Microbiology (4)</td>
</tr>
<tr>
<td>BIOL 330</td>
<td>Principles of Human Physiology (4)</td>
</tr>
</tbody>
</table>
### FRENCH BA, BS AND MINOR

**French**

College of Arts & Humanities  
Department of World Languages & Cultures  
227 Armstrong Hall • 507-389-2116  
Website: www.mnsu.edu/languages

Chair: Adriana Gordillo  
Faculty: Evan Bibbee

Studying French provides insight into the literature and culture of France and other French-speaking countries. It also gives students a knowledge of language that enables them to work and travel in areas of the world where French is spoken. To facilitate these goals, the department sponsors a summer program in France. Students choosing to take advantage of this study-abroad opportunity, or who acquire language experience on their own initiative, may receive credit if arrangements are made in advance.

#### Communicate in Languages Other Than English

**Standard 1.1:** Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.

**Standard 1.2:** Students understand and interpret written and spoken language on a variety of topics.

**Standard 1.3:** Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.

#### Gain Knowledge and Understanding of Other Cultures

**Standard 2.1:** Students demonstrate an understanding of the relationship between the practices and perspectives of the culture studied.

**Standard 2.2:** Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.

#### Connect with Other Disciplines and Acquire Information

**Standard 3.1:** Students reinforce and further their knowledge of other disciplines through the foreign language.

**Standard 3.2:** Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures.

#### Develop Insight into the Nature of Language and Culture

**Standard 4.1:** Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.

**Standard 4.2:** Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.

**Participate in Multilingual Communities at Home & Around the World**

**Standard 5.1:** Students use the language both within and beyond the school setting.

**Standard 5.2:** Students show evidence of becoming lifelong learners by using the language for personal enjoyment and enrichment.

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**Academic Map/Degree Plan at www.mnsu.edu/programs/#All**

#### POLICIES/INFORMATION

**Admission to Major** is granted by the department. Minimum University admission requirements are:

- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (“C”).

Contact the department for application procedures.

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#### GPA Policy

A grade of “C-” or better must be earned for major or minor credit.

**P/N Grading Policy.** Work done for a major or minor must be done for a letter grade beyond the second-year level. A grade of P must be earned for major or minor credit in all work done on a P/N basis.

**Proficiency Policies.** Students who wish to receive credit by examination may take tests to have their proficiency evaluated. Students may not take a proficiency test for a course in which they are enrolled. The department reserves the right to deny admission to courses for those students whom a faculty member determines to have mastered the material already.

**Fulfilling BA Language Requirement.** Students who wish to validate the BA Language requirement for previous study in French, German, Spanish, Swedish or Norwegian may do so by taking a credit by exam (see above section). Students do not meet the BA language requirement merely because they have taken two years of high school language.

**Residency Requirement.** Transfer credits will be applied only if they are the equivalent of work offered by the Department of World Languages & Cultures for the major or minor in that language. In addition, a minimum of work must be taken at Minnesota State Mankato as follows: **Major:** a minimum of three upper division courses other than Independent or Individual Study, for a total of at least 8 credits. At least two of these courses must be at the 400 level. **Minor:** a minimum of two upper division courses other than Independent or Individual Study, for a total of at least 6 credits.

Courses not required for a student’s specific baccalaureate degree should be chosen according to these general guidelines:

- **BA:** Emphasis on literature in upper-division courses; students will most likely pursue their education beyond the baccalaureate level.

- **BS:** Emphasis on the ability to communicate in the language; presupposes knowledge of culture and civilization; students frequently have career goals in other disciplines for which a language is either required or recommended.

- **BS French Education:** Emphasis on communication (four skills plus culture and language analysis).

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#### FRENCH BA

Degree completion = 120 credits

**Prerequisites to Major**  
**Elementary French**  
- (choose 2-10 credits)  
  FREN 101 Elementary French I [5]  
  FREN 102 Elementary French II [5]  
  FREN 200 Entry-Level Intermediate French [2-4]

**Major Common Core Language**  
- (choose 11-12 credits)  
  FREN 350 Introduction to French Literature [3]  
  FREN 366 Oral Communication [2-6]  
  FREN 404 French Syntax [2-4]  
  FREN 420 French Seminar [1-3]  
  FREN 432 French Literature I [3-4]  
  FREN 442 French Literature II [3-4]  
  FREN 452 French Literature III [3-4]  

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Major Restricted Electives (choose 1-12 credits)
FREN 201 Intermediate French I [4]
FREN 204 Advanced Intermediate French [2-4]
FREN 211 Intermediate Readings [1-3]
FREN 214 Paris et l’ILE de France [1-3]
FREN 215 Composition [1-3]
FREN 216 Conversation [1-4]
FREN 217 Modern French [1-3]
FREN 218 On Y Va [1]
FREN 261 Conversation & Pronunciation [1-3]
FREN 293 Supervised Study in French-Speaking Countries [1-6]
FREN 299 Individual Study [1-4]
FREN 301 Third Year Vocabulary Review [3]
FREN 302 Composition [2-4]
FREN 302W Composition [2-4]
FREN 304 Third Year Grammar Review [3]
FREN 305 France Today [1-4]
FREN 313 Third Year French [1-4]
FREN 314 Paris et l’ILE de France [1-3]
FREN 315 Composition [1-3]
FREN 316 Conversation [1-4]
FREN 317 Modern French [1-3]
FREN 318 Introduction to Business French [1-4]
FREN 320 French Seminar [1-3]
FREN 322 Listening Comprehension and Pronunciation [1-3]
FREN 350 Introduction to French Literature [3]
FREN 366 Oral Communication [1-6]
FREN 393 Supervised Study in French-Speaking Countries [1-6]
FREN 402 French Civilization [3-4]
FREN 404 French Syntax [2-4]
FREN 405 Business French I [2-4]
FREN 406 Business French II [2-4]
FREN 414 Paris et l’ILE de France [1-3]
FREN 415 Composition [1-3]
FREN 416 Conversation [1-4]
FREN 417 Modern French [1-3]
FREN 420 French Seminar [1-4]
FREN 432 French Literature I [1-4]
FREN 432 French Literature II [1-4]
FREN 452 French Literature III [1-4]
FREN 452 French Literature II [1-4]
FREN 499 Individual Study [1-4]

Required Minor: Yes. Any.

Required Minor: Yes. Any.

FRENCH BS
Degree completion = 120 credits

Prerequisites to Major (Elementary French) - (choose 2-10 credits)
FREN 101 Elementary French I [5]
FREN 102 Elementary French II [5]
FREN 200 Entry-Level Intermediate French [2-4]

Major Common Core
Language (choose 11-21 credits)
FREN 302W Composition [2-4]
FREN 350 Introduction to French Literature [3]
FREN 366 Oral Communication [2-6]
FREN 404 French Syntax [2-4]

Literature (choose 4-15 credits)
FREN 420 French Seminar [1-3]
FREN 432 French Literature I [3-4]
FREN 442 French Literature II [3-4]
FREN 452 French Literature III [3-4]

Civilization (choose 3-4 credits)
FREN 305 France Today [3-4]
FREN 402 French Civilization [3-4]

Major Restricted Electives (choose 1-9 credits)
FREN 211 Intermediate Readings [1-3]
FREN 214 Paris et l’ILE de France [1-3]
FREN 215 Composition [1-3]
FREN 216 Conversation [1-4]
FREN 217 Modern French [1-3]
FREN 218 On Y Va [1]
FREN 261 Conversation & Pronunciation [1-3]
FREN 293 Supervised Study in French-Speaking Countries [1-6]
FREN 299 Individual Study [1-4]
FREN 301 Third Year Vocabulary Review [3]
FREN 302 Composition [2-4]
FREN 302W Composition [2-4]
FREN 304 Third Year Grammar Review [3]
FREN 305 France Today [1-4]
FREN 313 Third Year French [1-4]
FREN 314 Paris et l’ILE de France [1-3]
FREN 315 Composition [1-3]
FREN 316 Conversation [1-4]
FREN 317 Modern French [1-3]
FREN 318 Introduction to Business French [1-4]
FREN 320 French Seminar [1-3]
FREN 322 Listening Comprehension and Pronunciation [1-3]
FREN 350 Introduction to French Literature [3]
FREN 366 Oral Communication [1-6]
FREN 393 Supervised Study in French-Speaking Countries [1-6]
FREN 402 French Civilization [3-4]
FREN 404 French Syntax [2-4]
FREN 405 Business French I [2-4]
FREN 406 Business French II [2-4]
FREN 414 Paris et l’ILE de France [1-3]
FREN 415 Composition [1-3]
FREN 416 Conversation [1-4]
FREN 417 Modern French [1-3]
FREN 420 French Seminar [1-4]
FREN 432 French Literature I [1-4]
FREN 442 French Literature II [1-4]
FREN 452 French Literature III [1-4]
FREN 492 Individual Study [1-4]
FREN 494 Supervised Study [1-6]
FREN 497 Internship [1-6]
FREN 499 Individual Study [1-4]

FRENCH MINOR

Required for Minor (Core, 24 credits)
Elementary French or other proof of skill is needed.
Intermediate sequence counts toward the minor.
FREN 302W Composition [2-4]
FREN 350 Introduction to French Literature [3]
FREN 366 Oral Communication [2-6]
FREN 404 French Syntax [2-4]
(choose one course from the following)
FREN 305 France Today [3-4]
FREN 402 French Civilization [3-4]

COURSE DESCRIPTIONS

FREN 101 (5) Elementary French I
An introduction, within a cultural context, to the basic skills of listening, speaking, reading and writing.
GE-8

FREN 102 (5) Elementary French II
An introduction, within a cultural context, to the basic skills of listening, speaking, reading and writing.
Prerequisite: FREN 101 or equivalent
GE-8
FREN 201 (4) Intermediate French I
Grammar review, oral practice, written composition and development of reading and listening skills within a cultural context.
Prerequisite: One year university French or equivalent
GE-B

FREN 202 (4) Intermediate French II
Grammar review, oral practice, written composition and development of reading and listening skills within a cultural context.
Prerequisite: FREN 201 or equivalent

FREN 214 (1-3) Paris et l'Ile de France
Visits to the major churches, cathedrals, castles, monuments, museums and neighborhoods in and around Paris.
Prerequisite: FREN 101, FREN 102, or equivalent

FREN 216 (1-4) Conversation
Practice in intermediate-level conversational skills.
Prerequisite: FREN 101, FREN 102, or equivalent

FREN 217 (1-3) Modern France
Introduction to contemporary French civilization.
Prerequisite: FREN 101, FREN 102, or equivalent

FREN 218 (1) On y va
Preparation for study in France.

FREN 261 (1-3) Conversation & Pronunciation
Systematic development of conversational idiom and vocabulary. Intensive work on pronunciation. May be taken by majors and minors up to three times.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 293 (1-6) Supervised Study in French-Speaking Countries
Topics will vary. Study for credit must be approved by the department prior to departure.
Prerequisite: FREN 101, FREN 102, or equivalent

FREN 299 (1-4) Individual Study
Topics will vary.

FREN 301 (3) Third-Year Vocabulary Review
Systematic review of French vocabulary.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 302W (2-4) Composition
Review of grammar and vocabulary. Practice in descriptive, narrative, and expository prose.
Prerequisite: FREN 201, FREN 202, or equivalent
WI

FREN 304 (3) Third-Year Grammar Review
Systematic review of French grammar.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 305 (1-4) France Today
Social, political, and economic trends in contemporary France.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 314 (1-3) Paris et l'Ile de France
Visits to the major churches, cathedrals, castles, monuments, museums and neighborhoods in and around Paris.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 315 (1-3) Composition
Practice in descriptive and narrative prose. Acquisition of grammatical structures and vocabulary beyond the intermediate sequence.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 316 (1-4) Conversation
Practice in conversational skills.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 317 (1-3) Modern France
Introduction to contemporary French civilization.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 318 (1-4) Introduction to Business French
Introduction to basic concepts associated with French business practices.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 322 (1-3) Listening Comprehension and Pronunciation
Development of listening comprehension and pronunciation through the use of tapes, videos, films, compact discs, and other recorded materials.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 323 (2-4) French Phonetics & Applied Linguistics
A study of the sound system in French. Intensive oral practice.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 350 (3) Introduction to French Literature
A beginning literature course designed to teach students to read with understanding and critical ability.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 356 (1-6) Oral Communication
Intensive practice in advanced conversational skills. May be repeated for credit.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 393 (1-6) Supervised Study in French-Speaking Countries
Topics will vary. Study for credit must be approved by the department prior to departure.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 402 (3-4) French Civilization
Survey of historical, philosophical, literary and artistic development of France from the beginning to the present.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 404 (2-4) French Syntax
Systematic review of French grammar.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 405 (2-4) Business French I
Study of current vocabulary, terminology and practices used in the business world. Study of developments affecting the French business, industrial and agricultural communities.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 406 (2-4) Business French II
Study of France's position in the European Economic Community and of the development of French business law with emphasis on the obligations and rights of business people, the classification and organization of the various types of companies, the emission of contracts and other documents.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 414 (1-3) Paris et l'Ile de France
Visits to the major churches, cathedrals, castles, monuments, museums and neighborhoods in and around Paris.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 416 (1-4) Conversation
Practice in advanced conversation skills.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 417 (1-3) Modern France
In-depth study of different aspects of contemporary French civilization.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 420 (1-4) French Seminar
In-depth study of an author, genre, movement, theme or period.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 432 (1-4) French Literature I
A study of the major authors, works and movements of two successive centuries of French literature.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 442 (1-4) French Literature II
A study of the major authors, works and movements of two successive centuries of French literature.
Prerequisite: FREN 201, FREN 202, or equivalent
FRENCH COURSES

FREN 452 (1-4) French Literature III
A study of the major authors, works and movements of two successive centuries of French literature.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 492 (1-4) Individual Study
Topics will vary.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 494 (1-6) Supervised French Study
Topics will vary. Study for credit must be approved by the department prior to departure.
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 497 (1-6) Internship
Prerequisite: FREN 201, FREN 202, or equivalent

FREN 499 (1-4) Individual Study
Prerequisite: FREN 201, FREN 202, or equivalent

FRENCH TEACHING BS

French Teaching
College of Arts & Humanities
Department of World Languages & Cultures
227 Armstrong Hall • 507-389-2116
Website: www.mnsu.edu/languages
Chair: Adriana Gordillo
Faculty: Evan Bibbee

Studying French provides insight into the literature and culture of France and other French-speaking countries. It also gives students a knowledge of language that enables them to work and travel in areas of the world where French is spoken. To facilitate these goals, the department sponsors a summer program in France. Students choosing to take advantage of this study-abroad opportunity, or who acquire language experience on their own initiative, may receive credit if arrangements are made in advance.

Communicate in Languages Other Than English
Standard 1.1: Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.
Standard 1.2: Students understand and interpret written and spoken language on a variety of topics.
Standard 1.3: Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.

Gain Knowledge and Understanding of Other Cultures
Standard 2.1: Students demonstrate an understanding of the relationship between the practices and perspectives of the culture studied.
Standard 2.2: Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.

Connect with Other Disciplines and Acquire Information
Standard 3.1: Students reinforce and further their knowledge of other disciplines through the foreign language.
Standard 3.2: Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures.

Develop Insight into the Nature of Language and Culture
Standard 4.1: Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.
Standard 4.2: Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.

Participate in Multilingual Communities at Home & Around the World
Standard 5.1: Students use the language both within and beyond the school setting.
Standard 5.2: Students show evidence of becoming lifelong learners by using the language for personal enjoyment and enrichment.

GPA Policy. A grade of “C-” or better must be earned for major or minor credit.

P/N Grading Policy. Work done for a major or minor must be done for a letter grade beyond the second-year level. A grade of P must be earned for major or minor credit in all work done on a P/N basis.

Proficiency Policies. Students who wish to receive credit by examination may take tests to have their proficiency evaluated. Students may not take a proficiency test for a course in which they are enrolled. The department reserves the right to deny admission to courses for those students whom a faculty member determines to have mastered the material already.

Fulfilling BA Language Requirement. Students who wish to validate the BA Language requirement for previous study in French, German, Spanish, Swedish or Norwegian may do so by taking a credit by exam (see above section). Students do not meet the BA language requirement merely because they have taken two years of high school language.

Residency Requirement. Transfer credits will be applied only if they are the equivalent of work offered by the Department of World Languages & Cultures for the major or minor in that language. In addition, a minimum of work must be taken at Minnesota State Mankato as follows: Major: a minimum of three upper division courses other than Independent or Individual Study, for a total of at least 8 credits. At least two of these courses must be at the 400 level. Minor: a minimum of two upper division courses other than Independent or Individual Study, for a total of at least six credits.

Courses not required for a student’s specific baccalaureate degree should be chosen according to these general guidelines:

- BA:
  Emphasis on literature in upper-division courses; students will most likely pursue their education beyond the baccalaureate level.
- BS:
  Emphasis on the ability to communicate in the language; presupposes knowledge of culture and civilization; students frequently have career goals in other disciplines for which a language is either required or recommended.
- BS French Education:
  Emphasis on communication (four skills plus culture and language analysis).

FRENCH BS, TEACHING
Degree completion = 120 credits

Prerequisites to Major
Elementary French (choose 2-10 credits)
FREN 101 Elementary French I (5)
FREN 102 Elementary French II (5)
FREN 200 Entry-Level Intermediate French (2-4)

Major Common Core
Language (choose 111 credits)
FREN 302W Composition (2-4)
FREN 323 French Phonetics and Applied Linguistics (2-4)
FREN 350 Introduction to French Literature (3)
FREN 366 Oral Communication (2-6)
FREN 404 French Syntax (2-4)

Literature (choose 415 credits)
FREN 420 French Seminar (1-3)
FREN 432 French Literature I (3-4)
FREN 442 French Literature II (3-4)
FREN 452 French Literature III (3-4)

Civilization (choose 3-4 credits)

POLICIES/INFORMATION
Admission to Major: is granted by the department. Minimum University admission requirements are:
- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (“C”).
Contact the department for application procedures.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All
GENDER AND WOMEN’S STUDIES

Gender and Women’s Studies

College of Social & Behavioral Sciences
Department of Gender and Women’s Studies
109 Morris Hall • 507-389-2077
Website: http://sbs.mnsu.edu/women/

Chair: Shannon J. Miller

Faculty: Maria Bevacqua, Laura Harrison, Ana Perez

The Department of Gender and Women’s Studies familiarizes students with interdisciplinary feminist perspectives through coursework, internships, research, and activism. Students learn to examine the historical, social, psychological, political, economic, and cultural dimensions of gender, while gaining a more complex understanding of the construction of gender and its intersection with other categories of difference, power, and inequality. By understanding how interlocking systems of oppression function locally and internationally, students will be better situated to apply their critical thinking skills as they work toward social justice in a global society.

The department supports a variety of opportunities for personal and professional development, including a student club and honor society, community and teaching internships, workshops and conferences, and cultural events. Students are encouraged to take leadership roles in the development of special programs and to become actively involved with community and campus-based activist groups, applying feminist theory to the practice of empowering women and creating social change.

Accelerated Combined Degree (BA/BS and MA/MS). Students interested in receiving both their undergraduate and graduate degrees in GWS at Minnesota State Mankato, may apply to the Department for admission into the Accelerated Graduate Program. Interested majors may apply upon the completion of 60 credits if they have a minimum GPA of 3.0. If accepted, students will work with an advisor to design an accelerated program in which up to 12 credits of 500-level courses can be applied to both their undergraduate and graduate programs. If accepted, students must maintain a minimum of 3.0 GPA overall and a 3.0 in the major the to continue in the program. Interested students should contact the Department for more information.

Other Graduation Requirements
See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

Required Minor: None.

COURSE DESCRIPTIONS SEE FRENCH

Gender and Women’s Studies BA, BS And Minors
AIS 240W American Indian Women (3)
ANTH 432 Kinship, Marriage and Family (3)
ANTH 433 Anthropology of Gender (3)
ART 419 Gender in Art (3)
BIOL 102 Biology of Women (3)
CORR 444 Women in the Criminal Justice System (3)
ENG 402 Gender in Literature (2-4)
ETHN 470 Women of Color (3)
GWS 120 Violence and Gender (4)
GWS 120W Violence and Gender (4)
GWS 225 Introduction to Lesbian, Gay, Bisexual, and Transgender Studies (4)
GWS 225W Introduction to Lesbian, Gay, Bisexual, and Transgender Studies (4)
GWS 230 Gender, Race, and Popular Culture (4)
GWS 251 Coming of Age: Gender and Culture (4)
GWS 251W Coming of Age: Gender and Culture (4)
GWS 260 Selected Topics (1-4)
GWS 277 Individual Study (1-6)
GWS 290 Workshop (1-4)
GWS 440 Feminist Pedagogy (3)
GWS 455 Politics of Sexuality (3)
GWS 460 Selected Topics (1-4)
GWS 477 Individual Study (1-6)
GWS 490 Workshop (1-4)
GWS 497 Internship: Teaching (1-6)
GWS 498 Internship: Community (1-6)
HIST 155 History of the Family in America (3)
HIST 408 History of Women in Preindustrial Europe (4)
HIST 487 United States Women's History (4)
HLTH 400 Women's Health (3)
LAWE 235 Women in Law Enforcement (3)
PHIL 445 Feminist Philosophy (3)
POL 424 Women & Politics (3)
PSYC 460W Psychology of Women (3)
SOC 209 Sociology of Human Sexualities (3)
SOC 307 Sex & Gender in Contemporary Society (3)
SOC 409 Family Violence (3)
SOWK 420 Women's Issues in Social Work (3)
SOWK 427 Social Work and Domestic Violence (3)

Required for Bachelor of Arts (BA) degree ONLY - Language (8 credits)

Required Minor: Yes. Any.

GENDER AND WOMEN'S STUDIES MINOR

Minor Core (16 credits)
Minors choose between GWS 110, GWS 110W and GWS 220, GWS 220W. If both are taken, one can be applied toward electives.
GWS 110 Introduction to Gender (4)
GWS 110W Introduction to Gender (4)
GWS 220 Sex and Gender Worldwide (4)
GWS 220W Sex and Gender Worldwide (4)
GWS 310 Feminist Thought (4)
GWS 330 Feminist Research and Action (4)
GWS 340 Undergraduate Seminar (4)

Minor Electives
(choose a minimum of 5 credits from the following)
AIS 240 American Indian Women (3)
AIS 240W American Indian Women (3)
ANTH 432 Kinship, Marriage and Family (3)
ANTH 433 Anthropology of Gender (3)
ART 419 Gender in Art (3)
BIOL 102 Biology of Women (3)
CORR 444 Women in the Criminal Justice System (3)
ENG 402 Gender in Literature (2-4)
ETHN 470 Women of Color (3)
GWS 120 Violence and Gender (4)
GWS 120W Violence and Gender (4)
GWS 225 Introduction to Lesbian, Gay, Bisexual, and Transgender Studies (4)
GWS 225W Introduction to Lesbian, Gay, Bisexual, and Transgender Studies (4)
GWS 230 Gender, Race, and Popular Culture (4)
GWS 251 Coming of Age: Gender and Culture (4)
GWS 251W Coming of Age: Gender and Culture (4)
GWS 260 Selected Topics (1-4)
GWS 277 Individual Study (1-6)
GWS 290 Workshop (1-4)
GWS 440 Feminist Pedagogy (3)
GWS 455 Politics of Sexuality (3)
GWS 460 Selected Topics (1-4)
GWS 477 Individual Study (1-6)
GWS 490 Workshop (1-4)
HIST 155 History of the Family in America (3)
HIST 408 History of Women in Preindustrial Europe (4)
HIST 487 United States Women's History (4)
HLTH 400 Women's Health (3)
LAWE 235 Women in Law Enforcement (3)
PHIL 445 Feminist Philosophy (3)
POL 424 Women & Politics (3)
PSYC 460W Psychology of Women (3)
SOC 209 Sociology of Human Sexualities (3)
SOC 307 Sex & Gender in Contemporary Society (3)
SOC 409 Family Violence (3)
SOWK 420 Women's Issues in Social Work (3)
SOWK 427 Social Work and Domestic Violence (3)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GWS 220W</td>
<td>Sex and Gender Worldwide</td>
<td>4</td>
<td>This course will examine women’s lives and activism, past and present, throughout the world. We will explore and evaluate individual and collective efforts to achieve social justice in the context of interlocking systems of oppression. Fall, Spring, Summer</td>
</tr>
<tr>
<td>GWS 225</td>
<td>Intro. to Lesbian, Gay, Bisexual and Transgender Studies</td>
<td>4</td>
<td>An introduction to the study of lesbian, gay, bisexual and transgender communities and identities, including challenges to homophobia and heterosexism. We will explore social and historical constructions of LGBT identities as they vary across ethnic, class, and gender lines. Fall, Spring</td>
</tr>
<tr>
<td>GWS 225W</td>
<td>Intro. to Lesbian, Gay, Bisexual and Transgender Studies</td>
<td>4</td>
<td>An introduction to the study of lesbian, gay, bisexual and transgender communities and identities, including challenges to homophobia and heterosexism. We will explore social and historical constructions of LGBT identities as they vary across ethnic, class, and gender lines. Fall, Spring</td>
</tr>
<tr>
<td>GWS 230</td>
<td>Gender, Race, and Popular Culture</td>
<td>4</td>
<td>Explores how popular culture shapes and mirrors our understandings of gender and sexuality and their intersections with race and class. Critically examines representations of gender and race in popular culture forms such as film, television, music, books, and the internet. On Demand</td>
</tr>
<tr>
<td>GWS 251</td>
<td>Coming of Age: Gender and Culture</td>
<td>4</td>
<td>This course explores the gendered coming-of-age experience in different time periods and cultures. Students will learn and apply tools from women’s studies to analyze the impact of gender, race, class, and sexuality on childhood, adolescence and adulthood. Fall, Spring</td>
</tr>
<tr>
<td>GWS 251W</td>
<td>Coming of Age: Gender and Culture</td>
<td>4</td>
<td>This course explores the gendered coming-of-age experience in different time periods and cultures. Students will learn and apply tools from gender and women’s studies to analyze the impact of gender, race, class, and sexuality on childhood, adolescence and adulthood. Fall, Spring</td>
</tr>
<tr>
<td>GWS 260</td>
<td>Selected Topics</td>
<td>1-4</td>
<td>Offered according to student demand and instructor availability/expertise, topics courses provide curriculum enrichment on an ongoing basis. Variable</td>
</tr>
<tr>
<td>GWS 277</td>
<td>Individual Study</td>
<td>1-6</td>
<td>Concentrated study and research in areas of student’s special interests/expertise under supervision of a faculty member. Prequisite: Women’s Studies major/minor Fall, Spring</td>
</tr>
<tr>
<td>GWS 290</td>
<td>Workshop</td>
<td>1-4</td>
<td>Topics to be announced. May be retaken for credit. Variable</td>
</tr>
</tbody>
</table>

**Minor Core**

- GWS 225 Introduction to Lesbian, Gay, Bisexual, and Transgender Studies (4)
- GWS 230 Gender, Race, and Popular Culture (4)
- GWS 455 Politics of Sexuality (3)
- PSYC 205 Psychology of Sexual Health (3)
- SOC 209 Sociology of Human Sexualities (3)  
  (Choose one of the following courses)
- ANTH 269 Anthropology of Sex (3)
- ANTH 340 Language and Power (4)
- SOC 307 Sex & Gender in Contemporary Society (3)
GWS 330 (4) Feminist Research and Action
This course examines fundamentals of feminist research and the relationship between theory and practice. Students will engage philosophical and methodological questions about the production of knowledge, learn concrete research skills, and complete individual research/action projects.

Spring

GWS 330W (4) Feminist Research and Action
This course examines fundamentals of feminist research and the relationship between theory and practice. Students will engage philosophical and methodological questions about the production of knowledge, learn concrete research skills, and complete individual research/action projects.

Spring

GWS 340 (4) Undergraduate Seminar
Advanced topics in women's and gender studies. Prerequisite: GWS 110 or GWS 220 or consent

Spring

WI

GWS 411 (4) Sexual Assault Victim Advocacy
Students will learn about the legal, cultural, and political factors that contribute to sexual assault and gendered violence. This course will combine hands-on training in activism from course instructors and community members in the field of sexual assault advocacy, as well as a background in theories of gender and sexual assault. Sexual assault advocates provide confidential services to victims of sexual violence, including hospital and legal advocacy, crisis counseling, and emotional support. Students who satisfactorily complete 40 hours of training will be certified as sexual assault advocates at the end of the semester.

On Demand: Fall, Spring

GWS 440 (3) Feminist Pedagogy
We explore key philosophical and methodological issues in feminist teaching with an emphasis on application of the material.

GWS 455 (3) Politics of Sexuality
This course explores the interconnections between sex, gender, and sexuality, with special attention to how institutions and communities shape experience and identity.

GWS 460 (1-4) Selected Topics
Offered according to student demand and instructor availability/expertise, topics courses provide curriculum enrichment on an ongoing basis.

Variable

GWS 477 (1-6) Individual Study
Concentrated study and research in areas of student's special interests/expertise under supervision of a faculty member.

Prerequisite: Must be department major/minor

Fall, Spring

GWS 490 (1-4) Workshop
Topics to be announced. May be retaken for credit.

Variable

GWS 497 (1-6) Internship: Teaching
Students assist a faculty member in teaching GWS 110 or GWS 220.

(Complete course handbook available from: cynthia.veldhuisen@mnsu.edu)

Prerequisite: GWS 110 or GWS 220 and consent.

GWS 498 (1-6) Internship: Community
The Gender and Women's Studies internship provides students with the opportunity to gain experience within an on-campus, off-campus private, public or community organization. This internship provides a means for pursuing an interest in a field of work, or within a particular organization; gaining work and/or activist experience and practical skills; making appropriate contacts which might be useful in establishing a future career.

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**GEOGRAPHY AND GEOGRAPHY PROFESSIONAL BA, BS, CERTIFICATE AND MINOR**

**Geography**

College of Social & Behavioral Sciences
Department of Geography
206 Morris Hall • 507-389-2617
Website: http://sbs.mnsu.edu/geography/
Chair: Donald A. Friend
Faculty: Woo Jang, Phillip Larson, Jose Javier Lopez, Cynthia A. Miller, Martin D. Mitchell, Rama Mohapatra, Ginger Schmid, Forrest Wilkerson, Fei Yuan

Geography is both a social and natural science that studies the interactions between people and their environment. Geography is home to cutting edge geospatial technologies (GIS – Geographic Information Systems, GPS – Global Positioning Systems, and Satellite Remote Sensing) that provide students with skills in very high demand in the work force. Geography examines the distribution of all physical and cultural phenomena across the face of the Earth. Physical geography studies landforms, climate, and biotic distributions along with natural resources and the processes governing their location and use. Cultural geography explores the characteristics of human societies including religion, economy, migration, and government and how these vary across space and through time. The Department of Geography offers a full suite of courses covering the cultural, physical, regional, and geospatial branches of geography at the undergraduate and graduate levels. The majors, minor and Certificate in Geographic Information Science (GISc) offered by the Department provide background and training that enable students to enter careers in the public or private sectors as well as prepare them for graduate study.

**Academic Map/Degree Plan at www.mnsu.edu/programs/#All**

**POLICIES/INFORMATION**

Admission to Major. Students enrolling in 300-400 level courses must be admitted to the program. Admission to major is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (“C”).

Contact the department for application procedures.

**GPA Policy.** A GPA of 2.0 or higher in a major or minor in geography is required for graduation. Refer to the College regarding required advising for students on academic probation.

**Pass/No Credit Policy.** P/N grading will be accepted in the major only for GEOG 401, and GEOG 497 and GEOG 409 at instructor discretion. All other courses must be taken for letter grades. All courses for the minor must be taken for letter grades.

**GEOGRAPHY BA**

Degree completion = 120 credits

**Major Common Core**

GEOG 101 Introductory Physical Geography (3)
GEOG 103 Introductory Cultural Geography (3)
GEOG 340 United States (3)
GEOG 370 Cartographic Techniques (4)
GEOG 401 Colloquium (1)

**Major Restricted Electives**

Cultural-Systematic (choose 3 credits)
GEOG 425 Economic Geography (3)
GEOG 435 Urban Geography (3)
GEOG 436 Rural Geography (3)
GEOG 437 Political Geography (3)

Geospatial (choose 3 credits)
GEOG 438 Social Geography (3)

**Physical (choose 3 credits)**
GEOG 217 Weather (4)
GEOG 313 Natural Disasters (4)
GEOG 315 Geomorphology (3)
GEOG 414 Biogeography (3)
GEOG 420 Conservation of Natural Resources (3)
GEOG 410 Climatic Environments (3)
Foreign Regional (choose 3 credits)
GEOG 445 Latin America (3)
GEOG 446 Canada (3)
GEOG 450 Europe (3)
GEOG 454 Russian Realm (3)
GEOG 456 Africa (3)
GEOG 458 Geography of East Asia (3)

Capstone Experience (choose 1-4 credits)
GEOG 440 Field Studies (1-4)
GEOG 480 Seminar (1-4)
GEOG 491 Senior Paper (1-4)
GEOG 497 Internship (1-10)

Major Unrestricted Electives
Additional Electives (choose 1-8 credits)
Total credits in major must equal or exceed 32. Take number of credits needed to reach 32.
GEOG 200 - GEOG 499

Other Graduation Requirements
Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)
Required Minor. Yes. Any.

PROFESSIONAL BA
Degree completion = 120 credits

Major Common Core
GEOG 101 Introductory Physical Geography (3)
GEOG 103 Introductory Cultural Geography (3)
GEOG 340 United States (3)
GEOG 370 Cartographic Techniques (4)
GEOG 401 Colloquium (1)

Major Restricted Electives
Cultural-Systematic (choose 3 credits)
GEOG 425 Economic Geography (3)
GEOG 435 Urban Geography (3)
GEOG 436 Rural Geography (3)
GEOG 437 Political Geography (3)
GEOG 438 Social Geography (3)
Physical (choose 3 credits)
GEOG 217 Weather (4)
GEOG 313 Natural Disasters (4)
GEOG 315 Geomorphology (3)
GEOG 410 Climatic Environments (3)
GEOG 414 Biogeography (3)
GEOG 420 Conservation of Natural Resources (3)
Foreign Regional (choose 3 credits)
GEOG 445 Latin America (3)
GEOG 446 Canada (3)
GEOG 450 Europe (3)
GEOG 454 Russian Realm (3)
GEOG 456 Africa (3)
GEOG 458 Geography of East Asia (3)

Capstone Experience (choose 1-4 credits)
GEOG 440 Field Studies (1-4)
GEOG 480 Seminar (1-4)
GEOG 491 Senior Paper (1-4)
GEOG 497 Internship (1-10)

Major Unrestricted Electives
Additional Electives (choose 1-8 credits)
Total credits in major must equal or exceed 32. Take number of credits needed to reach 32.
GEOG 200 - GEOG 499

PROFESSIONAL BS
Degree completion = 120 credits

Major Common Core
GEOG 101 Introductory Physical Geography (3)
GEOG 103 Introductory Cultural Geography (3)
GEOG 340 United States (3)
GEOG 370 Cartographic Techniques (4)
GEOG 401 Colloquium (1)

Major Restricted Electives
Cultural-Systematic (choose 3 credits)
GEOG 425 Economic Geography (3)
GEOG 435 Urban Geography (3)
GEOG 436 Rural Geography (3)
GEOG 437 Political Geography (3)
GEOG 438 Social Geography (3)
Physical (choose 3 credits)
GEOG 217 Weather (4)
GEOG 313 Natural Disasters (4)
GEOG 315 Geomorphology (3)
GEOG 410 Climatic Environments (3)
GEOG 414 Biogeography (3)
GEOG 420 Conservation of Natural Resources (3)
Foreign Regional (choose 3 credits)
GEOG 445 Latin America (3)
GEOG 446 Canada (3)
GEOG 450 Europe (3)
GEOG 454 Russian Realm (3)
GEOG 456 Africa (3)
GEOG 458 Geography of East Asia (3)

Capstone Experience (choose 1-4 credits)
GEOG 440 Field Studies (1-4)
GEOG 480 Seminar (1-4)
GEOG 491 Senior Paper (1-4)
GEOG 497 Internship (1-10)

Major Unrestricted Electives
Additional Electives (choose 15-24 credits)
Total credits in major must equal or exceed 48. Up to 6 elective credits may be taken outside Geography with departmental permission.
GEOG 200-499

www.mnsu.edu 2018-2019 Undergraduate Catalog 171
GEOGRAPHIC INFORMATION SCIENCE (GISC) CERTIFICATE
(18-20 credits)
Students will receive a fundamental knowledge and understanding of Geographic Information Systems (GIS) and Remote Sensing technologies with the option to focus more intensively on advanced GIS, Remote Sensing or Global Positioning Systems (GPS) principles and applications.

Major Common Core
GEOG 373 Introduction to Geographic Information Systems (4)
GEOG 473 Intermediate GIS (4)
GEOG 474 Introduction to Remote Sensing (4)

Major Restricted Electives (choose 6-8 credits)
GEOG 439 Transportation Modeling & GIS (4)
GEOG 471 Digital Field Mapping with GPS (4)
GEOG 475 Applied Remote Sensing & GIS (4)
GEOG 476 Spatial Statistics (3)
GEOG 478 Spatial Analysis with GIS (3)
GEOG 479 GIS Practicum (1-4)
GEOG 480 Seminar: GIS/Environmental Hazards (3)

GEOGRAPHY MINOR
Required for Minor
GEOG 101 Introductory Physical Geography (3)
GEOG 103 Introductory Cultural Geography (3)
GEOG 340 United States (3)

Minor Electives
Choose 9 credits from GEOG 200 - GEOG 499

COMBINED BS GEOGRAPHY AND MA URBAN PLANNING LEADING TO ACCELERATED COMPLETION OF MASTER’S DEGREE
Geography and Urban Studies share an arrangement for an accelerated Bachelor’s/Master’s degree program. Undergraduate students in Geography with a GPA of at least 3.0 can apply to the accelerated program prior to or during their junior year. If accepted, they petition to take up to 12 credits at the graduate level, and those courses are then included in both their undergraduate program and in the Master’s of Urban Planning program. Contact either department for specific information.

COURSE DESCRIPTIONS

GEOG 100 (3) Elements of Geography
An introduction to Geography and its themes of study. The course will familiarize students with where places are located in the world together with their cultural and physical features. Students will be tasked to think critically and diversely about various cultures and features of the modern world.
Fall, Spring
GE-8, GE-10
Diverse Cultures - Purple

GEOG 101 (3) Introductory Physical Geography
Survey of the processes and features of the earth’s physical environment, earth-sun relationships, weather, climate, natural vegetation, soil, and landforms. Examines their interrelations and spatial distribution using North America and worldwide examples. Some coverage of human-environmental relations.
Fall, Spring
GE-3, GE-10

GEOG 103 (3) Introductory Cultural Geography
Cultural aspects of interactions between people and their environment focusing on spatial patterns of population, agriculture, politics, language, religion, industrialization, and urbanization. Emphasis is placed on the processes that create the cultural landscape and on management of land and natural resources.
Fall, Spring
GE-5, GE-8
Diverse Cultures - Purple

GEOG 210W (3) Landscapes and Places
Introduction to the concepts of landscape and place in a variety of geographical writings. Emphasizes works with strong regional overtones. The interaction between the physical and cultural environments is paramount. Field observation and integrating imagery into original student writing documents is also addressed.
WI, GE-10

GEOG 217 (4) Weather
An examination of the processes involved in weather formation. Students will be introduced to weather map analysis, simple forecasting and observational techniques, and weather instruments.
Fall, Spring

GEOG 299 (1-3) Individual Study
An assignment that is tailored to individual needs of a student. The instructor and the student arrange the type of project for the student, such as a term paper, readings, mapping, field investigation, or computer cartography.
Prerequisite: Consent
Fall, Spring

GEOG 313 (4) Natural Disasters
Examination of natural processes responsible for generating natural disasters across the globe. Students will analyze environmental, social and economic impacts of disasters. They will address uncertainty in prediction, critical decisions involved in mitigation and response, and will become aware of potential disasters in their community. Concepts discussed include plate tectonics, earth surface processes, and atmospheric processes that result in earthquakes, volcanism, landslides, tsunami, hurricanes, tornados, floods, etc. Students will evaluate risk potential, uncertainties in risk analysis, arguments in models/theory and construct arguments regarding how we evaluate risk.
Variable
GE-2, GE-10

GEOG 315 (3) Geomorphology
Covers elements of the structure of the earth and the variety of landforms found on the earth’s surface, with emphasis upon the processes, both past and present, that act upon the surface to create the landforms now visible. Local field trips.
Fall

GEOG 340 (3) United States
Students will develop a knowledge of the similarities and contrasts in regional landscapes and cultures of the United States.
Fall, Spring

GEOG 341 (3) World Regional Geography
Differences and similarities in the cultural and natural environments by the world’s major regions. Useful survey of world geography for educators and international relations students.
Fall, Spring
Diverse Cultures - Purple

GEOG 342 (3) Geography of Minnesota
The course involves the natural and human environments of Minnesota. The physical resources, population history, and current issues are emphasized.
Fall (Odd Years)

GEOG 352 (3) GIS for Crime Analysis
This is a hands-on, exercise-based GIS for Law Enforcement course analyzing the contemporary realities of the spatial and geographic aspects of crime. Students acquire practical tools necessary to conduct effective mapping and spatial analyses of crime using GIS software. Lab activities are designed to benefit those working with public safety and emergency response systems.
Fall

GEOG 370 (4) Cartographic Techniques
The lecture material addresses map projections, technology changes in production, basic analysis and depiction of quantitative point, line and areal data. Also, the evaluation of maps and the history of cartography from a European, Oriental, and American Indian perspective is discussed. All maps are drawn using computer assistance.
Fall, Spring

GEOG 373 (4) Introduction to Geographic Information Systems
The course will be an introduction to the analysis of spatial data using the concept of a geographic information system (GIS). Content of the course will be, to a great extent, based on the NCGIA core curriculum with assignments tailored to the data and software available within the department such as ArcGIS.
Fall, Spring

GEOG 401 (1) Colloquium
Overview of geographic work, interests, and research by guest speakers.
Fall

GEOG 409 (1-4) Selected Topics
The instructor will develop a specific course on a geographic topic, such as soils, geomorphology, mapping, population geography, or some other topic for the class.
Fall, Spring

5/24/17
GEOG 410 (3) Climatic Environments
The characteristics of particular climates and understanding the factors that control their spatial distribution.
Fall

GEOG 411 (3) Soils Geomorphology
This course examines soils and their role in interpreting the history of landform development. Soils chronicle the environment in which they have formed, and reflect the environment they currently support. Understanding their formation and subsequent distribution is essential to good management practices. Applications include the analysis of soil data bases and assimilation of field derived soil profile data.
Fall, Spring (On Demand), Summer (On Demand)

GEOG 412 (4) Advanced Weather
Meteorological principles and theory are applied to the analysis and interpretation of weather data in order to better understand the structure and evolution of synoptic-scale weather systems. Basic knowledge of mathematics will be assumed. Preerequisite: GEOG 217
Fall

GEOG 414 (3) Biogeography
Analyzes the distribution and concentration of plants and animals throughout the world. Emphasis is placed on the role of evolution, tectonics, and physical barriers to the distribution and migration of species. Special emphasis is placed on the role of humans in the modern redistribution of species.
Fall

GEOG 415 (4) Earth Surface Processes
This course examines the natural processes that operate on our planet and shape the landscape presently. This will be done through a focus on applied exercises, measurements and direct/indirect observations. Through applied projects students will have an understanding of how these processes interact within a variety of Earth Systems.
Fall (On Demand), Spring (On Demand), Summer

GEOG 416W (4) Fluvial Geomorphology and Hydrology
An in-depth investigation into fluvial systems including sediment transport, sediment budget analysis, channel geometry/morphology, drainage basin analysis, geomorphic evolution of fluvial landscapes, hydrology, and fluvial geomorphology. Emphasis on channel formation, storm hydrograph and flood analysis, discharge measurements of fluvial systems, and effects of anthropogenic modification and use of fluvial systems.
Fall, Spring (On Demand)
Prerequisite: Either GEOG 101 or GEOL 121 and GEOG 315 or 415 are recommended.

GEOG 417 (5) Quaternary Environments and Climatic Change
An interdisciplinary investigation into Quaternary environmental/climatic change and the impact of change on the behavior and evolution of humans. This course has three segments: 1) An examination of natural systems responsible for climatic change, the impact climatic fluctuations have on Earth systems, timing of Quaternary changes, evidence of climatic/environmental change from spatially distant, climatically distinct environments; 2) Investigation into worldwide evidence of human evolution, global dispersion, and adaptation to environmental systems; 3) Introduction into various methodological approaches in Quaternary archelogic, geomorphic, and climatic studies. Focus is on proxy records used for climate/environmental reconstruction, archelogic/geomorphic field methods, geochronologic dating methods.
Fall, Spring
Prerequisite: Either GEOG 101 or ANTH 210. We strongly encourage students to take GEOG 315 before enrolling. GEOL 121 can be substituted for GEOG 101 with instructor permission.

GEOG 420 (3) Conservation of Natural Resources
Survey of natural resources emphasizing energy, minerals, soils, fisheries, and water resources. Also addresses timber, wetlands, and wildlife on public and private lands.
Spring

GEOG 425 (3) Economic Geography
Examines national and international economic geographical order and trade activities. Topics include economic development, competition, international trade, and impacts on the environment and people.

GEOG 435 (3) Urban Geography
Hypotheses and generalization related to urban functions, structure, land use, distribution, growth, and sometimes decline. Emphasis will be mostly on the United States’ urban places.
Fall

GEOG 436 (3) Rural Geography
Introduction to theoretical frameworks for analyzing processes of economic, environmental, and social change in rural regions. Includes basic and advanced geographical principles and techniques for studying non-urban areas. Designed to equip students with the knowledge and skills necessary for carrying out research projects on rural environments.
Spring

GEOG 437 (3) Political Geography
Spatial problems and structure of governments, focusing on countries of the world and their geographic internal order. Covers such topics as boundary problems, strategic locations, and geopolitical explanations of international and internal relations and conflicts.
Spring

GEOG 438 (3) Social Geography
Fall

GEOG 439 (4) Transportation Modeling & GIS
Four major sets of ideas will be covered: Introduction to Spatial Organization, Network Analysis, Allocation Methods, and Urban Transportation. The emphasis is on these approaches to understanding the geography of transport by description, explanation, and normative or optimal methods.
Fall

GEOG 440 (1-4) Field Studies
Various excursions to study physical and cultural landscapes inside and outside of Minnesota.
Variable

GEOG 445 (3) Latin America
Regional geography covering the ecological and human environment of Middle and South America, including the Caribbean. Students can pick specific topics to study in detail. The geographic relations between the USA and Latin America are also covered.
Fall

GEOG 446 (3) Canada
Students will develop a knowledge of the environmental, cultural, historical, and economic geographies of Canada. Readings of bestselling fiction and scholarly works written by Canadians will provide a Canadian perspective on the nation's past, present, and future.
Fall

GEOG 447 (3) Europe
Cultural, environmental, and economic background of Europe west of Russia and Ukraine. Following a general geographic survey, the course will cover major regions and countries.
Spring

GEOG 454 (3) Russian Realm
Survey of the area of Russia and her neighbors. Examines regional patterns of the physical environment, natural resources, population distribution, cities, and economic activity. Relates people to the land.
Variable

GEOG 456 (3) Africa
A survey of the physical and cultural resources and economic development of the continent with emphasis on current issues. Topics discussed will focus on Africa south of the Sahara.
Variable

GEOG 458 (3) Geography of East Asia
Examines the physical and human environments of eastern Asia, mainly China, Korea and Japan. The class will be assisted by visual sources and hands-on use of primary documents.
Variable

GEOG 471 (4) Digital Field Mapping with GPS
This course covers the basic strategies for field mapping using data acquired from global positioning systems (GPS). Prerequisite: GEOG 373 or equivalent
Fall
GEOG 473 (4) Intermediate GIS
Comprehensive examination of computer-assisted systems for manipulation and analysis of spatially-referenced data, including data structure and organization, input and output problems, data management, and strategies for analytical work.
Prerequisite: GEOG 373
Spring

GEOG 474 (4) Introduction to Remote Sensing
This is an introductory course on theories and techniques of remote sensing. Focus will be placed on introducing advanced theories and techniques for digital image processing and helping students obtain independent research skills using remote sensing data.
Prerequisite: GEOG 373, GEOG 474
Fall

GEOG 475 (4) Applied Remote Sensing & GIS
This course provides students the opportunity to develop further knowledge of remote sensing. Emphasis will be placed on introducing advanced theories and techniques for digital image processing and helping students obtain independent research skills using remote sensing data.
Prerequisite: GEOG 373, GEOG 473
Spring

GEOG 476 (3) Spatial Statistics
Descriptive statistics, probability, hypothesis testing, introduction to non-parametric statistics, correlation, introduction to regression analysis, spatial statistics, and principles of data representation in graphs and tables.
Spring

GEOG 477 (1-3) Topics in Techniques
This offering will include a variety of selected technical topics in geography, including but not necessarily limited to manual cartographic drafting and negative scribings, photomechanical techniques in production cartography, aerial photo interpretation, and advanced coverage of digital analysis of satellite-derived remote sensor data and global positioning systems.
Prerequisite: Consent
Variable

GEOG 478 (3) Spatial Analysis with GIS
Introduction to theoretical frameworks for spatial analysis and geographic quantitative methods. Includes basic and advanced geographic principles and techniques for studying spatial patterns. Designed to equip students with the skills necessary to carry out research projects that demand advanced statistics.
Prerequisite: GEOG 373 or GEOG 473, or consent
Variable

GEOG 479 (1-4) GIS Practicum
This offering will include supervised project work in raster-based and/or vector-based GIS, using problems and data drawn from local or regional agencies or other professional-level organizations with whom the Geography Department maintains a relationship. Students must have completed one of the prerequisite courses, or professional-level experience.
Prerequisite: GEOG 373 or GEOG 473, or consent
Variable

GEOG 480 (1-4) Seminar
Topics vary in physical, cultural, economic, political, and historical geography, as well as environmental conservation and geographic techniques.
Prerequisite: GEOG 373
Variable

GEOG 491 (1-4) Senior Paper
Fall, Spring

GEOG 497 (1-10) Internship
An applied work and learning experience. The student will provide a written internship report on professional practicum and the work supervisor will be consulted on how much the student has accomplished.
Prerequisite: Consent
On Demand

GEOG 499 (1-3) Individual Study
An assignment that is tailored to individual needs of a student. An arrangement is made that the student works on a project (term paper, readings, mapping, field investigation, GIS, or related topics).
Prerequisite: Consent
On Demand

GEOLOGY BS, MINOR AND CERTIFICATE

Geology

College of Science, Engineering and Technology
Department Chemistry & Geology
241 Ford Hall • 507-389-1963
Website: cset.mnsu.edu/chemgeo/programs/geol/
Chair: Mary Hadley
Faculty: Bryce Hoppie, Steven Losh, Chad Wittkop

Geology is the study of the Earth, its materials, and its processes. It concerns itself with solving basic scientific problems and utilizing knowledge of the Earth for the benefit of society. Its concerns include but are not limited to soil preservation, water production and quality, hazards mitigation, resource exploration and production, engineering of structures large and small, climate change, and the history of life on Earth and the search for life on other planets.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
Admission to Major is granted by the department. Minimum university admission requirements are:
- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (“C”).
Contact the CSET advising office for application procedures.

P/N Grading Policy: All courses for a Geology award must be taken for a letter grade.
Program-specific admission requirements
Admission to Major is granted by the department. Minimum admission requirements are:
- a minimum cumulative GPA of 2.00 (“C”).
Contact the CSET advising office for application procedures.

Other Graduation Requirements
A minimum of two additional upper division (300/400) credits must be completed to meet university graduation requirements. Coursework in a supporting natural science (e.g. BIOL, CHEM, ENVIR) is strongly recommended. Consult with your advisor before fulfilling this requirement.

Successful completion of a Research Experience for Undergraduates (REU) can be substituted for GEOL 499 as the Capstone Experience subject to Department approval.

GEOLOGY BS

Major Common Core
GEOL 121 Physical Geology (4)
GEOL 122 Earth History (4)
GEOL 201 Elements of Mineralogy (4)
GEOL 302 Petrology (4)
GEOL 320W Sedimentology and Stratigraphy (4)
GEOL 330 Structural Geology (4)
GEOL 401 Field Studies (1-3)
GEOL 410 Glacial Geology (3)
GEOL 430 Petroleum and Ore Deposit Geology (3)
GEOL 449 Applied Soil Science and Surface Hydrology (4)
GEOL 450 Hydrogeology (3)

Major Restricted Electives
- Geology Electives (choose 7 - 8 credits)
- GEOL 401 Field Studies (1-3)
- GEOL 410 Glacial Geology (3)
- GEOL 430 Petroleum and Ore Deposit Geology (3)
- GEOL 449 Applied Soil Science and Surface Hydrology (4)
- GEOL 450 Hydrogeology (3)
THE COURSE has a laboratory component.

Introduces the physical features and processes of the earth that control these events.

Recurring events on the earth that ultimately influence all of our lives. This course earthquakes, volcanic eruptions, and flooding are three examples of naturally recurring events on the earth.

COURSE DESCRIPTIONS

GEOL 108 (3) Oceans of the World
An introduction to the world's oceans: how they work, what they contain, how they impact everything on Earth, and how humans impact them.

Fall, Spring

GEOL 122 (4) Earth History
An examination of the development and evolution of life on earth. In addition to reviewing the range of life forms and global climates existing on earth during various times in its geologic past, we will also look at how global industrialization could lead to the earth's next period of mass extinction. Weekly laboratory assignments illustrate principles discussed in lectures.

Spring

GEOL 201 (4) Elements of Mineralogy
Examination of the elemental composition and crystal structure of various common minerals. Laboratory time is spent practicing techniques of identifying crystals and minerals. The importance and occurrence of many economic minerals is also covered thoroughly in this course.

Prerequisite: GEOL 100 or GEOL 121

Fall

GEOL 302 (4) Petrology
Study of the compositions and origins of igneous, sedimentary, and metamorphic rocks in a plate tectonic context. Topics include mineral optics and geochemistry. Lab portion of course emphasizes identification and study of rocks.

Prerequisite: GEOL 201

Spring

GEOL 305 (2) Earth Science for Elementary Educators
An integrated, multi-disciplinary study of the Earth and the solar system. The course establishes basic concepts of astronomy, physical geography, and geology to give students a thorough understanding of the Earth and its place in the solar system. Learning outcomes partially fulfill licensure requirements for elementary educators.

This course is focused on content.

Prerequisite: BIOL 100, PHYS 101

Fall, Spring

GEOL 310 (3) Earth and Space Systems
An integrated, multi-disciplinary study of the Earth and the solar system. The course builds on basic concepts of astronomy, chemistry and geology to give students an enhanced understanding of the nature and relationship among the forces that control the Earth's evolution. Learning outcomes partially fulfill licensure requirements for secondary science educators.

Prerequisite: AST 101, CHEM 201, GEOL 121

Fall

GEOL 320W (4) Sedimentology and Stratigraphy
Focused studies of the origins and processes of transportation, deposition, burial and diagenesis of sedimentary materials. Lab assignments focus on sedimentary material identification and analysis. Field trips required.

Prerequisite: GEOL 121

Fall

GEOL 330 (4) Structural Geology
Study of processes and results of rock deformation at scales ranging from microscopic to plate tectonic, and at conditions ranging from the Earth's surface to the deep interior.

Prerequisite: GEOL 121

GEOL 401 (1-3) Field Studies
This course is devoted to the study and practice of geological field investigations. Students will first learn basic field investigative methods. Students will then be appropriately versed in the geological history and importance of a region selected for in-depth study. Finally, students will participate in a field trip to a regional site of geologic importance over an extended weekend (4-6 days). Potential study sites may include Minnesota's North Shore and Iron Range, the Badlands and Black Hills of South Dakota, the Ozarks, or the Rocky Mountains.

Prerequisite: GEOL 100 or GEOL 121 and GEOL 122

Variable

OTHER GRADUATION REQUIREMENTS

Successful completion of a Research Experience for Undergraduates (REU) can be substituted for GEOL 499 as the Capstone Experience subject to Department approval.
**GEOL 410 (3) Glacial Geology**
Study of the origin, composition, texture, morphology, and stratigraphy of glacial deposits. Topics include the geologic record of glaciation, techniques used to reconstruct histories of glaciation, glacial depositional systems, provenance of glacial sediments, influence of glaciation on soil texture, and interpretation of glacial geologic maps. Emphasis will be placed on description and interpretation of glacial features in southern Minnesota. Field trips required.
Prerequisite: GEOL 121
On Demand: Fall, Spring, Summer

**GEOL 430 (3) Petroleum and Ore Deposit Geology**
Comprehensive survey of ore deposit and petroleum geology, including exploration and production technologies. Course emphasizes projects using industry data.
Prerequisite: GEOL 121, GEOL 201, GEOL 122
Corequisite: GEOL 320W, GEOL 302, GEOL 330
Variable

**GEOL 440 (4-8) Geology Field Camp**
Geologic field mapping and interpretation in diverse settings. Course is offered by universities throughout the U.S. and elsewhere.
Prerequisite: GEOL 121, GEOL 122, GEOL 201, GEOL 320W, GEOL 330
Summer

**GEOL 449 (4) Applied Soil Science and Surface Hydrology**
The application of geologic data and principles to problems created by human occupancy and use of the physical environment. Lecture and laboratory topics include soil classification and conservation, hazardous waste site evaluation and remediation, and living with geologic hazards.
Prerequisite: GEOL 121
ALT-Spring

**GEOL 450 (3) Hydrogeology**
This course introduces physical and chemical studies of hydrogeology. The main areas of discussion will include the physical and chemical attributes of aquifers, movement of ground-water and solute through soils and rocks, and reactions between earth materials and pollutants in ground-water systems. The class includes extensive use of MODFLOW and MT3D, the two most commonly used groundwater modeling programs currently available.
Prerequisite: CHEM 201, GEOL 121
ALT-Spring

**GEOL 490 (1-4) Workshop**

**GEOL 497 (1-10) Internship**
Internships allow students to apply knowledge and skills learned through undergraduate geoscience classes to real-world problems. Students will work with faculty to secure suitable employment and when finished, students will develop a written report of professional practicum that explores the relationships that exist among collegiate lessons and workplace tasks. Evaluation will be based on the content and presentation of the report as well as consultations with the internship supervisor.
Fall, Spring, Summer

**GEOL 499 (1-5) Individual Study**

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**GERMAN BA, BS AND MINOR**

**German**

College of Arts & Humanities
Department of World Languages & Cultures
227 Armstrong Hall • 507-389-2116
Website: www.mnsu.edu/languages

Chair: Adriana Gordillo
Faculty: Nadja Kraemer

In our changing global environment, communication is the key to understanding other peoples and cultures. The German program prepares its students to thrive as global citizens in a diverse world. Students in German language education acquire language proficiency and cultural competence that provide insight into the culture, literature, and history of German-speaking countries and enables them to travel, study, and work in areas where the target language is used.

At the end of their program, students will meet the National Standards for Foreign Language Learning

**Communicate in Languages Other Than English**

- **Standard 1.1:** Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.

- **Standard 1.2:** Students understand and interpret written and spoken language on a variety of topics.

- **Standard 1.3:** Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.

**Gain Knowledge and Understanding of Other Cultures**

- **Standard 2.1:** Students demonstrate an understanding of the relationship between the practices and perspectives of the culture studied.

- **Standard 2.2:** Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.

**Connect with Other Disciplines and Acquire Information**

- **Standard 3.1:** Students reinforce and further their knowledge of other disciplines through the foreign language.

- **Standard 3.2:** Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures.

**Develop Insight into the Nature of Language and Culture**

- **Standard 4.1:** Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.

- **Standard 4.2:** Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.

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**Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION**

**Admission to Major** is granted by the department. Minimum university admission requirements are:
- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (“C”).
A minimum GPA of 2.5 is required in all German courses. Contact the department for application procedures.

**GPA Policy.** A grade of “C-” or better must be earned for major or minor credit.

P/N Grading Policy. Work done for a major or minor must be done for a letter grade above the second-year level. A grade of “P” must be earned for major or minor credit in all work done on a P/N basis.

**Proficiency Policies.** Students with high school language experience may take the CLEP test for a maximum of 12 credits. Students who wish to receive credit by examination may take tests to evaluate their proficiency. Students may not take a proficiency test for a course in which they are enrolled. The department reserves the right to deny admission to courses for those students whom a faculty member determines to have mastered the material already.

**Fulfilling BA Language Requirement.** Students who wish to validate the BA Language requirement for previous study in French, German, Spanish, Swedish or Norwegian may do so by taking a language competency exam under the rules for credit by exam (see above section). Students do not meet the BA language requirements merely because they have taken two years of high school language.

**Residency Requirement.** Transfer credits will be applied only if they are the equivalent of work offered by the Department of World Languages & Cultures for the major or minor in that language. In addition, a minimum of work must be taken at Minnesota State Mankato as follows. Major: a minimum of eight credits upper division courses other than Independent or Individual Study. At least one of these courses must be at the 400 level. Minor: a minimum of one upper division course other than Independent or Individual Study, for a total of at least four credits.

Courses not required for a student’s specific baccalaureate degree should be chosen according to these general guidelines:
GERMAN CONTINUED

Governmental Organizations: The German-speaking Countries: An Interdisciplinary Introduction (4)

GERMAN MINOR

Required for Minor: Elementary German or other proof of skill is needed. The intermediate sequence counts toward the minor.

Required for Minor (choose 8-16 credits)
At least 14 credits at the upper-division level are required for the minor. Eight of the upper-division credits must be in skills courses selected from the list below

GER 340 Topics in Language (1-4)
GER 341 Composition and Conversation (4)
GER 342 Selected Readings (1-4)
GER 343 German Civilization (1-4)

German Minor Electives (choose 8-16 credits)

GER 201 Intermediate German I (4)
GER 202 Intermediate German II (4)
GER 293 Supervised Foreign Study: Intermediate (1-4)
GER 299 Individual Study (1-4)
GER 393 Supervised Foreign Study (1-6)
GER 441 Conversation and Composition (4)
GER 442 German Literature (1-4)
GER 443 Topics in German Studies (1-4)
GER 445 Topics in German Linguistics (1-4)
GER 460 Topics in German Cinema (4)
GER 490 Senior Capstone Project (1-4)
GER 493 Supervised Foreign Study (1-6)
GER 497 Internship (1-6)
GER 499 Individual Study (1-4)

COURSE DESCRIPTIONS

GER 101 (4) Elementary German I
Introduction to German for students with little or no language experience.
GE-8

GER 102 (4) Elementary German II
Prerequisite: GER 101 or equivalent
GE-8

GER 150W (4) The German-speaking Countries: An Interdisciplinary Introduction
This course offers an interdisciplinary introduction to the German-speaking countries (Germany, Austria, Switzerland, Liechtenstein); it will provide an overview of their geography, history, culture, society and current political situation in comparison to the U.S.
WI, GE-6, GE-8
Diverse Cultures - Purple

GER 201 (4) Intermediate German I
A review of German structure and its application to reading, conversation, and composition.
Prerequisite: GER 102 or equivalent
GE-8

GER 202 (4) Intermediate German II
Prerequisite: GER 201 or equivalent
GE-8

GER 293 (1-4) Supervised Foreign Study: Intermediate

GER 299 (1-4) Individual Study
Prerequisite: as appropriate for level of project

GER 340 (1-4) Topics in Language
Topics will vary and course may be repeated for credit. Language topics include pronunciation and intonation, advanced grammar, etc. The focus is on advanced oral or written communication.
Prerequisite: Two years of university level German or equivalent.

GER 341 (4) Composition and Conversation
Intensive practice in speaking and writing for students who have completed the intermediate sequence or equivalent.
Prerequisite: completion of GER 202 or equivalent.

GER 342 (1-4) Selected Readings
Discussion and analysis of major themes and movements based on selected readings from representative authors from the German-speaking world.
Prerequisite: Completion of GER 202 or equivalent

GERMAN BA

Degree completion = 120 credits

Prerequisites to the Major
GER 101 Elementary German I (4)
GER 102 Elementary German II (4)

Major Common Core (24 credits)
GER 340 Topics in Language (1-4)
GER 341 Composition and Conversation (4)
GER 342 Selected Readings (1-4)
GER 343 German Civilization (1-4)
GER 441 Conversation and Composition (4)
GER 442 German Literature (1-4)

Major Unrestricted Electives (12 credits)
GER 150V The German-speaking Countries: An Interdisciplinary Introduction (4)
GER 201 Intermediate German I (4)
GER 293 Supervised Foreign Study: Intermediate (1-4)
GER 299 Individual Study (1-4)
GER 340 Topics in Language (1-4)
GER 393 Supervised Foreign Study (1-6)
GER 443 Topics in German Studies (1-4)
GER 445 Topics in German Linguistics (1-4)
GER 460 Topics in German Cinema (4)

Other Graduation Requirements
Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)

Required Minor: Yes. Any.

GERMAN BS

Degree completion = 120 credits

Prerequisites to the Major
GER 101 Elementary German I (4)
GER 102 Elementary German II (4)

Major Common Core (24 credits)
GER 340 Topics in Language (1-4)
GER 341 Composition and Conversation (4)
GER 342 Selected Readings (1-4)
GER 343 German Civilization (1-4)
GER 344 Topics in German Studies (1-4)
GER 441 Conversation and Composition (4)
GER 442 German Literature (1-4)

Major Restricted Electives (12 credits)
GER 150V The German-speaking Countries: An Interdisciplinary Introduction (4)
GER 201 Intermediate German I (4)
GER 202 Intermediate German II (4)
GER 293 Supervised Foreign Study: Intermediate (1-4)
GER 299 Individual Study (1-4)
GER 341 Composition and Conversation (4)
GER 342 Selected Readings (1-4)
GER 343 German Civilization (1-4)
GER 441 Conversation and Composition (4)
GER 442 German Literature (1-4)
GER 343 Selected Readings (1-4)

GERMAN MINOR

Required for Minor: Elementary German or other proof of skill is needed. The intermediate sequence counts toward the minor.

Required for Minor (choose 8-16 credits)
At least 14 credits at the upper-division level are required for the minor. Eight of the upper-division credits must be in skills courses selected from the list below

GER 340 Topics in Language (1-4)
GER 341 Composition and Conversation (4)
GER 342 Selected Readings (1-4)
GER 343 German Civilization (1-4)

German Minor Electives (choose 8-16 credits)
GER 201 Intermediate German I (4)
GER 202 Intermediate German II (4)
GER 293 Supervised Foreign Study: Intermediate (1-4)
GER 299 Individual Study (1-4)
GER 393 Supervised Foreign Study (1-6)
GER 441 Conversation and Composition (4)
GER 442 German Literature (1-4)
GER 443 Topics in German Studies (1-4)
GER 445 Topics in German Linguistics (1-4)
GER 460 Topics in German Cinema (4)
GER 490 Senior Capstone Project (1-4)
GER 493 Supervised Foreign Study (1-6)
GER 497 Internship (1-6)
GER 499 Individual Study (1-4)
GERMAN CONTINUED

GER 343 (1-4) German Civilization
Major cultural and historical aspects of German from ancient times to the present. Prerequisite: Completion of GER 202 or equivalent

GER 393 (1-6) Supervised Foreign Study
Study for credit must be approved by the department prior to departure. Prerequisite: Intermediate Sequence

GER 441 (4) Conversation and Composition
Intensive practice in speaking and writing German. Prerequisite: Completion of at least one 300 level course in German.

GER 442 (1-4) German Literature
Topics vary and course may be repeated if a different topic/genre is the focus. Major writers from German speaking countries. Genres include novel, poetry, theatre, short story, etc. Prerequisite: Completion of readings GER 302 or equivalent

GER 443 (1-4) Topics in German Studies
The course deals with the complex cultural traditions and political histories of German-speaking countries in Central Europe, such as the metropolis Berlin, the Holocaust, minority voices. Topics vary and the course may be repeated if a different topic is the focus. Fall, Spring

GER 445 (1-4) Topics in German Linguistics
Topics may vary. Course may be repeated for credit. Discussion and analysis of German phonetics and syntax and historical linguistics, for example. Prerequisite: Completion of a least one 300 level German course.

GERMAN TEACHING BS

German Teaching
College of Arts & Humanities
Department of World Languages & Cultures
227 Armstrong Hall • 507-389-2116
Website: www.mnsu.edu/languages
Chair: Adriana Gordillo
Faculty: Nadja Kramer

In our changing global environment, communication is the key to understanding other peoples and cultures. The German program prepares its students to thrive as global citizens in a diverse world. Students in German language education acquire language proficiency and cultural competence that provide insight into the culture, literature, and history of German-speaking countries and enables them to travel, study, and work in areas where the target language is used.

At the end of their program, students will meet the National Standards for Foreign Language Learning

Communicate in Languages Other Than English
Standard 1.1: Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.
Standard 1.2: Students understand and interpret written and spoken language on a variety of topics.
Standard 1.3: Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.

Gain Knowledge and Understanding of Other Cultures
Standard 2.1: Students demonstrate an understanding of the relationship between the practices and perspectives of the culture studied.
Standard 2.2: Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.

Connect with Other Disciplines and Acquire Information
Standard 3.1: Students reinforce and further their knowledge of other disciplines through the foreign language.
Standard 3.2: Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures.

Develop Insight into the Nature of Language and Culture
Standard 4.1: Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.
Standard 4.2: Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.

Participate in Multilingual Communities at Home & Around the World
Standard 5.1: Students use the language both within and beyond the school setting.
Standard 5.2: Students show evidence of becoming life-long learners by using the language for personal enjoyment and enrichment.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
Admission to Major is granted by the department. Minimum university admission requirements are:
- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 ("C").
A minimum GPA of 2.5 is required in all German courses. Contact the department for application procedures.

GPA Policy. A grade of "C-" or better must be earned for major or minor credit.
P/N Grading Policy. Work done for a major or minor must be done for a letter grade above the second-year level. A grade of "P" must be earned for major or minor credit in all work done on a P/N basis.

Proficiency Policies. Students with high school language experience may take the CLEP test for a maximum of 12 credits. Students who wish to receive credit by examination may take tests to evaluate their proficiency. Students may not take a proficiency test for a course in which they are enrolled. The department reserves the right to deny admission to courses for those students whom a faculty member determines to have mastered the material already.

Fulfilling BA Language Requirement. Students who wish to validate the BA language requirement for previous study in French, German, Spanish, Swedish or Norwegian may do so by taking a language competency exam under the rules for credit by exam (see above section). Students do not meet the BA language requirements merely because they have taken two years of high school language.

Residency Requirement. Transfer credits will be applied only if they are the equivalent of work offered by the Department of World Languages & Cultures for the major or minor in that language. In addition, a minimum of work must be taken at Minnesota State Mankato as follows. Major: a minimum of eight credits upper division courses other than Independent or Individual Study. At least one of these courses must be at the 400 level. Minor: a minimum of one upper division course other than Independent or Individual Study, for a total of at least four credits.

Courses not required for a student’s specific baccalaureate degree should be chosen according to these general guidelines:
GLOBAL SOLUTIONS IN ENGINEERING CONTINUED

GLOBAL SOLUTIONS IN ENGINEERING TECHNOLOGY MINOR

Global Solutions in Engineering Technology

College of Science, Engineering and Technology:
Advising Center:
131 Trafton Science Center N • 507-389-1521
Website: www.cset.mnsu.edu

Locations: Mankato Campus, Mesabi Range Community and Technical College, Normandale, and 7700 France

Global experiences are difficult to fit into a traditional engineering program because of credit expectations and sequential course offerings. This minor in the context of engineering experiences and with a focus on cultural learning will create a pathway for students to develop cultural and language skills desired by our regional employers. Through the resulting minor, graduates will be produced with an expanded set of skills to address global problem solving in engineering and technology.

Policies: This minor includes several components. First, 16 credits of coursework from a wide range of courses offered through many programs on campus will be required in order for the student to gain a better understanding of global issues and practices. Two courses must be taken from a short list (Tier 1) of potential classes from either of the following two groups: “Culture and Communication” and “Trade and Technology.” In addition to these Tier 1 courses, several additional courses must be taken from Tier 2 options in the following groups: “Culture and Communication,” “Language,” and “Trade and Technology.” Students must take between 4 and 8 credits from the “Language” group, with the remaining credits to be taken in any combination from the remaining groups.

In addition to the course requirements given above, the students will participate in an international experience of an approved type (i.e., study abroad, international internship/co-op, Engineers Without Borders projects, etc.) The students will work with program leadership in ascertaining whether the proposed experience meets the expectations of the minor.

Lastly, in preparation for and upon completion of this international experience, the student will participate twice [2 at 1 credit] in the “Global Experience in Engineering and Technology” course developed in conjunction with the minor. This seminar course will include material to prepare the students for the international experience, development of goals/objectives for the international experience, an opportunity for returning students to mentor students preparing for a similar experience, etc.

Admission Standards: Admission to this minor and the associated engineering and engineering technology courses will require admission to the Engineering or Engineering Technology program in which the student is pursuing a baccalaureate degree.

Admission to this minor and the associated engineering and engineering technology courses will require admission to the Engineering or Engineering Technology program in which the student is pursuing a baccalaureate degree.

Core
Minor Core - Tier 1 Courses
Select at least two courses from either group “Culture and Communication” or “Trade and Technology”, minimum 6 credits

Tier 1 Course Options - Culture and Communication Core
CMST 203 Intercultural Communication [4]
GEOG 103 Introductory Cultural Geography [3]
HIST 170 Ancient World Civilization to 1500 [4]
HIST 170W Ancient World Civilization to 1500 [4]
HIST 171 World Civilization, 1500-Present [4]
HIST 171W World Civilization, 1500-Present [4]
HIST 180 European History to 1648 [4]
HIST 180W European History to 1648 [4]
HIST 181 European History: 1648 to the Present [4]
HIST 181W European History: 1648 to the Present [4]
PHIL 205W Culture, Identity, and Diversity [3]

Tier 1 Course Options - Trade and Technology Core
ECON 420 International Economics [3]
IBUS 380 Principles of International Business [3]
MRKT 100 Foundations of Business Concepts [3]

Composition & Conversation
GER 341 Composition and Conversation (4)

Major Restricted Electives (1-10 credits)
GER 150W The German-speaking Countries: An Interdisciplinary Introduction (4)
GER 293 Supervised Foreign Study: Intermediate (1-4)
GER 299 Individual Study (1-4)
GER 340 Topics in Language (1-4)
GER 342 Selected Topics (1-4)
GER 343 German Civilization (1-4)
GER 393 Supervised Foreign Study (1-6)
GER 442 German Literature (1-4)
GER 443 Topics in German Studies (1-4)
GER 445 Topics in German Linguistics (1-4)
GER 460 Topics in German Cinema (4)
GER 490 Senior Capstone Project (1-4)
GER 493 Supervised Foreign Study (1-6)
GER 497 Internship (1-6)
GER 499 Individual Study (1-4)

Required for Major: Students must “demonstrate intermediate-high level speaking proficiency” as defined in the ACTFL Proficiency Guidelines established by the American Council on the Teaching of Foreign Languages or equivalent. Contact the department for details. Also required for the major are first-hand experiences with the target cultures.

Other Graduation Requirements
See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

Required Minor: None.
HEALTH AND PHYSICAL EDUCATION BS

Health and Physical Education

College of Allied Health & Nursing

This major is a joint program offered by the Departments of Health Science and Human Performance that meets Professional Educator Licensing and Standards Board (PELSB) requirements for licensure in both Health Education and Physical Education.

Department of Health Science

213 Highland Center N • 507-389-1527
Website: www.mnsu.edu/dept/health/

Chair: Marlene K. Tappe

Faculty: Autumn Hamilton, Amy Hedman, Dawn Larsen, Jennifer Longgren, Judith Luebke, Marge Murray-Davis, Thad Shunkwiler, Marlene Tappe, Joseph Visker, Mark Windschitl

Department of Human Performance

1400 Highland Center • 507-389-6313
Website: ahn.mnsu.edu/hp/

Chair: Lynnette M. Engeswick
Program Coordinators: Sue Tarr and Ben Schwamberger
Faculty: Ben Schwamberger, Sue Tarr

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

Students planning to major in the College of Allied Health and Nursing have an advisor from their area of interest assigned to them. Questions and concerns pertaining to advising and the assignment of advisors can be answered by Shirley Murray, Student Relations Coordinator, 507-389-5194, with office located in 124 Myers Field House.
The Health Informatics program prepares students to use Information Systems and Health Information Technology to design, evaluate, adopt, and apply technology-based innovations in healthcare delivery, management, and research.

The program's mission is to prepare students to effectively use health informatics and analytics to impact health, health promotion, healthcare delivery, and healthcare decision making by preparing professionals, analysts, and visionary future leaders who maximize inter-professional collaborations through data analysis, knowledge discovery, and dissemination of cutting edge innovations for the benefit of the individual, family, and business while promoting societal health outcomes. In support of this mission, the program is designed so that each student will be prepared to:

- Differentiate the roles and responsibilities of healthcare information and management systems and services within and across various healthcare organizations.
- Integrate professional leadership traits and communication techniques that foster collaborative discovery of advances in population health, experience of care, and cost management.
- Articulate roles of governmental, regulatory, professional, and accreditation agencies related to healthcare and their impact on clinical outcomes, and financial performance.
HEALTH SCIENCE MINOR

Health Science
College of Allied Health & Nursing
Department of Health Science
213 Highland Center N • 507-389-1527
Website: www.mnsu.edu/dept/health/

Chair: Marlene K. Tappe
Faculty: Autumn Hamilton, Amy Hedman, Dawn Larsen, Jennifer Londgren, Judith Luebke, Marge Murray-Davis, Marlene Tappe, Thad Shunkwiler, Mark Windschitl, Joseph Visker

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
Admission Requirements. Please see the admission requirements specific to each of the undergraduate programs offered by the Department of Health Science

Admission Requirements. Please see the admission requirements specific to each of the undergraduate programs offered by the Department of Health Science

Academic Requirements
Grade Policy. The Department of Health Science requires students in Alcohol and Drug Studies, to earn a “C-” or better in all required general education, required, and elective courses in the major. Students in Community Health Education, Health and Physical Education, and School Health Education are required to earn a “C-” or better in all required general education (except Chemistry), required major courses (except Human Anatomy), and elective courses in these majors. The department also requires students in the Alcohol and Drug Studies and Health Science minors to earn a “C-” or better in all core and elective courses in the minors.

Minimum G.P.A. Policy. The Department of Health Science requires students in Alcohol and Drug Studies, Community Health Education, Health and Physical Education, and School Health Education to maintain a G.P.A. of 2.5 or better in the major (required general education, required, and elective courses in a major). A G.P.A. of 2.5 in the major is required for graduation in Alcohol and Drug Studies, Community Health Education, Health and Physical Education, and School Health Education. 

P/N Grading Policy. All required general education, required, and elective courses must be taken for grade except HLTH 495, HLTH 496, and HLTH 497.

Academic Integrity Policy. The Department of Health Science values and supports an environment conducive to learning as well as academic integrity. Therefore, students are expected to comply with Minnesota State Mankato student responsibilities and policies for academic integrity. Academic integrity includes meeting one’s responsibilities in an honest and forthright manner and avoiding acts of dishonesty, plagiarism, cheating, collusion, and other forms of academic misconduct. An act of dishonesty, cheating, collusion, and/or any other form of academic misconduct will result in a 0 on the assessment or assessments related to plagiarized work. An act of plagiarism will result in a 0 on the assessment or assessments related to any act of academic misconduct and/or a repeated act of plagiarism after remediation in any Health Science course or courses will result in discontinuance from, or eligibility to enroll in, the academic programs offered by the Department of Health Science. Additionally, evidence related to any act of academic misconduct will be submitted, as appropriate, to the Office of Academic Affairs and/or the College of Education. Please note: Policy reflects minimum departmental standards. Individual instructors may impose more severe sanctions for an act of academic dishonesty within their courses.

HEALTH SCIENCE MINOR

Minor Core
HLTH 101 Health and the Environment (3)
HLTH 260 Introduction to Health Education (3)
The student will be required to meet with the Chairperson of the Department of Health Science and receive remediation related to plagiarism. Two acts of dishonesty, cheating, collusion, and/or any other form of academic misconduct and/or an act of plagiarism after remediation will result in a final course grade of “F”. Evidence related to any act of academic misconduct will be submitted to the Chairperson of the Department of Health Science. Two acts of academic misconduct or a repeated act of plagiarism after remediation in any Health Science course or courses will result in discontinuance from, or eligibility to enroll in, the academic programs offered by the Department of Health Science. Additionally, evidence related to academic misconduct will be submitted, as appropriate, to the Office of Academic Affairs and/or the College of Education. Please note: Policy reflects minimum departmental standards. Individual instructors may impose more severe sanctions for an act of academic dishonesty within their courses.

In addition to the Core, choose one 3 credit 200-level course: (choose 3 credits)
HLTH 210 First Aid & CPR (3)
HLTH 211 Human Sexuality in a World of Diversity (3)
HLTH 212 Consumer Health (3)
HLTH 225 Introduction to Alcohol and Drug Studies (3)
HLTH 240 Drug Education (3)

In addition to the Core, choose 12 credits from the following list of 300 and 400 level courses:
HLTH 311 Family Life & Sex Education (3)
HLTH 315 Holistic Health and Wellness (3)
HLTH 321 Medical Terminology (3)
HLTH 400 Women’s Health (3)
HLTH 410W Current Health Issues (3)
HLTH 417 Principles of Wellness Coaching (3)
HLTH 440 Teaching First Aid and CPR (2)
HLTH 441 Death Education (3)
HLTH 450 Environmental Health (3)
HLTH 451 Emotional Health and Stress (3)
HLTH 454 Chronic and Infectious Diseases (3)
HLTH 455 Health and Aging (3)
HLTH 459 Critical Topics in Health (1-3)
HLTH 460 Introduction to Epidemiology (3)
HLTH 465 Health Care Delivery in the United States (3)
HLTH 466 Global Health (3)
HLTH 467 Public Health Law (3)
HLTH 475 Biostatistics (3)
HLTH 477 Behavior Change Foundations and Strategies (3)
HLTH 488 Workplace Health Promotion (3)
HLTH 491 Directed Research in Health Science (1-6)

COURSE DESCRIPTIONS
LOCATED UNDER HEALTH SCIENCE (HLTH) COURSE DESCRIPTIONS
HEALTH SCIENCE COURSE DESCRIPTIONS

Health Science

College of Allied Health & Nursing

Department of Health Science
213 Highland Center N • 507-389-1527
Website: www.mnsu.edu/dep/health/

Chair: Marlene K. Tappe
Faculty: Autumn Hamilton, Amy Hedman, Dawn Larsen, Jennifer Londgren, Judith Luebbe, Marge Murray-Davis, Marlene Tappe, Thad Shunkwiler, Mark Windschitl, Joseph Visker

Accreditation: NCATE: Health and Physical Education, BS; School Health Education, BS

The Department of Health Science offers undergraduate majors in Alcohol and Drug Studies (B.S.), Community Health Education (B.S.), and School Health Education (B.S.) as well as a major in Health and Physical Education in collaboration with the Department of Human Performance. (See individually listed programs within Table of Contents.) The department also offers undergraduate minors in Alcohol and Drug Studies and Health Science. At the graduate level the Department of Health Science offers Post-Baccalaureate programs in Public Health Education (100% online) and School Health Education (onlineplus) as well as advanced degree programs in Community Health Education (M.S. (onlineplus) and School Health Education (M.S. (onlineplus)).

Policies/Information

Admission Requirements: Please see the admission requirements specific to each of the undergraduate programs offered by the Department of Health Science.

Academic Requirements

Grade Policy: The Department of Health Science requires students in Alcohol and Drug Studies, to earn a “C” or better in all required general education, required, and elective courses in the major. Students in Community Health Education, Health and Physical Education, and School Health Education are required to earn a “C” or better in all required general education (except Chemistry), required major courses (except Human Anatomy), and elective courses in these majors. The department also requires students in the Alcohol and Drug Studies and Health Science minors to earn a “C” or better in all core and elective courses in the minors.

Minimum G.P.A. Policy: The Department of Health Science requires students in Alcohol and Drug Studies, Community Health Education, Health and Physical Education, and School Health Education to maintain a G.P.A. of 2.5 or better in the major, required general education, required, and elective courses in a major. A G.P.A. of 2.5 in the major is required for graduation in Alcohol and Drug Studies, Community Health Education, Health and Physical Education, and School Health Education.

P/N Grading Policy: All required general education, required, and elective courses must be taken for grade except HLTH 495, HLTH 496, and HLTH 497.

Academic Integrity Policy

The Department of Health Science values and supports an environment conducive to learning as well as academic integrity. Therefore, students are expected to comply with Minnesota State Mankato student responsibilities and policies for academic integrity. Academic integrity includes meeting one’s responsibilities in an honest and forthright manner and avoiding acts of dishonesty, plagiarism, cheating, collusion, and other forms of academic misconduct. An act of dishonesty, cheating, collusion, and/or any other form of academic misconduct will result in a “F” on the assessment and a full letter grade deduction from the final course grade (e.g., “A” to “B”). An act of plagiarism will result in a “F” on the assessment or assessment and the student will be required to meet with the chair of the Department of Health Science and receive remediation related to plagiarism. Two acts of dishonesty, cheating, collusion, and/or any other form of academic misconduct and/or an act of plagiarism after remediation will result in a final course grade of “F”. Evidence related to any act of academic misconduct will be submitted to the Chairperson of the Department of Health Science. Two acts of academic misconduct or a repeated act of plagiarism after remediation in any Health Science course or courses will result in discontinuance from, or eligibility to enroll in, the academic programs offered by the Department of Health Science. Additionally, evidence related to academic misconduct will be submitted, as appropriate, to the Office of Academic Affairs and/or the College of Education. Please note: Policy reflects minimum departmental standards. Individual instructors may impose more severe sanctions for an act of academic dishonesty within their courses.

Course Descriptions

HLTH 101 (3) Health and the Environment
This course is designed to introduce the wellness concept, encouraging development of physical, mental, social and environmental health of the individual. The course ultimately fosters decision-making through a variety of instructional strategies. Fall, Spring, Summer

GE-10

HLTH 210 (3) First Aid & CPR
Provides the knowledge and skills necessary in an emergency to help sustain life, reduce pain, and minimize the consequences of injury or sudden illness. Includes First Aid certification for the non-professional and all aspects of CPR for the non-professional and professional. Fall, Spring, Summer

GE-11

HLTH 211 (3) Human Sexuality in a World of Diversity
This course is an overview of Human Sexuality with special emphasis on how sexuality relates to marginalized populations. This course requires a supervised field trip. Variable

GE-7

Diverse Cultures - Gold

HLTH 212 (3) Consumer Health
This course is designed to examine health products, services, and information from the consumer’s perspective. Emphasis will be placed on those factors that influence and ultimately determine which products, services, and information sources that you will either accept or reject.

Fall, Spring, Summer

GE-2

HLTH 215 (1) First Responder/CPR Recertification
This course is for people currently certified (or expired within the last month) in ARC CPR/AED. This course is also for people currently certified (or expired within the last year) in ARC Emergency Response or as a First Responder.

Fall, Spring, Summer

GE-5

HLTH 225 (3) Introduction to Alcohol and Drug Studies
This course provides information on a variety of topics related to chemical use, abuse and dependency. Students will be exposed to chemical dependency counseling, assessment and intervention techniques. Different drug classifications will be discussed in detail. Counselor core functions and ethics will be discussed also.

Fall, Spring, Summer

GE-5

HLTH 240 (3) Drug Education
Addresses drugs and drug use from psychological, behavioral, pharmacological, historical, legal and clinical perspectives - while examining the effects of drug use on personal health and social functioning.

Fall, Spring, Summer

GE-5

HLTH 260 (3) Introduction to Health Education
Introduction to Health Education is required of all Health Science majors and minors. This is the foundation class for the professional preparation of health educators. The course explores the knowledge, skills, and competencies of health educators in various settings.

Prerequisite: HLTH 101
Corequisite: HLTH 101

Fall, Spring, Summer
HLTH 311 (3) Family Life & Sex Education
Explores biological, physiological, and sociological perspectives of human sexuality. The course examines personal and family relationships and addresses family life and sex education teaching methods for school and community settings.
Fall, Spring, Summer

HLTH 315 (3) Holistic Health and Wellness
This course presents a study of the essential nature and characteristics of total health. The course explores dimensions of mental, physical, social, and spiritual wellbeing. Various approaches to holistic health and wellness are considered.
Variable

HLTH 320 (3) School Health Education
This course provides School Health teaching majors the knowledge, skills, and dispositions they will need to be a part of a coordinated school health program team and teach comprehensive school health education in middle/junior and senior high schools.
Spring

HLTH 321 (3) Medical Terminology
For health care personnel, emphasis on spelling, pronunciation and meaning.
Fall, Spring, Summer

HLTH 360 (3) Theories and Models of Health Education
Introduces theories and models in the context of health education. Examines approaches to health education program planning as well approaches to explain and predict health behavior and their application to interventions in health education.
Prerequisite: HLTH 101, HLTH 260
Fall, Spring

HLTH 361W (4) Health Communication and Advocacy
Health Communication and Advocacy focuses upon the development of communication and advocacy skills for the health educator. Identifying credible sources, communicating public health information, health media campaigns, health advocacy; written and verbal communication skills emphasized.
Prerequisite: HLTH 360
Fall, Spring

HLTH 380W (3) Health Education Planning, Implementing & Evaluating 1
This course requires students to plan a health promotion and health education program. Skills include assessing needs, determining objectives, identifying measurement and intervention strategies, and developing an evaluation plan.
Prerequisite: HLTH 360, HLTH 361W
Corequisite: HLTH 361W
Fall, Spring

HLTH 400 (3) Women's Health
This course explores current issues, controversies and concerns affecting women's health. Relationships between social, cultural, psychological, environmental and physical factors of women's health status are examined.
Variable

HLTH 406 (3) Ethics and Professionalism for Addiction Professionals
The focus of this course is on the foundations of ethics and professionalism for addictions professionals. The course will cover professional and ethical codes as well as topics related to continued development as a professional.
Prerequisite: HLTH 225
Spring

HLTH 407 (3) Pharmacology for Alcohol and Drug Professionals
This course provides information on characterizing and classifying information pharmacology, pharmacokinetics, pharmacodynamics, behavioral effects, and pharmacotherapy options for drugs of abuse. The course will focus on the application of topics in alcohol and drug professional settings.
Prerequisite: HLTH 225
Fall

HLTH 408W (3) Theories and Methods for Addictions Professionals
This course explores counseling theories and strategies and how they can be applied to clients in alcohol and drug treatment programs. The course also provides an overview of primary functions of addictions professionals and methods to deliver effective services.
Prerequisite: HLTH 225
Fall

HLTH 410W (3) Current Health Issues
An in-depth review of significant health concerns and controversies in health science using critical thinking as the framework for critiquing the issues.
Fall, Spring
Diverse Cultures - Purple

HLTH 417 (3) Principles of Wellness Coaching
This course contains content associated with achieving entry-level certifications for wellness coaching. Health behavior change strategies are emphasized within the context of the health coaching theory, coaching relationship skills, well-being assessment, and goal setting.
Fall, Spring

HLTH 420 (3) Health Teaching Methods
This course provides School Health teaching majors the knowledge and skills they will need to be a part of a coordinated school health program team and teach comprehensive school health education in middle/junior and senior high schools.
Prerequisite: HLTH 320
Fall

HLTH 420W (3) Health Teaching Methods
This course provides School Health teaching majors the knowledge and skills they will need to be a part of a coordinated school health program team and teach comprehensive school health education in middle/junior and senior high schools.
Prerequisite: HLTH 320
Fall, Spring

HLTH 440 (2) Teaching First Aid and CPR
American Red Cross instructor certification for Community First Aid and Safety courses. Includes review of course contents, preparation in teaching principles, methods, strategies, course materials and their use, clerical duties, and teaching experience.
Prerequisite: HLTH 210
Summer

HLTH 441 (3) Death Education
Explores the relationship of death concerns to the process of meaningful living. Uses a variety of learning strategies to examine death attitudes, values and related behaviors.
Variable

HLTH 449 (3) Clinical Health Education
Course is designed for health educators preparing for employment in a medical/health care setting and includes an overview of hospital-clinic based educational program. Patient interviewing and counseling skills are presented for professional and paraprofessional health care personnel. Course emphasis is on developing and preparing a teaching module in patient education.
Prerequisite: HLTH 454
Variable

HLTH 450 (3) Environmental Health
To promote identification and analysis of environmental influences upon health status. Health concerns related to residential, occupational, and other environments are explored. Problems pertaining to air, water, solid waste, housing, land use, toxic waste, and sanitation are addressed.
Fall

HLTH 451 (3) Emotional Health and Stress
Emphasis is on recognition of, and enhancing awareness about, how stress affects human health and performance. Stress management techniques such as relaxation, effective communication, cognitive-behavioral approaches, eating behaviors, regular exercise, and time management are explored.
Fall, Summer

HLTH 454 (3) Chronic and Infectious Diseases
The purpose of this course is to develop the knowledge and understanding of the causes, symptoms and methods of controlling and preventing chronic and infectious diseases. Primary and secondary prevention strategies will be identified. Emphasis will be placed on those behaviors that foster and those that hinder wellbeing.
Prerequisite: BIOL 310, BIOL 330
Fall, Spring
HLTH 455 (3) Health and Aging
This course investigates the physical and mental health concerns of the aging process. Explores specific health problems confronting older persons, and examines preventive health behaviors and health maintenance practices.
Spring, Summer

HLTH 456 (3) Assessment and Diagnosis of Substance Use Disorders
This course is designed to provide students with practical knowledge and application techniques in assessing an individual with a chemical use/dependency problem. Various assessment techniques will be presented and discussed as to appropriate utilization. This course meets the criteria or Rule 25 training in Chemical Dependency Assessment.
Prerequisite: HLTH 225
Spring

HLTH 457 (3) Transdisciplinary Research in Health-Related Fields
This course will explore transdisciplinary research design with emphasis related to the areas of allied health and nursing sciences and disciplines. Basic overview of research methodologies commonly utilized in health sciences and approaches to transdisciplinary research will be explored through review of original research. Students will be required to produce and revise scientific writing with specific focus on inter/transdisciplinary studies. Team-based problem centered research questions will be developed and investigated using transdisciplinary methodology with current health-related issues.
Fall

HLTH 459 (1-3) Critical Topics in Health
An in-depth study of specific topics of current interest in the Health Science discipline.
Variable

HLTH 460 (3) Introduction to Epidemiology
Examines the philosophy and rationale of current epidemiological practice. Requires the application of epidemiological techniques to selected health concerns. Explores the interaction of agent, host and environment with the emphasis on application of principles of prevention.
Fall, Spring

HLTH 465 (3) Health Care Delivery in the United States
An examination of the system of delivery of health care in the United States from a historical, social, political, and economic perspective.
Variable

HLTH 466 (3) Global Health
This course focuses on the determinants of health, the concept of culture, and the intersection of health issues, culture, and health status. Linkages between health and development are addressed and research methods instrumental for identifying relationships between culture and health are discussed. The course examines diverse strategies for measuring health and explores how public health efforts (domestic and global) benefit from understanding and working with cultural processes. Emphasis is placed on the burden of disease, risk factors, populations most affected by different disease burdens, and key measures to address the burden of disease in cost-effective ways.
Fall (On-Demand), Spring (On-Demand)
Diverse Cultures - Purple

HLTH 467 (3) Public Health Law
An examination of the judicial system and the development, enactment and enforcement of laws as they relate to the public's health.
Variable

HLTH 469 (3) Co-Occurring Disorders
The focus of this course is on assessment and treatment of persons with coexisting mental disorders as well as chemical dependency.
Prerequisite: HLTH 225
Fall

HLTH 475 (3) Biostatistics
Introduction to statistical analysis as applied to the health sciences. Examines concepts and methods of statistical procedures applied to health problems and issues.
Prerequisite: MATH 110, STAT 154, Or any other mathematics course higher than MATH 110.
Fall, Spring

HLTH 477 (3) Behavior Change Foundations and Strategies
Behavior Change Foundations and Strategies (3 semester credits) is a course that focuses upon the complexity of health behavior change and the skills necessary for a health promotion professional to assess, plan, and evaluate behavior change interventions for individuals and communities. Health behavior change theories and strategies will be discussed. Topics covered in class will include: behavior modification, goal setting, self-management, coping skills, and social support. Emphasis will also be given to the impact of policy and environmental influences on behavior.
Prerequisite: HP 290, HP 414
Fall, Spring

HLTH 480 (3) Health Education Planning, Implementing & Evaluating 2
This course includes health program evaluation and research, with emphasis on evaluation models and approaches, qualitative and quantitative methods, process and summative evaluation, logic models, and dissemination of results.
Prerequisite: HLTH 380W
Fall, Spring

HLTH 482 (4) Administration and Grant Writing in Health Education
Focuses on entry-level competencies related to the administration and management of health education programs. These include obtaining acceptance and support for programs, leadership, managing human resources, facilitating partnerships in support of health education, grant writing, and training individuals involved in the implementation of health education.
Prerequisite: HLTH 380W
Fall, Spring

HLTH 488 (3) Worksite Health Promotion
The course examines approaches to promote health and prevent disease and injury, and explores other health related issues at the workplace. Assessment, planning, implementation and evaluation strategies are addressed. Model programs are reviewed and analyzed.
Spring, Summer

HLTH 490 (1-4) Directed Research in Health Science
Supervise individual research or investigation in Health Science under guidance of a faculty mentor. Culminating research project with paper and/or presentation required.
On-Demand

HLTH 491 (1-6) Directed Research in Health Science
A seminar for students preparing for a career in Health Education. Emphasis on: reviewing coursework, identifying and securing an internship site, and exploring employment opportunities within community organizations, public health agencies, work sites, health care facilities, and educational settings for health education.
Prerequisite: HLTH 380W
Fall, Spring

HLTH 495 (1) Senior Seminar in Health Education
A seminar for students preparing for a career in Health Education. Emphasis on: reviewing coursework, identifying and securing an internship site, and exploring employment opportunities within community organizations, public health agencies, work sites, health care facilities, and educational settings for health education.
Prerequisite: HLTH 380W
Fall, Spring

HLTH 496 (1-9) Internship: Health Education
A concentrated pre-professional work experience for those students preparing for a career in community health. Student must schedule placement one semester in advance.
Prerequisite: BIOL 100, BIOL 310, BIOL 330, HLTH 260, HLTH 360, HLTH 361W, HLTH 380W, HLTH 454, HLTH 460, HLTH 480, HLTH 482, HLTH 495
Fall, Spring, Summer

HLTH 497 (1-12) Internship: Alcohol and Drug Studies
A concentrated pre-professional experience for those preparing for a career in chemical dependency counseling. All course work must be completed prior to placement. Student must schedule placement one semester in advance.
Prerequisite: Completion of all Alcohol and Drug Studies required core courses.
Fall, Spring

HLTH 499 (1-6) Individual Study
An in-depth study on a topic of particular interest to the student and project supervisor.
Fall, Spring
HISTORY BA, BS
HISTORY BA, BS AND MINOR

History

College of Social & Behavioral Sciences
Department of History
110B Armstrong Hall • 507-389-1618
Website: www.mnsu.edu/history/

Chair: Matthew Loayza
Faculty: Justin Biel, Angela Jill Cooley, Christopher R. Corley, Kathleen L. Gorman, Jameel Haque, Lori Ann Lahnum, Matthew Loayza, Chad McCutchen, Agnes Odinga, Tao Peng, Kyle Ward

The study of history is the attempt to understand and interpret past human societies. It provides both the joy and anguish of contemplating collective experiences, and presents insights that could produce a better future for the human race. History also opens a panorama of enormous variety in human experiences, values, and customs, which provide enjoyment and from which society can also learn wisdom, mutual respect, and tolerance.

Academic Map/Degree Plan at www.mnsu.edu/programs/#ALL

POLICIES/INFORMATION

Admission to Major. Admission to major is granted by the department. Minimum university admission requirements are:
- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (“C”).
Contact the department for application procedures.

GPA Policy. A minimum cumulative grade-point average of 2.0 is required in the major.

Pass/No Credit Policy. Undergraduate history courses may be taken either for P/N or letter grading except HIST 490 (workshops), HIST 497 (1-12 credits), and HIST 499 (1-3 credits), which are available only on P/N grading. However, majors and minors in history and majors in social studies (history core) must take all history courses, other than those enumerated, for a letter grade. No more than one-fourth of the credits in a history major or minor may be taken as P/N.

Transfer Policy. Transfer students should come to the Department of History to have their transfer credits reviewed prior to registration for classes.

Residency Requirement. All transfer students majoring in history are required to take at least 9 semester credits at the Minnesota State Mankato Department of History. All transfer students minoring in history are required to take at least 6 semester credits at the Minnesota State Mankato Department of History.

In order to provide broad preparation for graduate study, history majors of superior ability may read for honors in three different areas (see HIST 390 (1)- HIST 392 (1)). To be eligible, a student must have completed at least 14 credits of history courses and have earned a grade-point average of 3.5 in history. The student may enroll for one honors course a semester. Honors credit may be counted for the history major and social studies (history core). Students who successfully complete these three courses with a grade-point average of 3.5 for all history courses (and who have met the other degree requirements) will be eligible for graduation “with distinction in history.”

Students interested in teaching history should see the Social Studies section for information on the major in Social Studies with a History Concentration BS, Teaching.

HISTORY BA

Degree completion = 120 credits

Major Common Core
HIST 495W Senior Seminar (4)

Major Restricted Electives
Survey Sequence (choose 8 credits)
Students must take one of the survey sequences (World History, European History, or United States History)
HIST 170 Ancient World Civilization to 1500 (4)
HIST 170W Ancient World Civilization to 1500 (4)
HIST 171 World Civilization, 1500-Present (4)
HIST 171W World Civilization, 1500-Present (4)

HIST 180 European History to 1648 (4)
HIST 180W European History to 1648 (4)
HIST 181 European History: 1648 to the Present (4)
HIST 181W European History: 1648 to the Present (4)
HIST 190 United States to 1877 (4)
HIST 190W United States to 1877 (4)
HIST 191 United States Since 1877 (4)
HIST 191W United States Since 1877 (4)

Europe (choose 4 credits)
Courses may not double-count between categories.
HIST 391 Reading for Honors: European History (1)
HIST 401 Classical World of Greece & Rome (4)
HIST 402 Foundations of Judaism, Christianity, & Islam (4)
HIST 403 The Middle Ages (4)
HIST 406 Social History of Renaissance and Reformation Europe (4)
HIST 407 The Age of Absolutism and Enlightenment (4)
HIST 408 Women and Gender in European History (4)
HIST 410 The Witch Hunts in European History (4)
HIST 412 Modern Germany since 1500 (4)
HIST 414 Early England to 1603 (4)
HIST 415 England since 1603 (4)
HIST 419 France since the Revolution in 1789 (4)
HIST 421 Modern Russia (4)
HIST 424 Scandinavian History (4)
HIST 427 Eastern Europe (4)
HIST 431 European History: Selected Topics (1-4)

United States (choose 4 credits)
Courses may not double-count between categories.
HIST 390 Readings for Honors: United States History (1)
HIST 430 United States: Selected Topics (1-4)
HIST 436 History of East Asian Relations with the United States (4)
HIST 452 Minnesota History (4)
HIST 454 Early America to 1763 (4)
HIST 455 Revolutionary & Early National America 1763-1820 (4)
HIST 458 U.S. History 1820-1861 (4)
HIST 459 U.S. History 1861-1900 (4)
HIST 462 U.S. History, 1900-1945 (4)
HIST 463 U.S. History, 1945-Present (4)
HIST 465 History of U.S. Foreign Relations, 1775-1900 (4)
HIST 466 History of U.S. Foreign Relations in the Twentieth Century (4)
HIST 468 U.S. Constitutional History to 1896 (4)
HIST 469 U.S. Constitutional History from 1896 (4)
HIST 470 American Frontier (4)
HIST 471 20th Century American West (4)
HIST 476 Comparative Slavery and Emancipation (4)
HIST 477 Advanced African-American History (3)
HIST 478 America in Vietnam (4)
HIST 481W Civil Rights in the Twentieth Century (4)
HIST 483 American Social and Cultural History (4)
HIST 484 American Labor History (4)
HIST 485 History of American Immigration and Ethnicity (4)
HIST 486 American Environmental History (4)
HIST 487 United States Women's History (4)
HIST 488 Disasters in American History (4)

Third World (choose 4 credits)
Courses may not double-count between categories.
HIST 302 World History: An Overview (4)
HIST 392 Reading for Honors: World History (1)
HIST 402 Foundations of Judaism, Christianity, & Islam (4)
HIST 432 World History: Selected Topics (1-4)
HIST 434 East Asian History: 1800-1945 (4)
HIST 435 East Asian History: 1945 - The Present (4)
HIST 436 History of East Asian Relations with the United States (4)
HIST 437 Africa History to 1800 (4)
HIST 438 Modern Africa (4)
HIST 441 Colonial Latin America (4)
HIST 442 History of Latin America (4)
HIST 465 History of U.S. Foreign Relations, 1775-1900 (4)
HIST 466 History of U.S. Foreign Relations in the Twentieth Century (4)
HIST 476 Comparative Slavery and Emancipation (4)
HIST 478 America in Vietnam (4)
Major Unrestricted Electives
Upper-Division Electives (choose 8 credits)
Courses may not double-count between categories.
HIST 300 - 499
General Electives (choose 4 credits)
Courses may not double-count between categories.
HIST 100 - 499

Other Graduation Requirements
Choose 8 credit(s):
take one series
Language

Required Minor. Yes. Any
HISTORY BS
Degree completion = 120 credits

Major Common Core
HIST 495 Senior Seminar [4]

Major Restricted Electives
Survey Sequence (choose 8 credits)
Students must take one of the survey sequences (World History, European History, or United States History)
HIST 170 Ancient World Civilization to 1500 [4]
HIST 170W Ancient World Civilization to 1500 (4)
HIST 171 World Civilization, 1500-Present (4)
HIST 171W World Civilization, 1500-Present (4)
HIST 180 European History to 1648 [4]
HIST 180W European History to 1648 (4)
HIST 181 European History: 1648 to the Present (4)
HIST 181W European History: 1648 to the Present (4)
HIST 190 United States to 1877 [4]
HIST 190W United States to 1877 (4)
HIST 191 United States Since 1877 (4)
HIST 191W United States Since 1877 (4)

Europe (choose 4 credits)
Courses may not double-count between categories.
HIST 391 Reading for Honors: European History (1)
HIST 401 Classical World of Greece & Rome (4)
HIST 402 Foundations of Judaism, Christianity, & Islam (4)
HIST 403 The Middle Ages (4)
HIST 406 Social History of Renaissance and Reformation Europe (4)
HIST 407 The Age of Absolutism and Enlightenment (4)
HIST 408 Women and Gender in European History (4)
HIST 410 The Witch Hunts in European History (4)
HIST 412 Modern Germany since 1500 (4)
HIST 414 Early England to 1603 (4)
HIST 415 England since 1603 (4)
HIST 419 France since the Revolution in 1789 (4)
HIST 421 Modern Russia (4)
HIST 424 Scandinavian History (4)
HIST 427 Eastern Europe (4)
HIST 431 European History: Selected Topics [1-4]

United States (choose 4 credits)
Courses may not double-count between categories.
HIST 390 Readings for Honors: United States History [1]
HIST 430 United States: Selected Topics [1-4]
HIST 436 History of East Asian Relations with the United States [4]
HIST 452 Minnesota History (4)
HIST 454 Early America to 1763 (4)
HIST 455 Revolutionary & Early National America 1763-1820 (4)
HIST 465 History of U.S. Foreign Relations, 1775-1900 (4)
HIST 466 History of U.S. Foreign Relations in the Twentieth Century (4)
HIST 468 U.S. Constitutional History to 1896 (4)
HIST 469 U.S. Constitutional History from 1896 (4)
HIST 470 American Frontier (4)
HIST 471 20th Century American West (4)
HIST 475 Comparative Slavery and Emancipation (4)
HIST 477 Advanced African-American History (3)
HIST 478 America in Vietnam (4)
HIST 481W Civil Rights in the Twentieth Century (4)
HIST 483 American Social and Cultural History (4)
HIST 484 American Labor History (4)
HIST 485 History of American Immigration and Ethnicity (4)
HIST 486 American Environmental History (4)
HIST 487 United States Women’s History (4)
HIST 488 Disasters in American History (4)

World (choose 4 credits)
Courses may not double-count between categories.
HIST 302 World History: An Overview [4]
HIST 392 Reading for Honors: World History [1]
HIST 402 Foundations of Judaism, Christianity, & Islam (4)
HIST 432 World History: Selected Topics [1-4]
HIST 434 East Asian History: 1800-1945 (4)
HIST 435 East Asian History: 1945 - The Present (4)
HIST 436 History of East Asian Relations with the United States (4)
HIST 437 African History to 1800 (4)
HIST 438 Modern Africa (4)
HIST 441 Colonial Latin America (4)
HIST 442 History of Latin America (4)
HIST 465 History of U.S. Foreign Relations, 1775-1900 (4)
HIST 466 History of U.S. Foreign Relations in the Twentieth Century (4)
HIST 476 Comparative Slavery and Emancipation (4)
HIST 478 America in Vietnam (4)

Major Unrestricted Electives
Upper-Division Electives (choose 8 credits)
Courses may not double-count between categories.
HIST 300 - 499
General Electives (choose 4 credits)
Courses may not double-count between categories.
HIST 100 - 499

Required Minor. Yes. Any
HISTORY MINOR

Minor Requirements. A minor in history consists of 18 semester hours with a minimum of 9 semester hours at the 300-400 level.

COURSE DESCRIPTIONS

HIST 155 (3) History of the Family in America
This course is designed to provide an overview and analysis of the historical experiences of the family in the United States from earliest settlement to the present in order to aid students in understanding the contemporary situation of the family in American society.
Variable
GE-5, GE-7
Diverse Cultures - Purple

HIST 170 (4) Ancient World Civilization to 1500
A history of the physical, political, cultural, social, and economic foundations of world civilizations to 1500.
Fall, Spring
GE-5, GE-8

HIST 170W (4) Ancient World Civilization to 1500
A history of the physical, political, cultural, social, and economic foundations of world civilizations to 1500. Same content as HIST 170, except this course satisfies WI, Writing Intensive. Students may not take both HIST 170 and HIST 170W for credit.
Variable
WI, GE-5, GE-8

HIST 171 (4) World Civilization, 1500-Present
Review of major changes in World Civilizations since 1500.
Fall, Spring
GE-5, GE-8
Diverse Cultures - Purple

HIST 171W (4) World Civilization, 1500-Present
Review of major changes in World Civilization since 1500. Same content as HIST 171, except this course satisfies the writing intensive, WI. Students may not take both HIST 171 and HIST 171W for credit.
Variable
WI, GE-5, GE-8
HIST 180 (4) European History to 1648
A survey of European civilization from Egypt to the end of the Thirty Years War. Fall, Spring
GE-5, GE-10

HIST 180W (4) European History to 1648
A survey of European civilization from Egypt to the end of the Thirty Years War. Same content as HIST 180, except this course satisfies the writing intensive, WI. Students may not take both HIST 180 and HIST 180W for credit. Variable
WI, GE-5, GE-10

HIST 181 (4) European History: 1648 to the Present
A survey of European history from the end of the Thirty Years War to the present. Fall, Spring
GE-5, GE-9

HIST 181W (4) European History: 1648 to the Present
Survey of European history from the end of the Thirty Years War to the present. Same content as HIST 181, except this course satisfies the writing intensive, WI. Students may not take both HIST 181 and HIST 181W for credit. Fall, Spring
WI, GE-5, GE-9

HIST 190 (4) United States to 1877
This course is designed to provide an overview of America’s political, social, economic, and cultural development from earliest colonization to 1877. Fall, Spring
GE-5, GE-7
Diverse Cultures - Purple

HIST 190W (4) United States to 1877
This course is designed to provide an overview of America’s political, social, economic, and cultural development from earliest colonization to 1877. Same content as HIST 190, except this is a writing intensive course and satisfies WI. Students may not take both HIST 190 and HIST 190W for credit. Variable
WI, GE-5, GE-7
Diverse Cultures - Purple

HIST 191 (4) United States Since 1877
A survey of American History from the end of Reconstruction to the present with a special emphasis on political and social developments. Fall, Spring
GE-5, GE-7
Diverse Cultures - Purple

HIST 191W (4) United States Since 1877
This course is designed to provide an overview of America’s political, social, economic, and cultural development from 1877 to the present. This course has the same content as HIST 191, but is approved as fulfilling WI. Students may not take both HIST 191 and HIST 191W for credit. Variable
WI, GE-5, GE-7
Diverse Cultures - Purple

HIST 223 (4) Islamic Civilizations
This course would increase and diversify the offerings of Minnesota State Mankato’s curriculum and of the History department. This course would provide information to interested students from Muslim and non-Muslim background concerning the cultures and history of the Islamic world, therefore, providing a learning opportunity for students who are curious about Islamic cultures, while also giving our growing Muslim student population a space to study their own cultural production. This class engages a subject that is increasingly visible and misunderstood in our society and will serve as a bridge between our diverse student body and our community. Spring
G-7, G-8
Diverse Cultures - Gold

HIST 250 (4) Riot and Revolution in History
Through a series of historical simulations, students develop communication and oral reasoning skills by researching, writing, and participating in debates about key global political events that changed the course of history. Students will study primary and secondary sources related to the historical events. Students will draft, rewrite, and defend oral arguments based on their research, and they will conduct debates with other students in class. Fall, Spring
G-1B, G-9
Diverse Cultures - Purple

HIST 260 (4) Introduction to Traditional East Asian Civilization
A general survey of premodern East Asian civilizations -- particularly China and Japan -- from the beginning to 1800. Topics include the formation and development of East Asian civilizations and the evolving East Asian engagement with the natural environment before the 19th century. Variable
GE-5, GE-10
Diverse Cultures - Purple

HIST 260W (4) Introduction to Traditional East Asian Civilization
A general survey of premodern East Asian civilizations -- particularly China and Japan -- from the beginning to 1800. Topics include the formation and development of East Asian civilizations and the evolving East Asian engagement with the natural environment before the 19th century. Same content as HIST 260, except this course satisfies a writing intensive, WI, requirement. Variable
WI, GE-5, GE-10
Diverse Cultures - Purple

HIST 268 (4) American Legal History
Students develop communication and oral reasoning skills by researching and participating in historical legal and constitutional debates. Students will study primary and secondary sources related to congressional debates, legal cases, and other historical events in American law. The class will cover some of the most important debates in American history with the goal of gaining a better understanding of historical legal issues and constitutional development and improving student rhetorical and communication skills. On-Demand: Fall, Spring, Summer
G-18, G-9

HIST 280 (4) History in Black and White
This class traces the evolving history of race from its creation in early modern Europe to political uses of this history in the twenty-first century United States. Students will learn about whiteness and blackness as social constructions that implicated the trans-Atlantic slave trade, patterns of imperialism, systems of oppression, and notions of beauty in western society. Students will also be involved in historical commemoration and/or racial justice projects involving communities of color in Minnesota to reflect on how the historical context informs these activities and how history continues to be used politically. On-Demand: Fall, Spring
GE-9, GE-11

HIST 300 (4) Study Abroad/ Study Away Historical Tour
Historical study tours provide students with the opportunity to study at an off-campus location in a tour or program organized by a History professor. In addition to the off-campus experience, the course may also include readings, assignments, and class meetings on campus before or after the tour. On-Demand: Fall, Spring, Summer

HIST 302 (4) World History: An Overview
Review of World History as a field of study. Fall/ Spring

HIST 390 (1) Readings for Honors: United States History
Prerequisite: 14 semester credits of History with minimum GPA of 3.5
Variable

HIST 391 (1) Reading for Honors: European History
Prerequisite: 14 semester credits of History with minimum GPA of 3.5
Variable

HIST 392 (1) Reading for Honors: World History
Prerequisite: 14 semester credits of History with minimum GPA of 3.5
Variable

HIST 401 (4) Classical World of Greece & Rome
The history of Greece and Rome stressing political, social and economic institutions and cultural and intellectual achievements. Variable

HIST 402 (4) Foundations of Judaism, Christianity & Islam
A history of western monotheistic religions and their interactions with the secular world and each other from the beginnings of Judaism to the Crusades. Variable
HIST 403 (4) The Middle Ages
A history of the Middle Ages stressing political, social and economic interactions and cultural achievements.
Variable

HIST 406 (4) Renaissance and Reformation Europe
European history from the later Middle Ages to the end of the Thirty Years’ War (c.1300-1648). Students will examine the intellectual, religious, and cultural developments in Western Europe, with special attention given to social life and popular culture.
Variable

HIST 407 (4) The Age of Absolutism and Enlightenment
The history of Europe from the Treaty of Westphalia to the eve of the French Revolution (1648-1789). Course emphasizes absolutism and constitutionalism, the construction of European empires, the scientific revolution and Enlightenment, and social and economic changes.
Variable

HIST 408 (4) Women and Gender in European History
A history of women from Classical Greece and Rome to the modern era. An analysis of the changing concepts of gender relations within a study of women as individuals and as members of socio-economic, ethnic, kin, and religious groups.
Variable
Diverse Cultures - Purple

HIST 410 (4) The Witch Hunts in European History
A history of the witchcraft phenomenon in Europe from the Middle Ages to 1800. The course examines the rise and decline of the European witch hunts through the history of religion, politics, law, gender, sexuality, and social life.
On-Demand: Fall, Spring, Summer
Diverse Cultures - Purple

HIST 412 (4) Modern Germany since 1500
Review of German history from the Reformation and Thirty Years War to the present, including such topics as Rise of Prussia, Revolution of 1848, Bismarck and the formation of a German Empire, World War I, Weimar Republic and the rise of Hitler, World War II and Germany since 1945.
Variable

HIST 414 (4) Early England to 1603
England from ancient times to the death of Elizabeth I.
Variable

HIST 415 (4) England since 1603
Political, social and economic development of England and Great Britain since the death of Elizabeth I.
Variable

HIST 419 (4) France since the Revolution in 1789
Review of French history from the Revolution of 1789 to the present, including such topics as origins and course of the Revolution, Napoleon, Louis XVIII to Third Republic, World War I, World War II and France since 1945.
Variable

HIST 421 (4) Modern Russia
A history of Russia and surrounding areas from the fall of Tsarism in 1917 to the modern era.
Variable

HIST 424 (4) Scandinavian History
Political, economic, social, cultural, and immigration history of the Scandinavian countries, including major themes in the mass migration and history of Scandinavians in America. Emphasis on the period, 1500-present.
Variable

HIST 427 (4) Eastern Europe
A history of Eastern Europe from the Middle Ages to the present.
Variable

HIST 430 (1-4) United States: Selected Topics
This seminar course will deal with a specific aspect of United States history as announced by the department.
Variable

HIST 431 (1-4) European History: Selected Topics
This seminar course will deal with a specific aspect of European history as announced by the department.
Variable

HIST 432 (1-4) World History: Selected Topics
This seminar course will deal with a specific aspect of World History as announced by the department.
Variable

HIST 434 (4) East Asian History: 1800-1945
A comparative history of the Chinese and Japanese nations from the 19th century to 1945.
Variable

HIST 435 (4) East Asian History: 1945 - The Present
A comparative history of the rise of the Chinese and Japanese nations from 1945 to the present.
Variable
Diverse Cultures - Purple

HIST 436 (4) History of East Asian Relations with the United States
History of relations of major East Asian countries with the United States from the late 18th century to the present.
Variable

HIST 437 (4) African History to 1800
Investigation of historical developments across the African continent from prehistory through the eighteenth century. Topics will include ancient empires of West Africa, the Swahili coast, the spread of Islam, the trans-Atlantic slave trade and the formation of South Africa’s multi-racial society.
Variable
Diverse Cultures - Purple

HIST 438 (4) Modern Africa
Investigation of historical developments in Sub-Saharan Africa during the nineteenth and twentieth centuries. Topics will include trade with Europe and America, European colonization and African resistance, life in colonial Africa, independence movements, South Africa’s apartheid state and the Rwanda genocide.
Variable
Diverse Cultures - Purple

HIST 441 (4) Colonial Latin America
This course traces the rise and fall of the Spanish and Portuguese Empires in America. Specific focus is given to the interactions between the European, African, and indigenous populations as they formulated societies in the Americas.
On-Demand: Fall, Spring, Summer
Diverse Cultures - Purple

HIST 442 (4) Modern Latin America
This course traces the history of Latin America from the late colonial period through the present as the various countries in the region attempted to transcend their colonial past and confront the pressures of modernization and globalization.
Variable
Diverse Cultures - Purple

HIST 452 (4) Minnesota History
This course will examine Minnesota’s social, political, and economic development from the earliest human habitation to the present.
Variable

HIST 454 (4) Early America to 1763
This course will examine America’s political, social, economic, and cultural development from the earliest settlement of the continent by indigenous peoples to 1763, when provincial Americans began to demand more than token equality in the British Empire.
Variable
Diverse Cultures - Purple

HIST 455 (4) Revolutionary & Early National America 1763-1820
This course will examine the social, economic, ideological, political, diplomatic, and military experiences of the United States between 1763 and 1820, in order to understand the creation of the American political nation and the culture which developed within it.
Variable
Diverse Cultures - Purple
HIST 458 (4) U.S. History 1820-1861
This course will discuss the social, economic, and political issues from the rise of Jackson through the beginning of the Civil War. Major issues to be covered include: Jacksonian Democracy, Industrialization, Reform, Westward Expansion, Slavery, and the 1850’s.
Variable
Diverse Cultures - Purple

HIST 459 (4) U.S. History 1861-1900
This course will explore the immediate causes and consequences of the Civil War as well as the rise of an industrial/urban United States. Major issues to be covered include: causes of the Civil War, the war itself, Reconstruction, the Gilded Age, and Populism.
Variable
Diverse Cultures - Purple

HIST 462 (4) U.S. History, 1900-1945
Reform/domestic themes and U.S. foreign policies during the Progressive Era, the “Roaring 20’s,” the Great Depression and the New Deal, and the two world wars.
Variable
Diverse Cultures - Purple

HIST 463 (4) U.S. History, 1945-Present
Social, political and foreign affairs since World War II.
Variable

HIST 465 (4) History of U.S. Foreign Relations, 1775-1900
This course will explore the economic, strategic, and ideological factors shaping American foreign policy from 1775 to 1900. Students will examine how U.S. policy makers defined their goals and how their assumptions led the United States to pursue territorial and commercial expansion.
Variable
Diverse Cultures - Purple

HIST 466 (4) History of U.S. Foreign Relations in the Twentieth Century
An examination of the major factors influencing U.S. diplomacy since 1900. Students will examine how influential policy makers defined their diplomatic goals, and how both domestic and external factors have contributed to America’s reaction to wars and revolutions around the world.
Variable
Diverse Cultures - Purple

HIST 468 (4) U.S. Constitutional History to 1896
This course examines U.S. constitutional history from its English foundations to 1896. Students will read and analyze court decisions and discuss how legal history reflects American society, culture, politics, and economics during this period.
Variable

HIST 469 (4) U.S. Constitutional History from 1896
This course examines U.S. constitutional history from 1896 to the present. Students will read and analyze court decisions and discuss how legal history reflects American society, culture, politics, and economics during this period.
Variable

HIST 470 (4) American Frontier
Occupation of the area between the Mississippi and the Pacific from Spanish exploration to the late 19th century.
Variable
Diverse Cultures - Purple

HIST 471 (4) 20th Century American West
This course looks at the social, political, and economic developments that transformed the 20th Century American West.
Variable
Diverse Cultures - Purple

HIST 476 (4) Comparative Slavery and Emancipation
This course will discuss slavery and emancipation in the Atlantic World (Africa, Latin America, and the United States). Students will discover how slavery and emancipation differed in various regions and over time.
Variable
Diverse Cultures - Purple

HIST 477 (3) Advanced African-American History
A course which deals with the main themes in African-American history and their interpretations.
Variable

HIST 478 (4) America in Vietnam
This course will examine the Vietnam War. Students will discover how and why the U.S. became involved in Vietnam, examine the specific problems faced by American diplomats and military officials, and how the war affected American society.
Fall
Diverse Cultures - Purple

HIST 481W (4) Civil Rights in the Twentieth Century
This course will examine the long civil rights movement throughout the 20th century. The course will focus on the African American freedom movement including strategy and tactics, massive resistance by southern white supremacists, and federal and state responses. The course may also address the civil rights struggles of other marginalized populations.
Variable
WI

HIST 482 (4) American Social and Cultural History
Topics in intellectual history or popular and traditional culture.
Variable

HIST 484 (4) American Labor History
An examination of the history of labor and the emergence of social welfare within the context of the modernization of western society and the diversity of the United States.
Variable

HIST 485 (4) History of American Immigration and Ethnicity
A historical study of the immigration and ethnic experience in America. Includes an examination of political, social, and economic changes that resulted in population movements to the U.S. and of the development of immigration laws in response to the arrival of "outsiders." Attention is given to the rise of anti-immigrant movements at various times in American history.
Variable

HIST 486 (4) American Environmental History
This course will examine the interaction between humans and the American environment from pre-Columbus to the present.
Variable

HIST 487 (4) United States Women's History
This course is designed to provide a survey and analysis of the historical experiences of women in the United States from earliest settlement by indigenous peoples to the present in order to aid students in understanding the contemporary situation of women in American society.
Variable

HIST 488 (4) Disasters in American History
Discussion of disasters in US history from colonial times to the present. Contemporary descriptions of the events will be reviewed as will the changing response of both the public and the government to these events.
Variable

HIST 490 (1-4) Workshops
Specific titles to be announced in departmental course descriptions. P/N only.

HIST 495W (4) Senior Seminar
This seminar course will include a discussion of the history of the discipline of history, an introduction to research methodologies, and the nature of historical writing. Each student will write a research paper as part of the course. Permission of department and instructor required. Course is required for History majors.
Fall, Spring
WI

HIST 497 (1-12) Internship
Students will apply historical skills and knowledge through a practical work experience at a not-for-profit organization, governmental agency, for-profit business, or other institution. P/N only.
Variable

HIST 499 (1-3) Individual Study
Advanced independent study and research. P/N only.
Variable
HONORS PROGRAM

Honors Program

College of Graduate Studies and Research
265 Morris Hall, 507-389-5191
Website: www.mnsu.edu/honors

Director: Anne Dahlman
Assistant Director: Giovanna Walters

Honors Program Faculty: Kellian Clink (Library Services); Christopher Corley (History); Kristen Cvancara (Communication Studies); Anne Dahlman (Honors); Julie Kerri-Berry (Theatre and Dance); Rosemary Krawczyk (Psychology); Teresa Kruszenga (Educational Studies: K-12 and Secondary Programs); Justine Martin (Library Services); Martin Mitchell (Geography); Giovanna Walters (Honors)

Mission Statement: The mission of the Honors Program at Minnesota State Mankato is to encourage future leaders, researchers, and global citizens by providing high ability and motivated students with exceptional learning opportunities, mentoring relationships, and a community of scholars that foster their development as future leaders in a global society.

Program Overview: The Honors Program is dedicated to the development of three main competencies: leadership, research, and global citizenship. Students can choose between two honors designations. Students who enroll in a 14-credit Honors Program that includes 6 credits of Honors General Education courses and 8 honors credits will graduate with the designation: Honors Program Graduate with Distinction. Students who participate in an abbreviated 8-credit honors curriculum will graduate with the designation: Honors Program Graduate. As students move into courses within their major, they further develop their honors competencies through advanced honors seminars and individualized plans of study. Throughout their time at the University, students will participate in co-curricular activities which complement their plan of study. At the culmination of all coursework, seniors are required to demonstrate acquisitions of the leadership, research, and global citizenship competencies through a successful presentation and defense of an honors portfolio in HONR 475: Honors Portfolio.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

Admission to the Honors Program: The Honors Director, in consultation with the Honors Council, grants admission to the Honors Program. No predetermined test score or class rank guarantees or precludes admission. The selection committee considers the applicant’s demonstrated academic excellence and inquisitiveness. Contact the Honors Program Director for application forms and procedures.

GPA Policy: Students must maintain a minimum overall 3.3 GPA to register for honors courses.

Pass/No Credit Policy: All of the Honors courses (including honors sections of general education courses and honors seminars) must be taken for a letter grade, except for HONR 475, which is only taken as pass/no credit.

Transfer Policy: Transfer students should contact the Honors Program Director to have their transfer credits reviewed when they submit the application for admission.

The Honors Program Graduate with Distinction track requires a core program of 14 credit hours. The Honors Program Graduate track requires 8 credit hours.

Required Courses (2 credits)
FYEX 100 First Year Seminar (1) OR
HONR 201 Introduction to Honors (1)
HONR 475 Honors Portfolio (1)

Required Honors Sections of General Education Courses* (6 credits)
Students must take at least 6 credits of designated Honors sections of General Education courses. Upon permission of the Director, students can substitute up to 6 credits of Honors General Education courses by taking upper-level credits beyond the 7 required credits.

Required Honors Seminars (6 credits)
Students must complete a total of 6 credit hours of HONR 401. Course may be repeated for credit for each new topic. Students can substitute up to 3 credits of HONR 401 with HONR 450, HONR 455, or HONR 499.

HONR 401 Honors Seminar (1-3)
* For students who pursue the Honors Program Graduate with Distinction track

Language Requirement. In addition to their coursework, all honors students will demonstrate competency in a second language according to the American Council on the Teaching of Foreign Languages “Intermediate Mid” level (for students continuing a language studied in high school) or “Intermediate Low” (for students studying a new language). Competency can be demonstrated through course completion or via examination.

COURSE DESCRIPTIONS

HONR 201 (1) Introduction to Honors
This course is required for students who transfer into the Honors program or who join without taking the FYEX course. This course provides an orientation to the mission and core competencies of the Honors Program. Students will analyze and categorize leadership, research, and global citizenship themes, identify appropriate learning goals, and develop an e-portfolio for their use in the Honors Program.

HONR 250 (1-6) Honors Service Learning
One way to meet Honors Program requirements is through Service-Learning. Students will develop meaningful Service-Learning activities which will involve an action and reflection dynamic. May be taken as traditional course or individually in consultation with the Honors Program Director.

HONR 255 (1-6) Honors Practicum
Honors students may engage in significant learning experiences outside of the traditional classroom setting. A practicum typically begins with student interest that turns into an educational activity. Practicums will be individually determined in consultation with the Honors Program Director.

HONR 401 (1-4) Honors Seminar
Seminars are offered by University faculty from a wide variety of disciplines. In addition, interdisciplinary seminars can be offered.

HONR 450 (1-6) Honors Service Learning
One way to meet Honors Program requirements is through Service-Learning. Students will develop meaningful Service-Learning activities which will involve an action and reflection dynamic. May be taken as traditional course or individually in consultation with the Honors Program Director.

HONR 455 (1-6) Honors Practicum
Honors students may engage in significant learning experiences outside of the traditional classroom setting. A practicum typically begins with student interest that turns into an educational activity. Practicums will be individually determined in consultation with the Honors Program Director.

HONR 475 (1) Honors Portfolio
This required course allows the student to articulate where and how he or she has met the Honors Program Learning Outcomes.

HONR 499 (1-6) Individual Study
To be arranged with Honors Program Director.
The Human-Animal Studies minor investigates animals themselves, as well as past and present relationships between human and non-human animals. Drawing from the social sciences and the humanities, it seeks to spark new conversations about ethical and moral concerns surrounding animals, the protection of animals, and representations of animals. The minor will be especially beneficial for students pursuing a broad range of animal-related careers, including but not limited to careers in animal shelters, sanctuaries, veterinary centers, research labs, zoos, farms, and wildlife management.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

Policies/Information
No more than two of the six courses required for the minor may be taken P/N.

HUMAN-ANIMAL STUDIES MINOR

Core
Take all 3 (10 credits)
ENG 319 Animals and Literature (4)

HUMANITIES BA AND MINOR

GPA Policy. Candidates for a major in Humanities must maintain a 2.5 grade-point average in the major.

P/N Grading Policy. Humanities core courses taken for a major or minor in Humanities may not be taken on a P/N basis.

HUMANITIES BA
Degree completion = 120 credits

Major Common Core
HUM 282W Global Perspectives and Humanities Traditions (4)
HUM 350 Reading in Humanities (1-4)
HUM 380 Topics in Humanities (4)
HUM 450W Humanities Seminar (4)
HUM 490 Senior Capstone Project (4)

Major Restrictive Electives (choose 15 credits)
ART 260 Art History Survey I (3)
ART 266 Art History Survey II (3)
ART 265W Art As Politics (3)
ART 416 Art of Africa, the Americas, and the South Pacific (3)
ART 417 Medieval Art and Architecture (3)
ART 434 Arts Administration (3)
ART 460 Ancient Art (3)
ART 462 Renaissance Art (3)
ART 467 Art of the Islamic World (3)
ART 469 Asian Art (3)
ENG 318 Multicultural Literature (2-4)
ENG 433W Selected Studies in World Literature (4)
ENG 435 The World Novel (2-4)
ENG 436 Native American Literature (2-4)
ENG 438 African American Literature (2-4)
ENG 481 History of the English Language (4)
HUM 101W Introduction to Humanities (4)
HUM 150 Western Humanities I: Beginnings through the Renaissance (4)
HUM 151 Western Humanities II: Renaissance through the Present (4)
An introduction to the interdisciplinary study of the humanities, as expressed through the cultures and traditions of sub-Saharan Africa, Latin America, and the Pacific region. Artistic, philosophical and religious forms of cultural expression are considered within their social and historical contexts.

ALT: Spring
GE-6, GE-8
Diverse Cultures • Purple

HUM 250 (2-4) Perspectives in Humanities
Explores the critical analysis of written, visual and/or musical texts; considers these texts from a variety of cultural and historical contexts; and analyzes issues that engage basic questions of human existence, for individuals and societies. May be repeated when topic changes.

Variable
GE-6

HUM 250W (4) Perspectives in Humanities
Explores the critical analysis of written, visual and/or musical texts; considers these texts from a variety of cultural and historical contexts; and analyzes issues that engage basic questions of human existence, for individuals and societies. May be repeated when topic changes.

Variable
GE-6

HUM 280 (2-4) Humanities Traditions
Historical or cultural periods, beliefs, or movements within the larger Western traditions of Europe and America and the expressions of these traditions through the visual, literary and performing arts and other forms. May be repeated when topic changes.

Variable
GE-6

HUM 280W (4) Humanities Traditions
Historical or cultural periods, beliefs, or movements within the larger Western traditions of Europe and America and the expressions of these traditions through the visual, literary and performing arts and other forms. May be repeated when topic changes.

Variable
GE-6

HUM 281W (4) Human Diversity and Humanities Traditions
Cultural and artistic traditions of groups that have experienced discrimination or exclusion in U.S. society and how these groups express themselves through the visual, literary and performing arts and other forms. May be repeated when topic changes.

Variable
GE-6

HUM 282W (4) Global Perspectives and Humanities Traditions
Historical or cultural periods, beliefs, or movements within the larger Western traditions of Europe and America and the expressions of these traditions through the visual, literary and performing arts and other forms. May be repeated when topic changes.

Variable
GE-6

HUM 350 (1-4) Reading for Humanities
Independent reading in the Humanities. Three options: 1) selected readings in Classical Humanities; 2) selected readings in Environmental Humanities; and 3) student-selected readings in Humanities. Requires permission of Humanities Program Director.

Variable
GE-6

HUM 350 (4) Topics in Humanities
Topics in Humanities will be a variable-title course that explores special topics in common issues, ideas, and themes that run throughout different cultures and throughout human history. May be repeated with different topics.

Variable
GE-6

HUM 450W (4) Humanities Seminar
Intensive study of a topic related to the Humanities. Topics have included the Baroque Era, Modernism and the Arts, and Culture and Critical Theory. Prerequisite: HUM 282W

Fall (On-Demand), Spring (On-Demand)

WI
HUMANITIES CONTINUED

HUM 490 (4) Senior Capstone Project
An individual project by Humanities Majors that will demonstrate an ability to use interdisciplinary methods to draw together different areas of study in focusing on a specific topic, problem or concern. Requires approval of the Humanities Director or designated advisor.
Prerequisite: Admission to college as Humanities Major

HUM 498 (1-4) Humanities Internship
An applied work and learning experience in the field of interdisciplinary Humanities. Prerequisite: HUM 282W, advanced standing in Humanities and consent of instructor.
On-Demand

HUMAN PERFORMANCE (HP) COURSE DESCRIPTIONS

Human Performance

College of Allied Health & Nursing

Department of Human Performance
1400 Highland Center • 507-389-6313
Website: ahn.mnsu.edu/hp/

Chair: Lynnette Engeswick
Jessica Albers, Suzannah Armentrout, Cindra Kamphoff, Jon Lim, Theresa Mackey, Michelle McAlarnen, Vicki Schull, Ben Schwamberger, Patrick Sexton, Sue Tar, Mary Visser,

Admission to Major is granted by the department. Minimum university ad
Admission requirements are:
- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.5 (“C”) or above.

Students are encouraged to consult with appropriate advisors for additional
departmental requirements.

POLICIES/INFORMATION
Candidiates of the Health and Physical Education majors and DAPE minor in
the department must have a cumulative grade point average of 2.5 or above to
be admitted to the Department of Human Performance and Professional Education.
A grade of “C” or better is required in all courses in the major and minor. Candi-
dates may not take any course in the major and minor from the department
as independent studies.

Students in the School Health and Physical Education program are required to
complete 40 credits of General Education courses in 11 Goal Areas for gradua-
tion. Students planning to major in the College of Allied Health and Nursing have
an advisor from their area of interest assigned to them. Questions and concerns
pertaining to advising and the assignment of advisors can be answered by Shirley
Murray, student relations coordinator, 124 Myers Field House, 507-389-6315.

COURSE DESCRIPTIONS

HP 102 (1) Individualized Exercise
This course provides small group personal training sessions (e.g., 1 to 4) ideal for
sedentary students looking to begin a physical activity program in a noncom-
petitive supportive environment. With the assistance of exercise science students
enrolled in HP 486, participants will enhance their physical fitness and overall
wellness.
Fall, Spring
GE-11

HP 103 (1) Fitness for Living
Concepts and development of lifelong healthy exercise and nutritional habits.
Fall, Spring
GE-11

HP 104 (1) Adult Fitness
This course is designed to provide specific information and strategies to allow
adults to develop or maintain lifelong healthy exercise habits that impact physical
fitness in one or more of the following areas: cardiovascular and muscular endur-
ance, muscular strength, flexibility, and body composition.
On Demand
GE-11

HP 105 (1) Beginner and Advanced Beginner Swimming
Introduction to basic swimming skills; basic rescue and water safety skills and
techniques; stroke instruction in front crawl, back crawl, elementary backstroke,
breaststroke, and sidestroke.
Fall
GE-11

HP 107 (1) Orienteering
This course is designed to introduce the student to the basics of orienteering and
land navigation. Through 15 weeks of classes and instruction, the student will
be able to understand the basic principles of navigation. The class will be 50%-
classroom instruction and 50% outdoor activity.
On-Demand

HP 114 (1) Billiards and Bowling
Theory and practice of billiards or bowling.
Fall, Spring
GE-11

HP 117 (1) Aerobic Conditioning
Theory and practice of aerobic conditioning.
Fall, Spring
GE-11

HP 130 (1) Self-Defense for Women
Includes street fighting techniques and personal safety tips.
Fall, Spring
GE-11

HP 139 (1) Winter Survival
The winter survival (WS) seminar is designed to provide students with an introduc-
tion to winter survival techniques applicable to severe and varying weather con-
ditions. Classroom lecture and outdoor hands-on training is utilized to accomplish
the course objectives. Winter survival is pass/fail.
On-Demand
GE-11

HP 141 (2) Introduction to Sport Management
This course is designed to introduce students to the vast array of fields within the
sport management industry and the different job opportunities that are available as
well as basic knowledge and skill sets needed to be a sport manager.
Fall, Spring

HP 143 (1) Aqua Exercise
Development of cardiovascular fitness, strength, flexibility, and endurance through
a variety of exercise formats in the water. Swimming ability not a prerequisite.
Fall, Spring
GE-11

HP 145 (1) Aquatic Conditioning and Water Polo
Introductions to conditioning techniques for aquatic activities (swimming, triathlon,
water polo, etc.). Development of cardiovascular fitness, strength, flexibility, and
endurance. Individual/team skills and techniques of water polo. Prerequisite: Swim
500 yards without stopping.
On-Demand
GE-11

HP 146 (1) Intercollegiate Bowling
Prerequisite: Bowling experience/averages.
On-Demand
GE-11

HUM 499 (1-4) Individual Study
Interdisciplinary study in an area for which the student has basic preparation.
Prerequisite: Approval of faculty.
HP 147 (1) Intercollegiate Cross Country
Open for credit to those on the intercollegiate team.
Prerequisite: Selection for team
Fall
GE-11

HP 148 (1) Intercollegiate Softball
Open for credit only for those students who make the Minnesota State Mankato team and who complete the requirements.
Prerequisite: Selection for team
Spring
GE-11

HP 149 (1) Intercollegiate Volleyball
Open for credit only for those students who make the Minnesota State Mankato team and who complete the requirements.
Prerequisite: Selection for team
Fall
GE-11

HP 150 (1) Intercollegiate Wrestling
Open for credit to those who make the wrestling team and complete the requirements.
Prerequisite: Selection for team
Spring
GE-11

HP 152 (1) Intercollegiate Track and Field
Open for credit to those who make the team and complete the requirements.
Prerequisite: Selection for team
Spring
GE-11

HP 153 (1) Intercollegiate Swimming
Open for credit only for those students who make the Minnesota State Mankato team and who complete the requirements.
Prerequisite: Selection for team
Spring
GE-11

HP 154 (1) Intercollegiate Football
Open for credit only for those students who make the Minnesota State Mankato team and who complete the requirements.
Prerequisite: Selection for team
Fall
GE-11

HP 155 (1) Intercollegiate Basketball
Must be on intercollegiate roster.
Prerequisite: Selection for team
Spring
GE-11

HP 156 (1) Intercollegiate Baseball
Class for only students on the intercollegiate baseball team. Need permission to register.
Prerequisite: Selection for team
Spring
GE-11

HP 157 (1) Intercollegiate Golf
Open for credit to those who make the team and complete the requirements.
Prerequisite: Selection for team
Spring
GE-11

HP 158 (1) Intercollegiate Tennis
Open for credit to those who make the team and complete the requirements.
Prerequisite: Selection for team
Spring
GE-11

HP 159 (1) Intercollegiate Hockey
This course is admission by permission only. The course is limited to male students who are members of the Minnesota State Mankato intercollegiate hockey team.
Prerequisite: Selection for team
Spring
GE-11

HP 160 (2) Introduction to Exercise Science
Introduction to the discipline of exercise science. Course is designed to acquaint exercise science majors with opportunities within the major, recommended minors, and an overview of the exercise science profession and career options.
Fall, Spring

HP 161 (1) Intercollegiate Soccer
Participation in NCAA II soccer.
Prerequisite: Selection for team
Fall
GE-11

HP 166 (1) Team Game Skills
Flag/Touch Football, Softball (fast and slow pitch), Soccer, Speedball, Ultimate, Volleyball, Basketball, Team handball.
Fall, Spring
GE-11

HP 167 (1) Individual Dual Activities
Participation and increase skill knowledge through activity in track and field or gymnastics.
Fall, Spring

HP 168 (1) Fitness Activities
Participation and increase skill knowledge through activity in body building, physical conditioning, and aerobics.
Fall, Spring
GE-11

HP 169 (1) Social, Folk and Square Dance Techniques
Techniques of traditional folk dance, square dance and fundamentals of a variety of social dances.
Fall, Spring
GE-11

HP 170 (1) Winter Activities
Skiing, cross-country skiing, ice skating, or snowboarding.
Spring
GE-11

HP 171 (1) Introduction to Handball
Acquaint student with basic skills, and rules of handball.
Fall, Spring
GE-11

HP 172 (1) Advanced Handball
Acquaint student with advanced skills, strategies, and rules of handball.
Fall, Spring
GE-11

HP 173 (1) Aquatic Skills
Overview of aquatic skills and activities. Basic techniques and practical experience in teaching aquatic skills and activities.
Prerequisite: Human Performance major or Aquatic emphasis. Ability to swim front crawl, back crawl, elementary backstroke, breaststroke, sidestroke. Developing teaching skills and curriculum.
Fall, Spring
GE-11

HP 174 (1) Sport Activities
Variable content based on demand.
Prerequisite: Varies depending on activity
Fall, Spring
GE-11

HP 175 (1) Social, Folk and Square Dance Techniques
Techniques of traditional folk dance, square dance and fundamentals of a variety of social dances.
Fall, Spring
GE-11

HP 176 (1) Lifetime Activities I
Acquaint student with the basic skills, strategy and rules of badminton, tennis, or racquetball.
Fall, Spring
GE-11

HP 177 (1) Lifetime Activities II
Basic skills and knowledge of terminology, rules, and strategy in archery or golf.
Fall, Spring
GE-11

HP 178 (1) Social, Folk and Square Dance Techniques
Techniques of traditional folk dance, square dance and fundamentals of a variety of social dances.
Fall, Spring
GE-11

HP 179 (1) Winter Activities
Skiing, cross-country skiing, ice skating, or snowboarding.
Spring
GE-11

HP 180 (1) Introduction to Handball
Acquaint student with basic skills, and rules of handball.
Fall, Spring
GE-11

HP 181 (1) Advanced Handball
Acquaint student with advanced skills, strategies, and rules of handball.
Fall, Spring
GE-11

HP 182 (1) Aquatic Skills
Overview of aquatic skills and activities. Basic techniques and practical experience in teaching aquatic skills and activities.
Prerequisite: Human Performance major or Aquatic emphasis. Ability to swim front crawl, back crawl, elementary backstroke, breaststroke, sidestroke. Developing teaching skills and curriculum.
Fall, Spring
GE-11

HP 183 (1) Sport Activities
Variable content based on demand.
Prerequisite: Varies depending on activity
Fall, Spring
GE-11

HP 184 (1) Social, Folk and Square Dance Techniques
Techniques of traditional folk dance, square dance and fundamentals of a variety of social dances.
Fall, Spring
GE-11

HP 185 (1) Winter Activities
Skiing, cross-country skiing, ice skating, or snowboarding.
Spring
GE-11

HP 186 (1) Introduction to Handball
Acquaint student with basic skills, and rules of handball.
Fall, Spring
GE-11

HP 187 (1) Advanced Handball
Acquaint student with advanced skills, strategies, and rules of handball.
Fall, Spring
GE-11

HP 188 (1) Aquatic Skills
Overview of aquatic skills and activities. Basic techniques and practical experience in teaching aquatic skills and activities.
Prerequisite: Human Performance major or Aquatic emphasis. Ability to swim front crawl, back crawl, elementary backstroke, breaststroke, sidestroke. Developing teaching skills and curriculum.
Fall, Spring
GE-11

HP 189 (1) Sport Activities
Variable content based on demand.
Prerequisite: Varies depending on activity
Fall, Spring
GE-11

HP 190 (1) Social, Folk and Square Dance Techniques
Techniques of traditional folk dance, square dance and fundamentals of a variety of social dances.
Fall, Spring
GE-11

HP 191 (1) Winter Activities
Skiing, cross-country skiing, ice skating, or snowboarding.
Spring
GE-11

HP 192 (1) Introduction to Handball
Acquaint student with basic skills, and rules of handball.
Fall, Spring
GE-11

HP 193 (1) Advanced Handball
Acquaint student with advanced skills, strategies, and rules of handball.
Fall, Spring
GE-11

HP 194 (1) Aquatic Skills
Overview of aquatic skills and activities. Basic techniques and practical experience in teaching aquatic skills and activities.
Prerequisite: Human Performance major or Aquatic emphasis. Ability to swim front crawl, back crawl, elementary backstroke, breaststroke, sidestroke. Developing teaching skills and curriculum.
Fall, Spring
GE-11

HP 195 (1) Sport Activities
Variable content based on demand.
Prerequisite: Varies depending on activity
Fall, Spring
GE-11

HP 196 (1) Social, Folk and Square Dance Techniques
Techniques of traditional folk dance, square dance and fundamentals of a variety of social dances.
Fall, Spring
GE-11

HP 197 (1) Winter Activities
Skiing, cross-country skiing, ice skating, or snowboarding.
Spring
GE-11

HP 198 (1) Introduction to Handball
Acquaint student with basic skills, and rules of handball.
Fall, Spring
GE-11

HP 199 (1) Advanced Handball
Acquaint student with advanced skills, strategies, and rules of handball.
Fall, Spring
GE-11

HP 200 (1) Aquatic Skills
Overview of aquatic skills and activities. Basic techniques and practical experience in teaching aquatic skills and activities.
Prerequisite: Human Performance major or Aquatic emphasis. Ability to swim front crawl, back crawl, elementary backstroke, breaststroke, sidestroke. Developing teaching skills and curriculum.
Fall, Spring
GE-11

HP 201 (1) Sport Activities
Variable content based on demand.
Prerequisite: Varies depending on activity
Fall, Spring
GE-11

HP 202 (1) Social, Folk and Square Dance Techniques
Techniques of traditional folk dance, square dance and fundamentals of a variety of social dances.
Fall, Spring
GE-11

HP 203 (1) Winter Activities
Skiing, cross-country skiing, ice skating, or snowboarding.
Spring
GE-11
HP 202 (1) Introduction to Teaching PE and Health
Introduction to physical education and health teaching majors. An overview of history, physical education and health teaching profession, and opportunities and challenges in teaching.
Spring

HP 203 (2) Fundamentals of Indoor and Outdoor Team Sports
This class is intended for students in Physical Education to learn the fundamentals of teaching indoor and outdoor team sports. Students will use current teaching models to learn and evaluate age appropriate teaching progressions and assessment techniques. Students will become proficient in both performing and teaching specific skills related to team sport (flag football, basketball, volleyball, soccer, ultimate Frisbee, team handball).
Fall
On-Demand

HP 204 (2) Fundamentals of Individual and Dual Sports
This class is intended for students in Physical Education to learn the fundamentals of teaching individual and dual sports. Students will use current teaching models to learn and evaluate age appropriate teaching progressions and assessment techniques. Students will become proficient in performance and analysis of fundamental movements and skills in individual and dual sports (bowling, golf, tennis, pickle ball, badminton) and leisure activities (disc golf, bocce ball).
On-Demand

HP 205 (2) Fundamentals of Rhythm and Dance
This class is intended for students in Physical Education to learn the fundamentals of teaching rhythm and dance. Students will use current teaching models to learn and evaluate age appropriate teaching progressions and assessment techniques. Students will become proficient in performance and analysis of fundamental movements and skills in rhythmic activities and dance (folk, square, line, and social).
On-Demand

HP 210 (2) Global Aspects of Sport
On-Demand

HP 241 (1) Sailing
Students must furnish Coast Guard approved wearable life preserver. Beginning and intermediate sailing techniques. Sailboat racing.
Prerequisite: Swimming ability
On-Demand
GE-11

HP 242 (1) Canoeing
Paddling skills and safety/rescue techniques. Beginning white water skills. Students must provide their own personal flotation devices.
Prerequisite: Swimming ability
On-Demand
GE-11

HP 245 (1) Intermediate Swimming
Prerequisite: Front crawl, back crawl, elementary backstroke, sidestroke, breaststroke. Spring
GE-11

HP 248 (1) Stroke Analysis
Prerequisite: Ability to swim strokes.
On-Demand
GE-11

HP 250 (2) Lifeguard Training
Explanations, demonstrations, practice, and review of skills required of lifeguards. Red Cross certification.
Prerequisite: Swim 500 yards. Front crawl, breaststroke, elementary backstroke, sidestroke.
On-Demand
GE-11

HP 252 (2) Officiating Theory
The course is designed to give an overview of approximately five sports. Emphasis is placed on the philosophy behind sport officiating. Discussion involves how to get started, organization helpful to officials, learning materials, stipends to be earned, types of equipment and cost.
On-Demand
GE-11

HP 255 (3) Development Movement
Designed to prepare teacher candidates to recognize, understand, apply, and analyze the skill theme approach to elementary children’s physical education curriculum. Emphasis will be on movement concepts, skill themes, rhythms and dance, and generic levels of skill proficiency.
Spring

HP 257 (2) Water Safety Instructor (WSI)
American Red Cross requirements for Water Safety Instructor (WSI) certification. Practical experiences included.
Prerequisite: Swim 500 yards. Front crawl, back crawl, elementary backstroke, breaststroke, sidestroke.
On-Demand
GE-11

HP 265 (2) Orientation to PT, OT, and AT
Orientation to existing and emerging careers in the allied health professions such as occupational therapy, physical therapy, and athletic training. Strategies for gaining admission to allied health graduate studies programs will be emphasized. Fall, Spring

HP 266 (2) Teaching Dance in Physical Education
Methods and materials for teaching creative dance/movement and dance technique to children K-12. Includes practicum experiences with varied age groups.
On-Demand

HP 290 (3) Psycho-Social Aspects of Sport
Examines sport from a socialpsychological perspective. To identify and discuss ways in which societal values affect the character of sport and the people involved.
Prerequisite: SOC 101
Fall, Spring

HP 291 (2) Concepts of Fitness
Adult fitness, from theory to practice.
Fall, Spring
GE-11

HP 301 (1) Swimming Theory
Methods, procedures, and philosophy of coaching competitive swimming.
Prerequisite: Competitive swimming experience.
On-Demand

HP 302 (1) Wrestling Theory
Methods and procedures used in coaching.
Prerequisite: Wrestling experience or wrestling class.
On-Demand

HP 303 (1) Volleyball Theory
Methods and procedures used in coaching volleyball.
Prerequisite: Volleyball experience or consent.
On-Demand

HP 304 (1) Track & Field Theory
Methods and procedures used in coaching.
On-Demand

HP 305 (1) Baseball Theory
Methods and procedures used in coaching baseball.
On-Demand

HP 306 (1) Football Theory
Course designed to teach the various techniques and philosophies of the game of football for prospective coaches. Open enrollment male or female.
Fall

HP 308 (1) Hockey Coaching Theory
The course is designed for those interested in coaching hockey at the youth and high school level.
On-Demand
On-Demand with an emphasis on application for coaches. All material presented will be approached from a practical perspective regarding the physiological response of the human body to acute and chronic exercise. The purpose of this course is to acquaint the student with the basic information and performance tests, interpretation of results, basic statistical analysis, and grading/evaluating performance. Course is designed for pre-professionals who will be working in adapted physical activity for adult populations. Designed for coaches, physical education majors in the Exercise Science, Sport Management, and Athletic Training tracks, and other physically active individuals. Designed for coaching, physical education majors in the Exercise Science, Sport Management, and Athletic Training tracks, and students with majors from other departments who are interested in adapted physical activity outside the school setting. The course is designed to acquaint the coaching licensure student with the basic principles of structural kinesiology and biomechanics.

HP 309 (1) Basketball Coaching Theory
Methods and procedures used in coaching. On-Demand

HP 310 (1) Softball Theory
Methods and procedures used in coaching. Prerequisite: Softball experience or consent. On-Demand

HP 311 (1) Cross Country Theory
Methods and procedures used in coaching. On-Demand

HP 316 (1) Tennis Theory
Methods and procedures used in coaching. On-Demand

HP 317 (1) Golf Coaching Theory
Methods and procedures used in coaching. On-Demand

HP 318 (1) Soccer Theory
Methods and procedures used in coaching. On-Demand

HP 320 (3) Foundations of Motor Learning
Analysis variables which affect the learning, performance, and retention of motor skills. Prerequisite: PSYC 101 Fall, Spring

HP 323 (2) Elementary Physical Education Methods
Methods and materials for teaching physical education in the elementary school. Fall, Spring

HP 325 (3) Sport Ethics and Professional Development
This course will enable students to gain a deeper understanding of the moral reasoning processes of sport management professionals. Students will develop the knowledge, skills, and abilities to apply moral reasoning in dealing with ethical dilemmas in sport management. Fall, Spring

HP 340 (2) Prevention and Care
Basic recognition, prevention, and care of injuries/illnesses suffered by athletes and other physically active individuals. Designed for coaching, physical education, and sports medicine minor students. Prerequisite: BIOL 220, HLTH 210 Fall, Spring

HP 344 (2) Aquatic Organization and Administration
Development of skills necessary to organize and administer aquatic programs (seasonal and yearly). Prerequisite: Lifeguard Training/WSI or consent. On-Demand

HP 346 (2) Evaluation Techniques I Clinical
The study and application of clinical assessment techniques used to evaluate lower body injuries incurred by physically active populations. The required clinical experience component will provide the student with the opportunity to apply these skills in the clinical environment. Prerequisite: HP 341 and HP 342 concurrent

HP 348 (3) Structural Kinesiology and Biomechanics
A study of the structural and biomechanical functions of the muscular system during physical activity, sport, and exercise. Prerequisite: BIOL 220 Fall, Spring

HP 354 (1) Coaches Physiology
The purpose of this course is to acquaint the student with the basic information regarding the physiological response of the human body to acute and chronic exercise. All material presented will be approached from a practical perspective with an emphasis on application for coaches. On-Demand

HP 356 (3) Methods of Elementary Physical Education
Designed to prepare teacher candidates to recognize, understand, apply, and analyze the skill theme approach to elementary children's physical education curriculum. The emphasis will be based on movement concepts, skill themes, rhythms and dance, and generic levels of skill proficiency.

HP 360 (3) Foundations of Sport Management
This course will provide an overview of the academic and professional sport management industry. Topics and challenges specific to the industry will be examined. Students will learn basic professional career paths, tasks, and duties of sport managers with a focus on practical examples of sport management skills and strategies, as well as relevant theoretical concepts. Fall

HP 371 (2) Scientific Principles of Sport
This course is designed to acquaint the student with the basic principles of structural kinesiology and biomechanics. Prerequisite: BIOL 220, PHYS 101 On-Demand

HP 372 (3) Exercise Science for Coaches
The purpose of this course is to acquaint the student with an understanding of basic scientific principles essential to working successfully with athletes as a coach.

HP 386 (4) Methods of Middle & Secondary Physical Education
Designed for teacher candidates to analyze, apply, and evaluate developmentally appropriate content development skills, develop lesson plans, and peer teach. Teacher candidates will apply the standards of effective practice in teaching middle and secondary level students in physical education. Prerequisite: HP 201, HP 255, HP 266, all Performance Courses Spring

HP 387 (3) Methods of Secondary Physical Education
This course is designed for teacher candidates to apply, analyze, and evaluate developmentally appropriate content skills, develop lesson plans, and peer teaching. Teacher candidates will apply the standards of effective practice in teaching K-12 level students in physical education. Prerequisite: KSP 330 Corequisite: KSP 330 Fall

HP 392 (3) Group Exercise Instruction
The student will gain knowledge and skills that will allow them to take and pass a reputable group exercise certification, develop/instruct a wide variety of group exercise formats and monitor and modify the exercise of participants in group exercise.

HP 398 (0) CPT: Co-Operative Experience
Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one semester or on a part-time basis. Contact an advisor in your program for complete information.

HP 403W (3) Research Methods & Statistics in Exercise Science
Provides an introduction to measurement and evaluation commonly used in physical education and exercise science. This encompasses the administration of skills and performance tests, interpretation of results, basic statistical analysis, and grading/evaluating performance. Prerequisite: HP 290, HP 414 Fall

HP 405 (3) Adapted Physical Activity
Course is designed for preprofessionals who will be working in adapted physical activity outside the school setting. The course is for students with physical education majors in the Exercise Science, Sport Management, and Athletic Training tracks, and students with majors from other departments who are interested in adapted physical activity for adult populations.

www.mnsu.edu 2018-2019 Undergraduate Catalog
HP 411 (3) Developmental Adapted Physical Education
Legal and theoretical bases for teaching physical education to students with disabilities. First course in DAPE sequence.
Fall, Spring

HP 412 (3) Assessment in Adapted Physical Education
Evaluation of motor skills and fitness of students with disabilities. Prerequisite: HP 411
Summer

HP 413 (2) Lifespan Motor Development
Study of lifespan motor development from prenatal through adulthood, including information on delayed development and the normal pattern of skill acquisition. Fall

HP 414 (3) Physiology of Exercise
Introductory study of the effects of both acute and chronic exercise on structure and function of the human body across the life span. Prerequisite: BIOL 330. BIOL 230 or BIOL 310 may be substituted for BIOL 330. Fall, Spring

HP 415 (2) Advanced Sports Medicine
This course is designed for individuals interested in advanced study in the field of sports medicine. The course will provide advanced study or orthopaedic assessment techniques, application of therapeutic exercise and modalities, and rehabilitation techniques. Prerequisite: BIOL 220, HTH 210, HP 340
Spring, Summer

HP 417 (3) Principles of Wellness Coaching
This course contains content associated with achieving entry-level certifications for wellness coaching. Health behavior change strategies are emphasized within the context of the health coaching theory, coaching relationship skills, well-being assessment, and goal setting. Fall, Spring

HP 418 (3) Intercultural Competence for Allied Health Professionals
Studying abroad is a transformative experience that has the power to challenge our thinking and our perspective on the world. This experiential course will help you become a global citizen, develop intercultural competence, and enhance your abilities to work in health-related fields with diverse clients and patients. Specifically, we will be participating in intercultural activities before the study abroad and several cultural immersion activities while abroad (e.g., participating in a traditional cultural ceremony).
Spring

HP 419 (2) Teaching Dance to Individuals with Exceptional Needs
Adaptation of dance materials to facilitate learning of individuals with special needs through simulated and hands-on teaching experiences.
On-Demand

HP 423 (3) Teaching Strategies in Secondary Developmental Adapted Physical Education
Develop teaching strategies, curricular programming, and adaptations/modifications for students with disabilities in secondary physical education settings. Application of these strategies in fieldwork experiences with students with disabilities in physical education/DAPE settings. Prerequisite: HP 411
Summer

HP 424 (4) Methods of Elementary Physical Education
Designed for teacher candidates to analyze, apply, and evaluate developmentally appropriate content development skills, and develop lesson plans to teach elementary physical education. Prerequisite: HP 201, HP 255, HP 266, HP 386, All HP Performance
Fall

HP 432 (2) Elementary Teaching Field Experience
A field experience for teacher candidates to develop lesson plans and teach physical education to elementary students on-site prior to student teaching. Fall, Spring

HP 435 (3) Planning Sport Facilities
This course provides students with information on the planning, development, and administration of sport facilities (i.e., physical education, athletics, recreation, fitness/wellness centers, etc.). Fall, Spring

HP 437 (3) Sport Media, Sponsorship & Sales
An in-depth study of sport management theories, policies, objectives, and strategies applied to sport marketing through the functions and areas of sport sponsorship, sales, and media. Fall, Summer

HP 439 (3) Nutrition for Physical Activity and Sport
Provides in-depth exploration of the dietary needs of physically active individuals across the lifespan. Its laboratory component will focus on performance and interpretation of assessments commonly used to determine dietary and physiological status. Prerequisite: HP 414
Fall, Spring

HP 441 (2) Organize & Administer
Planning, organizing, controlling, resource allocation, communication, marketing, public relations, and legal aspects of physical education and sport. Fall, Spring

HP 445 (3) Teaching Students with Cognitive & Emotional/Behavioral Disabilities
Theory, strategies and best practices for teaching physical education to students with cognitive disabilities (including mental retardation, autism, and multiple disabilities accompanying mental retardation) and emotional/behavioral disorders. Spring

HP 451 (3) Principles of Coaching
Basic understanding of the theoretical and practical applications of the sport science areas of physical education related to coaching. Current issues and topics addressing the principles and problems of the prospective interscholastic coach. Fall, Summer

HP 452 (2) Athletic Testing and Conditioning
Field testing, exercise instruction, and the periodization technique of exercise prescription for athletes and physically active individuals. Includes scientific strategies for enhancing strength, power, and endurance performance along with computer-aided program design. Prerequisite: HP 414
Fall, Spring

HP 459 (3) Financial Aspects of Sport
This course is designed to provide knowledge and understanding of the principles of economics, budgeting, and finance as they apply to the sport business industry. Prerequisite: ACCT 200 or consent of instructor
Fall, Spring

HP 462 (3) Sports Administration
This course provides students with fundamental theoretical and practical knowledge in management principles and techniques. Philosophy, leadership, communications, public relations, marketing, ethical and legal issues, finances and facilities are also studied. Fall, Spring, Summer

HP 463 (3) Seminar in Sport Management
This course is designed to provide students with opportunities to apply the knowledge and skills obtained from sport management courses in order to solve problems that a sport manager is likely to encounter. Spring, Summer

HP 464 (3) Analysis of Sport Data
The introduction of basic principles and procedures of measurement skills used by sport manager in applying and analyzing sport-related data such as sport marketing, operational, or financial data in a sport organizational setting. On Demand: Summer

HP 465 (3) Legal Aspects of Physical Education and Sport
To provide legal and safety aspects in physical activity. Legal liability, civil rights, and contract law are emphasized. Fall, Spring, Summer

HP 466 (3) Graded Exercise Testing and Exercise Prescription
An introduction to basic graded exercise tests and exercise prescription commonly used in clinical as well as health/wellness appraisal settings. Prerequisite: HP 414
Fall, Spring
HP 466W (3) Graded Exercise Testing and Exercise Prescription
An introduction to basic graded exercise tests and exercise prescription commonly used in clinical as well as health/wellness appraisal settings.
Prerequisite: HP 414
Fall, Spring

VI

HP 467 (3) Worksite Wellness Program Development
Reviews the contextual issues and health policies in the workplace. Efficacy of best practices in worksite wellness strategies, employee engagement, program design and implementation, and program assessment are explored.
Prerequisite: HP 414
Spring

HP 468 (3) Sport Marketing
The study of marketing theory, research, strategies, and techniques in the areas of market segmentation, sport products, licensing and merchandising, market research, pricing, promotions, sales, public relations, electronic media, sponsorship and consumer behavior as it applies to the marketing sport or marketing products through sport.
Fall, Spring

HP 469 (3) Event Management in Sport
Techniques/principles of planning, funding and managing sport events. Collegeiate championships, nonprofit events, benefits, professional events.
Fall

HP 470 (3) Psychology of Coaching
To introduce interested students, professionals, and coaching licensure candidates to the psychological literature and latest techniques associated with coaching in an athletic setting.
Prerequisite: PSYC 101 or equivalent
Fall, Spring

HP 471 (3) Consulting Techniques in Dev. Adapted Physical Education
Study of techniques of consulting in D/APE with the spectrum of individuals involved in the IEP process, including but not limited to: students with disabilities, general physical education teachers, other school professionals and support service personnel, families/parents, peer tutors, and community agencies to enhance the learning of students with disabilities both within and outside the classroom setting.
Prerequisite: HP 411, HP 412, HP 445
Spring

HP 472 (3) Psychology of Sport and Athletic Injury
This course provides understanding and application of the psychology of sport and injury. Topics include psychological concerns, psychosocial antecedents, injury, psychological skills to implement with patients who are injured as a result of participation in athletics and physical activity.
Variable

HP 475 (3) International Sport Management
The purposes of this course is to expand students' awareness of global sport management principles and obtain first-hand experience in international sport through studying abroad. The course will address ethics, marketing, event management, finance, and challenges/issues in international sport management.
On-Demand

HP 477 (3) Behavior Change Foundations and Strategies
Behavior Change Foundations and Strategies (3 semester credits) is a course that focuses upon the complexity of health behavior change and the skills necessary for a health promotion professional to assess, plan, and evaluate behavior change interventions for individuals and communities. Health behavior change theories and strategies will be discussed. Topics covered in class will include: behavior modification, goal setting, self-management, coping skills, and social support. Emphasis will also be given to the impact of policy and environmental influences on behavior.
Prerequisite: HP 290
Fall, Spring

HP 482 (1) Coaching Practicum
Supervised experience in a public school varsity/junior varsity sport setting.
Prerequisite: HP 340, HP 372, HP 451
Fall, Spring

HP 483 (3) Cardiac Rehabilitation
A course designed to provide experience for persons seeking leadership roles in institutions housing programs of rehabilitative cardiovascular exercise and risk factor intervention.
Prerequisite: HP 414 and HP 467 or equivalent
Fall, Spring

HP 486 (3) Small Group Personal Training
This course will prepare exercise science students to lead personal training sessions in a professional environment. Each student will serve as a personal trainer for HP 102 students applying skills from HP 456 and HP 466. Students will further their personal training techniques using a client-centered approach.
Prerequisite: HETH 210, HP 456, HP 466
Fall, Spring

HP 487 (3) Applied Exercise Science
This course is designed to provide an applied, comprehensive experience for exercise science students to develop skills and dispositions to succeed in careers in health/fitness and sport performance.
Prerequisite: HP 414
Corequisite: HP 496
Fall, Spring

HP 488 (3) Applied Sport Business
This course is designed to provide a rigorous, comprehensive hands-on learning experience for students majoring in Sport Management. This more closely supervised field experience requires a rigorous time and energy commitment from students.
Fall, Spring, Summer
HP 490 (1-4) Workshop
Content is variable and based on special topic.
On-Demand

HP 491 (1-4) In-Service
Broad spectrum of foci available. Designed in consultation with requesting group.
On-Demand

HP 492 (1-10) Internship: Corporate and Community Fitness
This internship is designed to provide the student with practical experience in the area of corporate and community fitness.
Prerequisite: HP 414, HP 466
Fall, Spring

HP 493 (1) Internship in Developmental Adapted Physical Education
Supervised hands-on experience teaching physical education to students with disabilities.
Prerequisite: HP 411 and HP 445
Fall, Spring

HP 496 (1-10) Internship
Designed as an intense practical experience in a selected area.
Prerequisite: HP 414, HP 466
Fall, Spring

HP 499 (1-5) Individual Study
Topics for reading and/or research in human performance to be arranged between student and faculty. Must be done prior to registration.
Fall, Spring
Integrated Engineering

Department of Integrated Engineering
College of Science, Engineering & Technology
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Websites: cset.mnsu.edu/ie and www.ire.minnstate.edu
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Chair: Dean Kelley
Faculty: Rebecca Bates, Dean Kelley, Eleanor Leung, Elizabeth Pluskwik, Robert Sleezer, Jacob Swanson, Yuezhou Wang
Affiliated Iron Range Faculty: Ronald Ulseth (Co-Director), Andy Lillesve

Accreditation. Integrated Engineering and Twin Cities Engineering are Accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org

The Integrated Engineering major is offered through a novel engineering education program, unique at Minnesota State Mankato. Integrated Engineering Program is offered in the Twin Cities region of northeast Minnesota (Virginia, MN) and Twin Cities Engineering is offered in the Twin Cities metro area (Bloomington, Minn.) These programs focus on the 3rd and 4th year of the undergraduate engineering program. Students transfer into the Bachelor of Science in Engineering program after two years of pre-engineering work elsewhere.

Students learn traditional engineering knowledge and skills in a project-based learning environment. The Integrated Engineering (IE) educational model is a project-based learning model in which students work with industry and others on real-life design projects with a focus on producing graduates with integrated technical/professional knowledge and competencies. Learning is done in the context of the design projects.

The IE educational model emphasizes innovation, creativity, design, experimental techniques, modeling techniques with an ultimate goal of regional economic development. The Integrated Engineering program allows students to tailor their education to focus on a variety of engineering fields or to create a multidisciplinary experience. Successful completion of the program culminates in the Bachelor of Science in Engineering.

Graduates of the Minnesota State Mankato Integrated Engineering Program will achieve at least 2 of the following program educational objectives, but will be capable of achieving all within one to four years of graduation:

- Designing, implementing and integrating thermal, electrical, mechanical and computer-controlled systems, components, and processes that will serve the region, the nation, and the world;
- Continuing their education through technical or professional graduate programs, professional licensure, or certifications, and the wide variety of other types of life-long learning;
- Creating, developing, leading, and managing in a wide range of enterprises that result in sustainable and enhanced economic regional development through their disciplinary expertise;
- Demonstrating actions such as community service, professional ethics, professional responsibility and mentoring future engineers.

Academic Map/Degree Plan at www.mnsu.edu/programs/#ALL

POLICIES/INFORMATION

MINIMUM INTEGRATED ENGINEERING PROGRAM ENTRY REQUIREMENTS

Entry Requirements. A minimum of 49 semester credit hours including the following courses and credits must be completed before the student enters the engineering curriculum in the Fall of the junior year in full standing:

- Calculus and Differential Equations (16 credits)
- General Physics (calculus-based) (8 credits)
- Additional math and science courses, including chemistry, (8 credits)
- Intro engineering courses including programming or introduction to engineering, statics, dynamics and lab-based electric circuits (13 credits)
- English Composition (4 credits)

All courses and credits shown above must be completed before full enrollment in 300-level engineering courses, unless special permission is granted by the department chair. All of the above courses must be taken for “grade.” It is not acceptable for the student to take any of these courses on a pass/no credit basis. A grade of “C” or better must be achieved in each course. Students may be admitted provisionally while these requirements are being satisfied.

Application to Program. To be considered for admission, the student must have a cumulative GPA of 2.5 for all science, math, and engineering courses. Admission to the Integrated Engineering Program is selective and subject to the approval of the Integrated Engineering program faculty. Admission to the Integrated Engineering Program requires the completion of the application found at the following website: http://cset.mnsu.edu/ie/apply.html.

Each application will be evaluated individually and the decision of Integrated Engineering program faculty will be final. Failure to submit an application by stated deadline could result in the student being denied admission to the program. If a student is denied admission to the Integrated Engineering Program, he/she can reapply for admission in subsequent years.

A. Minnesota State Mankato students

This application form (http://cset.mnsu.edu/ie/apply.html) is submitted to the Integrated Engineering Program along with a copy of the student’s Minnesota State Mankato transcript and any transfer evaluations. Pre-engineering students at Minnesota State Mankato are not guaranteed admission to the program.

B. Transfer Students

Transfer students must submit an application to Minnesota State Mankato and follow all transfer policies. Students may be able to complete the required pre-engineering curriculum at another college or university and have these courses and credits transferred to Minnesota State Mankato, when applying for admission to the Integrated Engineering Program.

GPA Policy. GPA Policy: Students graduating with a B.S. in Engineering degree must have:

1. A cumulative GPA of 2.5 or higher.
2. Grades of 1.67 (“C-”) or better for courses taken at Minnesota State Mankato to be accepted.

P/N Grading Policy. P/N credit will not be applied to any course used to meet the degree requirements.

All students must follow all Minnesota State Mankato policies.

INTEGRATED ENGINEERING BSE
Degree completion = 128 credits

Required General Education

Students who complete the Minnesota Transfer Curriculum will satisfy the Composition (ENG 101) and Communications requirements.

ENG 101 Composition (4)
MATH 121 Calculus I (4)
PHYS 221 General Physics I (4)
Economics Course (Choose 3 Credits).
ECON 201 Principles of Macroeconomics (3)
ECON 202 Principles of Microeconomics (3)
Communications (Choose 3 - 4 Credits).
COMS 102 Public Speaking (3)
ENG 271 Communication (4)
Chemistry (Choose 3 - 5 Credits).
CHEM 191 Chemistry for Engineers (3)
CHEM 201 General Chemistry I (5)

Prerequisites to the Major

ENGR 110 can be replaced by either an introduction to engineering course or a programming course similar to CS 110. Circuit Analysis should be accompanied by a lab. Students need a total of 32 Math and Science credits comprised of courses from General Education and prerequisites to the major.

EE 230 Circuit Analysis I (3)
EE 240 Evaluation of Circuits I (1)
ENGR 110 Introduction to Project-based Engineering (3)
MATH 122 Calculus II (4)
MATH 223 Calculus III (4)
MATH 231 Ordinary Differential Equations (4)
ME 212 Statics (3)
ME 214 Dynamics (3)
PHYS 222 General Physics II (3)
PHYS 232 General Physics Laboratory (1)

CHOOSE 1 CLUSTER:

Physics
PHYS 223 General Physics III (3)
PHYS 233 General Physics III Laboratory (1)
Chemistry
CHEM 202 General Chemistry II (5)
Choose one Focus area from the following.

**Broad Focus (Choose 16 Credits)**

**Major Common Core**

All students must complete 4 credits of ENGR 492.

ENGR 301 Design I (3)
ENGR 302 Design II (3)
ENGR 311W Professionalism I (3)
ENGR 312W Professionalism II (3)
ENGR 321 Engineering Core: Statistics (1)
ENGR 322 Engineering Core: Programming/Modeling (1)
ENGR 331 Mechanical Core: Dynamic Systems (1)
ENGR 332 Mechanical Core: Fluid Mechanics (1)
ENGR 333 Mechanical Core: Manufacturing Processes (1)
ENGR 334 Mechanical Core: Material Science (1)
ENGR 335 Mechanical Core: Mechanics of Materials (1)
ENGR 336 Mechanical Core: Thermodynamics (1)
ENGR 341 Electrical Core: AC Circuits (1)
ENGR 342 Electrical Core: Control Theory (1)
ENGR 343 Electrical Core: Digital Logic (1)
ENGR 344 Electrical Core: Electronics (1)
ENGR 345 Electrical Core: Instrumentation (1)
ENGR 346 Electrical Core: Motors, Generators & Transformers (1)
ENGR 401 Capstone Design I (3)
ENGR 411W Professionalism III (3)
ENGR 412W Professionalism IV (3)
ENGR 421 Advanced Engineering Core: Engineering Economics (1)
ENGR 422 Advanced Engineering Core: Entrepreneurship (1)
ENGR 492 Seminar (1)

**Elective and Capstone Design (Choose 3 Credits).**

Students have the option of completing a thesis or a fourth design project.

ENGR 402 Capstone Design II (3)
ENGR 498 Senior Thesis (3)

**Major Restricted Electives**

Choose 6-7 credits of approved Arts and Humanities courses and choose 6-7 credits of Social Science courses for a total of 13 credits. The Depth Requirement can be fulfilled by a sequence of courses from the same department (such as HIST 180 and HIST 181 or PHI 101 and PHI 321W). A list of approved courses can be found at the program website. Students should also meet the University’s diverse cultures requirement. Students who complete the Minnesota Transfer Curriculum will satisfy the Depth Requirement.

**Major Unrestricted Electives**

Choose one Focus area from the following.

**Broad Focus (Choose 16 Credits)**

Students choosing not to complete a focus area must complete 0-2 credits of ENGR 350-355 and 14-16 credits of ENGR 431, ENGR 432, ENGR 441, ENGR 442, ENGR 450-463, and ENGR 475-479. ENGR 450-463 and ENGR 475-479 are repeatable. At least 12 credits of ENGR 350-355, ENGR 450-463 and ENGR 475-479 must be in the field of mechanical engineering. At least two of the four engineering projects must include design of mechanical systems.

ENGR 350 - 355 Elective Technical Competencies
ENGR 431 - 432 Mechanical Advanced Competencies
ENGR 441 Electrical Advanced Competency: Electricity & Magnetism (1)
ENGR 442 Electrical Advanced Competency: Signals & Systems (1)
ENGR 450 - 463 Advanced Technical Electives
ENGR 475 - 479 Advanced Technical Electives

**Other Focus Areas (Choose 16 Credits)**

Students choosing a focus area other than mechanical or electrical must complete 0-2 credits of ENGR 350-355 and 14-16 credits of ENGR 431, ENGR 432, ENGR 441, ENGR 442, ENGR 450-463, and ENGR 475-479. ENGR 450-463 and ENGR 475-479 are repeatable. At least 14 credits of ENGR 350-355, ENGR 450-463 and ENGR 475-479 must be in the field of focus. At least two of the four engineering projects must include design of focus-area systems.

ENGR 350 - 355 Elective Technical Competencies
ENGR 431 - 432 Mechanical Advanced Competencies
ENGR 441 - 442 Electrical Advanced Competencies
ENGR 450 - 463 Advanced Technical Electives
ENGR 475 - 479 Advanced Technical Electives

**TECHNICAL INTEGRATION & DESIGN MINOR**

**Two Locations:** Mesabi Range College, Normandale Community College

The minor in Technical Integration & Design is for students who wish to learn about engineering design processes and gain experience working with and contributing to an engineering design team. Students will work with a team on an industry-sponsored project and complete 8 credits of technical competency coursework. In this context, they will develop their awareness of engineering technology and design processes while developing professional skills that can be carried forward into a career working with engineers in industry, complementing the expertise developed in their major. Students should have junior/senior standing in their major and must apply for admission. The application form can be found at http://cset.mnsu.edu/cour/minor.html.

**Policy.** This minor is not available for Integrated Engineering majors.

**GPA Policy.** Students earning a minor in Technical Integration & Design must have:

1. A cumulative GPA of 2.5 or higher in minor courses.
2. Grades of 1.67 ("C") or better for individual minor courses.

**P/N Grading Policy.** P/N credit will not be applied to any course used to meet the certification requirements.

**Standards.** Students must complete the application process for the minor, indicating relevant coursework experience, completing the essays, and presenting a learning plan. Students must have a 2.5 or higher GPA and be a junior or senior in their major. Admission to the minor is selective and subject to the approval of the Integrated Engineering faculty.

**Core**

ENGR 300 Introduction to Engineering Design for Non-Majors (4)
ENGR 311W Professionalism I (3)
ENGR 321 Engineering Core: Statistics (1)
ENGR 322 Engineering Core: Programming/Modeling (1)
ENGR 421 Advanced Engineering Core: Engineering Economics (1)
ENGR 422 Advanced Engineering Core: Entrepreneurship (1)
ENGR 492 Seminar (1)

**Elective**

Choose 4 credits from ENGR 350-355. Courses are repeatable. Students in the minor can take 4 credits of 300-level electives.

ENGR 350 - 355 Elective Technical Competencies

**TECHNICAL INTEGRATION & DESIGN CERTIFICATE**

**16 Credits**

Two Locations: Mesabi Range College, Normandale Community College

The Technical Integration & Design Certificate program is for students with junior or senior standing in their major or graduates who wish to learn about engineering design processes and gain experience working with and contributing to an engineering design team. Students will work with a team on an industry-sponsored project and complete 8 credits of technical competency coursework. In this context, they will develop their awareness of engineering technology and design processes while developing professional skills that can be carried forward into a career working with engineers in industry, complementing the expertise developed in their major. Students must apply for admission. The application form can be found at http://cset.mnsu.edu/cour/minor.html.
This certificate is not available for Integrated Engineering majors.

GPA Policy: Students earning a certificate in Technical Integration & Design must have:
1. A cumulative GPA of 2.5 or higher in certificate courses.
2. Grades of 1.67 ("C-") or better for individual certificate courses.

P/N Grading Policy: P/N credit will not be applied to any course used to meet the certificate requirements.

Core
Major Common Core
ENGR 300 Introduction to Engineering Design for Non-Majors (4)
ENGR 311W Professionalism I (3)
ENGR 321 Engineering Core: Statistics (1)
ENGR 322 Engineering Core: Programming/Modeling (1)
ENGR 421 Advanced Engineering Core: Engineering Economics (1)
ENGR 422 Advanced Engineering Core: Entrepreneurship (1)
ENGR 492 Seminar (1)

Major Unrestricted Electives
Choose 4 credits from ENGR 350-355. Courses are repeatable. TID Certificate students can take 4 credits of 300-level electives. Choose 4 Credits.
ENGR 350 - 355 Elective Technical Competencies

PROJECT BASED ENGINEERING CERTIFICATE
1.5 Credits

Two Locations: Mesabi Range College, Normandale Community College

The Project-Based Engineering Certificate program is for students with junior or senior standing in an engineering program in the US or abroad. Students will work with a team on an industry-sponsored project and complete 8 credits of technical competency coursework. In this context, they will further develop their skills in engineering technology, design and professionalism. Students should have completed prerequisites for the integrated engineering program before beginning the certificate program. The application form can be found at http://cset.mnsu.edu/se/minor.html.

This certificate is not available for Integrated Engineering majors.

GPA Policy: Students earning a certificate in Technical Integration & Design must have:
1. A cumulative GPA of 2.5 or higher in certificate courses.
2. Grades of 1.67 ("C-") or better for individual certificate courses.

P/N Grading Policy: P/N credit will not be applied to any course used to meet the certificate requirements.

Major Common Core
ENGR 492 Seminar (1)

Engineering Design (Choose 3 Credits)
Students with junior standing in an engineering program will take ENGR 301. Students with senior standing or an earned engineering bachelors degree will take ENGR 401.
ENGR 301 Design I (3)
ENGR 401 Capstone Design I (3)

Professionalism (Choose 3 Credits)
Students with junior standing in an engineering program will take ENGR 311W. Students with senior standing or an earned engineering bachelors degree will take ENGR 411W.
ENGR 311W Professionalism I (3)
ENGR 411W Professionalism III (3)

Major Unrestricted Electives
Choose 8 credits from the following. Courses ENGR 450-463 and 475-479 may be taken for more than 1 credit. All other courses are 1 credit each.

Choose 0 - 2 Credits
ENGR 321 - 322 Engineering Core Competencies
Choose 0 - 6 Credits
ENGR 331 - 336 Mechanical Core Competencies
Choose 0 - 2 Credits
ENGR 341 - 346 Electrical Core Competencies
Choose 0 - 4 Credits
ENGR 421 - 422 Advanced Engineering Core
ENGR 431 - 432 Mechanical Advanced Competencies
ENGR 441 - 442 Electrical Advanced Competencies

Repeatable Courses (Choose 0 - 8 Credits)
ENGR 450 - 463 Advanced Technical Electives
ENGR 475 - 479 Advanced Technical Electives

COURSE DESCRIPTIONS
ENGR 110 (3) Introduction to Project-based Engineering
Introduction of the engineering design process, professional skills necessary for the modern engineer, learning strategies needed for academic success, and overview of engineering applications relevant to society. Students will use engineering tools to complete an engineering team project.
Fall, Spring

ENGR 293 (1) MAX Scholar Seminar
This class provides MAX scholars with an opportunity to explore a set of topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants.
Prerequisite: Recipient of a MAX scholarship or instructor consent
Fall, Spring

ENGR 299 (3) Bridge to Project-based Engineering
An introductory project-based learning experience in engineering designed to prepare students for upper-division project-based work. Students will be exposed to teamwork, self-regulated learning, and the design process as they participate in the design and implementation of an engineering project.
Prerequisite: Admission to Integrated Engineering major or consent.
On Demand: Fall, Spring, Summer

ENGR 300 (4) Introduction to Engineering Design for Non-Majors
Students working towards a minor in the Department of Integrated Engineering will participate in and reflect on the engineering design process, the professional aspects of working on an engineering team, and the intersection of engineering projects and their major. Design activities include such things as scouting, modeling, experimentation, analysis, modern tools, design reviews, multi-disciplinary systems view, creativity, safety, business plans, and global/societal/environmental impacts.
Prerequisite: Students must be admitted to the minor program in the Department of Integrated Engineering minor or certificate program.
Co-requisites: ENGR 311W
On Demand: Fall, Spring, Summer

ENGR 301 (3) Design I
Students learn and practice the essential elements of engineering design through industry project implementation: scouting, modeling, experimentation, analysis, modern tools, design reviews, multi-disciplinary systems view, creativity, safety, business plans, and global/societal/environmental impacts.
Fall, Spring

ENGR 302 (3) Design II
Students further learn and practice the elements of engineering design through industry project implementation: scouting, modeling, experimentation, analysis, modern tools, design reviews, multi-disciplinary systems view, creativity, safety, business plans, and global/societal/environmental impacts.
Fall, Spring

ENGR 311W (3) Professionalism I
Students learn and develop the elements of professionalism while operating in project teams interacting daily with clients from industry. Topics include leadership, metacognition, teamwork, written and oral communication, ethics, and professional and personal responsibility.
Fall, Spring

ENGR 312W (3) Professionalism II
Students further learn and develop the elements of professionalism while operating in project teams interacting daily with clients from industry. Topics include further examination of leadership, metacognition, teamwork, written and oral communication, ethics, and professional and personal responsibility.
Prerequisite: ENGR 311W
Fall, Spring

ENGR 321 (1) Engineering Core: Statistics
Introduction to statistics in an engineering context. Design of experiments, sources of data, sampling plans, descriptive statistics, inferential statistics, and statistical software are introduced and applied. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to major, minor or certificate programs.
Fall, Spring

ENGR 322 (1) Engineering Core: Programming/Modeling
Students gain breadth across all objectives and depth in either programming or mathematical modeling. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to major, minor or certificate programs.
Fall, Spring
ENGR 331 (1) Mechanical Core: Dynamic Systems
Application of differential equations to determine the time evolution of mechanical systems. Laplace transform approach for solving differential equations. Representing systems with transfer functions, block diagrams, and state space models. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to program.
Fall, Spring

ENGR 332 (1) Mechanical Core: Fluid Mechanics
Analysis of static and dynamic fluid systems using energy, continuity, impulse-momentum, Pascal, and Archimedes' principles. Applications in both steady and non-steady state. Fluid friction, pipe flow, flowmeters. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to program.
Fall, Spring

ENGR 333 (1) Mechanical Core: Manufacturing Processes
Introduction to the field of manufacturing and its relationship to other aspects of engineering. Study of established and emerging parts fabrication processes, such as 3D printing, welding, injection molding, casting, etc. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to program.
Fall, Spring

ENGR 334 (1) Mechanical Core: Material Science
Relationship between microstructures, processing, and properties of engineering materials with a focus on mechanical behavior and evaluation. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to program.
Fall, Spring

ENGR 335 (1) Mechanical Core: Mechanics of Materials
Introduction to material responses in various loading scenarios including axial, bending, shear, and torsion. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to program.
Fall, Spring

ENGR 336 (1) Mechanical Core: Thermodynamics
Application of first law of thermodynamics, mass balances, and property relationships to open and closed systems and power and refrigeration cycles. Introduction to the second law. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to program.
Fall, Spring

ENGR 341 (1) Electrical Core: AC Circuits
Behavior of RI, RC, and RIC circuits including natural, step, and driven responses. Application of Laplace transforms to circuit theory. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to program.
Fall, Spring

ENGR 342 (1) Electrical Core: Control Theory
Modeling and analysis of linear feedback control systems including block diagrams, stability, and root locus. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to program.
Fall, Spring

ENGR 343 (1) Electrical Core: Digital Logic
Introduction to combinational and sequential logic including logic gates, Boolean algebra, logic minimization, flip flops, and HDL. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to program.
Fall, Spring

ENGR 344 (1) Electrical Core: Electronics
Analysis of circuits containing active elements such as amplifiers, diodes, and transistors. Both field effect and bipolar junction devices are covered in the context of digital and analog circuits. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to program.
Fall, Spring

ENGR 345 (1) Electrical Core: Instrumentation
Issues related to measurement including transducers, resolutions, signal integrity, noise, analog to digital conversion, and loading. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to program.
Fall, Spring

ENGR 346 (1) Electrical Core: Motors, Generators & Transformers
Conversion of energy between the electrical, magnetic, and mechanical domains specifically including transformers, AC and DC motors; and AC and DC generators. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to program.
Fall, Spring

ENGR 350 (1-2) Elective Technical Competency
In-depth study of an engineering area related to an engineering project or foundation topic in a focus area. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to major, minor or certificate programs.
Fall, Spring

ENGR 351 (1-2) Elective Technical Competency in Mechanical Engineering
In-depth study of an engineering area related to an engineering project or foundation topic in the focus area of Mechanical Engineering. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to major, minor or certificate programs.
Fall, Spring

ENGR 352 (1-2) Elective Technical Competency in Electrical Engineering
In-depth study of an engineering area related to an engineering project or foundation topic in the focus area of Electrical Engineering. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to major, minor or certificate programs.
Fall, Spring

ENGR 353 (1-2) Elective Technical Competency in Systems Engineering
In-depth study of an engineering area related to an engineering project or foundation topic in the focus area of Systems Engineering. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to major, minor or certificate programs.
Fall, Spring

ENGR 354 (1-2) Elective Technical Competency in Programming
In-depth study of an engineering area related to an engineering project or foundation topic in the focus area of Programming. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to major, minor or certificate programs.
Fall, Spring

ENGR 355 (1-2) Elective Technical Competency in Modern Engineering Tools
In-depth study of an engineering area related to an engineering project or foundation topic in the focus area of Modern Engineering Tools. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to major, minor or certificate programs.
Fall, Spring

ENGR 398 (0) CPT: Co-Operative Experience
Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.
Prerequisite: MATH 223. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.
Fall, Spring, Summer

ENGR 401 (3) Capstone Design I
The first in a two-semester sequence of capstone design. Students build on the experience gained in ENGR 301/ENGR 302 to bring their implementation to that expected of contributing engineers in industry.
Prerequisite: ENGR 302, ENGR 312W. At least 14 credits earned in technical competencies.
Fall, Spring

ENGR 402 (3) Capstone Design II
This is the second capstone design course and fourth design course overall. Expectations include potential patent applications, entry in business plan competitions, or some similarly high level achievement.
Prerequisite: ENGR 401, ENGR 411W. At least 22 credits earned in technical competencies.
Fall, Spring
ENGR 411W (3) Professionalism III
Students further learn and develop the elements of professionalism while operating in project teams interacting daily with clients from industry. Further development/practice of leadership, metacognition, teamwork, written and oral communication, ethics, and professional and personal responsibility in project context. Prerequisite: ENGR 312W
Fall, Spring WI

ENGR 412W (3) Professionalism IV
Students further learn/develop professionalism while interacting regularly with clients from industry. Topics include further development and practice of leadership, metacognition, teamwork, written and oral communication, ethics, and professional and personal responsibility in project context. Prerequisite: ENGR 401, ENGR 411W
Fall, Spring WI

ENGR 421 (1) Advanced Engineering Core: Engineering Economics
Engineering economics topics including time value of money, simple and compound interest, annualized cash flows, inflation, and capital budgeting decision tools such as net present worth, payback period, return on investment, benefit/cost ratio, break-even analysis, and basic income statement reports. Topics are applied in a deep learning activity that relates to the team design project or a personal finance decision. Prerequisite: Admission to major, minor or certificate programs.
Fall, Spring

ENGR 422 (1) Advanced Engineering Core: Entrepreneurship
Introduction to basic value proposition strategies to develop an entrepreneurial mindset. Several business models and tools to develop and communicate the business case are explored, including the business model canvas. The business ecosystem of marketing, supply chain management, competitors, cost and revenue streams, as well as lean start up and lean manufacturing are explored as important factors in the design decisions that will add value to relevant customers and stakeholders. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work. Prerequisite: Admission to major, minor or certificate programs.
Fall, Spring

ENGR 431 (1) Mechanical Advanced Competency: Heat Transfer
Overview of heat transfer mechanisms including conduction, convection, and radiation. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work. Prerequisite: Admission to major, minor or certificate programs.
Fall, Spring

ENGR 432 (1) Mechanical Advanced Competency: Structural Analysis
Introduction to engineering standards in structural design; analysis of structures such as trusses, beams and frames with analytical, computational, and experimental methods for problem solving. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Fall, Spring

ENGR 441 (1) Advanced Electrical Core: Electricity & Magnetism
Maxwell’s equations applied to electrostatics and magnetostatics. Electromagnetic wave propagation, transmission lines, and antennas. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Fall, Spring

ENGR 442 (1) Electrical Advanced Competency: Signals & Systems
Descriptions of signals in the time and frequency domain. Analysis of linear systems in the time and frequency domain. Includes applications of Fourier transforms. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Fall, Spring

ENGR 450 (1-8) Advanced Technical Competency
In-depth, advanced study of an engineering area related to an engineering project or foundation topic in a focus area. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work. Prerequisite: Admission to major, minor or certificate programs and faculty approval for study that extends a core topic area.
Fall, Spring

ENGR 451 (1-8) Advanced Technical Competency in Electrical Engineering
In-depth, advanced study of an engineering area related to an engineering project or foundation topic in the focus area of Electrical Engineering. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work. Prerequisite: Admission to major, minor or certificate programs and faculty approval for study that extends a core topic area.
Fall, Spring

ENGR 452 (1-8) Advanced Technical Competency in Mechanical Engineering
In-depth, advanced study of an engineering area related to an engineering project or foundation topic in the focus area of Mechanical Engineering. Prerequisite: Admission to major, minor or certificate programs and faculty approval for study that extends a core topic area.
Fall, Spring

ENGR 453 (1-8) Advanced Technical Competency in Biomedical Engineering
In-depth, advanced study of an engineering area related to an engineering project or foundation topic in the focus area of Biomedical Engineering. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work. Prerequisite: Admission to major, minor or certificate programs and faculty approval for study that extends a core topic area.
Fall, Spring

ENGR 454 (1-8) Advanced Technical Competency in Chemical Engineering
In-depth, advanced study of an engineering area related to an engineering project or foundation topic in the focus area of Chemical Engineering. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work. Prerequisite: Admission to major, minor or certificate programs and faculty approval for study that extends a core topic area.
Fall, Spring

ENGR 455 (1-8) Advanced Technical Competency in Computer Engineering
In-depth, advanced study of an engineering area related to an engineering project or foundation topic in the focus area of Computer Engineering. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work. Prerequisite: Admission to major, minor or certificate programs and faculty approval for study that extends a core topic area.
Fall, Spring

ENGR 456 (1-8) Advanced Technical Competency in Engineering Management
In-depth, advanced study of an engineering area related to an engineering project or foundation topic in the focus area of Engineering Management. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work. Prerequisite: Admission to major, minor or certificate programs and faculty approval for study that extends a core topic area.
Fall, Spring

ENGR 457 (1-8) Advanced Technical Competency in Environmental Engineering
In-depth, advanced study of an engineering area related to an engineering project or foundation topic in the focus area of Environmental Engineering. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work. Prerequisite: Admission to major, minor or certificate programs and faculty approval for study that extends a core topic area.
Fall, Spring

ENGR 458 (1-8) Advanced Technical Competency in Industrial Engineering
In-depth, advanced study of an engineering area related to an engineering project or foundation topic in the focus area of Industrial Engineering. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work. Prerequisite: Admission to major, minor or certificate programs and faculty approval for study that extends a core topic area.
Fall, Spring

ENGR 459 (1-8) Advanced Technical Competency in Manufacturing Engineering
In-depth, advanced study of an engineering area related to an engineering project or foundation topic in the focus area of Manufacturing Engineering. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work. Prerequisite: Admission to major, minor or certificate programs and faculty approval for study that extends a core topic area.
Fall, Spring

ENGR 460 (1-8) Advanced Technical Competency in Materials Science and Engineering
In-depth, advanced study of an engineering area related to an engineering project or foundation topic in the focus area of Materials Science & Engineering. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work. Prerequisite: Admission to major, minor or certificate programs and faculty approval for study that extends a core topic area.
Fall, Spring

ENGR 461 (1-8) Advanced Technical Competency in Process Engineering
In-depth, advanced study of an engineering area related to an engineering project or foundation topic in the focus area of Process Engineering. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work. Prerequisite: Admission to major, minor or certificate programs and faculty approval for study that extends a core topic area.
Fall, Spring
ENGR 462 (1-8) Advanced Technical Competency in Systems Engineering
In-depth, advanced study of an engineering area related to an engineering project or foundation topic in the focus area of Systems Engineering. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to major, minor or certificate programs and faculty approval for study that extends a core topic area.
Fall, Spring

ENGR 463 (1-8) Advanced Technical Competency in Transportation Engineering
In-depth, advanced study of an engineering area related to an engineering project or foundation topic in the focus area of Transportation Engineering. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to major, minor or certificate programs and faculty approval for study that extends a core topic area.
Fall, Spring

ENGR 475 (1-8) Advanced Technical Competency in Combustion
In-depth, advanced study of an engineering area related to an engineering project or foundation topic in the focus area of Combustion. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to major, minor or certificate programs and faculty approval for study that extends a core topic area.
Fall, Spring

ENGR 476 (1-8) Advanced Technical Competency in Entrepreneurship
In-depth, advanced study of an engineering area related to an engineering project or foundation topic in the focus area of Entrepreneurship. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to major, minor or certificate programs and faculty approval for study that extends a core topic area.
Fall, Spring

ENGR 477 (1-8) Advanced Technical Competency in Leadership
In-depth, advanced study of an engineering area related to an engineering project or foundation topic in the focus area of Leadership. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to major, minor or certificate programs and faculty approval for study that extends a core topic area.
Fall, Spring

ENGR 478 (1-8) Advanced Technical Competency in Renewable Energy
In-depth, advanced study of an engineering area related to an engineering project or foundation topic in the focus area of Renewable Energy. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to major, minor or certificate programs and faculty approval for study that extends a core topic area.
Fall, Spring

ENGR 479 (1-8) Advanced Technical Competency in Structural Analysis
In-depth, advanced study of an engineering area related to an engineering project or foundation topic in the focus area of Structural Analysis. Students will do in-depth learning of some aspect of content area. Coursework may be tied to project work.
Prerequisite: Admission to major, minor or certificate programs and faculty approval for study that extends a core topic area.
Fall, Spring

ENGR 492 (1) Seminar
Students learn about engineering practice through seminars with practicing engineers from industry and are assisted in their development as learners through workshops. This course is repeated by Integrated Engineering students every semester.
Fall, Spring

ENGR 493 (1) MAX Scholar Seminar
This class is for MAX scholars and covers topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members. Students will mentor lower division scholars and do presentations.
Prerequisite: Recipient of a MAX scholarship or instructor consent.
Fall, Spring

ENGR 494 (1) Global Experience in Engineering and Technology
This class provides students pursuing a minor in “Global Solutions in Engineering and Technology” with an opportunity to explore a set of topics related to achieving success in advance of and following an international experience (internship, study abroad, etc.). Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Returning students will be required to participate in mentoring of students preparing for their international experience and provide written and/or oral presentations of various topics during the semester. This course is required both before and after participation in the international experience (min. 2 cr.)
Variable

ENGR 496 (1-4) Selected Topics in Engineering
Special topics not covered in other courses. May be repeated for credit on each new topic.
Prerequisite: Consent
Variable

ENGR 499 (3) Senior Thesis
Advanced study and research required. Topic of the senior thesis determined jointly by the student and the faculty advisor. Deliverables include written thesis and formal oral presentation.
Prerequisite: Senior standing in program and at least 14 credits earned in technical competencies
Fall, Spring, On Demand: Summer

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**INTERDISCIPLINARY STUDIES BS**

**Interdisciplinary Studies**

*College of Arts & Humanities*

230 Armstrong Hall • 507-389-5535

**Director: Kristen Treinen**

The Interdisciplinary Studies baccalaureate major is designed to give highly-motivated, self-directed students an opportunity to work with the faculty to create their own program and earn an undergraduate degree. Interdisciplinary Studies is a liberal-education program designed for students who wish to major in an interdisciplinary area with coherency of design.

**Admission to Major:** Admission will be granted to students who meet eligibility requirements and who complete a formal application to the Interdisciplinary Studies program. Eligibility requirements are as follows:

- Student must have a current, cumulative GPA of 2.0 or higher, according to the Minnesota State Mankato records.
- Student should apply after earning a minimum of 32 semester credits and before completing 80 semester credits, according to Minnesota State Mankato records. Students having more than 80 credits may still be considered for the Interdisciplinary Studies program if they are willing to meet all requirements of the program.
- After meeting with the Director of Interdisciplinary Studies, the student must submit a formal application on a form provided by the director.

**Program Policies/Information**

Areas of Concentration. Students seeking the Interdisciplinary Studies degree will select three academic areas in which to concentrate their work. A faculty in each of the three areas of study should be selected to help them arrange and oversee their course work. 

Continuation in Program. The following rules explain the requirements for a student to continue in the Interdisciplinary Studies program and to receive a university degree.

- Maintain a minimum 2.5 GPA overall for the three areas of study.
- Every course counted in the three areas must have a “C” or better, unless “P/NC” is specified for a course.
- Complete all university’s graduation requirements.
- Complete a minimum of 15 credit hours in each of the three areas of study.
- Complete a capstone project synthesizing the areas of study in IDST 496.
INTERDISCIPLINARY STUDIES CONTINUED

INTERNATIONAL BUSINESS BS AND MINOR

International Business

College of Business
Department of Marketing & International Business
150 Morris Hall • 507-389-2967
Website: cob.mnsu.edu/academics/international-business/

Chair: Ann Kuzma, Ph.D.
Faculty: Turgut Guvenli, M. Anaam Hashmi

The International Business program offers an integrated undergraduate degree. The objective of the program is to train and prepare students to compete and excel in today’s increasingly interdependent global economy.

The International Business minor is designed to complement the student’s major field of study and enhance his/her career opportunities. It is strongly recommended to students in business administration, marketing, management, aviation management, finance, accounting, computer science, language, political science, history, geography, and other related areas.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

Accreditation. The International Business program is accredited by the Association to Advance Collegiate Schools of Business (AACSB)

POLICIES/INFORMATION
Admission to a Major in the College of Business. Admission to a major in the College of Business typically occurs at the beginning of the student’s sophomore year. Once admitted, students may choose to pursue a degree in one or more of the following majors: Accounting, Finance, International Business, Management, or Marketing. Multiple criteria will be considered for admission to a major in the College of Business. Admission is competitive; meeting minimum requirements does not guarantee admission. Deadlines for application are: October 1 for Spring Semester and March 1 for Fall Semester.

Criteria Considered for Admission to the International Business Major
1. Minimum cumulative (including Transfer) Grade Point Average of 2.5.
2. Completion of the following courses with a minimum grade of C (2.0): IT 101, MATH 130, ACCT 200, BUS 295, ECON 201.

Requirements for the International Business Minor
1. Students must be admitted to a major at Minnesota State Mankato, and
2. Students must have a cumulative GPA of 2.0 or higher when starting the International Business minor.

Academic Advising. Students will initially receive their advisement from the professional advisors in the College of Business Student Center. When a student applies to the College of Business (which is done during BUS 295), he/she will be assigned a faculty advisor in the major area of study. Questions regarding the assignment of advisors can be answered in the College of Business Advising Center, 151 Morris Hall, 389-2963.

College of Business Policies. Students who are business minors, non-business majors or those who are not seeking a four-year degree may take up to 24 credits in the College of Business.

Students must be admitted to a major to take upper division (300/400) courses.

Students must be admitted to the College of Business major to be granted a Bachelor of Science degree in any College of Business majors.

Residency. Transfer students must complete a minimum of 30 resident credits at the upper division (300-400) level in the College of Business at Minnesota State Mankato.

Transfer students pursuing a major or minor in the College of Business must complete at least 50% (one-half) of their major or minor coursework at Minnesota State Mankato.

GPA Policy. Students must earn a minimum grade point average of 2.0 (“C”) on the total courses taken in the College of Business and a 2.25 overall GPA to meet graduation requirements.

P/N Grading Policy. No more than one-fourth of a student’s major shall consist of P/N grades.

Assessment Policy. The College of Business believes that the ongoing assessment of its programs makes a vital contribution to the quality of those programs and to student learning. Student Participation is an important and expected part of the assessment process.

Internships. Students are strongly encouraged to participate in one or more internship programs related to their field of study before graduation. Qualifying internships may receive academic credit counting towards a student’s major, but are not required to be taken for credit. To receive academic credit, students must be registered during the semester the internship takes place. Registration instructions and other business internship resources can be found at: cob.mnsu.edu/internship/

INTERNATIONAL BUSINESS BS

Degree completion = 120 credits

Required General Education
ECON 201 and MATH 130 must be completed for admission to the major.
ECON 201 Principles of Macroeconomics (3)
MATH 130 Finite Mathematics and Introductory Calculus (4)

Ethics Requirement (choose 3 credits)
PHIL 120W Introduction to Ethics (3)
PHIL 205W Culture, Identity, and Diversity (3)
PHIL 222W Medical Ethics (3)
PHIL 224W Business Ethics (3)
PHIL 226W Environmental Ethics (3)
PHIL 240W Law, Justice & Society (3)

Prerequisites to the Major
ACCT 200 Financial Accounting (3)
BUS 295 Professional Preparation for Business Careers (2)
IT 101 Introduction to Information Systems (3)

Major Common Core (choose 34 credits)
 Required of all College of Business Majors
ACCT 210 Managerial Accounting (3)
BLAV 200 Legal Environment of Business (3)
ECON 202 Principles of Microeconomics (3)
## INTERNATIONAL BUSINESS CONTINUED

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit(s)</th>
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<tbody>
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<td>IBUS 380</td>
<td>Principles of International Business</td>
<td>(3)</td>
</tr>
<tr>
<td>IBUS 210</td>
<td>Principles of Marketing</td>
<td>(3)</td>
</tr>
<tr>
<td>IBUS 419</td>
<td>International Business Seminar</td>
<td>(3)</td>
</tr>
<tr>
<td>IBUS 428</td>
<td>International Marketing</td>
<td>(3)</td>
</tr>
<tr>
<td>IBUS 448</td>
<td>International Business Management</td>
<td>(3)</td>
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<tr>
<td>IBUS 469</td>
<td>International Business Finance</td>
<td>(3)</td>
</tr>
<tr>
<td>IBUS 485</td>
<td>Export Administration</td>
<td>(3)</td>
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<tr>
<td>IBUS 490</td>
<td>International Business Policy</td>
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**Required of all International Business Majors** (choose 15 credits)

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<tr>
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<td>IBUS 469</td>
<td>International Business Finance</td>
<td>(3)</td>
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<tr>
<td>IBUS 485</td>
<td>Export Administration</td>
<td>(3)</td>
</tr>
<tr>
<td>IBUS 490</td>
<td>International Business Policy</td>
<td>(3)</td>
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</table>

**Major Restricted Electives**

Choose two courses from one of the following business functional areas [Marketing, Finance, or Management]

**OPTION A: Marketing** (choose 6 credits)

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credit(s)</th>
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<tbody>
<tr>
<td>MRKT 312</td>
<td>Professional Selling</td>
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</tr>
<tr>
<td>MRKT 316</td>
<td>Consumer Behavior</td>
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</tr>
<tr>
<td>MRKT 318</td>
<td>Integrated Marketing Communications</td>
<td>(3)</td>
</tr>
<tr>
<td>MRKT 324</td>
<td>Marketing Research &amp; Analysis</td>
<td>(3)</td>
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<tr>
<td>MRKT 339</td>
<td>Distribution Strategy</td>
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<tr>
<td>MRKT 420</td>
<td>Sales Management</td>
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**OPTION B: Finance** (choose 6 credits)

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<tr>
<td>ACCT 310</td>
<td>Management Accounting I</td>
<td>(3)</td>
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<tr>
<td>FINA 460</td>
<td>Investments</td>
<td>(3)</td>
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<td>FINA 462</td>
<td>Strategic Financial Management</td>
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<tr>
<td>FINA 463</td>
<td>Security Analysis</td>
<td>(3)</td>
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<tr>
<td>FINA 464</td>
<td>Financial Institutions and Markets</td>
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</tr>
<tr>
<td>FINA 467</td>
<td>Insurance and Risk Management</td>
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**OPTION C: Management** (choose 6 credits)

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<td>Human Resource Management</td>
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<tr>
<td>MGMT 380</td>
<td>Human Behavior in Organizations</td>
<td>(3)</td>
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<tr>
<td>MGMT 385</td>
<td>Introduction to Management Science</td>
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<td>MGMT 441</td>
<td>Staffing</td>
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<td>MGMT 444</td>
<td>Organization Design</td>
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<td>MGMT 459</td>
<td>Management Information Systems</td>
<td>(3)</td>
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**Major Unrestricted Electives** (choose 6 credits)

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<tr>
<td>FREN 202</td>
<td>Intermediate French II</td>
<td>(4)</td>
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<tr>
<td>GEOG 103</td>
<td>Introductory Cultural Geography</td>
<td>(3)</td>
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<td>GEOG 341</td>
<td>World Regional Geography</td>
<td>(3)</td>
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<tr>
<td>GER 202</td>
<td>Intermediate German II</td>
<td>(4)</td>
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<tr>
<td>IBUS 419</td>
<td>International Business Seminar</td>
<td>(3)</td>
</tr>
<tr>
<td>IBUS 491</td>
<td>In-Service</td>
<td>(1-4)</td>
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<tr>
<td>IBUS 492</td>
<td>Study Tour</td>
<td>(1-3)</td>
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<tr>
<td>IBUS 498</td>
<td>Internship</td>
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<td>IBUS 499</td>
<td>Individual Study</td>
<td>(1-3)</td>
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<tr>
<td>POL 231</td>
<td>World Politics</td>
<td>(3)</td>
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<td>SCAN 293</td>
<td>Intermediate Norwegian II</td>
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<tr>
<td>SCAN 295</td>
<td>Intermediate Swedish II</td>
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<tr>
<td>SPAN 202</td>
<td>Intermediate Spanish II</td>
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**Required Minor: None**

## INTERNATIONAL BUSINESS MINOR

### Minor Core

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</tr>
<tr>
<td>MRKT 210</td>
<td>Principles of Marketing</td>
<td>(3)</td>
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(choose four courses [12 credits] from the following)

<table>
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<td>IBUS 491</td>
<td>In-Service</td>
<td>(1-4)</td>
</tr>
<tr>
<td>IBUS 492</td>
<td>Study Tours</td>
<td>(1-3)</td>
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### COURSE DESCRIPTIONS

#### BUS 100 (3) Introduction to Business and Business Careers
This course prepares students for success by exposing them to the requirements, expectation, resources and opportunities of the College of Business. Students will have business experiences and will develop professional skills. Variable

#### BUS 295 (2) Professional Preparation for Business Careers
This course is required for admission to the College of Business for all business majors. The purpose of the course is to provide students with an overview of COB majors, allow students to create an academic plan for graduation, and develop professional skills needed for future job placement. Topics include cover letter and resume writing, interviewing skills, the process of networking, the internship program, etiquette skills, and requirements for graduation.

#### BUS 397 (3) IBE Practicum
An applied course that entails developing, launching, managing, and closing a business with the cohort of students enrolled in the class. Students write and present a business plan as they seek financing for their startup company. The business startup experience creates a real-world context in which students can practice the concepts introduced in MGMT 230, MKRT 210, and FINA 362. BUS 397 is part of the United Prairie Bank Integrated Business Experience, and students must enroll concurrently in BUS 397 and sections of FINA 362, MGMT 230, and MKRT 210 that are designated for IBE students.

Prerequisite: Must be admitted to a major

Co-requisite: FINA 362, MGMT 230, MRKT 210

#### IBUS 380 (3) Principles of International Business
International dimensions of business: global business environment (economic, cultural, legal, political) and international business functions (management, marketing, finance, exporting, importing).

Prerequisite: Junior Standing

#### IBUS 398 (0) CPT: Co-Operative Experience
Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one semester and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Prerequisite: At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

#### IBUS 419 (3) International Business Seminar
Topics on current developments in international business, technology, and legislation.

Prerequisite: IBUS 380

#### IBUS 428 (3) International Marketing
Managerial approach to marketing decision making in multicultural market situations.

Prerequisite: MKRT 210

#### IBUS 448 (3) International Business Management
This course examines cross-cultural differences in business practices. Among the topics covered are the differences in management styles, multiculturalism, international negotiations, as well as international human resource issues, social responsibility and ethics in a global context, international labor relations, cultural synergy and multicultural teams.

Prerequisite: IBUS 380

#### IBUS 469 (3) International Business Finance
International finance functions in a corporation include currency issues, investment, financial markets interacting, raising debt and equity, and export financing.

Prerequisite: IBUS 380

#### IBUS 485 (3) Export Administration
Provides knowledge and documentary skills in managing and implementing the export operations of firms engaged in international trade.

Prerequisite: IBUS 380

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### International Relations BA and Minor

The International Relations Major consists of 42 credit hours plus a minimum of one year (8 credits) of a foreign language. (The 42 required credits may include experiential learning or study abroad, maximum of 15 credits. Students must always consult with their advisor for the final approval of all experiential learning/study abroad credits for the International Relations major.) The International Relations degree is designed to prepare students for employment in international organizations, governmental and charitable agencies in the international arena, and business and financial institutions with overseas interests, or to provide a broad liberal arts education.

**Academic Map/Degree Plan at [www.mnsu.edu/programs/#ALL](http://www.mnsu.edu/programs/#ALL)**

**Policies/Information**

**Admission to Major** is granted by the department. Minimum university admission requirements are:
- a minimum of 32 earned semester credit hours
- a minimum cumulative GPA of 2.5 [“C”].

To prepare a program of study suitable to the needs and interests of the individual student, the international relations major is required to consult with an advisor. The student’s individualized program will be on file with the Department of Government and the awarding of a degree will depend upon fulfillment of the program.

**Admission Policy.** Students seeking admission to the International Relations major must have a cumulative GPA of 2.5.

**GPA Policy.** Students must have a GPA of 2.5 to graduate with an International Relations major.

**P/N Grading Policy.** With the exception of internship credits, which must be taken on a P/N basis, no more than one-fourth of the credits in the major may be taken P/N. Internship credits will not be counted as part of the one-fourth limitation, but will be subtracted from the total hours required for the major or minor prior to the computation of the one-fourth limitation.

**Minimum Credit Requirement.** All students (including transfer students) majoring in International Relations must take a minimum of 15 credits of International Relations courses at Minnesota State Mankato before graduation. With the consent of an International Relations advisor, the student may utilize credits in foreign language above and beyond the 100 level, from the approved course list.

Employment opportunities with respect to this degree are highly dependent upon the area the student selects as a companion minor or second major. For possible second majors or minors and employment opportunities associated with each, the student is urged to consult with an advisor.

The International Relations major consists of a Major Common Core (12 credits), Major Electives (15 credits), a Major Emphasis (15 credits), and International Experiential Learning (6-15 credits).

No more than 6 credits taken for POL 491 (Internship) count toward the International Relations major.

No more than 6 credits taken toward completing the Political Science major or the Political Science minor can be counted toward the International Relations major.

### INTERNATIONAL RELATIONS BA

**Degree completion = 120 credits**

**Major Common Core**

- POL 231 World Politics (3)
- POL 241 Introduction to Comparative Politics (3)
- POL 431 International Relations (3)

**Comparative Politics (choose 3 credits)**

- POL 435 Capitalism, Nationalism, and Democracy (3)
- POL 439 Comparative Social Policy: The Welfare State in Europe and the Americas (3)
- POL 440 Topics in Comparative Politics (1-4)
- POL 441 Russia & Neighboring States Politics (3)
- POL 442 South Asia: Politics & Policy (3)
- POL 443 Middle East Politics (3)
- POL 444 Latin American Politics (3)
- POL 445 Asian Pacific Rim: Politics & Policy (3)
- POL 446 African Politics (3)
- POL 447 European Democracies (3)
- POL 448 Political Development & Change (3)

**Major Restricted Electives (choose 15 credits)**

Advisor approval is required for “Topics” courses other than POL 430 and POL 440.

- ANTH 285 Special Topics (1-3)
- ANTH 322 Anthropology of Religion (3)
- ANTH 421W Health, Culture, and Disease (3)
- ANTH 430 Peoples and Cultures of Latin America (3)
- ANTH 435 The Rise of City-States and Nations (3)
- ANTH 485 Topics in Anthropology (1-3)
- ART 413 Scandinavian Art (3)
- ART 416 Art of Africa, the Americas, and the South Pacific (3)
- ART 417 Medieval Art and Architecture (3)
- ART 419 Gender in Art (3)
- ART 462 Renaissance Art (3)
- ART 463 Mannerism to Romanticism (3)
- ART 466 Realism to Postmodernism (3)
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<td>ART 467</td>
<td>Art of the Islamic World (3)</td>
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<tr>
<td>ART 469</td>
<td>Asian Art (3)</td>
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<td>ART 492</td>
<td>Art History Seminar (1-6)</td>
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<td>BLAW 453</td>
<td>Legal Environment of Business (3)</td>
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<td>CMST 203</td>
<td>Intercultural Communication (3)</td>
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<td>ECON 201</td>
<td>Principles of Macroeconomics (3)</td>
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<td>ECON 420</td>
<td>International Economics (3)</td>
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<td>Economic Development (3)</td>
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<td>Selected Studies in World Literature (4)</td>
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<td>Canada (3)</td>
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<td>Europe (3)</td>
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<td>Russian Realm (3)</td>
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<td>HIST 302</td>
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<td>Foundations of Judaism, Christianity, &amp; Islam (4)</td>
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<td>France since the Revolution in 1789 (4)</td>
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<td>HIST 476</td>
<td>Comparative Slavery and Emancipation (4)</td>
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<td>America in Vietnam (4)</td>
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<td>PHIL 321</td>
<td>Social &amp; Political Philosophy (3)</td>
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<td>History of Philosophy: Renaissance and Modern Philosophy (3)</td>
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<td>POL 311</td>
<td>Ancient &amp; Medieval Political Philosophy (3)</td>
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<td>POL 425</td>
<td>Terrorism &amp; Political Violence (3)</td>
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<td>Capitalism, Nationalism, and Democracy (3)</td>
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<td>International Conflict Resolution (3)</td>
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<td>POL 441</td>
<td>Russia &amp; Neighboring States Politics (3)</td>
</tr>
<tr>
<td>POL 442</td>
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<td>POL 447</td>
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<td>POL 449</td>
<td>Comparative Criminal Justice Systems (3)</td>
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<tr>
<td>SCAN 251W</td>
<td>Scandinavian Culture: The Same (4)</td>
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<tr>
<td>SCAN 451</td>
<td>Scandinavian Crime Fiction (4)</td>
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<td>SCAN 455</td>
<td>Topics in Scandinavian Film (4)</td>
</tr>
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<td>SOC 407</td>
<td>Population Dynamics (3)</td>
</tr>
<tr>
<td>SPAN 355</td>
<td>Spanish Civilization (1-4)</td>
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<tr>
<td>SPAN 356</td>
<td>Latin American Civilization (1-4)</td>
</tr>
<tr>
<td>SPAN 403</td>
<td>Topics in Spanish American Literature (1-4)</td>
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**Major Emphasis: Security & Peace (S&P)**

Choose 15 credits, totaling 15 credits. Must take at least 2 of the following: POL 432, POL 433, POL 437.

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<thead>
<tr>
<th>Course Code</th>
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<tr>
<td>CMST 203</td>
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<td>Political Geography (3)</td>
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<tr>
<td>HIST 436</td>
<td>History of East Asian Relations with the United States (4)</td>
</tr>
<tr>
<td>HIST 465</td>
<td>History of U.S. Foreign Relations, 1775-1900 (4)</td>
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<td>HIST 466</td>
<td>History of U.S. Foreign Relations in the Twentieth Century (4)</td>
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<td>HIST 478</td>
<td>America in Vietnam (4)</td>
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<td>POL 201</td>
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<td>POL 425</td>
<td>Terrorism &amp; Political Violence (3)</td>
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<td>European Democracies (3)</td>
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<td>Political Development &amp; Change (3)</td>
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<td>SCAN 451</td>
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<tr>
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<td>Population Dynamics (3)</td>
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</table>

**Major Emphasis: International Political Economy (IPE)**

Required 15 credits. Must take POL 436 and at least 2 of the following: ECON 420, IBUS 380, POL 433, POL 435, POL 448.

<table>
<thead>
<tr>
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<tr>
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<td>ECON 201</td>
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<td>ECON 420</td>
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</table>
INTERNATIONAL RELATIONS MINOR (18 credits)

Required 15 credits. Must take POL 433 and at least 2 of the following: POL 311, POL 312, POL 313, POL 416, POL 432.

ART 419 Gender in Art (3)
CMST 203 Intercultural Communication (4)
HIST 402 Foundations of Judaism, Christianity, and Islam (4)
PHIL 321W Social & Political Philosophy (3)
PHIL 336W History of Philosophy: Renaissance and Modern Philosophy (3)
PHIL 357 19th Century Philosophy (3)
PHIL 358W Topics in Asian Philosophy (3)
PHIL 361 Philosophy of Religion (3)
POL 201 Issues in Politics (1-3)
POL 234 Model United Nations (3)
POL 311 Ancient & Medieval Political Philosophy (3)
POL 312 Early Modern Political Philosophy (3)
POL 313 Modern Political Philosophy (3)
POL 416 Nonwestern Political Philosophy (3)
POL 430 Topics in International Relations (1-4)
POL 432 International Law (3)
POL 433 International Organization (3)
POL 434 United States Foreign Policy (3)
POL 435 Capitalism, Nationalism, and Democracy (3)
POL 436 International Political Economy (3)
POL 437 International Conflict Resolution (3)
POL 438 International Relations of East Asia (3)
POL 439 Comparative Social Policy: The Welfare State in Europe and the Americas (3)
POL 440 Topics in Comparative Politics (1-4)
POL 447 European Democracies (3)
POL 448 Political Development & Change (3)
POL 449 Comparative Criminal Justice Systems (3)
SCAN 451 Scandinavian Crime Fiction (4)

Choose 6 credits of electives from the approved list of IR program courses at the 300 and 400 level only.

POL 300–400 Any comparative politics course (3)

Required Electives

HIST 430 East Asian History: 1945 - The Present (4)
HIST 437 African History to 1800 (4)
HIST 438 Modern Africa (4)
HIST 442 History of Latin America (4)
PHIL 358W Topics in Asian Philosophy (3)
POL 201 Issues in Politics (1-3)
POL 234 Model United Nations (3)
POLS 416 Nonwestern Political Philosophy (3)
POLS 430 Capitalism, Nationalism, and Democracy (3)
POLS 438 International Relations of East Asia (3)
POLS 439 Comparative Social Policy: The Welfare State in Europe and the Americas (3)
POLS 440 Topics in Comparative Politics (1-4)
POLS 441 Russia & Neighboring States Politics (3)
POLS 442 South Asia: Politics & Policy (3)
POLS 443 Middle East Politics (3)
POLS 444 Latin American Politics (3)
POLS 445 Asian Pacific Rim: Politics & Policy (3)
POLS 446 African Politics (3)
POLS 447 European Democracies (3)
POLS 448 Political Development & Change (3)
SCAN 251W Scandinavian Culture: The Sami (4)
SCAN 451 Scandinavian Crime Fiction (4)
SCAN 455 Topics in Scandinavian Film (4)
SPAN 355 Spanish Civilization (1-4)
SPAN 356 Latin American Civilization (1-4)
SPAN 402 Topics in Spanish Peninsular Literature (1-4)
SPAN 403 Topics in Spanish American Literature (1-4)

International Experiential Learning (6-15 credits)

The International Experiential Learning component consists of a minimum of 6 credits and a maximum of 15 credits. Wherever possible, students are encouraged to satisfy this requirement by undertaking study at a university abroad. However, under exceptional circumstances, a student may be allowed to satisfy the requirement through an approved internship.

In consultation with their academic advisors, students will design the international experiential learning component of their major. The proposed study abroad or internship must be approved in advance by the advisor and by other relevant university authorities prior to undertaking the courses or internships in question, and students must earn the equivalent of a grade of “C” or better for these credits to be counted toward the International Relations major.

The credits earned under this requirement may not be used to satisfy the major common core requirements, which must be fulfilled at Minnesota State Mankato. However, they may be used to satisfy the student's chosen major concentration or as major elective credits. Note that the student may not use credits from language courses to satisfy his or her major concentration or as major elective credits and that no more than 6 credits taken for POL 491 (Internship) count toward the International Relations major.

Officially registered international students are exempt from the study abroad requirement.

Other Graduation Requirements

1. Minor: Any. Students are advised to consult with their advisor on the choice of a minor.
2. Foreign Language. The student must satisfy language requirement by completing a college level foreign language sequence of two courses (8 semester credits) with grades of “C” or above, or by demonstrating equivalent proficiency in a foreign language. Examples of the latter include scoring 3 or higher on an Advanced Placement Exam in a foreign language and graduating with a “C” average or better from a high school where the main classroom instruction was in a language other than English. Language credits do not count toward the International Relations degree. Talk to your advisor for full details.

INTERNATIONAL RELATIONS MINOR (18 credits)

POL 231 World Politics (3)
POL 241 Introduction to Comparative Politics (3)
POL 431 International Relations (3)
POL 300-400 Any comparative politics course (3)

Required Electives (6 credits)

Choose 6 credits of electives from the approved list of IR program courses at the 300 and 400 level only.
IRON RANGE ENGINEERING (SEE INTEGRATED ENGINEERING)

Iron Range Engineering (see Integrated Engineering)

Department of Integrated Engineering
College of Science, Engineering & Technology
141 Trafton Science Center N • 507-389-2744
Websites: cset.mnsu.edu/ie and www.ire.mnsu.edu

Chair: Dean Kelley
Faculty: Rebecca Bates, Mohammad Fanai, Leslie Flemming, Elizabeth Pulskwik
Affiliated Iron Range Faculty: Ronald Ulseth (Co-Director), Andy Lillesve

Location: Mesabi Range Community & Technology College, 1001 West Chestnut Street, Virginia, MN

This program provides upper division engineering coursework. Lower-division coursework is typically completed at a community college. Itasca Community College in Grand Rapids, MN is the primary partner for this program. Admission requires an application to Minnesota State Mankato and the Iron Range Engineering program. For more information, please see the description at the Integrated Engineering major.

JAPANESE COURSES

Japanese

College of Arts & Humanities
Department of World Languages & Cultures
227 Armstrong Hall • 507-389-2116
Website: www.mnsu.edu/languages
Chair: Adriana Gordillo

Although Minnesota State Mankato does not offer a degree in Japanese, students may register for Japanese courses offered at Gustavus Adolphus College for Minnesota State Mankato credit.

LATIN COURSES

Latin

College of Arts & Humanities
Department of World Languages & Cultures
227 Armstrong Hall • 507-389-2116
Website: www.mnsu.edu/languages
Chair: Adriana Gordillo

Although Minnesota State Mankato does not offer a degree in Latin, students may register for Latin courses offered at Gustavus Adolphus College for Minnesota State Mankato credit.

LATIN AMERICAN STUDIES MINOR

Latin American Studies

College of Social & Behavioral Sciences
Department of History
110 Armstrong Hall • 507-389-1618
Coordinator: Chad McCutchen
Faculty: Alfredo Duplat, James A. Grabowska, Kimberly E. Contag, Adriana Gordillo, Tomasz Inglot, Matt Loayza, Jose Lopez, Chad McCutchen, Gregory Taylor, Enrique Tomor

This interdisciplinary minor enables students from a variety of majors to focus on Latin America. This training is useful in many careers including international business, international relations, Spanish and social studies teaching, and the disciplines of the departments that contribute to the minor. When filing for graduation, Latin American studies minors should enter the code LATA in the column where minors are listed.

POLICIES/INFORMATION

GPA Policy. Minors must have a minimum GPA of 2.0 (“C”).

P/N Grading Policy. No more than one fourth of credits in minor may be taken P/N.

LATIN AMERICAN STUDIES MINOR

Restricted Electives

Foundation Courses (Choose 6 - 8 Credits)
ANTH 430 Peoples and Cultures of Latin America (3)
GEOG 445 Latin America (3)
HIST 442 Modern Latin America (4)
SPAN 356 Latin American Civilization (1-4)

Extended Study Courses (Choose 9 - 10 Credits)
No more than two courses may come from a single discipline
ANTH 412 Archaeology of Latin America (3)
ENG 437W Latina/o Literature (2-4)
HIST 441 Colonial Latin America (4)
POI 444 Latin American Politics (3)
SPAN 403 Topics in Spanish American Literature (1-4)
SPAN 494 Individual Study Abroad: Topics in Spanish American Literature (1-6)
SPAN 496 Individual Study Abroad: Topics in Spanish American Culture (1-6)
WLC 310 Portuguese for Spanish Speakers (4)

Other courses may be substituted with permission of the Latin American Studies faculty.
# LAW ENFORCEMENT

## Law Enforcement

**College of Social & Behavioral Sciences**  
**Department of Government**  
109 Morris Hall • 507-389-2721  
Website: sbs.mnsu.edu/government/enforcement/

**Director:** Pat Nelson  
**Program Academic Advisor:** Trudy Kunkel  
**Faculty:** Susan Burum, Colleen Clarke, Thorvald Dahle, Carl Lafata, Tamara Wilkins

The law enforcement program is designed for individuals seeking a professional career in law enforcement. It is open to in-service students who wish to improve their basic education or complete their degree, and to preservice students who may be interested in pursuing a career in law enforcement. This program aligns with the Criminal Justice - Law Enforcement Transfer Pathway.

In order to enter the law enforcement profession, applicants should be aware that physical, mental and background standards are set by the Minnesota Peace Officers Standards and Training Board and law enforcement agencies. Students should be aware that some criminal convictions prevent licensure as a peace officer. Law enforcement students should consider these standards.

**Academic Map/Degree Plan at** [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)

### POLICIES/INFORMATION

**Admission to Major:** Admission to the degree is granted by the department. Admission requires satisfaction of departmental GPA and course prerequisites as well as POST board documentation. Since these requirements are subject to change, students should contact the Government Department Office for current admission requirements. Both academic and physical agility standards are course requirem ent for which passing grades are necessary to graduation with the licensing degree option. Admission to the degree requires that a student must have completed 4 of the 6 lower division common core courses, LAWE131, and POL111 with a "C" or higher in each course, and a cumulative GPA of 2.6 or higher in the completed lower division core courses. Must have a cumulative GPA in the major of 2.0 or higher.

**GPA Policy:** Students seeking to graduate with a bachelor’s degree in Law Enforcement (licensing option) must have an earned 2.6 GPA in the major. They must also earn a grade of "C" or higher in the general education courses and the major common core courses.

**P/N Grading Policy:** All law enforcement classes except LAWE492 must be taken for a grade.

**Repeated Course Policy:** Students majoring in Law Enforcement may not repeat a course more than once, and no more than three different LAWE classes (including those accepted as transfer credits) may be repeated within a five year period.

**Minimum Courses Policy:** All students, including transfer students, majoring in Law Enforcement must take a minimum of five (5) different LAWE classes at Minnesota State Mankato for a total of not less than fifteen (15) credit hours. All students, including transfer students, seeking a minor in Law Enforcement must take a minimum of three (3) different LAWE classes at Minnesota State Mankato for a total of not less than nine (9) credit hours.

**Minnesota Licensure:** The student must successfully complete the licensing studies major and an integrated skills program, as well as meet other P.O.S.T Board and Minnesota State Mankato requirements before being approved to take the P.O.S.T Board licensure examination. This includes being certified in first aid and CPR (First Responder or EMT currently qualify). Only graduates of certified two and four year academic programs that also meet the requirements of the skills program providers may enter an integrated skills program. The license examination is administered by P.O.S.T and covers those items included in the P.O.S.T Board learning objectives.

---

**Note:** Since P.O.S.T Board rules change from year to year, we advise students to contact the program director, the program academic advisor or their assigned academic advisor for current rules regarding licensure.

### LAW ENFORCEMENT MAJOR

**B.S. in Law Enforcement (Licensing Studies) (58 credits)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tr>
<td>POL 111</td>
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<td>LAWE 131</td>
<td>Intro to Law Enforcement</td>
<td>3</td>
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<tr>
<td>LAWE 133</td>
<td>Police and Community</td>
<td>3</td>
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<tr>
<td>LAWE 231</td>
<td>Criminal Law &amp; Procedures</td>
<td>4</td>
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<tr>
<td>LAWE 233</td>
<td>Criminal Investigations</td>
<td>3</td>
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<td>LAWE 236</td>
<td>Minnesota Statutes</td>
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<td>LAWE 242</td>
<td>Police and Human Behavior</td>
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<tr>
<td>LAWE 243</td>
<td>Police Juvenile Justice Procedure</td>
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</table>

*Admission to program is required for 300-400 level courses.*

<table>
<thead>
<tr>
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<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>LAWE 310</td>
<td>Policing in a Diverse Society</td>
<td>3</td>
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<tr>
<td>LAWE 311</td>
<td>Victims and Survivors</td>
<td>3</td>
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<td>LAWE 313</td>
<td>Police Stress</td>
<td>3</td>
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<td>LAWE 343</td>
<td>Law Enforcement Mindset</td>
<td>3</td>
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<td>LAWE 426</td>
<td>Ethics and Leadership</td>
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<td>LAWE 431</td>
<td>Police Patrol Theory</td>
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<td>LAWE 433</td>
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### LAW ENFORCEMENT MINOR

**Required Core (10 credits)**

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<tr>
<td>LAWE 131</td>
<td>Intro to Law Enforcement</td>
<td>3</td>
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<tr>
<td>LAWE 231</td>
<td>Criminal Law and Procedures</td>
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### Electives (12 credits)

Choose 12 credits from the following list with nine (9) of the credits being 300-400 level:

<table>
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<tr>
<td>LAWE 132</td>
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<td>LAWE 133</td>
<td>Police and Community</td>
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<td>LAWE 233</td>
<td>Criminal Investigations</td>
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<td>LAWE 235</td>
<td>Women in Law Enforcement</td>
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<tr>
<td>LAWE 242</td>
<td>Police and Human Behavior</td>
<td>3</td>
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<td>LAWE 243</td>
<td>Police Juvenile Justice Procedure</td>
<td>3</td>
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<td>LAWE 243W</td>
<td>Police Juvenile Justice Procedure</td>
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<td>Policing in a Diverse Society</td>
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<td>Victims and Survivors</td>
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<td>LAWE 436</td>
<td>Civil Liberties</td>
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<td>LAWE 437</td>
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<td>Terrorism &amp; Political Violence</td>
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<tr>
<td>LAWE 439</td>
<td>Police Administration &amp; Planning</td>
<td>3</td>
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<td>LAWE 441</td>
<td>Federal Law Enforcement and Homeland Security</td>
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<tr>
<td>LAWE 442</td>
<td>Study Tour: Comparative Studies in Terrorism and Political Violence</td>
<td>3</td>
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</table>
LAWE 443 Study Tour: International Justice System (3)
LAWE 453 Constitutional Law (3)
LAWE 491 Topics in Law Enforcement (1-5)
LAWE 492 Internship (1-8)

COURSE DESCRIPTIONS

LAWE 131 (3) Introduction to Law Enforcement
The course provides a survey of the institutions and processes of the criminal justice system with an emphasis on the role of law enforcement agencies in a free society. Political theories of justice are explored with theories of crime causation. Fall, Spring

GE-5

LAWE 132 (3) Crime and Punishment
An overview of conflicting theories in criminal justice and the tools to critically evaluate the theories and present the strengths and weaknesses of each in written, oral or other forms. Variable
GE-5

LAWE 133 (3) Law Enforcement and Community Relations
This course explores the history of community policing and explains what community policing is and is not. It also examines what research has discovered about the relationship of the police with the community. The student will be introduced to the value of positive interactions between the police officer and the citizens they serve, as well as ways to incorporate problem-solving strategies on both small and large scales. Fall, Spring

LAWE 231 (4) Criminal Law & Procedures
The history and development of criminal law procedures and their application by law enforcement. Fall, Spring

LAWE 233 (3) Criminal Investigation
The history, legal aspects of investigation, the evolution of investigations and forensics, procedures of crime investigations, procurement and preservation of evidence and interviewing. Fall, Spring

LAWE 236 (3) Minnesota Statutes
An extensive study of Chapter 609, Minnesota Criminal Code, and traffic law. Prerequisite: Admission to Option I. Prerequisite: LAWE 231 Fall, Spring

LAWE 242 (3) Law Enforcement and Human Behavior
This course will expose students to theoretical foundations of human behavior and explore specific law enforcement situations in which that information can be used. Fall, Spring: On Demand: Summer

LAWE 243 (3) Police Juvenile Justice Procedure
This course focuses on the law enforcement approach to the juvenile justice system and how it has evolved in the United States. Theories of delinquency are reviewed. Minnesota Juvenile Code is emphasized. Fall, Spring

LAWE 243W (3) Police Juvenile Justice Procedure
This course focuses on the law enforcement approach to the juvenile justice system and how it has evolved in the United States. Theories of delinquency are reviewed. Minnesota Juvenile Code is emphasized. Fall, Spring

LAWE 310 (3) Policing in a Diverse Society
This course is designed to provide law enforcement students with the basic information, tools, and skills needed to improve interpersonal communications with coworkers and citizens from all ethnic and cultural groups. It is also intended to provide some historical information so students can contextualize and better understand why particular groups may distrust and resist law enforcement and the criminal justice system as a whole. Fall, Spring: On Demand: Summer Diverse Cultures: Purple

LAWE 311 (3) Victims/Survivors: Police Response
The purpose of this course is to develop in the student an insight into the dynamics of interpersonal violence, particularly sexual violence. The focus will be on developing effective law enforcement responses to the victims/survivors and the perpetrators. Fall, Spring

LAWE 321 (3) Women in Law Enforcement
This course utilizes a broad multi-disciplinary approach in examining the forces, theories, and popular beliefs that influenced the restriction and eventual acceptance of women in the policing profession. Included in this course are perspectives from the social, historical, biological, political, and social-psychological sciences. Variable

LAWE 331 (3) Police Stress
This course will cover the sources of intrapersonal and interpersonal stress in the law enforcement profession. Students will be required to assess their vulnerability to these stressors and develop their own strategies and tactics for coping. Fall, Spring

LAWE 333 (3) Criminal Forensics
Criminal forensics will include the history and development of the crime lab. Contemporary and historical cases will be discussed to provide the background and application of forensics. Also, discussion of crime lab examination of physical evidence and utilization of medico-legal specialists in investigations will be included in the course. On Demand: Fall, Spring, Summer

LAWE 336 (3) Advanced Criminal Investigation
A survey of methods and techniques for the investigation of major crimes. Prerequisite: LAWE 233 Variable

LAWE 337W (3) Police Technical Writing
This course will cover the basic techniques of writing reports, memoranda, forms, and other documents used in the law enforcement profession. This is a writing-intensive course that will not only fulfill MN POST Report Writing requirements, but will also require students to compose numerous documents and respond to writing feedback throughout the semester. Prerequisite: LAWE 236 Fall, Spring: On Demand: Summer WI

LAWE 343 (3) Law Enforcement Mindset
The course focuses on the psychological aspects of law enforcement from the perspectives of communication, interpersonal relations, and officer safety. The course will have required accompanying readings and the materials which, along with the classroom interaction, should provide the student with a solid foundation to build effective communications and to start to prepare the student psychologically for a career as a law enforcement officer. Fall, Spring

LAWE 343W (3) Law Enforcement Mindset
The course focuses on the psychological aspects of law enforcement from the perspectives of communication, interpersonal relations, and officer safety. The course will have required accompanying readings and the materials which, along with the classroom interaction, should provide the student with a solid foundation to build effective communications and to start to prepare the student psychologically for a career as a law enforcement officer. This course also has a writing intensive requirement that involves drafting, editing, and reviewing written assignments. Fall, Spring

WI

LAWE 345 (3) Narcotics Strategies
The course will examine the most commonly abused and trafficked controlled substances, as well as the Minnesota criminal statutes which provide the basis for law enforcement action. Also, the major case precedents that guide law enforcement interdiction efforts are discussed. Finally, this course additionally explores narcotics investigation on multiple levels, but emphasizes local law enforcement strategies and tactics. Fall, Spring, Summer

LAWE 393 (1-4) Issues in Law Enforcement
An examination of issues facing law enforcement today in constantly changing legal, social and cultural environments. Topics will vary and may be repeated for credit. Variable
LAWE 426 (3) Law Enforcement Ethics and Leadership
The course will examine ethics and leadership theory, interpretation, and application. Concepts such as vision, ownership, integrity, accountability, attitude, teamwork capability, monitoring, evaluation, and decision making will be interpreted through case studies of ethics and leadership in law enforcement. Fall, Spring, Summer

LAWE 431 (3) Police Patrol Theory
Provides students with specific procedures for handling various types of routine calls and situations and provides a base for handling those incidents which are not routine. Emphasizes critical thinking skills through discussion, assignments and evaluations. Prerequisite: Admission to Option I Fall, Spring

LAWE 433 (3) Senior Seminar
This is the capstone course for LAWE Option I and will include such topics as P.O.S.T. License review, ethics and interviewing skills. Prerequisite: Admission to Option I Fall, Spring

LAWE 434 (3) Comparative Criminal Justice System
A comparison of criminal justice philosophies, structures, and procedures found in various countries around the world. Same as POL 449. Variable

LAWE 436 (3) Civil Liberties
Review of selected United States Supreme Court decisions interpreting important freedoms contained in the Bill of Rights and the 14th Amendment. Focus is on the rationale which underlies decisions and its impact on American political social processes. Provides an opportunity to exercise and develop individual analytical abilities through analysis of Court’s reasoning. Same as POL 454. Variable

LAWE 437 (3) Judicial Process
An examination of the structure, jurisdiction and processes of federal and state courts. Emphasis is placed on selection of judges and justices and on the dynamics of judicial decision-making. Same as POL 475. Variable

LAWE 438 (3) Terrorism & Political Violence
History, philosophy, techniques and countermeasures to terroristic and law intensity threats to public order. Both domestic and international terror. The blurring of the lines between low intensity conflict/terrorism and multinational high intensity crime. Same as POL 425. Variable

LAWE 439 (3) Police Administration & Planning
An examination of emerging administrative and management concepts and the processes related to their implementation. Variable

LAWE 441 (3) Federal Law Enforcement & Homeland Security
This course explores the history, development and current role of federal law enforcement in the United States. This course also explores the history, implementation, and role of Homeland Security, along with the integration of purpose, action, and enforcement between Homeland Security, federal law enforcement, and local law enforcement with a lens of legal, policy, and cooperation strategies at the federal, state, and local levels. On Demand: Fall, Spring, Summer

LAWE 442 (3) Study Tour: Comparative Studies in Terrorism and Political Violence
This course complements the learning experience of traveling on a faculty led study abroad trip. The focus will be a comparison of terrorism, political violence, and counterterrorism activities in the United States to the same activities in the visited countries based on readings, research, observation, and participation. Instructor permission is required to register for this course. Prerequisite: Must be accepted into a faculty led study abroad trip. On Demand: Fall, Spring, Summer

LAWE 443 (3) Study Tour: Comparative International Justice Systems
This course complements the learning experience of traveling on a faculty led study abroad trip. The focus will be on a comparison of international justice systems in a variety of countries based on readings, research, observation, and participation. Instructor permission is required to register for this course. On Demand: Fall, Spring, Summer

LAWE 444 (3) Constitutional Law
Review of selected U.S. Supreme Court decisions relating to the powers of the President, Congress and the Judiciary, as well as the division of power between the states and the federal government. Focus is on case briefing, underlying rationales, and the development of individual analytical abilities. On Demand: Fall, Spring, Summer

LAWE 445 (3) Topics in Law Enforcement
This course explores topics in law enforcement beyond what is covered in the existing curriculum. Students study specialized topics of current importance in the field. Specific topics will change depending on the term and instructor. May be retaken with a change of topic. Variable

LAWE 446 (1-5) Internship
Field placement with a law enforcement agency or related organization. Provides a learning experience in which the student can integrate and apply knowledge and theory derived from curriculum. P/N only. Variable

LAWE 447 (1-3) Individual Study
Advanced study and research on topics not currently available in existing courses. May be repeated with a change of topic. Requires advisor and instructor approval of topic. Variable

LIBERAL ARTS AND SCIENCES AA

Liberal Arts and Sciences

College of Arts & Humanities
Liberal Studies Program
226 Armstrong Hall • 507-389-1712
Coordinator: 507-389-1712

Coordinator: Arts and Humanities Advising Office

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

Students should complete the general education requirements for the BS degree, plus 16 credits of lower division electives for a total of 60 semester credits.

GPA Policy. A minimum GPA of 2.0 is required.

P/N Grading Policy. No more than one-fourth of the credits in the degree program may be taken P/N.
Management

College of Business
Department of Management
150 Morris Hall • 507-389-2966
Website: cob.mnsu.edu/academics/management/

Chair: Kathleen Dale Ph.D.

Faculty: Angela Titi Amayah, Queen Booker, Shane Bowyer, Chris Brown Mahoney, Yvonne Cariveau, Manilyn Fox, John Kaliski, Rakesh Kawatra, Sung Kim, Claudia Pragman, Kathy Richie, Buddhadev Raychoudhury, Paul Schumann, Dooyoung Shin, Miles Smayling, Cheryl Trahms

The primary objective of the Department of Management is to offer a program of study with the aim of developing the technical, analytical and conceptual skills for future professionals of the private and public sectors. The program provides the student with fundamental principles and practices of effective management. Emphasis is placed on organizational functioning within changing socio-cultural, economic, legal and political environments. Students may select and complete one or both of the following emphases: business management or human resource management.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

Admission to a Major in the College of Business: Admission to a major in the College of Business typically occurs at the beginning of the student’s sophomore year. Once admitted, students may choose to pursue a degree in one or more of the following majors: Accounting, Finance, International Business, Management, or Marketing. Multiple criteria will be considered for admission to a major in the College of Business. Admission is competitive; meeting minimum requirements does not guarantee admission. Deadlines for application are: October 1 for Spring Semester and March 1 for Fall Semester.

Criteria Considered for Admission to the Management Major
1. Minimum cumulative (including transfer) Grade Point Average of 2.5.
2. Completion of the following courses with a minimum grade of C (2.0): IT 101, MATH 130, ACCT 200, BUS 295, ECON 201.

Requirements for the Human Resource Management Minor
1. Students must be admitted to a major at Minnesota State Mankato, and
2. Students must have a cumulative GPA of 2.5 or higher when starting the Human Resource Management minor.

Academic Advising. Students will initially receive their advising from the professional advisors in the College of Business Student Center. When a student applies to the College of Business (which is done during BUS 295), he/she will be assigned a faculty advisor in the major area of study. Questions regarding the assignment of advisors can be answered in the College of Business Advising Center, 151 Morris Hall. Advisors can be reached at 389-2963.

College of Business Policies. Students who are business minors, non-business majors or those who are not seeking a four-year degree may take up to 24 credits in the College of Business.

Transfer students pursuing a major or minor in the College of Business must complete at least 50% (one-half) of their major or minor coursework at Minnesota State Mankato.

GPA Policy. Students must earn a minimum grade point average of 2.0 (“C”) on the total courses taken in the College of Business and a 2.25 overall GPA to meet graduation requirements.

P/N Grading Policy. No more than one-fourth of a student’s major shall consist of P/N grades.

Assessment Policy. The College of Business believes that the ongoing assessment of its programs makes a vital contribution to the quality of those programs and to student learning. Student Participation is an important and expected part of the assessment process.

Internships. Students are strongly encouraged to participate in one or more internship programs related to their field of study before graduation. Qualifying internships may receive academic credit counting towards a student’s major, but are not required to be taken for credit. To receive academic credit, students must be registered during the semester the internship takes place. Registration instructions and other business internship resources can be found at: cob.mnsu.edu/internship/

MANAGEMENT BS

Degree completion = 120 credits

Required General Education
ECON 201 and MATH 130 must be completed for admission to the major.

ECON 201 Principles of Macroeconomics (3)
ECON 202 Principles of Microeconomics (3)
MATH 130 Finite Mathematics and Introductory Calculus (4)

Ethics Requirement (choose 3 credits)
PHIL 120W Introduction to Ethics (3)
PHIL 205W Culture, Identity, and Diversity (3)
PHIL 222W Medical Ethics (3)
PHIL 224W Business Ethics (3)
PHIL 226W Environmental Ethics (3)
PHIL 240W Law, Justice & Society (3)

Prerequisites to the Major (choose 8 credits)
ACCT 200 Financial Accounting (3)
BUS 295 Professional Preparation for Business Careers (2)
IT 101 Introduction to Information Systems (3)

Major Common Core
Required of all College of Business majors:
Choose 34 Credits

ACCT 210 Managerial Accounting (3)
BLAV 200 Legal Environment of Business (3)
ECON 202 Principles of Microeconomics (3)
ECON 207 Business Statistics (4)
FINA 362 Business Finance (3)
IBUS 380 Principles of International Business (3)
MGMT 230 Principles of Management (3)
MGMT 300 Introduction to MIS (3)
MGMT 346 Production & Operations Management (3)
MGMT 481 Business Policy & Strategy (3)
MRKT 210 Principles of Marketing (3)

Major Emphasis: BUSINESS MANAGEMENT

Required of all Business Management Emphasis Majors

MGMT 340 Human Resource Management (3)
MGMT 380 Human Behavior in Organizations (3)
MGMT 444 Organizational Design, Development, and Change (3)
MGMT 459 Management Information Systems (3)
MGMT 472 Project Management (3)

Electives (choose 12 credits)
ACCT 310 Management Accounting I (3)
BLAV 477 Negotiation and Conflict Resolution (3)
BUS 397 IBE Practicum (3)

MANAGEMENT BS AND MINOR
BUS 100 (3) Introduction to Business and Business Careers
This course prepares students for success by exposing them to the requirements, expectation, resources and opportunities of the College of Business. Students will have business experiences and will develop professional skills. Variable

BUS 295 (2) Professional Preparation for Business Careers
This course is required for admission to the College of Business for all business majors. The purpose of the course is to provide students with an overview of College of Business majors, allow students to create an academic plan for graduation, and develop professional skills needed for future job placement. Topics include cover letter and resume writing, interviewing skills, the process of networking, the internship program, etiquette skills, and requirements for graduation. Fall, Spring

BUS 397 (3) IBE Practicum
BUS 397 is an applied course that entails developing, launching, managing, and closing a business with the cohort of students enrolled in the class. Students write and present a business plan as they seek financing for their start-up company. The business start-up experience creates a real-world context in which students can practice the concepts introduced in MGMT 362, MGMT 230, and MRKT 210. BUS 397 is part of the United Prairie Bank Integrated Business Experience, and students must enroll concurrently in BUS 397 and sections of FINA 362, MGMT 230, and MRKT 210 that are designated for IBE students. Prerequisite: Must be admitted to a major. Co-requisite: FINA 362, MGMT 230, MRKT 210 Fall, Spring

MGMT 360 (3) Principles of Management
This course examines basic management concepts and principles, their historical development, and their application to modern organizations. Topics covered include planning, organizing, decision making, leadership, control, and organizational change. In addition, the course includes an introduction to business ethics and social responsibility, human resource management, organizational design and organizational behavior. Fall, Spring

MGMT 300 (3) Introduction to MIS
This course explores information systems which assist management in planning, directing and controlling the activities of an organization. Primary emphasis is placed on analysis, design and implementation of systems which generate information for managerial purposes. This course includes the application of database management and spreadsheet processing systems. Prerequisite: IT 101 Fall, Spring

MGMT 332 (3) Creativity and Innovation
This course is designed to develop a student’s personal creativity and help a student identify the process of organizational innovation. The course is comprised of a combination of short lecture, in-class discussion of readings and videos, writing assignments, an elevator pitch and group activities. Variable

MGMT 340 (3) Human Resource Management
This course examines the effective management of the human resources of organizations. Topics include analyzing jobs and writing job descriptions, recruiting and hiring of applicants, complying with employment law, managing promotions, quits, and layoffs; employee training and development; evaluating job performance; determining compensation; and managing human resources in a unionized environment. Fall, Spring

MGMT 346 (3) Production & Operations Management
This course engages students in the study of the operations management function in manufacturing and service organizations. Students learn how to apply the basic analytical models to operation decisions involving such topics as scheduling, production technology, inventory management, quality assurance, just-in-time production, and others. Prerequisite: ECON 207 Fall, Spring

MGMT 360 (3) Agribusiness in the Modern Economy
This course examines basic business concepts and principles and their application to modern and future agriculture industries. Agribusiness topics covered include commodities, supply chain, finance, sales, accounting, law, engineering, food safety, healthcare, data analysis, and technology. Professionals in the agriculture industry will be brought into class to explain how business knowledge and skills are essential to various sectors, including but not limited to: livestock, poultry, corn, soybeans, bio-fuels, engineering, and natural resources. Students will have an opportunity to broaden their thinking, understanding, and professional potential as related to the agriculture industry while interacting with industry professionals. Spring

MGMT 380 (3) Human Behavior in Organizations
Concepts, theories, and empirical research on organizational behavior are studied. Models and tools for diagnosing situations, individual behavior, group behavior, intergroup conflicts, supervisory problems and organizational change are analyzed. Prerequisite: MGMT 230 Fall, Spring

MGMT 385 (3) Introduction to Management Science
This course introduces a scientific approach to modeling and solving managerial decision problems. It includes such topics as linear and integer programming, network models, waiting-line models, simulation analysis, and decision theory. Fall, Spring
MGMT 441 (3) Staffing
Students learn how to hire the best talent available using sound professional methods. Students design and present legally defensible recruiting and screening techniques for jobs they have analyzed.
Prerequisite: MGMT 340
Fall, Spring

MGMT 442 (3) Compensation Management
The focus of this course is operating an effective, efficient, legal, and responsible system for compensating one’s employees. Includes the workings of labor markets, analyzing jobs, finding the market value for jobs, designing a pay structure, appraising performance, setting individual pay, determining benefits, occupations requiring special pay programs.
Prerequisite: MGMT 340
Fall, Spring

MGMT 443 (3) Entrepreneurship
The course is an active learning course where students are immersed in the process of starting a new enterprise. In managing their entrepreneurial projects, students conceptualize and develop business plans that includes self assessment, industry and market analyses, a marketing plan, human resource management, and financial analyses and projections.
Variable

MGMT 444 (3) Organization Design, Development, and Change
This course provides an understanding of the processes that cause organizations to be structured in various forms. The impact on size, technology, strategy, culture, and environmental conditions on structure are examined. The internal processes of power, conflict, culture, and organizational transformation are also emphasized.
Prerequisite: MGMT 230
Fall, Spring

MGMT 445 (3) Training & Development
Students design and deliver training by assessing client needs, defining learning outcomes, choosing effective methods, training, and evaluating results.
Prerequisite: MGMT 340
Fall, Spring

MGMT 447 (3) Management: Special Topics
Special topics as requested by students.
Prerequisite: MGMT 230
Variable

MGMT 449 (3) Quality Management
This course covers essential topics in modern quality management within manufacturing and service organizations from a managerial perspective, including quality planning, culture, customer focus, leadership, vendor relations, the use of statistical quality control tools and software as well as behavioral issues in the improvement of process and product/service quality.
Prerequisite: ECON 207 or equivalent
Variable

MGMT 458 (3) Corporate Information Systems
This course will provide conceptual frameworks and a practical guideline for understanding how information technologies can provide a competitive advantage, how to identify strategic information systems (SIS) opportunities and risks, how to manage organizational strategic information systems applications, and how to sustain such a competitive advantage in a global market.
Variable

MGMT 459 (3) Management Information Systems
This course is designed to prepare students to design and develop personal computer based information systems for management control and decision making using end-user software including spreadsheets and data base management systems. Students will design and develop several information systems as group projects.
Prerequisite: MGMT 230, MGMT 300
Fall, Spring

MGMT 472 (3) Project Management
Students will develop skills needed to initiate, plan, execute, control and close projects. The course will cover theories, techniques, group activities, and use of computer tools like Microsoft Project for managing projects.

MGMT 473 (3) Enterprise Resource Planning (ERP)
This course covers ERP software in general and how it helps integrate information used by an organization’s many different functions and departments into a unified computing system. How to use an ERP system to improve the business functions of an organization by streamlining its operations will also be covered. Students will learn how to document business processes using different tools including EPC charts. In addition, the course also covers managerial issues associated with an ERP project and how to manage those issues.
Prerequisite: MGMT 300
Variable

MGMT 476 (3) Decision Support System
In the course of their decision activities, managers work with many pieces of knowledge and have to make informed decisions based on this knowledge. This course is designed to introduce students to the various decision making techniques and explore the techniques required for automating such activities among knowledge workers in an organization.
Prerequisite: MGMT 385
Variable

MGMT 481 (3) Business Policy & Strategy
An integrative course for COB majors. Its emphasis is on understanding the role of a general manager, which should include an operations and international component.
Prerequisite: MGMT 210, MGMT 230, MGMT 346, FINA 362, IBUS 380
Fall, Spring

MGMT 482 (3) Business, Society & Ethics
Students learn how to apply moral principles to analyze ethical dilemmas in business. Students also learn how to argue for or against government regulation of business. Topics covered include bribery, anti-competitive business practices, pollution, product safety, marketing ethics, employee rights, sexual harassment, discrimination and affirmative action, conflicts of interest, and insider trading.
Variable

MGMT 484 (3) Leadership
The course provides a foundation for leadership development by offering theoretical background, practical information, and an opportunity for self-assessment that permits students to begin or continue the development of their leadership talent. The underlying theme upon which the course is based is that the ability to lead begins with reflection and self-awareness.

MGMT 486 (3) Strategic Human Resource Management
This capstone course examines how the strategic management of the human resources of an organization can enhance organizational success. The course investigates how to achieve strategic congruence between an organization’s strategy and HR management. Topics covered include the interrelationships among the HR disciplines, ethics, sustainability, social responsibility, the role of the HR professional, managing workforce changes, achieving competitive advantage through HR, HR performance metrics, and organizational effectiveness.
Prerequisite: MGMT 340
Fall, Spring

MGMT 491 (1-3) In-Service
Variable

MGMT 497 (3) Internship
Supervised experience in business, industry, state or federal institutions. P/N only.
Prerequisite: COB Junior Standing and GPA of 2.7 or higher
Fall, Spring

MGMT 498 (3) Internship
Supervised experience in business, industry, state or federal institutions. Grade only.
Prerequisite: COB Junior Standing and GPA of 2.7 or higher
Fall, Spring

MGMT 499 (1-4) Individual Study
Fall, Spring
Management Information Systems

College of Science, Engineering & Technology
Department of Computer Information Science
273 Wissink Hall • 507-389-1412
Website: cset.mnsu.edu/cis

Chair: Mahbubur Syed
Faculty: Cyrus Azarbad, Rajeev Bukaria, Jonathan Hardwick, Sarah Kruse, Guarionex Salivia, Christophe Veltos, Michael Wells

The Bachelor of Science in Management Information Systems provides students with in-depth knowledge of Information Technology concepts and applications, and prepares them to create innovative solutions for real-world problems. Students gain the ability to integrate hardware, software, and management skills to solve problems in a variety of IT areas.

The program's mission is to ensure that each graduate is exceptionally well qualified to undertake a successful information systems career in industry, business, education, or government. In support of this mission, the program is designed so that each student will:

- Gain a sound foundation in computing basics, analysis and design, programming, testing, software development, security, database, and human-computer interaction.
- Learn the theory and practice of information technology and develop skills to apply this knowledge to analyze and solve information system problems.
- Develop analytical, critical thinking, and interpersonal skills applicable to real-world problem solving.
- Acquire basic business concepts to assist them in career paths where they are interfacing with and developing solutions for business professionals.
- Develop effective oral and written communication skills.
- Appreciate the social and ethical issues in information systems

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

Admission to Major is granted by the department. Admission to the Major is required before the student is permitted to take 300- and 400-level courses. Requirements are:

- A minimum of 32 earned semester credits
- Completion of MATH 121 with a grade of “C” or better
- Completion of ENG 101 with a grade of “C” or better
- Completion of IT 210 with a grade of 3.0 or better and IT 214 with a grade of 2.0 or better (or in their equivalents).

GPA Policy. The completion of any major or minor in the Department of Computer Information Science requires both:

- a GPA of 2.5 or higher for all departmental courses, or their substitutions, used to complete the major or minor, and
- a GPA of 2.0 or higher for all courses, or their substitutions, used to complete the major or minor. This includes all departmental courses, supporting courses, and General Education courses required for the major or minor.

It is recommended that students who cannot maintain a GPA of 3.0 in required 100 and 200 level course see their advisor for a program review.

Grade Policy. All coursework used to complete a departmental major or minor, including required courses, required supporting courses, and required General Education courses, must be taken for a letter grade except for courses offered only as P/N.

No course completed with a grade of “D” can be used to complete a departmental major or minor program, or to meet a departmental prerequisite.

Registration Hold Policy. The department will place a registration hold on any student who earns a “D” or “F” in any of its courses. The department will also place such a hold on any student who drops any of its courses after the first two weeks of the semester. A student with a registration hold cannot register for courses until the hold is released, which requires filling out an appeal form and taking it to the student’s advisor for discussion. Appeal forms are available from the departmental office.

Dual Major Policy. Students can earn at most one undergraduate major from this department.

Incomplete Policy. The department gives incomplete grades for only two conditions. The first condition is illness, which requires a doctor’s written recommendation. The second condition arises when a death in the student’s family has caused the student to be away from the campus for an extended period. The student must have a satisfactory grade (“C” or better) in the course at the time of the onset of the condition.

Internship Policy. An internship is required for all majors.

Residency Policy. Students must earn at least 50 percent of the credits required for a major in Management Information Systems at Minnesota State Mankato.

Advising Policy. Every semester, before registering for courses, each student majoring in Management Information Systems must meet with his/her advisor to obtain permission for registration. This meeting ensures that all students are making satisfactory progress toward their degrees.

Portfolio Policy. Each student majoring in Management Information Systems is required to keep a portfolio of work done in all major courses, and to make this portfolio available to faculty for review. Keeping a portfolio gives the student ownership over his or her education and helps to personalize the educational experience. The portfolio also provides a valuable showcase of work accomplished when interviewing prospective employers or applying to graduate school.

MANAGEMENT INFORMATION SYSTEMS BS

Degree completion = 120 credits

Required General Education
CMST 100 Fundamentals of Communication (3)
ENG 101 Composition (4)
IT 200W Computers in Society (4)
MATH 121 Calculus I (4)
PHIL 224W Business Ethics (3)
Communication Studies (Choose 3 - 4 Credits).
CMST 102 Public Speaking (3)
CMST 212 Professional Communication and Interviewing (4)

Major Common Core
ACCT 200 Financial Accounting (3)
ECON 207 Business Statistics (4)
ENG 271W Technical Communication (4)
IT 210 Fundamentals of Programming (4)
IT 214 Fundamentals of Software Development (4)
IT 310 Data Structures & Algorithms (4)
IT 311 Business Application Programming (4)
IT 340 Introduction to Database Systems (4)
IT 350 Information Security (4)
IT 380 Systems Analysis and Design (4)
IT 440 Database Management Systems II (4)
IT 497 Internship (1-12)

Three credits of IT 497 are required for the major. Additional credits will be used to satisfy overall degree requirements.

Major Restricted Electives
Students must complete the requirements for ONE of the two clusters.

Cluster 1: Integrated Business Experience (IBE) (15 credits)
IBE Curriculum (Choose 12 Credits)
Three credits of IT 499 must be taken concurrently with the IBE practicum to count towards this cluster. The four IBE courses are taken together in a single semester. Work with the College of Business Advising Center to register for the IBE curriculum.
FINA 362 Business Finance (3)
IT 499 Individual Study (1-4)
Manufacturing Engineering Technology

College of Science, Engineering & Technology
Department of Automotive & Manufacturing Engineering Technology
205 Talbot Science Center E
Phone: 507-389-6383
Fax: 507-389-5002
Website: www.cset.mnsu.edu/met

Chair: Dr. Bruce E. Jones, Ph.D.
Faculty: Kuldeep Agarwal, Ph.D., Craig Evers, Ph.D., P.E., Shaheen Ahmed, Ph.D., Gary Mead, Ph.D., Harry Petersen, Ph.D., P.E., Winston Sealy, Ph.D.

Accreditation. The Manufacturing Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (ETAC-ABET), 415 N. Charles Street, Baltimore, MD 21201, 410.347.7700, www.ABET.org.

The mission of the Manufacturing Engineering Technology (MET) degree program at Minnesota State Mankato, is to provide a broad-based education to enable graduates to enter a variety of globally competitive manufacturing careers to serve the needs of the citizens of Minnesota, and the world by:
• providing the highest quality education to prepare application-oriented graduates for career opportunities in both traditional and computer-automated manufacturing environments;
• encouraging and supporting faculty, and students to engage in scholarly activities and research that support effective and ethical transfer of technology;
• providing access to state of the art equipment, facilities, and methodologies, along with faculty expertise to benefit MET students; and
• engaging in partnerships with area industry and other constituencies to broaden access to the program for traditional and diverse populations, while supporting K-12 pipeline development.

Program Description. Manufacturing Engineering Technology (MET) degree program awards a Bachelor of Science degree (BS) to successful students through a four-year curriculum.

“Engineering Technology” is the profession in which knowledge of the applied mathematical and natural sciences gained by higher education, practical experience, and competence developed in a specific field, is devoted to application of engineering principles and the implementation of technological advances for the benefit of humanity through its focus on product improvement, manufacturing, and automation of technological processes and operational functions. Engineering Technology Council of the American Society of Engineering Education (ASEE).

“Modern manufacturing activities have become exceedingly complex because of rapidly increasing technology and expanded environmental involvement. This, coupled with increasing social, political, and economic pressures, has increased the demand for highly skilled manufacturing technologists, engineers, and managers.” – Society of Manufacturing Engineers Fundamentals of Manufacturing 2005.

Students use major study areas of applied mathematics, engineering sciences and materials, product design, manufacturing processes, automated systems and controls, quality, manufacturing management and personal and professional effectiveness to perform in careers requiring the application of scientific and engineering knowledge and methods. Combined with technical skills in support of engineering activities, student careers often fit in the occupational spectrum between the craftsman and the engineer at the end of the spectrum closest to the engineer. Engineering technology is oriented less toward theory and more toward practical applications. (ASEE).

Manufacturing involves plans, materials, personnel, and equipment which are transformed in some way that adds value. Students acquire leadership and managerial skills necessary to enter careers in process and systems design, manufacturing operations, maintenance, technical sales or service functions. The curriculum concentrates on the study of individual subsystems and their overall optimization of cost, quality, speed, and flexibility goals for the success of a manufacturing enterprise. Students from the program are currently employed in a wide variety of industries including medical, electronics, power systems, defense, and automotive. A list of companies and industry sectors employing MET graduates may be obtained from the Department Chair.

The Society of Manufacturing Engineers (sme.org) is the lead professional society used in developing program criteria used for guiding program relevance and continuous improvement. Students are encouraged to take the Certified Manufacturing Engineer (CMfgT) exam in their senior year and pursue other certifications as their experience broadens.

The primary goal of the MET program is to provide all graduates with the solid technical foundation necessary to insure their success in a wide variety of employment opportunities. To accomplish this goal, program outcomes and objectives are defined and assessed for continuous improvement. These are consistent with the mission of the university and college and reviewed by the Industrial Advisory Board on an annual basis. They are as follows:

Program Outcomes. Students at the time of graduation are prepared to:
1. apply knowledge, problem solving techniques, and hands-on skills in the area of specialization.
2. convey and explain technical information and solutions to multiple audiences.
3. demonstrate the application of their knowledge of mathematics, statistics, science, engineering and technology.
4. conduct, analyze and interpret experiments and apply results to improve processes and systems.
5. recognize the need and develop the skills for lifelong learning.
6. communicate effectively across all design and management interface levels of an organization.
7. perform in careers requiring the application of scientific and engineering knowledge.
8. implement accepted professional standards of integrity and ethical conduct.
9. understand and engage in behavior which respects diversity and global cultures.
10. practice timeliness and quality with regard to work requirements.

Program Objectives. Graduates two to three years into their careers should have the foundation to:

MANUFACTURING ENGINEERING TECHNOLOGY BS AND MINOR

MANUFACTURING ENGINEERING TECHNOLOGY

www.mnsu.edu 2018-2019 Undergraduate Catalog 219
1. deliver products, services, and support to both internal and external organizations by applying technical knowledge, problem solving techniques and hands-on skills in traditional and emerging areas of manufacturing.
2. actively participate in ongoing professional development, professional growth and increasing professional responsibility.
3. effectively communicate ideas to technical and non-technical people.
4. perform, lead, and manage in cross-functional teams.
5. work within the accepted standards of professional integrity and conduct.
6. design, analyze, build, and test virtual or real models in product development and continuous improvement environments.
7. implement, and continuously improve cost, quality, time, and flexibility goals using world class management methodologies.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

Policies/Information
Admission to the MET Major is granted by the Department of MET. Admission to the major is required to register for 300-level courses. Minimum requirements for acceptance into the MET major include a cumulative GPA of 2.0 or higher and the completion of the courses listed in the Prerequisites to the Major in the MET section of this bulletin with a grade of “C” (2.0) or higher.

GPA Policy. A GPA of 2.5 or higher in the required courses for the major or minor in Manufacturing Engineering Technology is required in order to proceed in the program sequence and graduate. This GPA calculation is based on the following areas: Required General Education, Prerequisite to the Major, Major Common Core and Major Restricted Electives. Refer to the College of Science and Technology Student Advising Center regarding required advising for students on academic probation.

Refer to the Department regarding required advising for students on academic probation.

Department Grade Policy. All courses required for the MET major (Required General Education, Prerequisite to the Major, Major Common Core and Major Restricted Electives) must be completed with a grade of “C” (2.0) or better.

P/N Grading Policy. No more than 1/4 of all undergraduate credits may be P/N, except those courses offered P/N only.

Residency. A minimum of 50 percent of the credits for a major or minor in Manufacturing Engineering Technology must be taken at Minnesota State Mankato.

Prerequisites and corequisites must be observed unless written permission is obtained from the instructor and the Department of AMET. A flow chart of prerequisites is available in the Department Office and on AMET website.

The scheduling of all department courses is done biannually, based on enrollment and staffing. To obtain a current class schedule, contact the Department.

MANUFACTURING ENGINEERING TECHNOLOGY BS
Degree completion = 128 credits

Required General Education
ECON 202 Principles of Microeconomics (3)
ENG 271W Technical Communication (4)

Prerequisites to the Major
CHEM 104 Introduction to Chemistry (3)
EET 113 DC Circuits (3)
ENG 101 Composition (4)
MATH 121 Calculus I (4)
MET 104 Introduction to Manufacturing Engineering Technology (11)
MET 142 Introduction to Parametric Modeling (3)
MET 275 Manufacturing Processes I (4)
PHYS 211 Principles of Physics I (4)
STAT 154 Elementary Statistics (4)
CMST 100 Fundamentals of Communication (3)
CMST 102 Public Speaking (3)

Major Common Core
AET 334 Fluid Power (3)
MATH 122 Calculus II (4)
MET 323 Statics (3)
MET 324 Strength of Materials and Dynamics (4)
MET 341 Advanced Parametric Modeling (3)
MET 347 Manufacturing Automation (4)

Minor Required: None.

MANUFACTURING ENGINEERING TECHNOLOGY MINOR

Required for Minor
MET 104 Introduction to Manufacturing Engineering Technology (11)
MET 142 Introduction to Parametric Modeling (3)
MET 275 Manufacturing Processes I (4)

Electives
(choose 8 additional credits of MET courses)

Course Descriptions
MET 375 Manufacturing Processes II (4)
MET 386 Metrology for Engineering Technologist (3)
MET 407 Manufacturing Resource Planning and Control (3)
MET 423 Ergonomics & Work Measurement (3)
MET 424 Industrial Safety (2)
MET 425 Project and Value Management (3)
MET 426 Logistics and Transportation (3)
MET 427 Quality Management Systems (3)
MET 428 Lean Manufacturing (3)
MET 448 Computer Integrated Manufacturing (3)
MET 465 Lab Experience (2)
MET 488W Senior Design Project I (2)
MET 489W Senior Design Project II (2)
PHYS 212 Principles of Physics II (4)

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MET 347 (4) Manufacturing Automation
CNC programming, computer-aided manufacturing (CAM), flexible automations, machining centers, robotics, programmable logic controllers, tooling systems. Extra lab time is required.
Prerequisite: EET 113, MET 275, MET 341
Spring

MET 375 (4) Manufacturing Processes II
Advanced manufacturing processes including casting, forging, sheet metal forming, and powder metals are discussed. Topics also include materials treatment, preparation, and design for manufacture. Extra lab time is required.
Prerequisite: MET 275
Fall, Spring

MET 386 (3) Metrology for Engineering Technologist
Quality and its continuous improvement is supported by metrology, statistical process control, and geometric dimensioning and tolerancing. This course presents these topics and their integration into operations.
Prerequisite: MATH 121, MET 341, STAT 154. Admission to AET/MET major.
Fall

MET 398 (0) CPT: Co-Operative Experience
Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.
Prerequisite: MET 104. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.
Fall, Spring

MET 407 (3) Manufacturing Resource Planning and Control
Strategic plant resource management for global manufacturing. Approaches examine and practice continuous improvements to the value stream related to design integration, production scheduling, staffing, facilities planning, and material flow.
Fall

MET 423 (3) Ergonomics & Work Measurement
Investigates work design and automated and manual operations. Measurement, and development of design-based solutions for reduction of environmental stresses to the human body through work-machine systems analysis are applied. Regulatory, legal, and ethical issues are reviewed in the context of global manufacturing applications.
Prerequisite: STAT 154
Spring

MET 424 (2) Industrial Safety
Techniques of developing safety practices in an industrial environment. Topics include OSHA, current legislation, cost analysis, personal protection, employee selection, psychological aspects, product safety, hazard materials and catastrophe control.
Fall, Spring

MET 425 (3) Project and Value Management
Planning, management, and economic justification of projects are supported by computer tools for scheduling, staffing, and economic analysis.
Prerequisite: STAT 154
Fall, Spring

MET 426 (3) Logistics and Transportation
Fundamentals of logistics and supply chain management: control of materials, WIP, finished goods; costs of logistics. Theory and step-by-step procedures are used to analyze logistic systems, material handling, packaging, and transportation, including global logistics.
Fall

MET 427 (3) Quality Management Systems
This course is focused on quality assurance systems, management philosophies, methodology, function and impact of quality systems in manufacturing operations. Development and application of statistical process control tools.
Prerequisite: STAT 154
Fall

MET 428 (3) Lean Manufacturing
Basics of Lean Manufacturing in industry, with emphasis on application of concepts. Students will learn the principles of Lean Manufacturing and how they can benefit a business.
Prerequisite: MET 427 or similar quality control course
Spring

MET 448 (3) Computer Integrated Manufacturing
This course covers the following topics: manufacturing systems integration techniques, Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM), Computer-Aided Process Planning (CAPP), Direct Numerical Control (DNC), Flexible Machining Systems (FMS), Automated Storage and Retrieval Systems (ASRS), Automated Guided Vehicles (AGV) and Robotics.
Prerequisite: MET 347, PHYS 212
Fall

MET 465 (2) Lab Experience
This course provides experience in management, organization, supervision, and maintenance in a laboratory environment. Enrollment is limited.
Prerequisite: MET 375
Fall, Spring

MET 488W (2) Senior Design Project I
An examination of manufacturing design and research. Students refine their design proposal and begin their senior design projects. This course also prepares the student for MET 489W, Senior Design Project II, where the design proposal, sign proposal and begin their senior design projects. This course also prepares the student for MET 489W, Senior Design Project II.
Prerequisite: ENG 271W, MET 275, MET 425, 10 AET or MET 300/400 level
Fall, Spring

MET 488W (2) Senior Design Project II
Completion of the capstone design project, a continuation of MET 488W. Students complete the capstone design project, and final report are completed. This course should be taken in the fall semester of the senior year.
Prerequisite: ENG 271W, MET 275, MET 425, 10 AET or MET 300/400 level
Spring

MET 492 (1-4) Seminar: Manufacturing
Selected manufacturing topics.
Prerequisite: MET 488W, Permission Required

MET 497 (1-10) Internship: Manufacturing
Manufacturing work experience in an area pertinent to the student’s objective. Consent of internship coordinator required prior to the beginning of employment and registration. Typically done between the junior and senior year.
Prerequisite: 50% of major

MET 499 (1-4) Individual Study
Prerequisite: Permission Required
MARKETING BS AND MINOR

Marketing

College of Business
Department of Marketing and International Business
150 Morris Hall • 507-389-2967
Website: cob.mnsu.edu/academics/marketing/

Chair: Ann Kuzma, Ph.D.
Kevin Elliott Ph.D.; Mark Hall Ph.D.; Jianwei Hou Ph.D.; Juan Gloria Meng Ph.D.;
Kristin Scott Ph.D.

It is the objective of the marketing program to advance the understanding and practice of marketing. Faculty advance the discipline of marketing through research, writing, and involvement in professional associations. They improve the practice of marketing with a progressive curriculum for full and part-time students. The region's business community and public institutions also are directly served with student and faculty consulting and research projects.

The marketing major prepares students for marketing positions in retail management, business-to-business sales, promotion, distribution, marketing research, or marketing strategy. The marketing program provides students with the comprehensive knowledge necessary to assume upper level management positions in marketing within the workforce.

Accreditation. The Marketing program is accredited by the Association to Advance Collegiate Schools of Business (AACSB)

POLICIES/INFORMATION

Admission to a Major in the College of Business. Admission to a major in the College of Business typically occurs at the beginning of the student's sophomore year. Once admitted, students may choose to pursue a degree in one or more of the following majors: Accounting, Finance, International Business, Management, or Marketing. Multiple majors are not allowed. Students may pursue a Bachelor of Science degree in any College of Business major.

Academic Advising. Students will initially receive their advising from the professional advisors in the College of Business Student Center. When a student applies to the College of Business (which is done during BUS 295), he/she will be assigned a faculty advisor in the major area of study. Questions regarding the assignment of advisors can be answered in the College of Business Advising Center, 151 Morris Hall, 389-2963.

College of Business Policies. Students who are business minors, non-business majors, or those who are not seeking a four-year degree may take up to 24 credits in the College of Business.

Students must be admitted to a major to take upper division (300/400) courses in the College of Business.

Students must be admitted to the College of Business major to be granted a Bachelor of Science degree in any College of Business major.

Residency. Transfer students must complete a minimum of 30 resident credits at the upper division (300-400) level in the College of Business at Minnesota State Mankato.

Transfer students pursuing a major or minor in the College of Business must complete at least 50% (one-half) of their major or minor coursework at Minnesota State Mankato.

GPA Policy. Students must earn a minimum grade point average of 2.0 (“C”) on the total courses taken in the College of Business and a 2.25 overall GPA to meet graduation requirements.

P/N Grading Policy. No more than one-fourth of a student's major shall consist of P/N grades.

Assessment Policy. The College of Business believes that the ongoing assessment of its programs makes a vital contribution to the quality of those programs and to student learning. Student Participation is an important and expected part of the assessment process.

Internships. Students are strongly encouraged to participate in one or more internship programs related to their field of study before graduation. Qualifying internships may receive academic credit counting towards a student's major, but are not required to be taken for credit. To receive academic credit, students must be registered during the semester the internship takes place. Registration instructions and other business internship resources can be found at: cob.mnsu.edu/internship/

MARKETING BS

Degree completion = 120 credits

Required General Education
ECON 201 and MATH 130 must be completed for admission to the minor.
ECON 201 Principles of Macroeconomics (3)
MATH 130 Finite Mathematics and Introductory Calculus (4)

Ethics Requirement (choose 3 credits)
PHIL 120W Introduction to Ethics (3)
PHIL 205W Culture, Identity, and Diversity (3)
PHIL 222W Medical Ethics (3)
PHIL 224W Business Ethics (3)
PHIL 226W Environmental Ethics (3)
PHIL 240W Law, Justice & Society (3)

Prerequisites to the Major
ACCT 200 Financial Accounting (3)
BUS 295 Professional Preparation for Business Careers (2)
IT 101 Introduction to Information Systems (3)

Major Common Core (choose 34 credits)
Required of all College of Business Majors
ACCT 210 Managerial Accounting (3)
BLAW 200 Legal Environment of Business (3)
ECON 202 Principles of Microeconomics (3)
ECON 207 Business Statistics (4)
FINA 362 Business Finance (3)
IBUS 380 Principles of International Business (3)
MGMT 230 Principles of Management (3)
MGMT 300 Introduction to MIS (3)
MGMT 346 Production & Operations Management (3)
MGMT 481 Business Policy & Strategy (3)
MRKT 210 Principles of Marketing (3)

Required for Marketing Major (choose 21 credits)
MRKT 312 Professional Selling (3)
MRKT 316 Consumer Behavior (3)
MRKT 317 Product and Pricing Strategy (3)
MRKT 318 Integrated Marketing Communications (3)
MRKT 324 Marketing Research & Analysis (3)
MRKT 339 Distribution Strategy (3)
MRKT 490 Marketing Management (3)

Major Unrestricted Electives (choose 6 credits)
BUS 397 IBE Practicum (3)
MRKT 413 Business-to-Business Marketing (3)
MRKT 415 Retailing Management (3)
MRKT 416 Digital Marketing (3)
BUS 100 (3) Introduction to Business and Business Careers
This course prepares students for success by exposing them to the requirements, expectation, resources and opportunities of the College of Business. Students will have business experiences and will develop professional skills. Variable

BUS 295 (2) Professional Preparation for Business Careers
This course is required for admission to the College of Business for all business majors. The purpose of the course is to provide students with an overview of COB majors, allow students to create an academic plan for graduation, and develop professional skills needed for future job placement. Topics include cover letter and resume writing, interviewing skills, the process of networking, the internship program, etiquette skills, and requirements for graduation.
Fall, Spring

BUS 397 (3) IBE Practicum
An applied course that entails developing, launching, managing, and closing a business with the cohort of students enrolled in the class. Students write and present a business plan as they seek financing for their startup company. The business startup experience creates a real-world context in which students can practice the concepts introduced in MGMT 230, MKRT 210, and FINA 362. BUS 397 is part of the United Prairie Bank Integrated Business Experience, and students must enroll concurrently in BUS 397 and sections of FINA 362, MGMT 230, and MKRT 210 that are designated for IBE students. Prerequisite: Must be admitted to a major. Co-requisite: FINA 362, MGMT 230, MKRT 210 Fall, Spring
MARKETING CONTINUED

MRKT 413 (3) Business-to-Business Marketing
A broad examination of the techniques employed in business-to-business marketing. Topics include organizational buying, buyer-seller relationships and industrial marketing mix development.
Prerequisite: MRKT 210
Variable

MRKT 415 (3) Retailing Management
The study of retailing at the retail level, including the organization, operations, methods, policies, and problems of retail establishments in satisfying consumers.
Prerequisite: MRKT 210
Variable

MRKT 416 (3) Digital Marketing
This course is an examination of the role of digital technology, such as the Internet and social media platforms, in contemporary marketing strategy and its impact on business decision making and consumer behavior.
Prerequisite: MRKT 210
Variable

MRKT 420 (3) Sales Management
This course involves studying the role of the general sales manager, the functions of sales management within overall marketing strategy, and the development of analytical decision skills necessary to plan, manage, and control the sales force.
Prerequisite: MRKT 210
Variable

MRKT 428 (3) International Marketing
This course takes a managerial approach to analyzing marketing decision making in multinational market situations.
Prerequisite: MRKT 210 and IBUS 380
Fall

MRKT 480 (3) Seminar
Topics covered are specialized topics not covered in other courses and will be announced.
Prerequisite: MRKT 210
Variable

MRKT 490 (3) Marketing Management
This course should be the last marketing class taken, since it involves comprehensive marketing strategy development, integrating all dimensions of the marketing offering, and utilizing marketing information systems for top-level control and decision making.
Prerequisite: MRKT 210, MRKT 316, MRKT 317, MRKT 318 and MRKT 339
Fall, Spring

MRKT 492 (3) Study Tour
Study tours are led by Minnesota State University, Mankato faculty and provide students with opportunities to visit companies and attend lectures by renowned experts from key sectors of economy, government, and business.
Variable

MRKT 494 (3) Fair Trade Study Abroad in Belize
The curriculum focuses on Fair Trade, sustainability, and international business principles. Students will spend 9 days in Belize and learn about diverse populations, engage in a service learning project, and visit businesses who produce goods that are Fair Trade certified.
Spring
Diverse Cultures - Gold

MRKT 497 (1-9) Internship
Individual, supervised experience in a business firm or government agency. Taken for P/N only.
Prerequisite: MRKT 210
Fall, Spring

MRKT 498 (3) Internship
Individual, supervised experience in a business firm or government agency. Taken for grade only.
Prerequisite: MRKT 210 and Two additional 300 or 400 level marketing courses beyond MRKT 210 that are approved by the Department Internship Coordinator.
Fall, Spring

MRKT 499 (1-4) Individual Study
Individual study of special topics.
Prerequisite: Consent
Fall, Spring

MASS MEDIA BA, BS AND MINOR

Mass Media
College of Arts & Humanities
Department of Mass Media
136 Nelson Hall • 507-389-6417
Website: www.mnsu.edu/masscom
Chair: Amy Lauters
Faculty: Matt Cecil, Ellen Mrja, Charles Lewis, Jane McConnell, Mavis Richardson, Heather McIntosh, Rachael Hanel

The mission of the Department of Mass Media is to foster the public good by advancing socially responsible mass media through education, research and service. The department strives to prepare students for careers as ethical and responsible public communicators, innovative creators of media texts, and competent professionals in such fields as news, public relations, and other media-related fields.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

Admission to Major or Minor is granted by the department. Contact the department for application procedures.

Proficiency in English grammar, spelling, composition and keyboarding is essential for admission to the major or minor. The department requires that students complete with a cumulative GPA of 3.0 or better these courses or their equivalents: ENG 101 and MASS 110. Overall GPA will also be considered in determining admission status. Students not meeting minimum requirements may petition the faculty in writing to seek admission.

No student entering the Mass Media program may take courses beyond MASS 110, MASS 112, MASS 260 & MASS 412 unless he/she has met the stated requirements. Students seeking entry into the department’s major or minor must present evidence of their satisfactory fulfillment of these requirements.

In preparation for undertaking a major in Mass Media, students should consider taking these courses (or their equivalents): ECON 100, GEOG 103, ETHN 100, POL 371, PSYC 101, SOC 150 and SOC 101.

GPA Policy. Majors must earn a cumulative GPA of 2.5 or better in all mass media coursework, in addition to the 2.0 overall GPA required by the University for graduation. Refer to the College regarding required advising for students on academic probation.

P/N Grading Policy. Mass Media majors are required to take department courses for a letter grade, except for MASS 498, which must be taken P/N.

Transferring into Mass Media. Students considering transferring into the mass media program at Minnesota State Mankato need to be aware of department admission requirements, including prerequisite courses, GPA. They should contact the department as early as possible for information that will assure a smooth transfer. Failure to plan ahead may delay or preclude admission to the program.

Transfer Credit. The department accepts no more than 13 credits from other colleges and universities as transfer credits to be applied toward the major. They must be taken in courses that match or are the equivalent of courses that are either offered by the department or allowed by it for elective credit.

Internships. Opportunities for mass media internships exist on and off campus for junior and senior majors who want to work in professional settings. The internship must be done under professional supervision and is taken only after the student has (1) completed all prerequisite courses; (2) submitted a department internship contract signed by the student, the student’s internship supervisor and the department chair.
Filing a Program. By the end of the sophomore year the student, through individual consultation with a department advisor, should complete and file with the department a proposed program.

The department recommends that students develop programs of study that are complementary to their major in mass media. Students interested in news writing are encouraged to minor in courses in liberal arts, such as art, English, literature, modern language, history, humanities, philosophy or political science. Students interested in public relations are encouraged to minor in courses in business administration, art, communication studies, marketing, English, psychology, or sociology.

Communication Facilities. In addition to fully equipped modern computerized classrooms, the Department of Mass Media has access to a broad range of on-campus facilities that provide students practical experience. Students majoring in mass media may contribute to producing a student-oriented campus newspaper, The Reporter, and programming for KMSU-FM radio.

Counseling and Guidance. The key to the department’s selective approach to mass media education is its counseling and guidance program. Students are encouraged to choose a department advisor. Working closely with this faculty person, students develop academic programs that relate to their needs, interests and career aspirations.

All policies pertaining to mass media majors also apply to mass media minors, including standards for granting admission to the minor, GPA and P/N Grading policies.

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MASS MEDIA BA

Degree completion = 120 credits

Prerequisites to the Major

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>Composition</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 110</td>
<td>Introduction to Mass Media</td>
<td>(4)</td>
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</table>

Major Common Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASS 221W</td>
<td>Basic Writing for Mass Media</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 312</td>
<td>Mass Media Law</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 411</td>
<td>Mass Media Ethics and Criticism</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 498</td>
<td>Mass Media Internship</td>
<td>(4)</td>
</tr>
</tbody>
</table>

Mass Media majors must complete 4 credits of MASS 498

Major Restricted Electives

Group 1 (Choose 4 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MASS 233</td>
<td>Public Relations Principles</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 260</td>
<td>Principles of Visual Mass Media</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 325W</td>
<td>Media Reporting and Editing</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 330W</td>
<td>Writing for Digital Multimedia</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 340</td>
<td>Mass Media Research</td>
<td>(4)</td>
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Group 2 (Choose 4 Credits)

Focused Writing Course

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>MASS 325W</td>
<td>Media Reporting and Editing</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 330W</td>
<td>Writing for Digital Multimedia</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 334</td>
<td>Writing &amp; Speaking for Broadcast</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 431W</td>
<td>Freelancing for Mass Media</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 434W</td>
<td>Public Relations Writing</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 436W</td>
<td>Specialized Writing</td>
<td>(4)</td>
</tr>
</tbody>
</table>

Major Unrestricted Elective

Choose 12 Credits.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASS 112</td>
<td>- 499</td>
<td></td>
</tr>
</tbody>
</table>

Other Graduation Requirements:

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)

Required Minor: Yes. Any.

MASS MEDIA BS

Degree completion = 120 credits

Prerequisites to the Major

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
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<td>Composition</td>
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<td>MASS 110</td>
<td>Introduction to Mass Media</td>
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MASS MEDIA CONTINUED

Major Common Core

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>MASS 221W</td>
<td>Basic Writing for Mass Media</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 312</td>
<td>Mass Media Law</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 411</td>
<td>Mass Media Ethics and Criticism</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 498</td>
<td>Mass Media Internship</td>
<td>(4)</td>
</tr>
</tbody>
</table>

Mass Media majors must complete 4 credits of MASS 498

Major Restricted Electives

Group 1 (Choose 4 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASS 233</td>
<td>Public Relations Principles</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 260</td>
<td>Principles of Visual Mass Media</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 325W</td>
<td>Media Reporting and Editing</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 330W</td>
<td>Writing for Digital Multimedia</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 340</td>
<td>Mass Media Research</td>
<td>(4)</td>
</tr>
</tbody>
</table>

Group 2 (Choose 4 Credits)

Focused Writing Course

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASS 325W</td>
<td>Media Reporting and Editing</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 330W</td>
<td>Writing for Digital Multimedia</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 334</td>
<td>Writing &amp; Speaking for Broadcast</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 431W</td>
<td>Freelancing for Mass Media</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 434W</td>
<td>Public Relations Writing</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 436W</td>
<td>Specialized Writing</td>
<td>(4)</td>
</tr>
</tbody>
</table>

Major Unrestricted Electives

Choose 12 Credit(s).

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASS 112</td>
<td>- 499</td>
<td></td>
</tr>
</tbody>
</table>

Required Minor: Yes. Any.

MASS MEDIA MINOR

The mass media minor is for students who are interested in building skills in writing and media production in conjunction with their chosen majors. Students completing the minor will gain a solid understanding of the production and evaluation of media messages, ethics and law, and they will also gain skills needed to create media messages in a variety of formats suitable for numerous careers.

Prerequisites: Students must complete and have a 3.0 GPA in ENG 101 and MASS 110.

Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>Composition</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 110</td>
<td>Introduction to Mass Media</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 221W</td>
<td>Basic Writing for Mass Media</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 312</td>
<td>Mass Media Law</td>
<td>(4)</td>
</tr>
<tr>
<td>MASS 411</td>
<td>Mass Media Ethics and Criticism</td>
<td>(4)</td>
</tr>
</tbody>
</table>

Unrestricted Electives

Choose 8 Credits

A limited set of courses are offered at the Normandale Partnership Center. Consult with an advisor on course offerings.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASS 233</td>
<td>- 499</td>
<td></td>
</tr>
</tbody>
</table>

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COURSE DESCRIPTIONS

MASS 110 (4) Introduction to Mass Media

Nature, functions, responsibilities and effects of the media in contemporary society. GE-9

Diverse Cultures Purple

MASS 112 (2) Mass Media and Children

Course will examine the role of mass media in children's lives. Media will be examined as educator, image-maker, entertainer and messenger of violence. Summer

MASS 221 (4) Basic Writing for Mass Media

Basic techniques of gathering information and writing readable and accurate media stories. Prerequisite: ENG 101, MASS 110

Fall, Spring
MASS 221W (4) Basic Writing for Mass Media
Basic techniques of gathering information and writing readable and accurate media stories.
Prerequisite: ENG 101, MASS 110
Fall, Spring

MASS 233 (4) Public Relations Principles
Survey of current practices and problems in the field of public relations. Emphasizes successful case histories and planning techniques.
Prerequisite: MASS 221
Variable

MASS 260 (4) Principles of Visual Mass Media
Exploration of the basic principles of visual media design, stressing the significance of images in a mass media society. Special focus on contextualizing historical and technological changes affecting image production for mass media.
Variable
GE-6, GE-7
Diverse Cultures - Purple

MASS 280 (4) Social Media and Society
Explores social media and their impacts on society through consideration of technologies, social networks, markets, communities, politics and social movements, and major companies. Special focus on individuals’ roles as users, producers, consumers, and laborers toward becoming responsible online citizens.
On-Demand: Fall, Spring, Summer
GE-6, GE-9

MASS 290 (1-4) Selected Topics in Mass Media
Selected topics in mass media
Prerequisite: MASS 221 or consent
Variable

MASS 312 (4) Mass Media Law
Principles of the First Amendment, libel, fair trial, privacy, access to news, pornography, and regulation of radio and television.
Prerequisite: MASS 221
Fall, Spring

MASS 325 (4) Media Reporting and Editing
Discussion of and practice in reporting about public affairs and social issues, plus examination of copy editing and headline writing for traditional and new media.
Prerequisite: MASS 221
Variable

MASS 325W (4) Media Reporting and Editing
Discussion of and practice in reporting about public affairs and social issues, plus examination of copy editing and headline writing for traditional and new media.
Prerequisite: MASS 221
Variable
WI

MASS 330 (4) Writing for Digital Multimedia
Reporting, writing and packaging news for online audiences with an emphasis on multimedia platforms; includes evaluation of news sites and critical consideration of best practices, and economic, ethical and legal issues.
Prerequisite: MASS 221
Variable

MASS 330W (4) Writing for Digital Multimedia
Reporting, writing and packaging news for online audiences with an emphasis on multimedia platforms; includes evaluation of news sites and critical consideration of best practices, and economic, ethical and legal issues.
Prerequisite: MASS 221
Variable
WI

MASS 334 (4) Writing & Speaking for Broadcast
Planning, writing and delivering of broadcast news.
Prerequisite: MASS 221
Variable

MASS 340 (4) Mass Media Research
This course introduces students to the concepts, approaches and tools for gathering and analyzing information in mass media research. Students will become acquainted with and effectively use the terminology and concepts used in mass media research.
Variable

MASS 351 (4) Digital Imaging for Mass Media
Instruction in the fundamental concepts, terminology, techniques and applications of digital imaging in mass media. Development of the basic skills necessary to design, create, manage and distribute photographic and video digital images in mass media communication. Students must provide own camera equipment.
Prerequisite: MASS 221, MASS 260
Variable

MASS 360 (4) Digital Design for Mass Media
Practicum in typography, design, layout and production processes, including job budgeting and estimating, for newspapers, magazines, newsletters, brochures, posters, annual reports, direct mail and related print materials used public relations and journalism. Emphasis on graphic design software.
Prerequisite: MASS 221W, MASS 260

MASS 398 (0) CPT: Co-Operative Experience
Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and an adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.
Prerequisite: MASS 221. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.
Fall, Spring, Summer

MASS 411 (4) Mass Media Ethics and Criticism
Study, analysis and criticism of the mass media, their ethics and performance.
Prerequisite: MASS 221
Fall, Spring

MASS 412 (4) Mass Media History
Survey of the social, cultural, intellectual and technological development of advertising, public relations and print, broadcast and electronic journalism in the United States. Open to non-major/minors.

MASS 431 (4) Freelancing for Mass Media
Marketing and writing of non-fiction articles for contemporary print and electronic magazines.
Prerequisite: MASS 221

MASS 431W (4) Freelancing for Mass Media
Marketing and writing of non-fiction articles for contemporary print and electronic magazines.
Prerequisite: MASS 221
WI

MASS 434 (4) Public Relations Writing
Practical skill in the development of public relations writing including news releases, brochures, PSA's, pitch letters, annual reports.
Prerequisite: MASS 233
Variable

MASS 434W (4) Public Relations Writing
Practical skill in the development of public relations writing including news releases, brochures, PSA's, pitch letters, annual reports.
Prerequisite: MASS 233
Variable
WI

MASS 436 (4) Specialized Writing
Techniques and practicum in writing of features, reviews, editorials, opinion columns and other specialized fields for print and electronic media.
Prerequisite: MASS 221
Variable
MATHEMATICS

MASS 436W (4) Specialized Writing
Techniques and practice in writing of features, reviews, editorials, opinion columns and other specialized fields for print and electronic media.
Prerequisite: MASS 221
Variable
WI

MASS 450 (4) Strategic Communications Case Studies
Exploration of historic and contemporary examples of strategic public relations successes and failures. Analysis of public relations practices related to these cases, including planning, communication, evaluation exercises and management responsibilities.
Prerequisite: MASS 233
Variable

MASS 485 (4) Digital Advocacy Campaigns
Hands-on development, implementation, analysis, and evaluation of a digital advocacy campaign. Special focus on brandraising, network analysis, and social media analytics towards creating messages and determining campaign effectiveness.
On-Demand: Fall, Spring, Summer
Prerequisite: MASS 221W

MATHEMATICS BA, BS AND MINORS

Mathematics
College of Science, Engineering & Technology
Department of Mathematics and Statistics
273 Wissink • 507-389-1453
Website: www.cset.mnsu.edu/dept/mathstat/

Chair: Ruijun Zhao, PhD
Faculty: Jonathan Harper, PhD; In-Jae Kim, PhD; Namyoung Lee, PhD; Hyekyung Min, PhD; Gallande Premaratna, PhD; Mezbahur Rahman, PhD; Brandon Rokekamp, PhD; Deepak Sanjel, PhD; Soo Yeon Shin, PhD; Dan Singer, PhD; Yee-Ling Tiao, PhD; Han Wu, PhD; Hongxia Yin, PhD; Ke Zhu, PhD; Mark Zuiker, PhD

Mathematics in its purest form is an art concerned with ideas. The Department of Mathematics believes that an undergraduate major should be both an introduction to more advanced study and a survey of the many facets of mathematics. From the profound insights of Thales to the undecidability of Goedel, from the intuitive to the rigorous, from the abstract to the applied, with a solid emphasis on both the discrete and the continuous, the department expects all majors to be engaged in a wide range of mathematical ideas.

Unlike many other disciplines, mathematics is a very structured subject. Consequently, the curriculum consists of sequences of interrelated courses which must be taken in the appropriate order. The department expects that the well-prepared student will complete the mathematics major in four years.

The Department offers three mathematics majors and two minors. The primary focus of the B.S. Mathematics Teaching program is to prepare students to teach mathematics at the middle and secondary levels. The B.A. Mathematics and B.S. Mathematics programs are intended to prepare students for advanced study in mathematics or to work in business, industry, or government. The mathematics minor is intended for non-mathematics majors who desire a stronger background in mathematics to analyze risk and ensure financial security for individuals, corporations and society at large.

Prerequisite: MASS 221W

MASS 495 (1-4) Mass Media Workshop
Discussion and hands-on experience involving mass media activities. Topic varies.
Fall, Spring, Summer
Prerequisite: MASS 221W

MASS 498 (2-4) Mass Media Internship
Practical mass media experience in a professional setting.
Prerequisites: MASS 221, MASS 312, and MASS 411, plus two additional 300/400 level MASS courses, one of which must be MASS 325, MASS 330, MASS 334, MASS 431, MASS 434 or MASS 436
Fall, Spring

MASS 499 (1-2) Individual Study in Mass Media
Directed research on a mass media topic chosen by the student.
Prerequisite: MASS 221
Fall, Spring

Contact the College of Science, Engineering and Technology Student Relations Office for application procedures.

Accelerated Combined Degree (BS and MA/MS) Program. Students intending to complete their Bachelor’s and Master’s degree at Minnesota State Mankato may be granted permission to take classes that count toward their graduate program during their undergraduate studies. Admission to the program is conducted through the department. Upon being accepted, students will be assigned an advisor to aid in the design of an accelerated program of study (generally 5 years). Students must maintain a minimum 3.0 GPA overall and a 3.6 in major (as an undergraduate) to continue in the program. Please contact the Department Graduate Coordinator for detailed information.

P/N Grading Policy. In all courses taken for grade, P/N grading is available for courses in mathematics numbered MATH 121 or above. Credit by examination will not be approved for courses in mathematics numbered MATH 121 or above. All coursework must be completed and the P/N option must be chosen at the time of registration. Credit earned is applied toward the major.

P/N Course Application Policy. Within each major or minor, no course may be applied to more than one requirement.

Residency Policy. At least 3 credits applied to the mathematics minor must be earned at Minnesota State Mankato.

Credit by Examination. Credit by examination will not be approved for courses in which a student has already received a grade.

Credit Limitations. A student may accumulate a maximum of six credits from MATH 110 and the College Level Examination Program (CLEP). After completing MATH 122 with a grade of “C” or better, a student may not receive credit for MATH 110, MATH 112, MATH 113, MATH 115, or MATH 180 without the consent of the department. Since the following courses have some common content, credit is not allowed for both MATH 115 and either MATH 112 or MATH 113. A student may not receive credit for MATH 254 or STAT 354 after completing MATH 455 or STAT 455.

Students seeking enrollment in MATH 112 College Algebra, MATH 113 Trigonometry, MATH 115 Precalculus, MATH 121 Calculus 1, MATH 130 Finite Mathematics and Introductory Calculus, MATH 201 Elements of Mathematics 1, or STAT 154 Elementary Statistics must demonstrate readiness to succeed by satisfying the placement table below.

**MASS 436W (4) Specialized Writing**
Techniques and practice in writing of features, reviews, editorials, opinion columns and other specialized fields for print and electronic media.
Prerequisite: MASS 221
Variable
WI

**MASS 450 (4) Strategic Communications Case Studies**
Exploration of historic and contemporary examples of strategic public relations successes and failures. Analysis of public relations practices related to these cases, including planning, communication, evaluation exercises and management responsibilities.
Prerequisite: MASS 233
Variable

**MASS 485 (4) Digital Advocacy Campaigns**
Hands-on development, implementation, analysis, and evaluation of a digital advocacy campaign. Special focus on brandraising, network analysis, and social media analytics towards creating messages and determining campaign effectiveness.
On-Demand: Fall, Spring, Summer
Prerequisite: MASS 221W

**Mathematics BA, BS and Minors**

- Completion of 8 credits of mathematics in courses numbered MATH 121 or higher
- A minimum 2.5 cumulative GPA in mathematics courses.

Contact the College of Science, Engineering and Technology Student Relations Office for application procedures.

Accelerated Combined Degree (BS and MA/MS) Program. Students intending to complete their Bachelor’s and Master’s degree at Minnesota State Mankato may be granted permission to take classes that count toward their graduate program during their undergraduate studies. Admission to the program is conducted through the department. Upon being accepted, students will be assigned an advisor to aid in the design of an accelerated program of study (generally 5 years). Students must maintain a minimum 3.0 GPA overall and a 3.6 in major (as an undergraduate) to continue in the program. Please contact the Department Graduate Coordinator for detailed information.

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P/N Course Application Policy. Within each major or minor, no course may be applied to more than one requirement.

Residency Policy. At least 3 credits applied to the mathematics minor must be earned at Minnesota State Mankato.

Credit by Examination. Credit by examination will not be approved for courses in which a student has already received a grade.

Credit Limitations. A student may accumulate a maximum of six credits from MATH 110 and the College Level Examination Program (CLEP). After completing MATH 122 with a grade of “C” or better, a student may not receive credit for MATH 110, MATH 112, MATH 113, MATH 115, or MATH 180 without the consent of the department. Since the following courses have some common content, credit is not allowed for both MATH 115 and either MATH 112 or MATH 113. A student may not receive credit for MATH 254 or STAT 354 after completing MATH 455 or STAT 455.

Students seeking enrollment in MATH 112 College Algebra, MATH 113 Trigonometry, MATH 115 Precalculus, MATH 121 Calculus 1, MATH 130 Finite Mathematics and Introductory Calculus, MATH 201 Elements of Mathematics 1, or STAT 154 Elementary Statistics must demonstrate readiness to succeed by satisfying the placement table below.

**Academic Map/Degree Plan at [www.mnsu.edu/programs/4All](http://www.mnsu.edu/programs/4All)**

**Policies/Information**
Admission to Major is required to enroll in 300 and 400 level courses. Admission is granted by the Department. Admission requirements are:

- A minimum of 32 earned semester credit hours and a 2.0 minimum cumulative GPA
- Completion of 8 credits of mathematics in courses numbered MATH 121 or higher
- A minimum 2.5 cumulative GPA in mathematics courses.

Contact the College of Science, Engineering and Technology Student Relations Office for application procedures.

Accelerated Combined Degree (BS and MA/MS) Program. Students intending to complete their Bachelor’s and Master’s degree at Minnesota State Mankato may be granted permission to take classes that count toward their graduate program during their undergraduate studies. Admission to the program is conducted through the department. Upon being accepted, students will be assigned an advisor to aid in the design of an accelerated program of study (generally 5 years). Students must maintain a minimum 3.0 GPA overall and a 3.6 in major (as an undergraduate) to continue in the program. Please contact the Department Graduate Coordinator for detailed information.

P/N Grading Policy. In all courses taken for grade, P/N grading is available for courses in mathematics numbered MATH 121 or above. Credit by examination will not be approved for courses in mathematics numbered MATH 121 or above. All coursework must be completed and the P/N option must be chosen at the time of registration. Credit earned is applied toward the major.

P/N Course Application Policy. Within each major or minor, no course may be applied to more than one requirement.

Residency Policy. At least 3 credits applied to the mathematics minor must be earned at Minnesota State Mankato.

Credit by Examination. Credit by examination will not be approved for courses in which a student has already received a grade.

Credit Limitations. A student may accumulate a maximum of six credits from MATH 110 and the College Level Examination Program (CLEP). After completing MATH 122 with a grade of “C” or better, a student may not receive credit for MATH 110, MATH 112, MATH 113, MATH 115, or MATH 180 without the consent of the department. Since the following courses have some common content, credit is not allowed for both MATH 115 and either MATH 112 or MATH 113. A student may not receive credit for MATH 254 or STAT 354 after completing MATH 455 or STAT 455.

Students seeking enrollment in MATH 112 College Algebra, MATH 113 Trigonometry, MATH 115 Precalculus, MATH 121 Calculus 1, MATH 130 Finite Mathematics and Introductory Calculus, MATH 201 Elements of Mathematics 1, or STAT 154 Elementary Statistics must demonstrate readiness to succeed by satisfying the placement table below.
## Mathematics Continued

<table>
<thead>
<tr>
<th>Course</th>
<th>Minimum ACT/SAT Math Subscore</th>
<th>Minimum Accuplacer Intermediate Algebra Score</th>
<th>Minimum Accuplacer College Level Math Score</th>
<th>Minimum Accuplacer Calculus Readiness Score</th>
<th>Course Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math 112</td>
<td>ACT 22, Old SAT 550, New SAT* 550, 2-digit SAT 27.5** MCA 1158</td>
<td>60</td>
<td>N/A</td>
<td>N/A</td>
<td>Grade of P in MATH 098</td>
</tr>
<tr>
<td>Math 113</td>
<td>ACT 22, Old SAT 550, New SAT* 550, 2-digit SAT 27.5**</td>
<td>60 AND 84</td>
<td>N/A</td>
<td>OR Math 112 with a “C” or better</td>
<td></td>
</tr>
<tr>
<td>Math 115</td>
<td>ACT 23, Old SAT 530, New SAT* 560, 2-digit SAT 28**</td>
<td>60 AND 96</td>
<td>N/A</td>
<td>OR Grade of P in MATH 098</td>
<td></td>
</tr>
<tr>
<td>Math 121</td>
<td>ACT 24, Old SAT 560, New SAT* 580, 2-digit SAT 29**</td>
<td>60 AND 84 AND 21</td>
<td>MATH 115, or both MATH 112 and MATH 115, with a “C” (2.0) or better</td>
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<tr>
<td>Math 130</td>
<td>ACT 23, Old SAT 530, New SAT* 560, 2-digit SAT 28**</td>
<td>60 AND 84</td>
<td>N/A</td>
<td>OR MATH 112 or MATH 115 with a “C” (2.0) or better</td>
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</tr>
<tr>
<td>Math 181</td>
<td>ACT 23, Old SAT 530, New SAT* 560, 2-digit SAT 28**</td>
<td>60 AND 84</td>
<td>N/A</td>
<td>OR MATH 112 or MATH 115 with a “C” (2.0) or better</td>
<td></td>
</tr>
<tr>
<td>Math 201</td>
<td>ACT 22, Old SAT 530, New SAT* 550, 2-digit SAT 27.5** MCA 1148</td>
<td>60</td>
<td>N/A</td>
<td>N/A</td>
<td>OR Grade of P in MATH 098 or “C” (2.0) or better in MATH 112, MATH 115, or MATH 12</td>
</tr>
<tr>
<td>Stat 154</td>
<td>ACT 19, Old SAT 460, New SAT* 500, 2-digit SAT 25** MCA 1148</td>
<td>60</td>
<td>N/A</td>
<td>N/A</td>
<td>OR Grade of P in MATH 098 or “C” (2.0) or better in Math 112, Math 115, or Math 12</td>
</tr>
</tbody>
</table>

*New SAT is June 2016 or later

**Two digit SAT score is also called the SAT Math Composite Score.

### Procedures:

Students may substitute for the above requirements based on documentation of:

1. equivalent or higher scores on standardized college admissions tests that report a separate mathematics subscore within two calendar years;
2. successful completion of equivalent prior post-secondary education, such as coursework, transfer evaluations or Cambridge International Examinations; or
3. enrollment exclusively in non-credit courses or programs.

Substitutions. Students requesting such substitutions should submit the documentation to the Chair of the Department of Mathematics and Statistics for evaluation. The evaluation will be based on nationally accepted concordances between the testing instruments and/or courses. The Chair of the Department of Mathematics and Statistics or designee should respond in writing to student requests within three weeks of receiving them.

### Procedure for Waiver

1. Students not meeting the requirements for enrollment in Math 112, Math 201 or Stat 154 may request a waiver to this policy.
2. Written requests for waivers to the policy must be submitted to the Chair of the Department of Mathematics and Statistics, and should include evidence of alternate means of demonstrating readiness for college algebra including but not limited to:
   a. High school or recent post-secondary coursework which would indicate adequate preparation (transcripts or other records which include course titles, levels and grades are acceptable), or
   b. Verification of extenuating circumstances which may have affected performance on previous exams.
3. Requests for waivers should be submitted by the following deadlines:
   a. August 5th for fall semester enrollment,
   b. December 1st for spring semester enrollment, and
   c. May 1st for summer session enrollment.
4. The Chair of the Department of Mathematics and Statistics or designee should respond in writing to student requests within three weeks of receiving them.
5. Students whose initial requests are denied may submit a written appeal to the Dean of the College of Science, Engineering and Technology. The Dean should respond in writing, with a copy to the Chair of the Department of Mathematics and Statistics.
6. The Dean’s decision is the final step in this appeal process.

### Policy Rationale:

The purpose of the policy is to place students in a course that is developmentally appropriate to help ensure their long term success. Data suggests students not meeting these guidelines have a higher likelihood of having to repeat a course.

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### MATH BA

**Degree completion = 120 credits**

**Required General Education**

- MATH 121 Calculus I (4)
- MATH 290 Foundations of Mathematics (4)

**Major Common Core**

- MATH 122 Calculus II (4)
- MATH 170 Introduction to Mathematical Software Programming (3)
- MATH 223 Calculus III (4)
- MATH 247 Linear Algebra I (4)
- MATH 316 Intermediate Analysis (3)
- MATH 345 Abstract Algebra I (4)
- MATH 375 Introduction to Discrete Mathematics (4)
- MATH 492W Mathematics Capstone Experience (3)

Note: MATH 492 can substitute for MATH 492W

**Major Restricted Electives**

(Choose a minimum of 12 credits from the following; at least seven (7) credits must be at the 400 level)

- MATH 321 Ordinary Differential Equations (4)
- MATH 332 College Geometry (4)
- MATH 354 Concepts of Probability & Statistics (4)
- MATH 402 Introduction to Topology (4)
- MATH 411 Introduction to Complex Variables (4)
- MATH 417 Real Analysis I (4)
- MATH 418 Real Analysis II (3)
- MATH 422 Partial Differential Equations (4)
- MATH 425 Mathematical Modeling (4)
- MATH 428 Linear Optimization Methods (4)
- MATH 435 Modern Geometry (4)
- MATH 442 Theory of Numbers (4)
- MATH 446 Abstract Algebra II (4)
- MATH 447 Linear Algebra II (3)
- MATH 455 Theory of Statistics I (4)
- MATH 456 Theory of Statistics II (4)
- MATH 460 Actuarial Applications in Probability (3)
- MATH 461 Mathematical Theory of Interest (4)
- MATH 470 Numerical Analysis I (4)
- MATH 471 Numerical Analysis II (4)
- MATH 475 Advanced Mathematical Software Programming (4)
- MATH 480 History of Mathematics (3)

STAT 354, STAT 455 and STAT 456 can substitute for MATH 354, MATH 455 and MATH 456, respectively.

**Other Graduation Requirements**

- Language (8 credits)

| Required Minor. Yes. Any. |
### MATH BS

**Degree completion = 120 credits**

**Required General Education**
- MATH 121 Calculus I (4)
- MATH 290 Foundations of Mathematics (4)

**Major Common Core**
- MATH 122 Calculus II (4)
- MATH 170 Introduction to Mathematical Software Programming (3)
- MATH 223 Calculus III (4)
- MATH 247 Linear Algebra I (4)
- MATH 316 Intermediate Analysis (3)
- MATH 321 Ordinary Differential Equations (4)
- MATH 345 Abstract Algebra I (4)
- MATH 375 Introduction to Discrete Mathematics (4)

**Major Restricted Electives**

<table>
<thead>
<tr>
<th>Applied Mathematics (choose 0 - 12 credits)</th>
<th>MATH 422 Partial Differential Equations (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 425 Mathematical Modeling (4)</td>
<td>MATH 428 Linear Optimization Methods (4)</td>
</tr>
<tr>
<td>MATH 470 Numerical Analysis I (4)</td>
<td>MATH 471 Numerical Analysis II (4)</td>
</tr>
<tr>
<td>MATH 475 Advanced Mathematical Software Programming (4)</td>
<td></td>
</tr>
</tbody>
</table>

**Algebra (choose 0 - 12 credits)**
- MATH 442 Theory of Numbers (4)
- MATH 446 Abstract Algebra II (4)
- MATH 447 Linear Algebra II (3)
- MATH 475 Advanced Mathematical Software Programming (4)

**Analysis, Geometry and Topology (choose 0 - 12 credits)**
- MATH 332 College Geometry (4)
- MATH 402 Introduction to Topology (4)
- MATH 411 Introduction to Complex Variables (4)
- MATH 417 Real Analysis I (4)
- MATH 418 Real Analysis II (3)
- MATH 435 Modern Geometry (4)

**Statistics and Finance (choose 0 - 12 credits)**
- STAT 354, STAT 455 and STAT 456 may substitute for MATH 354, MATH 455 and MATH 456, respectively.

**Core**
- MATH 121 Calculus I (4)
- MATH 122 Calculus II (4)
- MATH 247 Linear Algebra I (4)

**Restricted Electives**

(Choose 7 credits from any courses listed for the BA and BS major).
See Residency Policy.

**ACTUARIAL MINOR**

**Core**
- FINA 362 Business Finance (3)
- FINA 460 Investments (3)
- MATH 121 Calculus I (4)
- MATH 122 Calculus II (4)

**Restricted Electives**

Statistics (choose 7-8 credits)
- STAT 354 Concepts of Probability & Statistics (4)
- STAT 450 Regression Analysis (3)
- STAT 455 Theory of Statistics I (4)

Finance (choose 3 credits)
(See Residency Requirement)
- FINA 467 Insurance and Risk Management (3)
- FINA 480 Options and Futures (3)

**Unrestricted Electives**

Recommended Courses [choose 0 - 13 credits]
Along with the above courses, the following courses satisfy aspects the VEE (Validation of Educational Experience) of the professional societies associated to actuarial science. Students taking these additional courses may apply them towards becoming certified in the three areas of the VEE: economics, applied statistical methods and corporate finance.

- ECON 201 Principles of Microeconomics (3)
- ECON 202 Principles of Microeconomics (3)
- MATH 223 Calculus III (4)
- STAT 458 Categorical Data Analysis (3)

### COURSE DESCRIPTIONS

**MATH 094 (4) Essential Mathematics with Elementary Algebra**

Basic mathematics skills integrating the fundamental operations of whole numbers, integers, fractions, decimals, percents, ratio and proportion with the elementary algebra topics of linear equations and inequalities, graphs, exponents, polynomials and factoring. Credit does not apply toward graduation.
P/N only. Summer

**MATH 098 (4) Intermediate Algebra**

Topics covered include intermediate study of graphs, systems of linear equations, introduction to functions, linear and nonlinear inequalities, factoring, rational expressions and equations, radicals, and basic quadratic equations. Credit does not apply toward graduation.
P/N only. Summer

**MATH 110 (3) Perspectives in Mathematics**

A survey of mathematics and its relationship to society, showing its development and evolution to meet the needs of humankind.
Prerequisite: Three years high school algebra/geometry or MATH 098
Fall, Spring, Summer
GE-4

**MATH 112 (4) College Algebra**

Concepts of algebra (real numbers, exponents, polynomials, rational expressions), equations and inequalities, functions and graphs, polynomial and rational functions, exponential and logarithmic functions, systems of equations and inequalities, matrices and determinants, conic sections, sequences and series, probability, and binomial theorem.
Prerequisite: Satisfy Placement Table in this section, or MATH 098 with grade of P.
Fall, Spring, Summer
GE-4

**MATH 223 Calculus III (4)**

Fall, Spring, Summer
Prerequisite: Satisfy Placement Table in this section, or MATH 098 with grade of P.

**MATH 316 Intermediate Analysis (3)**

Fall, Spring, Summer
Prerequisite: Satisfy Placement Table in this section, or MATH 098 with grade of P.

**MATH 492W Mathematics Capstone Experience**

Fall, Spring, Summer
Prerequisite: Satisfy Placement Table in this section, or MATH 098 with grade of P.

**MATH MINOR**

**Core**
- MATH 121 Calculus I (4)
- MATH 122 Calculus II (4)
- MATH 247 Linear Algebra I (4)

**Restricted Electives**

(Choose 7 credits from any courses listed for the BA and BS major).
See Residency Policy.
MATH 113 (3) Trigonometry
Basic concepts of trigonometry as preparation for college level mathematics and
science course work. Topics include concepts of algebra (real numbers, functions,
graphs of functions, exponential and logarithmic functions), trigonometric functions,
analytic trigonometry, applications of trigonometry, and analytic geometry.
Prerequisite: Satisfy Placement Table in this section, or MATH 112 with “C” (2.0) or
better.
Fall, Spring, Summer
GE-4

MATH 115 (4) Precalculus Mathematics
This course will cover topics of precalculus mathematics. Topics covered will include
functions, graphs of functions, exponential and logarithmic functions, conic sections,
systems of equations, and inequalities, matrixed, trigonometric functions, circular
functions, vectors and complex numbers, induction, series, and probability.
Prerequisite: Satisfy Math Placement Table in this section, or grade of P in MATH 098.
Fall, Spring, Summer
GE-4

MATH 121 (4) Calculus I
Limits, continuity, the derivative and applications, transcendental functions, L’Hôpital’s
Rule, and development of the Riemann integral.
Prerequisite: Satisfy Placement Table in this section, MATH 115 or both MATH 112
and MATH 113 with “C” (2.0) or better.
Fall, Spring, Summer
GE-4

MATH 122 (4) Calculus II
Techniques of integration, applications of integration, improper integrals, numerical
integration, the calculus of parametric curves, infinite series and sequences, and
vectors in two and three dimensions.
Prerequisite: MATH 121 with “C” (2.0) or better or consent
Fall, Spring, Summer

MATH 127 (2) Calculus II for Engineering Technology: Integration
A continuation of the study of calculus from MATH 121 including transcendental
functions, L’Hôpital’s rule, techniques of integration, and vectors in two and three
dimensions. Content is intended for students enrolled in any engineering technology
program. Credit for both MATH 127 and MATH 122 is not allowed.
Prerequisite: MATH 121 with “C” (2.0) or better or consent
Fall

MATH 130 (4) Finite Mathematics and Introductory Calculus
This course develops concepts and skills in algebra and introductory calculus needed
for applications in business, economics, social sciences and life sciences,
using polynomials, exponentials, logarithms, linear systems, linear programming,
sequences, series, derivatives and integrals.
Prerequisite: Satisfy Placement Table in this section, or grade of C+ (2.0) or better in either MATH 112 or MATH 115.
Fall, Spring, Summer
GE-4

MATH 170 (3) Introduction to Mathematical Software Programming
Students will learn the rudiments of algorithmic processes such as iteration and
recursion and implement simple mathematical algorithms in a commonly used math-
ematical software package. Applications may include graphing, equation solving,
numerical approximation, recurrence relations, and generation of mathematical
objects such as sets, lists, permutations and trees.
Prerequisite: MATH 121 Fall (On Demand), Spring (On Demand)

MATH 180 (4) Mathematics for Computer Science
This course is an introduction to the mathematical concepts needed in computer
science, including sets, logic, representations of numbers, counting techniques,
discrete functions, matrices, trees and graphs, and algorithm analysis.
Prerequisite: MATH 112 or equivalent, with “C” (2.0) or better, or consent
Fall
GE-4

MATH 181 (3) Intuitive Calculus
This course presents the concepts of the differential and integral calculus from an
intuitive (non-theoretical) point of view. The course emphasis is on the applications
of the calculus. Credit for both MATH 181 and MATH 121 is not allowed.
Prerequisite: Satisfy Placement Table in this section, or MATH 112 with “C” (2.0) or better.
Spring, Summer
GE-4

MATH 201 (3) Elements of Mathematics I
Nature of mathematics from a problem solving approach using sets, relations, number
systems through integers, rational numbers and discrete mathematics.
Prerequisite: Satisfy Placement Table in this section, or Grade of P in MATH 098 or
“C” (2.0) or better in MATH 112 or MATH 115.
Fall, Spring
GE-4

MATH 202 (3) Elements of Mathematics II
A continuation of MATH 201, including rational and real number systems, informal
geometry and measurement, statistics, and probability.
Prerequisite: MATH 201, with “C” (2.0) or better or consent
Fall, Spring

MATH 203 (3) Elements of Math III
Transformational and Euclidean geometry, coordinate geometry and applications of
discrete mathematics.
Prerequisite: MATH 202 with “C” (2.0) or better or consent
Spring

MATH 223 (4) Calculus III
Surfaces, vector-valued functions, partial differentiation, multiple integration, and
vector calculus.
Prerequisite: MATH 122 with “C” (2.0) or better, or consent
Fall, Spring

MATH 247 (4) Linear Algebra I
Matrices, determinants, systems of linear equations, vector spaces, linear transform-
ations, and characteristic value problems.
Prerequisite: MATH 122 with “C” (2.0) or better or consent
Fall, Spring, Summer

MATH 290 (4) Foundations of Mathematics
Logic, proof techniques, set theory, relations, functions, cardinality, operations, and
an introduction to mathematical structures and number theory.
Prerequisite: MATH 122 with “C” (2.0) or better or consent
Fall, Spring
GE-2

MATH 293 (1) MAX Scholar Seminar
This class provides MAX scholars with an opportunity to explore a set of topics
related to achieving success in academic, professional and personal realms.
Speakers will include faculty, graduate students, visiting researchers and industry
members as well as student participants. Cannot be used towards a math major.
Prerequisite: Recipient of a MAX scholarship or instructor consent.
Fall, Spring

MATH 316 (3) Intermediate Analysis
Limits, sequences, continuity, and differentiation of a real valued function of a real variable.
Prerequisite: MATH 223 and MATH 290 with “C” (2.0) or better or consent
Spring

MATH 321 (4) Ordinary Differential Equations
This course presents the theory, computations, and applications of first and second
order differential equations and two-dimensional systems.
Prerequisite: MATH 122 with “C” (2.0) or better or consent
Fall, Spring, Summer

MATH 322 (4) College Geometry
This course covers several geometric systems including Euclidean, non-Euclidean,
transformational and projective. Other topics studied are topological properties
and the relationship between coordinate and synthetic geometry.
Prerequisite: MATH 290 with “C” (2.0) or better or consent
Fall

MATH 332 (4) College Geometry
An introduction to the theory of groups and rings, including polynomial rings, ho-
omorphisms, isomorphisms, and concepts of normal subgroups, ideals, quotient
groups, and quotient rings.
Prerequisite: MATH 290 with “C” (2.0) or better or consent
Fall
MATH 354 (4) Concepts of Probability & Statistics
This is a calculus-based course covering introductory level topics of probability and statistics. It is designed to meet the needs of both the practitioner and the person who plans further in-depth study. Topics include probability, random variables and probability distributions, joint probability distributions, statistical inference (both estimation and hypothesis testing), analysis of variance, regression, and correlation. Same as STAT 354.
Prerequisite: MATH 122 with "C" (2.0) or better or consent Fall, Spring, Summer

MATH 375 (4) Introduction to Discrete Mathematics
An introduction to the concepts fundamental to the analysis of algorithms and their realization. Topics will include combinatorics, generating functions, recurrence relations, graph theory, and networks.
Prerequisite: MATH 247 and MATH 290 with grade of "C" (2.0) or higher. Fall, Spring

MATH 398 (0) CPT: Co-Operative Experience
Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.
Prerequisite: At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply. Fall, Spring, Summer

MATH 402 (4) Introduction to Topology
An introduction to topological spaces and their fundamental properties such as compactness, connectedness, separation properties and countability properties. Continuous functions between topological spaces and common examples of topological spaces are also discussed.
Prerequisite: MATH 290 with grade of "C" (2.0) or higher. On Demand: Spring

MATH 411 (4) Introduction to Complex Variables
Algebra and geometry of complex numbers, analytic functions, power series, Cauchy’s theorem and residue theorem.
Prerequisite: MATH 223 and MATH 290 with "C" (2.0) or better or consent Spring (Odd Years)

MATH 417 (4) Real Analysis I
The topology of Euclidean spaces, norms, classical inequalities, local and global properties of continuous functions, preservation of compactness and connectedness, sequences in Euclidean space and sequences of functions.
Prerequisite: MATH 223 and MATH 290 with "C" (2.0) or better or consent Fall

MATH 418 (3) Real Analysis II
A continuation of MATH 417. The course may include topics from metric spaces, Riemann-Stieltjes integration, differentiation and integration in Euclidean space, sequences and series of functions, approximation theorems, implicit and inverse function theorems, equicontinuity, and mapping theorems.
Prerequisite: MATH 417 with "C" (2.0) or better or consent On Demand: Spring

MATH 422 (4) Partial Differential Equations
This course presents the theory, computations, and applications of partial differential equations and Fourier series.
Prerequisite: MATH 223 and MATH 321 with "C" (2.0) or better or consent Spring (Even Years)

MATH 425 (4) Mathematical Modeling
This course presents topics from mathematical analysis of both discrete and continuous models taken from problems in the natural sciences, economics and resource management.
Prerequisite: MATH 223 and MATH 247 with "C" (2.0) or better or consent Spring (Odd Years)

MATH 428 (4) Linear Optimization Methods
Simplex method and its variants, duality, sensitivity analysis, interior-point methods, quadratic programming and linear complementarity problems. Applications such as classification problems and game theory with linear optimization software.
Prerequisite: MATH 122, MATH 247 On Demand: Fall, Spring, Summer

MATH 435 (4) Modern Geometry
Geometry of spaces including Euclidean and non-Euclidean and applications of contemporary geometry.
Prerequisite: MATH 332 with "C" (2.0) or better or consent Fall (On Demand), Spring (On Demand), Summer (On Demand)

MATH 442 (4) Theory of Numbers
Euclidean algorithm, primes, composites, number theoretic functions, congruencies, Diophantine equations, Euler and Fermat theorems, algebraic number fields.
Prerequisite: MATH 345 with "C" (2.0) or better or consent Spring (Even Years)

MATH 446 (4) Abstract Algebra II
A continuation of MATH 345. The course will include topics from groups, rings, and fields.
Prerequisite: MATH 345 with "C" (2.0) or better or consent Fall (On Demand), Spring (On Demand), Summer (On Demand)

MATH 447 (3) Linear Algebra II
An in-depth study of linear operators and their related spaces, dimension, rank, matrix representation of linear operators, special matrices, determinants, eigenvectors and eigenvalues.
Prerequisite: MATH 345 with "C" (2.0) or better or consent Spring

MATH 455 (4) Theory of Statistics I
A mathematical approach to statistics with derivation of theoretical results and of basic techniques used in applications. Includes probability, continuous probability distributions, multivariate distributions, functions of random variables, central limit theorem and statistical inference. Same as STAT 455.
Prerequisite: MATH 223 with "C" (2.0) or better or consent Fall

MATH 456 (4) Theory of Statistics II
A mathematical approach to statistics with derivation of theoretical results and of basic techniques used in applications, including sufficient statistics, additional statistical inference, theory of statistical tests, inferences about normal models and nonparametric methods. Same as STAT 456.
Prerequisite: MATH 455 / STAT 455 with "C" (2.0) or better or consent Spring

MATH 460 (3) Actuarial Applications in Probability
This course applies probabilistic methods to problems encountered in actuarial science that prepares students for the Society of Actuaries Exam P/1.
Prerequisite: MATH 354, STAT 354, MATH 455 or STAT 455 and MATH 223 Fall (On Demand), Spring (On Demand), Summer (On Demand)

MATH 461 (4) Mathematical Theory of Interest
This course covers the theory of interest portion of Exam FM/2 of the Society of Actuaries. Topics include time value of money, measurement of interest, annuities certain, arithmetic and geometric annuities, amortization schedules and sinking fund, bonds and other securities, yield rates, and interest rate immunization.
Prerequisite: MATH 223 Fall (On Demand), Spring (On Demand), Summer (On Demand)

MATH 470 (4) Numerical Analysis I
This course provides an introduction to techniques and analysis involved with solving mathematical problems using technology. Topics include errors in computation, solutions of linear and nonlinear equations, numerical differentiation and integration, and interpolation.
Prerequisite: MATH 122, MATH 247 with "C" (2.0) or better or consent Fall

MATH 471 (4) Numerical Analysis II
This course is a continuation of MATH 470. Topics included are the algebraic eigenvalue problem, least squares approximation, solutions of systems of nonlinear equations, numerical solutions of ordinary differential equations.
Prerequisite: MATH 470 and MATH 223 with "C" (2.0) or better or consent On Demand: Spring
MATH 475 (4) Advanced Mathematical Software Programming
Students will learn fundamental concepts of computer programming and write software to implement a variety of mathematical algorithms, manipulate large amounts of data, test conjectures, and make abstract mathematical concepts concrete. Programming concepts include input versus output, data structures, local and global variables, switch statements, iteration, recursion, halting conditions, modularity, debugging, and algorithm analysis. Programming projects may vary with instructor, but could include topics from enumerative combinatorics, graph theory, group theory, linear algebra, and number theory. Prerequisite: Math 345 and Math 375 with a ‘C’ (2.0) or better, and senior standing or consent Fall, Spring

MATH 480 (3) History of Mathematics
The development of selected topics from before the Hellenistic time period to the late twentieth century. Familiarity with the content of HIST 180W is beneficial. Prerequisite: MATH 345 with ‘C’ (2.0) or better or consent Spring (Odd Years)

MATH 483 (3) Advanced Viewpoint of 5-8 School Mathematics
Advanced viewpoint of mathematics content and learning theories, teaching strategies, reading strategies, assessments, and planning, teaching and reflecting on grades 5-8 mathematics. Field experiences in grades 5-8 mathematics classroom required. Prerequisite: MATH 290 with ‘C’ (2.0) or better or consent Spring

MATH 484 (3) Technology in 5-12 School Mathematics
Numerical, verbal, symbolic and graphical representations of quantitative relationships, concatenations in written mathematics, problem solving, dynamic geometry, perspective drawing, parametric equations, geometric probability, transition matrices, statistics and calculus using technology. Prerequisite: MATH 290 with ‘C’ (2.0) or better or consent Fall

MATH 485 (3) Teaching Secondary School Mathematics
Learning theories, teaching strategies, assessment, planning and teaching by reflecting on secondary (grades 9-12) school mathematics. Field experiences in grades 9-12 mathematics classroom required. Prerequisite: MATH 290 with ‘C’ (2.0) or better or consent Fall

MATH 487 (1) Teaching Experiences in Mathematics
Student will work with an experienced member of the faculty in teaching a college mathematics course.

MATH 488 (1-3) Seminar
A course of study in which a group of students study a topic by examining results through reports and discussions. May be repeated for credit on each new topic.

MATH 489 (1-4) Workshop
A short course devoted to a specific mathematical topic. May be repeated for credit on each new topic.

MATH 491 (1-4) In-Service
A course designed to upgrade the qualifications of persons on-the-job. May be repeated for credit on each new topic.

MATH 492 (3) Mathematics Capstone Experience
This course is designed to allow undergraduate students an opportunity to integrate their undergraduate mathematics experiences by engaging each student in working on a problem in applied or theoretical mathematics. Content will vary by semester. Because of the breadth of mathematics topics needed for successful completion of the course, students need to have senior standing. Prerequisite: Two of the following: MATH 316, MATH 321, MATH 345, MATH 375 and senior standing (or permission of the instructor). Course can also be taken independent study with permission of a cooperating faculty member. On Demand: Fall

MATH 492W (3) Mathematics Capstone Experience
This course is designed to allow undergraduate students an opportunity to integrate their undergraduate mathematics experiences by engaging each student in working on a problem in applied or theoretical mathematics. Content will vary by semester. Because of the breadth of mathematics topics needed for successful completion of the course, students need to have senior standing. Prerequisite: Two of the following: MATH 316, MATH 321, MATH 345, MATH 375 and senior standing (or permission of the instructor). Course can also be taken independent study with permission of a cooperating faculty member. Fall

MATH 493 (1) MAX Scholar Seminar
This class provides MAX scholars with an opportunity to explore a set of topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Students will be required to participate in mentoring of lower division MAX scholarship recipients and provide written and oral presentations of various topics during the semester. Prerequisite: Recipient of a MAX scholarship or instructor consent Fall, Spring

MATH 495 (1-4) Selected Topics
A course in an area of mathematics not regularly offered. May be repeated for credit on each new topic.

MATH 498 (1-12) Internship
Provides a student the opportunity to gain expertise and experience in a special field under the supervision of a qualified person.

MATH 499 (1-4) Individual Study
Independent individual study under the guidance and direction of a faculty member in mathematics. Special arrangements must be made with an appropriate faculty member. May be repeated for credit on each new topic.
Mathematics Teaching

College of Science, Engineering & Technology
Department of Mathematics and Statistics
273 Vrisink • 507-389-1453
Website: www.mnsu.edu/dept/mathstat/

Chair: Ruijun Zhao, PhD
Faculty: Jonathan Harper, PhD; In-Jae Kim, PhD; Namyoung Lee, PhD; Hyekyung Min, PhD; Goldikande Pремарехна, PhD; Mazbuhur Rahman, PhD; Brandon Rowekamp, PhD; Deepak Sanjel, PhD; Soo Yeon Shin, PhD; Dan Singer, PhD; Ye-Ling Tsao, PhD; Han Wu, PhD; Hongxia Yin, PhD; Ke Zhu, PhD; Mark Zuiker, PhD

Mathematics in its purest form is an art concerned with ideas. The Department of Mathematics believes that an undergraduate major should be both an introduction to more advanced study and a survey of the many facets of mathematics. From the profound insights of Thales to the undecidability of Godel, from the intuitive to the rigorous, from the abstract to the applied, with a solid emphasis on both the discrete and the continuous, the department expects all majors to be engaged in a wide range of mathematical ideas.

Unlike many other disciplines, mathematics is a very structured subject. Consequently, the curriculum consists of sequences of interrelated courses which must be taken in the appropriate order. The department expects that the well-prepared student will complete the mathematics major in four years.

The Department offers three mathematics majors and two minors. The primary focus of the B.S. Mathematics Teaching program is to prepare students to teach mathematics at the middle and secondary levels. The B.A. Mathematics and B.S. Mathematics programs are intended to prepare students for advanced study in mathematics or to work in business, industry, or government. The mathematics minor is intended for non-mathematics majors who desire a stronger background in mathematics. The Actuarial Science Minor combines finance, statistics, and mathematics to analyze risk and ensure financial security for individuals, corporations and society at large.

Mathematics Teaching BS

POLICIES/INFORMATION

Admission to Major is required to enroll in 300 and 400 level courses. Admission requirements are:
- A minimum of 32 earned semester credit hours and a 2.0 minimum cumulative GPA
- Completion of 8 credits of mathematics in courses numbered MATH 121 or higher
- A minimum 2.5 cumulative GPA in mathematics courses.

Contact the College of Science, Engineering and Technology Student Relations Office for application procedures.

Accelerated Combined Degree (BS and MA/MS) Program. Students intending to complete their Bachelor’s and Master’s degree at Minnesota State Mankato may be granted permission to take classes that count toward their graduate program during their undergraduate studies. Admission to the program is conducted through the department. Upon being accepted, students will be assigned an advisor to aid in the design of an accelerated program of study (generally 5 years). Students must maintain a minimum 3.0 GPA overall and a 3.6 in major (as an undergraduate) to continue in the program. Please contact the Department Graduate Coordinator for detailed information.

Course Application Policy. Within each major or minor, no course may be applied to more than one requirement.

Residency Policy. At least 3 credits applied to the mathematics minor must be earned at Minnesota State Mankato.

GPA Policy. Mathematics majors or minors must earn a grade of “C” (2.0) or better in all courses taken for grade that are applied to the major or minor, respectively.

P/N Grading Policy. Not more than one-fourth of the credits in mathematics courses numbered MATH 121 or above can be taken under P/N and applied to a major or minor. All 300 and 400 level courses are offered for grade only with the exception of MATH 487, MATH 498, and MATH 499, which are available for both P/N and letter grade.

Credit by Examination. Credit by examination will not be approved for courses in which a student has already received a grade.

Credit Limitations. A student may accumulate a maximum of six credits from MATH 110 and the College Level Examination Program (CLEP). After completing MATH 122 with a grade of “C” or better, a student may not receive credit for MATH 110, MATH 112, MATH 113, MATH 115, or MATH 180 without the consent of the department. Since the following courses have some common content, credit is not allowed for both MATH 115 and either MATH 112 or MATH 113. A student may not receive credit for MATH 354 or STAT 354 after completing MATH 455 or STAT 455.

Students seeking enrollment in MATH 112 College Algebra, MATH 113 Trigonometry, MATH 115 Precalculus, MATH 121 Calculus I, MATH 130 Finite Mathematics and Introductory Calculus, MATH 201Elements of Mathematics I, or STAT 154 Elementary Statistics must demonstrate readiness to succeed by satisfying the placement table below.

**New SAT is June 2016 or later
** Two digit SAT score is also called the SAT Math Composite Score
ACT, SAT, and MCA scores are valid for 5 years

<table>
<thead>
<tr>
<th>Course</th>
<th>Minimum ACT/SAT Math Subscore</th>
<th>Minimum Accuplacer Intermediate Algebra Score</th>
<th>Minimum Accuplacer College Level Math Score</th>
<th>Minimum Accuplacer Calculus Readiness Score</th>
<th>Course Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math 112</td>
<td>ACT 22, Old SAT 520, New SAT* 550, 2-digit SAT 27.5** MCA 115B</td>
<td>OR</td>
<td>60</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Math 113</td>
<td>ACT 22, Old SAT 520, New SAT* 550, 2-digit SAT 27.5**</td>
<td>OR</td>
<td>60 AND 84</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Math 115</td>
<td>Act 23, Old SAT 530, New SAT* 540, 2-digit SAT 28**</td>
<td>OR</td>
<td>60 AND 96</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Math 121</td>
<td>ACT 24, Old SAT 560, New SAT* 580, 2-digit SAT 29**</td>
<td>OR</td>
<td>60 AND 84 AND 21</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Math 130</td>
<td>ACT 23, Old SAT 530, New SAT* 540, 2-digit SAT 28**</td>
<td>OR</td>
<td>60 AND 84</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Math 181</td>
<td>ACT 23, Old SAT 530, New SAT* 540, 2-digit SAT 28**</td>
<td>OR</td>
<td>60 AND 84</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Math 201</td>
<td>ACT 22, Old SAT 520, New SAT* 550, 2-digit SAT 27.5** MCA 114B</td>
<td>OR</td>
<td>60</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Stat 154</td>
<td>ACT 19, Old SAT 460, New SAT* 540, 2-digit SAT 25** MCA 114B</td>
<td>OR</td>
<td>60</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*2-digit SAT score is also called the SAT Math Composite Score

Procedures: Students may substitute for the above requirements based on documentation of:
1. equivalent or higher scores on standardized college admissions tests that report a separate mathematics sub-score within two calendar years;
2. successful completion of equivalent prior post-secondary education, such as course transfer evaluations or Cambridge International Examinations; or
The mission of the Mechanical Engineering Program at Minnesota State University, Mankato, is to provide a broad-based education that provides the graduate with many possibilities for a satisfying career.

Careers are also available in design and development organizations as well as in space, automotive, computer hardware and software, and processing industries. Typically, mechanical engineers are employed by the manufacturing, power, aerospace, automotive, computer hardware and software, and processing industries. Careers are also available in design and development organizations as well as in many federal and state agencies.

Preparation. Recommended high school preparation is one year each of precalculus (or equivalent), physics and chemistry. Without this background it may take longer than four years to earn the degree. Engineering drafting (CAD) and a computer language are also recommended.

The purpose of the policy is to place students in a course that is developmentally appropriate to help ensure their long term success. Data suggests students not meeting these guidelines have a higher likelihood of having to repeat a course.

Mechanical Engineering

College of Science, Engineering & Technology
Department of Mechanical and Civil Engineering
205 Traf ton Science Center E • 507-389-6383
Fax: 507-389-5002
Website: me.mnsu.edu

Chair: Patrick A. Tebbe P.E.


Mechanical Engineering (ME) is essential to a wide range of activities that include the research, design, development, manufacture, management, and control of engineering systems, subsystems, and their components. Mechanical engineers use the fundamentals of engineering mechanics, energy, thermal-fluid sciences, and materials sciences to design and analyze mechanical systems that perform useful tasks required by society. For example, mechanical engineers work with the design and function of machines, devices, and structures in the areas of manufacturing, processing, power generation, and transportation (air, land, sea, and space). As a result of rapidly expanding technology in recent years, mechanical engineers have become more versed in computer-aided design; robotics; bioengineering; environmental engineering; solar, wind, and ocean energy sources; and space exploration. The breadth of the field provides the graduate with many possibilities for a satisfying career.

Typically, mechanical engineers are employed by the manufacturing, power, aerospace, automotive, computer hardware and software, and processing industries. Careers are also available in design and development organizations as well as in many federal and state agencies.

Program Objectives. The mission of the Mechanical Engineering Program at Minnesota State University, Mankato, is to provide a broad-based education that will enable graduates to enter practice in the mechanical engineering profession, serving the needs of the State of Minnesota and the Nation.

Within a few years of graduation, graduates of the Mechanical Engineering Program at Minnesota State University, Mankato will be expected to:
- Meet or exceed the expectations of employers of mechanical engineers.
- Pursue their education with short courses, licensure programs, and/or postgraduate studies.
- Pursue leadership positions in their profession and/or communities.

The program mission and educational objectives are fully compatible with the mission of Minnesota State University, Mankato and the College of Science, Engineering, and Technology. Program objectives are monitored by the constituencies (the program's Industrial Advisory Board representing employers and alumni, students, and faculty of the program).

Other important features of the mechanical engineering program at Minnesota State University, Mankato include the following:
- Students are required to take the Fundamentals of Engineering exam in their senior year - a precursor to professional registration.
- Students are encouraged to work in engineering related areas for exposure to industrial practice. Internships are strongly recommended.
- Senior students must participate in a full academic year design experience working in a team similar to development teams in industry and government. Industrial sponsored projects are offered when available.

Preparation. Recommended high school preparation is one year each of precalculus (or equivalent), physics and chemistry. Without this background it may take longer than four years to earn the degree. Engineering drafting (CAD) and a computer language are also recommended.

MATH BS TEACHING
Degree completion = 120 credits

Required for General Education
MLTH 240 Drug Education (3)
MATH 121 Calculus I (4)

Major Common Core
MATH 122 Calculus II (4)
MATH 223 Calculus III (4)
MATH 247 Linear Algebra I (4)
MATH 290 Foundations of Mathematics (4)
MATH 316 Intermediate Analysis (3)
MATH 332 College Geometry (4)
MATH 345 Abstract Algebra I (4)
MATH 354 Concepts of Probability and Statistics (4)
MATH 375 Introduction to Discrete Mathematics (4)
MATH 483 Advanced Viewpoint of 5-8 School Mathematics (3)
MATH 484 Technology in 5-12 School Mathematics (3)
MATH 485 Teaching Secondary School Mathematics (3)
MATH 492 Mathematics Capstone Experience (3) OR
MATH 492W Mathematics Capstone Experience (3)

Other Graduation Requirements
See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

Required Minor: No.

COURSE DESCRIPTIONS SEE MATHEMATICS
A student who has failed to meet their Provisional or ENG 101 Composition (4) upper division course must follow a course in the same subject area as a course 300-level or above must be included in the 16 credit requirement. At least one to provide the measure of depth to the course of study, at least 3 credits at the again, (a), (b), and (c) must total at least 16 credits. the social science area 3 of which will be microeconomics or macroeconomics; economics, (b) at least 6 credits in the humanities area, and (c) at least 9 credits in the minimum requirements consist of (a) three credits of microeconomics or macro this requirement, the courses selected must provide both breadth and depth and Required Humanities and Social Science Courses (choose 3-4 credits) CMST 102 Public Speaking (3) ENG 271W Technical Communication (4) Prerequisites to the Major CHEM 191 Chemistry for Engineers (3) EE 230 Circuit Analysis I (3) EE 240 Evaluation of Circuits (1) MATH 121 Calculus I (4) MATH 122 Calculus II (4) MATH 223 Calculus III (4) MATH 321 Ordinary Differential Equations (4) ME 101 Introduction to Engineering - Mechanical (2) ME 103 Computer Graphics Communication (1) ME 201 Introduction to Problem Solving and Engineering Design (2) ME 203 Geometric Dimensioning and Tolerancing in Engineering Design (2) ME 212 Statics (3) ME 214 Dynamics (3) PHYS 221 General Physics I (4) PHYS 222 General Physics II (3) PHYS 232 General Physics II Laboratory (1) Major Common Core EE 244 Introduction to Digital Systems (2) ME 306 Materials Science [3] ME 223 Mechanics of Materials (3) ME 241 Thermodynamics (3) ME 291 Engineering Analysis (3) ME 321 Fluid Mechanics (3) ME 324 Heat Transfer (3) ME 329 Applied Thermodynamics (3) ME 333 Manufacturing Processes (3) ME 336 Mechanical Engineering Experimentation I (2) ME 341 Linear Systems [3] ME 417 Design of Machine Elements (3) ME 420 Computer Aided Engineering [3] ME 428 Design Project I (3) ME 436W Mechanical Engineering Experimentation II (2) ME 438W Design Project II (3) ME 463 Automatic Controls (3) ME 466W Mechanical Engineering Experimentation III (2) ME 492 Mechanical Engineering Seminar (1) Major Restricted Electives Choose 6 credits of mechanical engineering electives and 4 credits of math/ science electives. Mechanical Engineering Electives (choose 6 credits) Consult with your advisor for selection of mechanical engineering electives. Math/Science (choose 4 credits) BIOL 105 General Biology I (4) BIOL 105W General Biology I (4) CHEM 202 General Chemistry II (5) ENV 101 Perspectives in Environmental Science (4) MATH 247 Linear Algebra I (4) MATH 422 Partial Differential Equations (4) PHYS 223 General Physics III (3) PHYS 233 General Physics III Laboratory (1) Required Minor: None.

### COURSE DESCRIPTIONS

**ME 100 (1) Explorations in Engineering**

This course offers an introduction to the various disciplines of engineering and their relationship to the principles of physics and mathematics. Students are prepared for academic success and the transition into an engineering program. FALL GE-12

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**MECHANICAL ENGINEERING CONTINUED**

**MECHANICAL ENGINEERING BSME**

**Degree completion = 128 credits**

**Required General Education**

**Required Special General Education (23 credits)**

The Bachelor of Science in Mechanical Engineering degree does not adhere to the standard general education program required by other majors. Rather, it requires a special distribution of communication, humanities, and social science courses. Courses may be chosen to satisfy the university cultural diversity and writing intensive requirements concurrently.

**Required Humanities and Social Science Courses** (minimum of 16 credits) To satisfy this requirement, the courses selected must provide both breadth and depth and be limited to a selection of unrelated introductory courses. Each student should discuss with his/her mechanical engineering advisor the selection of courses to meet this requirement early in their academic career. A current list of acceptable courses is posted in the department office and on the department website. Specifically, the minimum requirements consist of (a) three credits of microeconomics or macroeconomics, (b) at least 6 credits in the humanities area, and (c) at least 9 credits in the social science area 3 of which will be microeconomics or macroeconomics; again, (a), (b), and (c) must total at least 16 credits.

To provide the measure of depth to the course of study, at least 3 credits at the 300-level or above must be included in the 16 credit requirement. At least one upper division course must follow a course in the same subject area as a course at the 100 or 200 level.

ENG 101 Composition (4)
ME 101 (2) Introduction to Engineering - Mechanical
To prepare students for a career in engineering with emphasis on mechanical; introduce the engineering fundamentals and the skills necessary to have a successful learning experience, and to prepare students for engineering education and profession through interactions with upper-class engineering students and practitioners. Prerequisite: MATH 113 or MATH 115 or MATH 121

ME 102 (1) Introduction to Engineering II
A continuation of ME 101 covering historical and global perspectives, engineering discipline and functions, professional aspects of engineering, ethical aspects of engineering, creativity and innovation, basics of personal computers-word processing and spreadsheets, introduction to problem solving. Variable

ME 103 (1) Computer Graphics Communication
Standards of graphics communication. Orthographic projections, dimensioning, tolerancing, section views. Extensive use of modern software to create engineering drawings. Introduction to solid modeling of parts and assemblies. This course includes laboratory component.

ME 203 (2) Geometric Dimensioning and Tolerancing in Engineering Design
This course is intended to provide the students with an understanding of the principles and methodologies of geometric dimensioning and tolerancing. Topics include: Datums, Material condition symbols, Tolerances of Form and profile, Tolerances of orientation and runout, location tolerances, and Virtual condition. This course includes laboratory component. Prerequisite: ME 103, ME 201

ME 201 (2) Introduction to Problem Solving and Engineering Design
This course has two main parts. Part one covers problem solving and fundamentals of programming including data types, decision making, repetitive loops, and arrays. Engineering applications requiring programming are included. Part two covers engineering design philosophy and methodology, communication skills, and teamwork. A design project is also included. Prerequisite: ME 101 Corequisite: ME 103, MATH 121 Fall, Spring

ME 212 (3) Statics
Resultants of force systems, equilibrium, analysis of forces acting on structural and machine elements, friction, second moments, virtual work. Prerequisite: PHYS 221 Fall, Spring

ME 214 (3) Dynamics
Kinematics and kinetics of particles, systems of particles and rigid bodies, work-energy, linear and angular impulse momentum, vibrations. Prerequisite: ME 212 Fall, Spring

ME 223 (3) Mechanics of Materials
Load deformation, stress, strain, stress-strain relationship, buckling, energy concepts, stress analysis of structural and machine elements. Prerequisite: ME 212 Fall, Spring

ME 240 (1) Building Systems Documentation
Communicating technical information about building systems including mechanical, electrical, and plumbing (MEP) systems. Students will learn to read and interpret mechanical plans as well as piping and instrumentation diagrams (P&ID). Prerequisites: ME 103 or instructor permission. Summer

ME 241 (3) Thermodynamics
Fundamental concepts of thermodynamics. Thermal properties of substances and state equations. Conservation of mass, first and second laws. Examples of applications to different engineering systems. Prerequisite: PHYS 221 Fall

ME 291 (1) MAX Scholar Seminar
This class provides MAX scholars with an opportunity to explore a set of topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Students will be required to participate in mentoring of lower division MAX scholarship recipients and provide written and oral presentations of various topics during the semester. This course may be repeated and will not count towards graduation requirements. Prerequisite: Recipient of a MAX scholarship or instructor consent. Fall, Spring

ME 297 (1-4) Internship
Fall

ME 299 (2) Thermal Analysis
Basic principles of thermodynamics, fluid mechanics, and heat transfer. First and second laws of thermodynamics and application to engineering systems and their design. Not for mechanical engineering major. Prerequisite: PHYS 221 with “C” (1.67) or better. Spring

ME 306 (3) Materials Science
Physical principles of elastic and plastic deformation of materials. Dislocation theory. Fatigue, creep, fracture, hardness, phase diagrams and other mechanical phenomena in materials. Ceramics and composite materials. Residual stresses. Lecture and lab demonstrations. Prerequisite: ME 223 Fall

ME 321 (3) Fluid Mechanics
Introduction to fluid properties, fluid statics, buoyancy, fluid kinematics, Bernoulli’s equation, control volume and differential approach to flow conservation equations, dimensional analysis, similarity, viscous flow in pipes, flow over immersed bodies, and pumps. Includes significant design component. Prerequisite: MATH 222, ME 214 Corequisite: ME 241 Fall

ME 324 (3) Heat Transfer

ME 329 (3) Applied Thermodynamics
Energy analysis and design of thermodynamic systems including power and refrigeration cycles. Thermodynamic relations. Application of thermodynamics to mixtures and solutions. Psychrometrics. Introduction to chemical thermodynamics. Third law of thermodynamics. Includes significant design component. Prerequisite: CHEM 191, ME 241 Spring

ME 333 (3) Manufacturing Processes
Introduction to manufacturing, tribology, casting, bulk deformation, sheet metal forming, material removal, joining, polymers, powder metals, ceramics, automation, integrated systems. Design for manufacture. Includes significant design component. Prerequisite: MATH 306, ME 223 Spring

ME 336 (2) Mechanical Engineering Experimentation I
Experiments in Mechanical Engineering, load-deformation, load-failure, fatigue, impact, hardness. Introduction to traditional machining and material processing. This course includes laboratory. Co-requisite: ME 333 Spring

ME 341 (3) Linear Systems
Analysis of linear systems in the time and frequency domains. Physical systems modeled and analyzed using time domain techniques. Fourier and Laplace Transforms. Prerequisite: EE 230, MATH 321, ME 214, PHYS 222 Co-requisite: ME 291 Fall
ME 398 (0) CPT: Co-Operative Experience
Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.
Prerequisite: ME 201. At least 60 credits earned; in good standing; instructor permission; co-op contract; other Prerequisites may also apply. Fall, Spring, Summer

ME 415 (3) Structural Analysis
Minimum design loads for buildings using ASCE 7 guidelines and load distribution. Analysis of determinate structural systems including the case of moving loads. Analysis of indeterminate structures using the flexibility and moment distribution methods. Use of software to enhance the analysis.
Prerequisite: ME 223
Fall

ME 416 (3) Thermal/Fluid Systems Design
The application of the principles of thermodynamics, fluid mechanics, and heat transfer to the design and analysis of selected energy systems of current interest, such as nuclear, solar, geothermal, and also conventional systems. Lecture and design projects.
Prerequisite: ME 324, ME 329
Variable

ME 417 (3) Design of Machine Elements
Application of principles of mechanics to the design of various machine elements such as gears, bearings, springs, rivets, welding. Stresses in mechanical elements. Design factors, fatigue, manufacturability. Lectures and design projects. Includes significant design content.
Prerequisite: ME 214, ME 223
Spring

ME 418 (3) Mechanical Systems Design
The application of mechanics to the design and analysis of motion and force transmitting systems. Optimum design. Includes significant design component.
Prerequisite: ME 417
Variable

ME 422 (3) Mechanics of Composite Materials
Introduce anisotropic mechanics theories, engineering application of various composite materials, mechanical behaviors and fabrication of composites, experimental and theoretical approach for composite designs, contemporary issues such as nano/micro-composites. Includes significant design component.
Prerequisite: ME 223

ME 424 (3) Analysis and Design of Heat Transfer Equipment
Analysis of heat and mass flow, design of heat exchangers and accompanying piping system. Methods of heat transfer enhancement, heat pipes. Includes significant design component.
Prerequisite: ME 324
Variable

ME 426 (3) Aerosol Theory and Technology
Introduction to the theory of aerosols and particulate systems. Properties, behavior, and physical principles of aerosols; including particle size statistics, Brownian motion and diffusion, and coagulation. Application in areas such as environmental systems, respiratory deposition, bioterrorism, and materials processing.

ME 428 (3) Design Project I
The first course in a two semester sequence that provides a complete design experience under professional guidance. The course covers: the product realization process, financial analysis, quality, patents, ethics and case studies. The students initiate a design project early in the semester to be completed in ME 438W.
Prerequisite: ME 324, ME 329, ME 333, ME 336, ME 341, ME 417
Fall

ME 429 (3) Energy Conversion
Methods of energy conversion. Topics may include hydroelectric, geothermal, wind and solar power generation, as well as unconventional methods of energy conversion. Term design problems.
Prerequisite: ME 324, ME 329
Variable

ME 431 (1) Building Information Modeling (BIM) for HVAC&R Engineers
Exploration of the principles and application of Building Information Modeling (BIM) in the HVAC&R industry. Course will include a practice project in the HVAC field using Autodesk Revit.
Prerequisite: Instructor permission
Summer

ME 432 (1) HVAC&R Systems and Applications
This course will focus on the typical HVAC&R systems and components in use today. Basic operation, advantages and disadvantages, as well as system integration will be discussed.
Prerequisite: ME 321, ME 324, ME 329
Or instructor permission
Summer

ME 433 (3) Design for Manufacturing and Assembly
This course introduces the concepts and roles of Design for Manufacturing and Assembly (DFMA) in product specification and standardization, design rules/principles for typical manufacturing and assembly (including manufacturing processes, analysis and approach towards robust design and manual and automatic/robotic assembly) processes, methods of material, shape and process selection, design for quality and reliability, design for manual/automatic (robotic) assembly, case studies on design for manufacturing and assembly with/without the aid of software.

ME 436W (2) Mechanical Engineering Experimentation II
Experimental and analytical studies of phenomena and performance of fluid flow, heat transfer, thermodynamics, refrigeration and mechanical power systems. This course includes laboratory component. Extensive writing component.
Prerequisite: ME 291, ME 324, ME 329
Fall

ME 438W (3) Design Project II
The second course of a two semester sequence providing a complete design experience and introduction to professional practice. This course includes: completion of the design project, design presentations, and the final design report. Students will prepare for and complete the Fundamentals of Engineering exam.
Prerequisite: ME 428
Spring

ME 439 (3) Heating Ventilating and Air Conditioning Design
Refrigeration cycles and equipment, refrigerant properties, heating and cooling loads, psychrometric analysis of air conditioning. Distribution of air conditioning medium and air quality as applied to design. Includes significant design component.
Prerequisite: ME 324, ME 329
Variable

ME 447 (3) Design of Machine Elements II
Application of principles of mechanics of materials and of material failure theories to the design and analysis of shafts, journal bearings, helical, bevel and worm gears, clutches, brakes, couplings, and flexible mechanical elements. Statistical considerations. Includes significant design content.
Prerequisite: ME 324, ME 329

ME 448 (3) Design of Machine Elements III
Application of principles of mechanics of materials and of material failure theories to the design and analysis of shafts, journal bearings, helical, bevel and worm gears, clutches, brakes, couplings, and flexible mechanical elements. Statistical considerations. Includes significant design content.
Prerequisite: ME 417
Spring

ME 450 (3) Finite Element Method
Energy and residual methods, 2D and 3D problems in stress analysis. Application of steady and transient heat flow, hydrodynamics, creeping flow. Includes significant design component.
Prerequisite: ME 223 and ME 324 or instructor consent
Variable

ME 463 (3) Automatic Controls
Analysis of control systems using the methods of Evans, Nyquist and Bode. Improvement of system performance by feedback compensation. Introduction to digital control. Includes significant design component.
Prerequisite: ME 341
Fall
ME 464 (3) Mechatronics
Synergistic combination of mechanical engineering, electronics, controls and programming in the design of mechatronic systems. Sensors, actuators and microcontrollers. Survey of the contemporary use of embedded microcontrollers in mechanical systems, case studies. Includes significant design component. Prerequisite: ME 417, ME 463 Spring

ME 466W (2) Mechanical Engineering Experimentation III
Experiments in vibrations: Motion measurement, force measurement, free vibration, frequency response, impact response, noise, signal processing. Experiments in control: system modelling and characterization in the time and frequency domains, feedback and compensation, PID control, control of velocity and position. This course includes laboratory. Extensive writing component. Prerequisite: ME 463 Spring

ME 466 (2) Mechanical Engineering Experimentation III
Experiments in vibrations: Motion measurement, force measurement, free vibration, frequency response, impact response, noise, signal processing. Experiments in control: system modelling and characterization in the time and frequency domains, feedback and compensation, PID control, control of velocity and position. This course includes laboratory. Extensive writing component. Prerequisite: ME 463 Spring

ME 491 (1-4) In-Service
Variable

ME 492 (1) Mechanical Engineering Seminar
To acquaint students with various engineering careers, various industries, and various societal and ethical problems.

Prerequisite: Senior standing in Mechanical Engineering
Co-requisite: ME 428 Spring

ME 493 (1) MAX Scholar Seminar
This class provides MAX scholars with an opportunity to explore a set of topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Students will be required to participate in mentoring of lower division MAX scholarship recipients and provide written and oral presentations of various topics during the semester. This course may be repeated and will not count towards graduation requirements. Prerequisite: Recipient of a MAX scholarship or instructor consent. Fall, Spring

ME 494 (1) Global Experience in Engineering and Technology
This class provides students pursuing a minor in “Global Solutions in Engineering and Technology” with an opportunity to explore a set of topics related to achieving success in advance of and following an international experience (internship, study abroad, etc.). Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Returning students will be required to participate in mentoring of students preparing for their international experience and provide written and/or oral presentations of various topics during the semester. This course is required both before and after participation in the international experience (min. 2 cr.). Variable

ME 497 (1-6) Internship
Variable

ME 499 (1-6) Individual Study
Variable

MEDICAL LABORATORY SCIENCE BS

Medical Laboratory Science
College of Science, Engineering & Technology
Department of Biological Sciences
242 Trafton Science Center S • 507-389-2417
Website: cset.mnsu.edu/biology/programs/ugrad/clsmt.html

Director: Lois Anderson MA

The four-year medical laboratory science curriculum leads to the degree of Bachelor of Science in medical laboratory science. The first three years are spent at the University. The fourth year is spent at one of the affiliated hospital schools of medical laboratory science. Upon successful completion of this year, the BS degree is awarded by the University and graduates are then eligible to take a certifying examination. Because the medical laboratory science curriculum closely parallels that of other majors, such as biology, students from other majors are encouraged to apply.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
Admission to Major is granted by the department. Minimum university admission requirements are:
- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 ("C").

Contact the department for application procedures. Students should contact the director of the Medical Laboratory Science program early in their college career for admission to the program, for academic and career counseling, and for information on the process and standards for admission to the professional curriculum, including registration procedures. Because enrollment in the fourth year is limited by the size of classes in the affiliated hospital schools, admission to the program does not ensure admission to the fourth year of the curriculum. Admission into the fourth-year hospital clinical internship is competitive. Students majoring in Medical Laboratory Science have an advisor from their area of interest assigned to them.

Prerequisite: Senior standing in Mechanical Engineering
Co-requisite: ME 428 Spring

ME 493 (1) MAX Scholar Seminar
This class provides MAX scholars with an opportunity to explore a set of topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Students will be required to participate in mentoring of lower division MAX scholarship recipients and provide written and oral presentations of various topics during the semester. This course may be repeated and will not count towards graduation requirements. Prerequisite: Recipient of a MAX scholarship or instructor consent. Fall, Spring

ME 494 (1) Global Experience in Engineering and Technology
This class provides students pursuing a minor in “Global Solutions in Engineering and Technology” with an opportunity to explore a set of topics related to achieving success in advance of and following an international experience (internship, study abroad, etc.). Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Returning students will be required to participate in mentoring of students preparing for their international experience and provide written and/or oral presentations of various topics during the semester. This course is required both before and after participation in the international experience (min. 2 cr.). Variable

ME 497 (1-6) Internship
Variable

ME 499 (1-6) Individual Study
Variable

Drug Screen Testing and Background Checks: Students may also be required to submit to Drug Screen Testing. Internship sites are required by law to do Background Checks on all students admitted to their medical laboratory science programs.
MEDICAL LABORATORY SCIENCES BS
Degree completion = 120 credits

Required General Education
BIOL 270 Microbiology (4)
CHEM 201 General Chemistry I (5)
(choose 4 credits)
MATH 112 College Algebra (4)
MATH 115 Precalculus Mathematics (4)
MATH 121 Calculus I (4)
(choose 4 credits)
BIOL 105 General Biology I (4)
BIOL 105W General Biology I (4)

Major Common Core
BIOL 106 General Biology II (4)
BIOL 175 Orientation to Clinical Laboratory Science (1)
BIOL 211 Genetics (4)
BIOL 220 Human Anatomy (4)
BIOL 330 Principles of Human Physiology (4)
BIOL 430 Hematology/Introduction to Immunology (4)
CHEM 202 General Chemistry II (5)
CHEM 322 Organic Chemistry I (4)
CHEM 323 Supplemental Organic Functional Group Chemistry (1)
CHEM 360 Principles of Biochemistry (4)

Major Restricted Electives
(choose 3 credits)
HLTH 475 Biostatistics (3)
STAT 154 Elementary Statistics (4)
(choose 30-39 credits)
Internship credits are determined in consultation with advisor.
MEDT 410 Clinical Hematology I (1-10)
MEDT 411 Clinical Immunohematology I (1-10)
MEDT 412 Clinical Immunology I (1-10)
MEDT 413 Clinical Chemistry I (1-10)
MEDT 414 Clinical Microbiology I (1-10)
MEDT 415 Clinical Microscopy I (1-10)
MEDT 416 Clinical Hematology II (1-10)
MEDT 417 Clinical Immunohematology II (1-10)
MEDT 418 Clinical Chemistry II (1-10)
MEDT 419 Clinical Microbiology II (1-10)
MEDT 420 Clinical Microscopy II (1-10)
MEDT 499 Individual Study (1-6)

CHOOSE 1 CLUSTER
Hennepin County Medical Center, Minneapolis, MN
BIOL 380 Blood Banking/Urinalysis (3)
BIOL 475 Medical Microbiology (4)
St. Luke’s Hospital, Cedar Rapids, IA / St. Luke’s College, Sioux City, IA / Mercy College of Health Science, Des Moines, IA / Sanford USD Medical Center, Sioux Falls, SD / New York Methodist Hospital, Brooklyn, NY / Mercy Medical Center, Sioux City, IA
BIOL 475 Medical Microbiology (4)

COURSE DESCRIPTIONS

MEDT 410 (1-10) Clinical Hematology I
Theory of blood cell formation; disease states; hemostasis, microscopic examination of blood/bone marrow films; practical experience with instruments and techniques which determine major hematologic and clotting parameters; quality control.

MEDT 411 (1-10) Clinical Immunohematology I
Major blood group systems; principles and procedures for antigen/antibody detection, identification; donor blood collection, preservation, processing, component therapy; transfusion reaction evaluation; Rh immune globulin; quality control.

MEDT 412 (1-10) Clinical Immunology I
Antigen/antibody structure function and interaction; basic principles and procedures of humoral and cellular immunology; performance and clinical correlation of serological testing; quality control.

MEDT 413 (1-10) Clinical Chemistry I
Identification and quantification of specific chemical substances in blood and body fluids by analytical techniques; clinical correlation with disease states; principles of instrumentation, data processing, toxicology; quality control.

MEDT 414 (1-10) Clinical Microbiology I
Theory and techniques of cultivation, isolation and identification of bacteria, fungi, parasites and viruses; determination of sensitivity to antimicrobial agents; clinical correlation to disease states, asepsis, environmental monitoring; quality control.

MEDT 415 (1-10) Clinical Microscopy I
Theory of renal function in health and disease; renal function tests including chemical and microscopic examination of urine; analysis of fecal specimens, gastric, spinal fluid and other body fluids; quality control.

MEDT 416 (1-10) Clinical Hematology II
A continuation of Clinical Hematology I

MEDT 417 (1-10) Clinical Immunohematology II
A continuation of Clinical Immunohematology I.

MEDT 418 (1-10) Clinical Chemistry II
A continuation of Clinical Chemistry I.

MEDT 419 (1-10) Clinical Microbiology II
A continuation of Clinical Microbiology I.

MEDT 420 (1-10) Clinical Microscopy II
A continuation of Clinical Microscopy I.

MEDT 499 (1-6) Individual Study
Related topics in medical technology.
The Military Science and Leadership Department offers a program enabling students/Cadets to compete for a commission as an officer in the United States Army, Army Reserve, or Army National Guard. University credit is awarded for the courses in the program, however, the Military Science program is not an academic major. Students must complete an academic major in another area in addition to the Military Science requirements. An academic minor in Military Science is available, however, the minor is limited to ROTC Cadets who have contracted with the United States Army.

The four-year Army ROTC curriculum develops the student’s leadership, managerial, and organizational abilities. Leadership skills acquired through ROTC and the practical application of skills provided in the program transfer easily to civilian career goals. ROTC graduates traditionally enter industrial and business career fields with a significant competitive edge.

The program consists of two parts: the basic course and the advanced course. The basic course usually occurs in the first year and sophomore year and students incur no military obligation. After completing the basic course, students may contract in the advanced course. In order to enroll, students must also sign a contract with the United States Army. Additionally, students with military basic training experience may receive advanced placement credit into the ROTC advanced course. The advanced course must be taken after students receive academic junior status. All Cadets receive uniforms and the necessary text books for military science classes. Also, all contracted Cadets will receive a living allowance of: $300 for MS I Cadets, $350 for MS II Cadets, $450 for MS III Cadets, and $500 for MS IV Cadets.

**MILITARY SCIENCE/ARMY ROTC**

**4-YEAR PROGRAM**

**Required for Program**
- HIST 478 American in Vietnam (4) OR
- MSL 252 The Evolution of American Warfare (3)
- MSL 101 Intro to the Army & Critical Thinking (1)
- MSL 102 Leadership & Decision Making (1)
- MSL 201 Leadership & Decision Making (2)
- MSL 202 Army doctrine & Team Development (2)
- MSL 301 Training Management & the Warfighting Function (3)
- MSL 302 Applied Leadership in Small Unit Operations (3)
- MSL 401 The Army Officer (3)
- MSL 402 Company Grade Leadership (3)

**2-YEAR PROGRAM**

**Required for Program**
- HIST 478 American in Vietnam (4) OR
- MSL 252 The Evolution of American Warfare (3)
- MSL 301 Training Management & the Warfighting Function (3)
- MSL 302 Applied Leadership in Small Unit Operations (3)
- MSL 401 The Army Officer (3)
- MSL 402 Company Grade Leadership (3)

**COURSE DESCRIPTIONS**

**MSL 101 (1) Intro to the Army & Critical Thinking**
Introduces Cadets to the personal challenges and competencies critical for effective leadership. Cadets learn how the personal development of life skills such as critical thinking, time management, goal setting, stress management, and comprehensive fitness relate to leadership, and the Army profession.

Fall

**MSL 102 (1) Intro to the Profession of Arms**
Cadets will learn how Army ethics and values shape the Army and the specific ways that these ethics are inculcated into Army culture. Cadets can expect to explore the seven Army Values, Warrior ethos, and to experience the Profession of Arms, Army Leadership and critical communication.

Spring

**MSL 150 (1) Leadership Lab**
This class is the associated leadership lab for the MSL classes. It is the hands-on portion where individual and collective military tasks are practiced and leadership lessons are applied. Students must be enrolled in ROTC to take this course.

Corequisite: MSL 101, MSL 102, MSL 201, MSL 202, MSL 299, MSL 301, MSL 302, MSL 401, MSL 402, MSL 499

Fall, Spring
MSL 201 (2) Leadership & Decision Making
Explores the dimensions of creative and innovative tactical leadership strategies and styles by examining team dynamics and two historical leadership theories that form the basis of the Army leadership framework. Aspects of personal motivation and team building are practiced planning, executing, and assessing team exercises. Fall

MSL 202 (2) Army Doctrine & Team Development
Examines the challenges of leading teams in the complex operational environment. The course highlights dimensions of terrain analysis, patrolling, and operation orders. Further study of the theoretical basis of the Army Leadership Requirements Model explores the dynamics of adaptive leadership in the context of military operations. Cadets develop greater self-awareness as they assess their own leadership styles and practice communication and team building skills. Spring

MSL 252 (3) The Evolution of American Warfare
This course is designed to provide an overview of American military history from the Revolutionary War to the present, with emphasis on the post World War I era. It examines the cause, conduct, consequences, and historical threads of military conflict. GE-5

MSL 277 (3) Cadet Professional Development Training (CPDT)
This course is devoted to the study and practical application of the Army profession and Army leadership development through firsthand service with real Army units on actual Army installations. Qualified Cadets compete for selection to attend one of 23 separate Army courses. Note: selection is very competitive and each course is managed by an Army chain of command. Fall, Spring

MSL 299 (1-8) Individual Study
This independent study course requires prior coordination with instructor once registered. This course will focus on leader self-development projects and study, designed to develop leader competencies and attributes. Fall, Spring

MSL 301 (3) Training Management & the Warfighting Function
Cadets will study, practice, and apply the fundamentals of Army Leadership, Officership, Army Values and Ethics, Personnel Development, and small unit tactics at the platoon level. At the conclusion of this course, Cadets will be capable of planning, coordinating, navigating, motivating and leading a squad and platoon in the execution of a mission during a classroom PE, a Leadership Lab, or during a Leader Training Exercise (LTX). Fall

MSL 302 (3) Applied Leadership in Small Unit Operations
Continuation of MSL 301 course. Spring Prerequisite: MSL 301

MSL 366 (3) Advanced Camp
This course is a rigorous and demanding 32-day internship held at Fort Knox, KY and is designed to develop and evaluate leadership ability and determine preparedness to become a commissioned Army officer. Cadets train in physically and mentally challenging situations to include land navigation, tactics, physical training, and drill and ceremony. Prerequisite: Limited to Cadets contracted with the US Army.

MSL 401 (3) The Army Officer
An advanced course that places primary emphasis on Officership with our MS IV Cadets who are our educational main effort; MS 401 and 402 together refine and ultimately complete the Cadet-to-commissioned officer transition. In MS 401 Mission Command and ethics is stressed along to assist the Cadet in further embracing their future role as an Army officer. Prerequisite: MSL 301, MSL 302 Fall

MSL 402 (3) Company Grade Leadership
The culmination of a four-year sequential, progressive, challenging developmental leadership experience. It is during this final semester that the Cadet is undergoing final preparation for the duties and responsibilities of a commissioned officer along with their integration into the Army. The emphasis is placed on critical knowledge, skills, abilities and competencies skills newly commissioned officers will need as a 2LT. Prerequisite: MSL 301, MSL 302 Spring

MSL 403 (1) Application of Physical Conditioning
Students plan, organize and lead individual and team oriented physical conditioning activities. These activities are geared toward the physical development and instruction of underclassmen. All Cadets will take a physical fitness test prior to the end of the semester. Limited to ROTC Cadets who executed an enlistment contract with the U.S. Army. Prerequisite: MSL 210 Fall, Spring

MSL 498 (3) Cultural Understanding and Language Proficiency Internship
Students will develop cultural awareness and foreign language proficiency skills through a one-month summer overseas immersion experience to one of 42 different countries. Internship will expose the student to culture and will intensify language study, which helps produce commissioned officers who possess the right blend of language and cultural skills required to support global operations in the 21st Century. Internship will focus on one of three immersion opportunities: military-to-military exchange, governmental or English Instruction. [MUST BE A CONTRACT ROTC CADET TO PARTICIPATE] Fall, Spring Diverse Cultures - Gold

MSL 499 (1-8) Individual Study
This independent study course requires prior coordination with instructor once registered. This course will focus on leader self-development projects and study, designed to develop leader competencies and attributes.
MUSIC BA AND MINOR

Music

College of Arts & Humanities
Department of Music
202 Earley Center for Performing Arts • 507-389-2118
Website: www.mnsu.edu/music/
Email: music@mnsu.edu
Chair: Douglas Snapp, DMA

Faculty: Gerard Aloisio DMA; David Dickau DMA; David Gadberry Ph.D; Dale Haefner MS; Aaron Humble DMA; John Lindberg Ph.D; Michael Olson DA; Joseph Rodgers DMA; Amy K Roisum Foley Ph.D; Stephanie Thorpe DMA; Michael Thursby MM; David Viscoli DMA

Music at Minnesota State Mankato

Following the University’s philosophy of “Real World Thinking”, the Department of Music prepares students for careers in multiple fields. The core music curriculum combines elements from Music Performance, Music Education, and Music Industry. In addition, our students develop marketable creative and critical thinking skills that serve them well in a variety of professions.

Accreditation: National Association of Schools of Music (NASM)

Music at Minnesota State Mankato

The Bachelor of Arts in Music is granted by the department in a two-step process.

Step One: Be admitted to music studies. Every new and transfer student will:
- Participate in an interview with a small group of faculty
- Present a formal application for admission to a specific music major
- Be accepted by a music faculty (including an autobiographical statement, detailing background and career goals)
- Be presented with a portfolio for review by music faculty
- Be granted admission to a specific music major
- Participate in an interview with a small group of faculty

If a student does not meet one or more of these standards, he/she may be admitted provisionally to a music major for one semester while deficiencies are addressed. In that semester, the student will be asked to resubmit his/her application. If any issues are unresolved, the student will be asked to choose another major.

Required for All Majors:
1. MUSC 103 Pop Music USA: R & B to MTV (3)
2. MUSP 101 Concert Choir (1)
3. MUSP 121 Maverick Wind Ensemble (1)

For details on these requirements see a Department of Music Advisor.

GPA Policy: Students must pass required courses under either a music major or the music minor with a grade of “C” or higher. Students on academic probation must consult with the department chair.

P/N Grading Policy: No P/N grades are accepted for required music courses except where course is only offered P/N.

Transfer students who wish to major or minor in music will be evaluated by appropriate music faculty for proper placement in the music curriculum. These students must fulfill all graduation requirements of the Department of Music in both academic and performance areas.

Residency: Music majors must earn at least half of their music credits (including two semesters of private study) at Minnesota State Mankato.

Prospective music majors and minors must audition in their major performing area prior to registration.

All students taking private lessons will pay a fee for the lessons each semester.

Students interested in pursuing a major in music must contact the department for an advising appointment and audition.

Private lessons incorporate the study of multiple musical genres as the student develops independent creative and critical thinking skills.

May be repeated. (auditions required – see Department of Music for information)

100-level: Study includes practical techniques; Exploration of the instrument; Application of technique; Healthy practices; Exploration of basic literature.

200-level: Preparation for gateway to upper level study (or capstone performance for minor): Explore and perform different musical styles and literature; Initiation of creative collaborative musicianship activities; Application of concepts from theory and aural skills; Expansion of performance techniques.

300-level: Initial preparations for capstone experience through performances and possible junior recital; Advanced techniques in pedagogy; Collaborative and independent musicianship developed; Introduction to entrepreneurial skills; Service or service-learning activities.

400-level: Prepare for capstone experience; Demonstrate mastery of musicianship skills through performance, conducting, arranging, collaboration and/or other creative activities; Perform in multiple musical genres; Demonstrate awareness of social/historical context of music through a written and/or oral presentation; Demonstrate entrepreneurial skills.

Guidelines for Music Ensembles.

100-level: Students demonstrate awareness of their responsibilities to the ensemble and director and how their part integrates into the larger ensemble; participate effectively in various artistic, educational, recreational and other settings; participate cooperatively in group artistic performances; Demonstrate growth in artistry, technical skills, collaborative competence and knowledge of repertory through regular ensemble experiences.

200-level: Students demonstrate basic leadership within the section; demonstrate mentorship to 100-level students; demonstrate initiative in developing as a soloist; participate effectively in various artistic, educational, recreational and other settings; participate cooperatively in group artistic performances; Demonstrate growth in artistry, technical skills, collaborative competence and knowledge of repertory through regular ensemble experiences.

300-level: Students demonstrate leadership within the section; demonstrate mentorship to 100- and 200-level students; demonstrate abilities as a soloist; participate effectively in various artistic, education, recreational and other settings; participate cooperatively in group artistic performances; Demonstrate growth in artistry, technical skills, collaborative competence and knowledge of repertory through regular ensemble experiences.

400-level: Demonstrate leadership for the ensemble as a whole. Serve as soloist; Demonstrate ability to assist conductor as needed with sectionals, rehearsals, chamber groups, etc.; Participate effectively in various artistic, education, recreational and other settings; Participate cooperatively in group artistic performances; Demonstrate growth in artistry, technical skills, collaborative competence and knowledge of repertory through regular ensemble experiences.

MUSIC BA

Degree completion = 120 credits

Required General Education

Goal Area B
MUSC 307 Music of the World (3)

Pop Music USA
Choose 3 Credits
MUSC 102 Pop Music USA: Jazz to Country to Blues (3)
MUSC 103 Pop Music USA: R & B to MTV (3)

Goal Area 11-Ensembles (1st Year) Choose 2 Credits
MUSP 101 Concert Choir (1)
MUSP 102 University Chorale (1)
MUSP 121 Maverick Wind Ensemble (1)
MUSP 122 Maverick Symphonic Band (1)
MUSP 123 University Orchestra (1)
MUSP 125 Jazz Mavericks (1)

Prerequisites to the Major
To be accepted into the major, a student must: 1) Meet university requirements (minimum of 30 earned credits, with a cumulative GPA of 2.0 or higher) 2) Have a "C" or better in all required music courses.

Major Common Core
MUSC 111 Music Theory 1 (2)
MUSC 112 Music Theory 2 (2)
MUSC 113 Musicianship 1 (2)
MUSC 116 Musicianship 2 (2)
MUSC 119 Class Piano 1 (1)
MUSC 190 Seminar in Music Careers (1)
MUSC 199 Admission to Major Interview (0)
MUSC 211 Music Theory 3 (2)
MUSC 212 Music Theory 4 (2)
MUSC 215 Musicianship 3 (1)
MUSC 216 Musicianship 4 (1)
MUSC 219 Class Piano 2 (1)
MUSC 220 Piano Proficiency (0)
MUSC 299 Upper Level Admission Assessment (0)
MUSC 301W Music History 1 (3)
MUSC 302W Music History 2 (3)
MUSC 320 Musicpreneurship (2)
MUSC 411 Form and Analysis (3)
MUSC 499 Senior Capstone Project or Recital (1)

Major Restricted Electives
Music Technology Choose 2 Credits
MUSC 129 Digital Music 1 (2)
MUSC 240 Music Technology (2)

Concert Attendance 8 Semesters required
MUSC 100 Concert Attendance (0)

Studio Class
Every semester that a student is enrolled in lessons, Studio Class is a required corequisite.
MUSP 150 Studio Class (0)

In-Service  Choose 2 Credits
2 Semesters (1 credit per semester)
MUSP 482 In-Service 1

Primary Ensemble (2nd Year) Choose 2 Credits
MUSP 201 Concert Choir 1
MUSP 202 University Chorale 1
MUSP 221 Maverick Wind Ensemble 1
MUSP 222 Maverick Symphonic Band 1
MUSP 223 University Orchestra 1
MUSP 225 Jazz Mavericks 1

Primary Ensemble (3rd Year) Choose 2 Credits
MUSP 301 Concert Choir 1
MUSP 302 University Chorale 1
MUSP 321 Maverick Wind Ensemble 1
MUSP 322 Maverick Symphonic Band 1
MUSP 323 University Orchestra 1
MUSP 325 Jazz Mavericks 1

Primary Ensemble (4th Year) Choose 2 Credits
MUSP 401 Concert Choir 1
MUSP 402 University Chorale 1
MUSP 421 Maverick Wind Ensemble 1
MUSP 422 Maverick Symphonic Band 1
MUSP 423 University Orchestra 1
MUSP 424 Jazz Mavericks 1

Additional Ensembles Choose 4 Credits
Pianists pursuing the Performance Emphasis are strongly encouraged to register for MUSP 215 and MUSP 315, Collaborative Piano.
MUSP 101 Concert Choir 1
MUSP 102 Class Piano 1
MUSP 103 Chamber Singers 1
MUSP 108 Contemporary Vocal Ensemble 1

MUSP 111 Music Productions to Stage and Screen (1)
MUSP 114 Vocal Ensemble (1)
MUSP 121 Maverick Wind Ensemble (1)
MUSP 122 Maverick Symphonic Band (1)
MUSP 123 University Orchestra (1)
MUSP 125 Jazz Mavericks (1)
MUSP 126 Contemporary Instrumental Ensemble (1)
MUSP 131 Maverick Machine Athletic Band (1)
MUSP 133 Percussion Ensemble (1)
MUSP 135 Theatre Orchestra (1)
MUSP 139 Instrumental Ensemble (1)
MUSP 201 Concert Choir 1
MUSP 202 University Chorale (1)
MUSP 203 Contemporary Vocal Ensemble (1)
MUSP 211 Music Productions for Stage and Screen (1)
MUSP 214 Vocal Ensemble (1)
MUSP 215 Collaborative Piano (1)
MUSP 221 Maverick Wind Ensemble (1)
MUSP 222 Maverick Symphonic Band (1)
MUSP 223 University Orchestra (1)
MUSP 225 Jazz Mavericks (1)
MUSP 226 Contemporary Instrumental Ensemble (1)
MUSP 233 Percussion Ensemble (1)
MUSP 235 Theatre Orchestra (1)
MUSP 239 Instrumental Ensemble (1)
MUSP 301 Concert Choir 1
MUSP 302 University Chorale (1)
MUSP 303 Chamber Singers (1)
MUSP 308 Contemporary Vocal Ensemble (1)
MUSP 311 Music Productions for Stage and Screen (1)
MUSP 314 Vocal Ensemble (1)
MUSP 315 Collaborative Piano (1)
MUSP 321 Maverick Wind Ensemble (1)
MUSP 322 Maverick Symphonic Band (1)
MUSP 323 University Orchestra (1)
MUSP 325 Jazz Mavericks (1)
MUSP 326 Contemporary Instrumental Ensemble (1)
MUSP 331 Maverick Machine Athletic Band (1)
MUSP 333 Percussion Ensemble (1)
MUSP 335 Theatre Orchestra (1)
MUSP 339 Instrumental Ensemble (1)
MUSP 401 Concert Choir 1
MUSP 402 University Chorale (1)
MUSP 403 Chamber Singers (1)
MUSP 408 Contemporary Vocal Ensemble (1)
MUSP 411 Music Productions for Stage and Screen (1)
MUSP 414 Vocal Ensemble (1)
MUSP 421 Maverick Wind Ensemble (1)
MUSP 422 Maverick Symphonic Band (1)
MUSP 423 University Orchestra (1)
MUSP 426 Contemporary Instrumental Ensemble (1)
MUSP 428 Percussion Ensemble (1)
MUSP 435 Theatre Orchestra (1)
MUSP 439 Instrumental Ensemble (1)

Lessons (1st Year) Choose 2 Credits
All lessons should be in the same performance area. Please see music advisor for more information.
MUSP 151 Private Voice 1 (1)
MUSP 152 Introduction to Vocal Studies (1)
MUSP 155 Private Piano 1 (1)
MUSP 156 Private Harpsichord 1 (1)
MUSP 157 Private Organ 1 (1)
MUSP 161 Private Trumpet 1 (1)
MUSP 162 Private Horn 1 (1)
MUSP 163 Private Trombone 1 (1)
MUSP 164 Private Euphonium 1 (1)
MUSP 165 Private Tuba 1 (1)
MUSP 171 Private Violin 1 (1)
MUSP 172 Private Viola 1 (1)
MUSP 173 Private Cello 1 (1)
MUSP 174 Private Double Bass 1 (1)
MUSP 176 Private Classical Guitar 1 (1)
MUSP 178 Private Electric Guitar 1 (1)
A minor (such as one in Non-Profit Leadership or Entrepreneurship) is recommended. Additional 18-20 credits of electives in a BA in Music with a Performance emphasis can be earned through electives, or additional ensemble participation. There are an additional 4-6 credits of upper division courses. These can be accomplished through Additional Ensembles.

Lessons (3rd Year) Choose 2 - 6 Credits
Students pursuing a Performance Emphasis register for 3-credit lessons each semester; students pursuing other emphases register for 1-credit lessons.

MUSP 179 Private Electric Bass 1 (1)
MUSP 181 Private Flute 1 (1)
MUSP 182 Private Oboe 1 (1)
MUSP 183 Private Clarinet 1 (1)
MUSP 184 Private Saxophone 1 (1)
MUSP 185 Private Bassoon 1 (1)
MUSP 186 Private Percussion 1 (1, 3)
MUSP 191 Private Instrument 1 (0, 1)

Lessons (2nd Year) Choose 2 - 6 Credits
Students pursuing a Performance Emphasis register for 3-credit lessons each semester; students pursuing other emphases register for 1-credit lessons.

MUSP 251 Private Voice 2 (1, 3)
MUSP 255 Private Piano 2 (1, 3)
MUSP 256 Private Harpsichord 2 (1, 3)
MUSP 257 Private Organ 2 (1, 3)
MUSP 261 Private Trumpet 2 (1, 3)
MUSP 262 Private Horn 2 (1, 3)
MUSP 263 Private Trombone 2 (1, 3)
MUSP 264 Private Euphonium 2 (1, 3)
MUSP 265 Private Tuba 2 (1, 3)
MUSP 271 Private Violin 2 (1, 3)
MUSP 272 Private Viola 2 (1, 3)
MUSP 273 Private Cello 2 (1, 3)
MUSP 274 Private Double Bass 2 (1, 3)
MUSP 276 Private Classical Guitar 2 (1, 3)
MUSP 278 Private Electric Guitar 2 (1, 3)
MUSP 279 Private Electric Bass 2 (1, 3)
MUSP 281 Private Flute 2 (1, 3)
MUSP 282 Private Oboe 2 (1, 3)
MUSP 283 Private Clarinet 2 (1, 3)
MUSP 284 Private Saxophone 2 (1, 3)
MUSP 285 Private Bassoon 2 (1, 3)
MUSP 286 Private Percussion 2 (1, 3)
MUSP 291 Private Instrument 2 (1, 3)

Lessons (1st Year) Choose 2 - 6 Credits
Students pursuing a Performance Emphasis register for 3-credit lessons each semester; students pursuing other emphases register for 1-credit lessons.

MUSP 351 Private Voice 3 (1, 3)
MUSP 355 Private Piano 3 (1, 3)
MUSP 356 Private Harpsichord 3 (1, 3)
MUSP 357 Private Organ 3 (1, 3)
MUSP 358 Private Contemporary Commercial Voice 3 (1, 3)
MUSP 361 Private Trumpet 3 (1, 3)
MUSP 362 Private Horn 3 (1, 3)
MUSP 363 Private Trombone 3 (1, 3)
MUSP 364 Private Euphonium 3 (1, 3)
MUSP 365 Private Tuba 3 (1, 3)
MUSP 371 Private Violin 3 (1, 3)
MUSP 372 Private Viola 3 (1, 3)
MUSP 373 Private Cello 3 (1, 3)
MUSP 374 Private Double Bass 3 (1, 3)
MUSP 376 Private Classical Guitar 3 (1, 3)
MUSP 378 Private Electric Guitar 3 (1, 3)
MUSP 379 Private Electric Bass 3 (1, 3)
MUSP 381 Private Flute 3 (1, 3)
MUSP 382 Private Oboe 3 (1, 3)
MUSP 383 Private Clarinet 3 (1, 3)
MUSP 384 Private Saxophone 3 (1, 3)
MUSP 385 Private Bassoon 3 (1, 3)
MUSP 386 Private Percussion 3 (1, 3)
MUSP 391 Private Instrument 3 (1, 3)

Major Emphasis: Performance
Students pursuing this emphasis are to take 3-credit lessons in their Sophomore, Junior, and Senior years of study.

Pianists and singers will need at least 2 additional credits of upper division credits - this can easily be accomplished through Additional Ensembles.

Instrumentalists will need at least 4 more credits in upper division courses. These can be earned through electives, or additional ensemble participation. There are an additional 18-20 credits of electives in a BA in Music with a Performance emphasis. A minor (such as one in Non-Profit Leadership or Entrepreneurship) is recommended.

MUSC 261 Introduction to Conducting (1)

Lessons (4th Year) Choose 6 Credits
MUSP 451 Private Voice 4 (3)
MUSP 455 Private Piano 4 (3)
MUSP 456 Private Harpsichord 4 (3)
MUSP 457 Private Organ 4 (3)
MUSP 461 Private Trumpet 4 (3)
MUSP 462 Private Horn 4 (3)
MUSP 463 Private Trombone 4 (3)
MUSP 464 Private Euphonium 4 (3)
MUSP 465 Private Tuba 4 (3)
MUSP 471 Private Violin 4 (3)
MUSP 472 Private Viola 4 (3)
MUSP 473 Private Cello 4 (3)
MUSP 474 Private Double Bass 4 (3)
MUSP 476 Private Classical Guitar 4 (3)
MUSP 478 Private Electric Guitar 4 (3)
MUSP 479 Private Electric Bass 4 (3)
MUSP 481 Private Flute 4 (3)
MUSP 482 Private Oboe 4 (3)
MUSP 483 Private Clarinet 4 (3)
MUSP 484 Private Saxophone 4 (3)
MUSP 485 Private Bassoon 4 (3)
MUSP 488 Private Percussion 4 (1, 3)
MUSP 491 Private Instrument 4 (1, 3)

Pedagogy and Literature
Percussion, Wind, and String Instruments
MUSC 471 Instrumental Pedagogy & Literature (2)

Voice
MUSC 353 Diction for Singers (1)
MUSC 451 Vocal Literature (3)
MUSC 452 Vocal Pedagogy (1)

Piano
MUSC 455 Piano Pedagogy (1)
MUSC 456 Piano Literature (3)

Major Emphasis: Music Leadership
This emphasis prepares the graduate for community music-making in a secular setting, including community music-making, conducting, music with children, and studies in piano, guitar, and voice. Please work closely with your advisor.

MUSC 247 Guitar Pedagogy and Techniques (1)
MUSC 261 Introduction to Conducting (1)
MUSC 340 Music Methods for the Elementary Classroom (2)
MUSP 151 Private Voice 1 (1)
MUSP 152 Introduction to Vocal Studies (1)
MUSP 155 Private Piano 1 (1)
MUSP 176 Private Classical Guitar 1 (1)
MUSP 317 Small Vocal Ensemble and Solo Accompanying (1)

Recommended General Education Courses:

Recommended Minor:
Psychology, including two of the following courses (8 credits):
PSYC 433 Child Psychology;
PSYC 436 Adolescent Psychology;
PSYC 466 Psychology of Aging

Additional Recommended Electives:
BIOL 220 Human Anatomy [4]

Major Emphasis: Entrepreneurship
In addition to the music courses above, add a minor in Entrepreneurship or Non-Profit Leadership (18-21 credits, including enough upper division courses to meet the 40-credit upper division graduation requirement). An additional 13-16 credits remain as electives.

Other Graduation Requirements
Choose 8 credit(s): take one Language
### Music Minor

**Core**
- MUSC 111 Music Theory 1 (2)
- MUSC 112 Music Theory 2 (2)
- MUSC 115 Musicianship 1 (2)
- MUSC 116 Musicianship 2 (2)
- MUSC 301W Music History 1 (3)
- MUSC 302W Music History 2 (3)
- MUSP 299 Sophomore Recital/Project (0)

**Elective**
Concert Attendance-2 semesters required
- MUSC 100 Concert Attendance (0)

#### 1st Year-Private Lessons
**Choose 2 Credits**
- MUSP 151 Private Voice 1 (1)
- MUSP 152 Introduction to Vocal Studies (1)
- MUSP 155 Private Piano 1 (1)
- MUSP 156 Private Harpsichord 1 (1)
- MUSP 157 Private Organ 1 (1)
- MUSP 161 Private Trumpet 1 (1)
- MUSP 162 Private Horn 1 (1)
- MUSP 163 Private Trombone 1 (1)
- MUSP 164 Private Euphonium 1 (1)
- MUSP 165 Private Tuba 1 (1)
- MUSP 171 Private Violin 1 (1)
- MUSP 172 Private Viola 1 (1)
- MUSP 173 Private Cello 1 (1)
- MUSP 174 Private Double Bass 1 (1)
- MUSP 176 Private Classical Guitar 1 (1)
- MUSP 178 Private Electric Guitar 1 (1)
- MUSP 179 Private Electric Bass 1 (1)
- MUSP 181 Private Flute 1 (1)
- MUSP 182 Private Oboe 1 (1)
- MUSP 183 Private Clarinet 1 (1)
- MUSP 184 Private Saxophone 1 (1)
- MUSP 185 Private Bassoon 1 (1)
- MUSP 186 Private Percussion 1 (1, 3)
- MUSP 191 Private Instrument 1 (1, 3)

#### 2nd Year-Private Lessons
**Choose 2 Credits**
- MUSP 251 Private Voice 2 (1)
- MUSP 255 Private Piano 2 (1)
- MUSP 256 Private Harpsichord 2 (1)
- MUSP 257 Private Organ 2 (1)
- MUSP 261 Private Trumpet 2 (1)
- MUSP 262 Private Horn 2 (1)
- MUSP 263 Private Trombone 2 (1)
- MUSP 264 Private Euphonium 2 (1)
- MUSP 265 Private Tuba 2 (1)
- MUSP 271 Private Violin 2 (1)
- MUSP 272 Private Viola 2 (1)
- MUSP 273 Private Cello 2 (1)
- MUSP 274 Private Double Bass 2 (1)
- MUSP 276 Private Classical Guitar 2 (1)
- MUSP 278 Private Electric Guitar 2 (1)
- MUSP 279 Private Electric Bass 2 (1)
- MUSP 281 Private Flute 2 (1)
- MUSP 282 Private Oboe 2 (1)
- MUSP 283 Private Clarinet 2 (1)
- MUSP 284 Private Saxophone 2 (1)
- MUSP 285 Private Bassoon 2 (1)
- MUSP 286 Private Percussion 2 (1, 3)
- MUSP 291 Private Instrument 2 (1, 3)

**Ensembles**
**Choose 4 Credits**
- MUSP 101 Concert Choir (1)
- MUSP 102 University Chorale (1)
- MUSP 103 Chamber Singers (1)
- MUSP 108 Contemporary Vocal Ensemble (1)
- MUSP 111 Music Productions for Stage and Screen (1)
- MUSP 114 Vocal Ensemble (1)

- MUSP 121 Maverick Wind Ensemble (1)
- MUSP 122 Maverick Symphonic Band (1)
- MUSP 123 University Orchestra (1)
- MUSP 125 Jazz Mavericks (1)
- MUSP 126 Contemporary Instrumental Ensemble (1)
- MUSP 131 Maverick Machine Athletic Band (1)
- MUSP 133 Percussion Ensemble (1)
- MUSP 135 Theatre Orchestra (1)
- MUSP 139 Instrumental Ensemble (1)
- MUSP 201 Concert Choir (1)
- MUSP 202 University Chorale (1)
- MUSP 203 Chamber Singers (1)
- MUSP 208 Contemporary Vocal Ensemble (1)
- MUSP 211 Music Productions for Stage and Screen (1)
- MUSP 214 Vocal Ensemble (1)
- MUSP 221 Maverick Wind Ensemble (1)
- MUSP 222 Maverick Symphonic Band (1)
- MUSP 223 University Orchestra (1)
- MUSP 226 Contemporary Instrumental Ensemble (1)
- MUSP 233 Percussion Ensemble (1)
- MUSP 235 Theatre Orchestra (1)
- MUSP 235 Jazz Mavericks (1)
- MUSP 239 Instrumental Ensemble (1)

**General Education Literature Classes**
**Choose 3 Credits**
- MUSC 101 Introduction to Music (3)
- MUSC 102 Pop Music USA: Jazz to Country to Blues (3)
- MUSC 103 Pop Music USA: R & B to MTV (3)
- MUSC 120 Music Money and Success (3)
- MUSC 209 Music Travel Tour (1-3)

**Course Descriptions**

**MUSC 100 (0) Concert Attendance**
- Required for all undergraduate music majors each semester in residence.
- May be repeated. P/N only.

**MUSC 101 (3) Introduction to Music**
A general course in music appreciation. This course includes a study of styles at different periods, musical forms, and information about composers with emphasis on the elements of music and how these elements have evolved through history.

- Fall: Spring
- GE-6

**MUSC 102 (3) Pop Music USA: Jazz to Country to Blues**
- Popular music is a multi-billion dollar industry today. What is it, and where did it come from? Learn about the origins of jazz in the music of African-Americans, its growth from Dixieland through the Big Band era (with the contributions of performers like Louis Armstrong and Duke Ellington) to its influences on musical styles in the present day.
- Fall: On Demand: Summer
- GE-6, GE-7
- Diverse Cultures - Purple

**MUSC 103 (3) Pop Music USA: R & B to MTV**
- Rock music has fans in every country and in every culture. It really is a “universal” language, but it didn’t start that way. It began as black rhythm and blues in the 40’s, and through to the present, minority groups have had a major influence on the music.
- Spring: On Demand: Summer
- GE-6, GE-7
- Diverse Cultures - Purple

**MUSC 110 (3) Fundamentals of Music**
- Notation, basic keyboard skills.

**MUSC 111 (2) Music Theory 1**
- Part I of a four semester sequence in Music Theory focusing on written music notation skills including scales, tonality, key modes, intervals, transposition, chords, cadences, non-harmonic tones and melodic organization.

**MUSC 112 (2) Music Theory 2**
- Part II of a four semester sequence in Music Theory focusing on written music notation skills including scales, tonality, key modes, intervals, transposition, chords, cadences, non-harmonic tones and melodic organization.
- Spring
- Prerequisite: MUS 131

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MUSIC CONTINUED

MUSC 115 (2) Musicianship 1
Part I of the four semester sequence focusing on sight-singing and ear training.
Fall

MUSC 116 (2) Musicianship 2
Part II of the four semester sequence focusing on sight-singing and ear training.
Spring

MUSC 119 (1) Class Piano 1
Class instruction in keyboard. No experience with the keyboard is required. Functional skills, including technique, scales and chord progressions, solo playing, and ensemble playing are all incorporated. Assignments are made based upon the student’s major and interests.
Music majors only. Permission of Instructor required.
Fall, Spring

MUSC 120 (3) Survey of American Popular Music
A survey of commercially successful popular music from roughly 1900 to the present—what was the music? Who were the artists? When was it first heard, and what were the factors that contributed to its success?
Fall

MUSC 121 (2) Foundations in Music Industry
A survey of career opportunities in Music Industry.
Spring

MUSC 122 (3) Introduction to the Music Industry
This course is designed to provide an introduction of the organizational structures and current practices of the modern music industry with historical perspective for the music business and recording technology student.

MUSC 129 (2) Digital Music 1
An introductory course in musical creativity using technology, audio recording, and computer based music. Explore basic audio processing, routing, and live sound design, and creative projects that draw from experimental cinema, electroacoustics, EDM, and contemporary music. You don’t have to be able to read music to take this class.
Fall

MUSC 190 (1) Seminar in Music Careers
This course will provide an overview of various music careers and will examine the attitudes and behaviors of successful professional musicians.
Fall

MUSC 199 (0) Admission to Major Interview
Interview for admission to the music major. See your advisor for details.
Fall, Spring

MUSC 209 (1-3) Music Travel Tour
Prepare for, and participate in, a musical tour. Destinations will vary with each offering, and may include international experiences. Prior to travel, class sessions will deal with the music and culture of the destination. There will be additional travel expenses associated with the class. This class may be repeated for credit.
On Demand: Fall, Spring, Summer
GE-6

MUSC 210 (2) Music Theory 3
Part II of a four semester sequence in Music Theory focusing on written music notation skills.
Fall

MUSC 212 (2) Music Theory 4
Part IV of a four semester sequence in Music Theory focusing on written music notation skills.
Spring

MUSC 215 (1) Musicianship 3
Part III of the four semester sequence focusing on sight-singing and ear training.
Fall

MUSC 216 (1) Musicianship 4
Part IV of the four semester sequence focusing on sight-singing and ear training.
Spring

MUSC 217 (1) Jazz Pedagogy and Improvisation
Introduction to the basic concepts of jazz pedagogy/theory and improvisation used in teaching and playing jazz and contemporary music.
Spring

MUSC 219 (1) Class Piano 2
A continuation of MUSC 119, Class Piano 1. Mastery of those skills (technique, scales and chord progressions, solo playing, and ensemble playing) are demonstrated over the semester.
Prerequisite: MUSC 119
Fall, Spring

MUSC 220 (0) Piano Proficiency
This assessment will determine basic proficiency in playing functional and classical piano.
Fall, Spring

MUSC 221 (1) Activity in Music Industry
This course will allow students to gain experience working in the Music Industry area. This course must be taken for two semesters to receive proper credit.
Fall, Spring

MUSC 222 (2) Social Media in the Music Industry
This course will examine current and potential professional marketing uses of social media in the music industry, including fan-base communication/building, concert promotion, and sales of music and merchandise.
Spring

MUSC 230 (3) Songwriting 1
Songwriting 1 is a course designed to explore the analytical structure of songs: from their conception to production. Students examine a variety of songs, and participate in songwriting, production, and analytical exercises.
Prerequisite: MUSC 111, MUSC 112
Fall

MUSC 240 (2) Music Technology
Technology applications for the K-12 music educator.
Fall

MUSC 241 (1) Brass Pedagogy and Techniques
Instrumental music education majors only. Emphasis on pedagogical methods and techniques of individual instruments.
Odd years: Fall

MUSC 242 (1) String Pedagogy and Techniques
Instrumental music education majors only. Emphasis on pedagogical methods and techniques of individual instruments.
Even years: Fall

MUSC 243 (1) Guitar Pedagogy and Techniques
Instrumental music education majors only. Emphasis on pedagogical methods and techniques of individual instruments.
Odd years: Fall

MUSC 244 (1) Percussion Pedagogy and Techniques
Instrumental music education majors only. Emphasis on pedagogical methods and techniques of individual instruments.
Even years: Fall

MUSC 245 (1) Woodwind Pedagogy and Techniques
Instrumental music education majors only. Emphasis on pedagogical methods and techniques of individual instruments.
Odd years: Spring

MUSC 247 (1) Music Technology
The basics of establishing and maintaining a guitar ensemble or program in a school situation.
On Demand: Fall, Spring

MUSC 248 (1) Woodwind Pedagogy and Techniques
Instrumental music education majors only. Emphasis on pedagogical methods and techniques of individual instruments.
Odd years: Spring

MUSC 249 (1) Piano Pedagogy and Techniques
Instrumental music education majors only. Emphasis on pedagogical methods and techniques of individual instruments.
Even years: Spring

MUSC 250 (2) Music Technology
Technology applications for the K-12 music educator.
Fall

MUSC 251 (2) Music Theory 3
Part II of a four semester sequence in Music Theory focusing on written music notation skills.
Fall

MUSC 252 (2) Music Theory 4
Part IV of a four semester sequence in Music Theory focusing on written music notation skills.
Spring

MUSC 253 (1) Musicianship 3
Part III of the four semester sequence focusing on sight-singing and ear training.
Fall

MUSC 254 (1) Musicianship 4
Part IV of the four semester sequence focusing on sight-singing and ear training.
Spring

MUSC 255 (1) Jazz Pedagogy and Improvisation
Introduction to the basic concepts of jazz pedagogy/theory and improvisation used in teaching and playing jazz and contemporary music.
Spring

MUSC 299 (0) Upper Level Admission Assessment
Prior to admission to 300- and 400-level classes, students are assessed by a cohort of music faculty. The assessment includes a review of academic progress, and a presentation or performance before the music faculty. For more information, please see your academic advisor.
Permission required.
GE-13
MUSC 301W (3) Music History 1
This writing-intensive course focuses on the repertory of Western Music from pre-history through 1800. It examines the ways that culture and patronage impacted music developments, and focuses on techniques appropriate to research, including finding, evaluating, and using sources.
Prerequisite: ENG 101, MUS 131
Fall

MUSC 302W (3) Music History 2
This writing-intensive course focuses on the repertory of Western Music from 1800 to the present. It examines the ways that culture and patronage impacted music developments, and focuses on techniques appropriate to research, including finding, evaluating, and using sources.
Prerequisite: ENG 101, MUS 131
Spring

MUSC 303 (2) Music Styles for the Music Educator 1
Musical styles of western culture prior to 1800. There is a particular focus on developing the skills for teaching the content in K-12 teaching.
Prerequisite: MUS 231, MUS 232, ENG 101
Fall

MUSC 304 (2) Music Styles after 1800 for the Music Educator
Musical styles of western culture after 1800. There is a particular focus on developing the skills for teaching the content in K-12 teaching.
Prerequisite: MUS 231, MUS 232, ENG 101
Spring

MUSC 308 (3) Women in Music
This course explores the role of women composers, performers, educators and administrators in Western art music.
On Demand: Fall, Spring
GE-6

MUSC 309W (3) Music Travel Tour
Prepare for, and participate in a musical tour. Destinations will vary with each offering, and may include international experiences. Prior to travel, class sessions will deal with the music and culture of the destination. There will be additional travel expenses associated with the class.
On Demand: Fall, Spring, Summer
Prerequisite: ENG 101
GE-6

MUSC 320W (2) Musicpreneurship
In this course music majors will learn how to market themselves, create their own brand and lay the groundwork for their post-college careers. The course will cover the basics of self-representation, bio writing, resume building, networking, self-promotion, professional communications and presentations, e-portfolios, social media and other strategies used by professional musicians.

MUSC 321 (1) Practicum in Music Industry
This course will allow students to gain experience in working in the Music Industry field in a supervisory or administrative role. This course must be taken for two semesters to receive proper credit.
Fall, Spring

MUSC 325 (3) Music Management and Concert Production
This course is designed to acquaint and give specific knowledge with regards to managing a concert production, working with promoters, finding artists, and creating and negotiating contracts.
Fall

MUSC 330 (3) Songwriting 2
Songwriting II is a course that examines advanced aspects of songwriting composition and production. Topics include production-oriented songwriting analysis and composition and lead-sheet design.
Even Years: Spring
Prerequisite: MUSC 111, MUSC 112

MUSC 331 (3) Electronic Orchestration
Electronic Orchestration is a course that explores electronic sound design, synthesis, and production techniques.
Even Years: Spring

MUSC 340 (2) Materials and Methods of Teaching Music
Kindergarten and elementary grades. For elementary education majors only.
Fall, Spring, Summer

MUSC 341 (2) General Music K-5
Required of all music education majors. Techniques and methods leading to licensure to teach General Music K-5. Music majors only.
On Demand: Fall, Spring

MUSC 342 (2) General Music 6-12
Required of all music education majors. Techniques and methods leading to licensure to teach General Music in grades 6-12. Music majors only.
On Demand: Fall, Even Years: Spring

MUSC 353 (1) Diction for Singers
Applying the International Phonetic Alphabet to song texts in English, French, Italian, Spanish and German.
On Demand: Fall, Even Years: Spring

MUSC 402 (3) Music of the Renaissance
An intensive examination of the music of Western Civilization from 1450-1600.
On Demand: Fall, Spring

MUSC 403 (3) Music of the Baroque Era
An intensive investigation of the music written from 1600-1750.
On Demand: Fall, Spring, Summer

MUSC 404 (3) Music of the Classic Period
Music of the age of Haydn, Mozart, and Beethoven.
On Demand: Fall, Spring

MUSC 405 (3) Music of the 19th Century
An intensive study of Romanticism in music.
On Demand: Fall, Spring, Summer

MUSC 406 (3) Music of the Modern Era
Music since 1900.
On Demand: Fall, Spring, Summer

MUSC 411 (3) Form and Analysis
Significant musical forms, past and present.
Spring

MUSC 412 (1-3) Composition
An independent study in compositional techniques.
Prerequisite: Consent
On Demand: Fall, Spring

MUSC 414 (3) Arranging (instrumentation/orchestration)
Writing techniques for instrumental groups of various types.
On Demand: Fall, Spring

MUSC 415 (2) Choral Arranging
Arranging music for choral ensembles.
On Demand: Fall, Spring

MUSC 416 (3) Contrapuntal Techniques
Writing and analyzing 2-part, 3-part, and 4-part counterpoint.
On Demand: Fall, Spring

MUSC 421 (3) Project Development in the Music Industry
Class and/or individual projects for music industry majors only.
Fall

MUSC 424 (3) Music Promotion
This course is designed to acquaint the student with the areas of promoting and marketing of themselves, someone else as a performer, and their company.
Spring

MUSC 425 (3) Music in the Marketplace
This course is interdisciplinary in nature and designed to give students an overview of many aspects of the Music Industry including music publishing, copyright, public relations, audience development, financial management, fundraising, donor development, and grant writing.
Spring
MUSC 426 (2) Legal Aspects of the Music Industry
This class will cover the legal systems, legal reasoning statutes and contracts that impact the music industry. Emphasis will be on copyright, publishing and recording agreements. Prerequisite: MUS 298
Spring

MUSC 428 (3) Music Licensing for Film, TV and Games
In an industry where record sales are on the decline, music publishing and licensing is on the rise. Student will learn the theory, process and practice of licensing music for films, television shows, commercials and video games using a variety of letters, forms and contracts. Prerequisite: MUSC 426, Mus 484
Spring

MUSC 430 (1) Music Industry Composition Seminar
Music Industry Composition Seminar is a composition class for advanced music industry and composition students. Topics include artistic critiques, song form analysis, and production topics. Fall, Spring

MUSC 431 (3) Film Scoring and Multimedia
Film Scoring and Multimedia is a course that examines historical trends in film scoring, from orchestral scores to electronic scoring. Students will be able to work with both audio and visual components, developing their own visual material, and create short electronic film scores using common electronic synthesis techniques. Prerequisite: MUSC 111, MUSC 112
Odd Years: Spring

MUSC 451 (1) Vocal Literature
A survey of solo and small ensemble vocal literature through classical art song, musical theater and contemporary styles. Even Years: Fall; On Demand: Spring

MUSC 452 (3) Vocal Pedagogy
The scientific study of the vocal mechanism and application of healthy vocal techniques. This course will also address the principles of and skills necessary for applied voice instruction. Odd Years: Fall; On Demand: Spring

MUSC 455 (1) Piano Pedagogy
Technical problems in relationship to different styles. On Demand: Fall, Spring

MUSC 456 (3) Piano Literature
A survey of literature for the keyboard from the early baroque to the present. On Demand: Fall, Spring

MUSC 465 (3) Choral Musicianship 1
Choral conducting and the administration of school choral programs. Even Years: Fall

MUSC 466 (3) Choral Musicianship 2
A continuation of Choral Musicianship 1. Odd years: Spring

MUSC 471 (2) Instrument Literature & Pedagogy
Topics to be discussed are methods, literature, and teaching techniques for specific wind, percussion, and stringed instruments. On Demand: Fall, Spring

MUSC 475 (3) Instrumental Musicianship 1
Instrumental conducting and the administration of school band and orchestra programs. Even Years: Fall

MUSC 476 (3) Instrumental Musicianship 2
A continuation of Instrumental Musicianship 1.

MUSC 482 (1) In-Service
Fall, Spring, Summer

MUSC 485 (1-4) Selected Topics
On Demand: Fall, Spring, Summer

MUSC 489 (1-4) Workshop
On Demand: Fall, Spring, Summer
Even Years: Spring

MUSC 498 (1-16) Internship
Fall, Spring, Summer
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSP 155 (1</td>
<td>Private Piano 1</td>
<td>1</td>
<td>Audition required. Permission of instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 156 (1</td>
<td>Private Harpsichord 1</td>
<td>3</td>
<td>Audition required. Permission of instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 157 (1</td>
<td>Private Organ 1</td>
<td>3</td>
<td>Audition required. Permission of instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 161 (1</td>
<td>Private Trumpet 1</td>
<td>3</td>
<td>Audition required. Permission of instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 162 (1</td>
<td>Private Horn 1</td>
<td>1</td>
<td>Audition required. Permission of instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 163 (1</td>
<td>Private Trombone 1</td>
<td>1</td>
<td>Audition required. Permission of instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 164 (1</td>
<td>Private Euphonium 1</td>
<td>1</td>
<td>Audition required. Permission of instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 165 (1</td>
<td>Private Tuba 1</td>
<td>1</td>
<td>Audition required. Permission of instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 171 (1</td>
<td>Private Violin 1</td>
<td>1</td>
<td>Audition required. Permission of Instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 172 (1</td>
<td>Private Viola 1</td>
<td>1</td>
<td>Audition required. Permission of Instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 173 (1</td>
<td>Private Cello 1</td>
<td>1</td>
<td>Audition required. Permission of Instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 174 (1</td>
<td>Private Double Bass 1</td>
<td>1</td>
<td>Audition required. Permission of Instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 176 (1</td>
<td>Private Classical Guitar 1</td>
<td>1</td>
<td>Audition required. Permission of Instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 177 (1</td>
<td>Group Instruction in Guitar</td>
<td></td>
<td>Learn to play acoustic guitar. Instruments may be available. On Demand.</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 178 (1</td>
<td>Private Electric Guitar 1</td>
<td>1</td>
<td>Audition required. Permission of Instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 179 (1</td>
<td>Private Electric Bass 1</td>
<td>1</td>
<td>Audition required. Permission of Instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 181 (1</td>
<td>Private Flute 1</td>
<td>1</td>
<td>Audition required. May be repeated. Permission of instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 182 (1</td>
<td>Private Oboe 1</td>
<td>1</td>
<td>Audition required. Permission of instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 183 (1</td>
<td>Private Clarinet 1</td>
<td>1</td>
<td>Audition required. Permission of instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 184 (1</td>
<td>Private Saxophone 1</td>
<td>1</td>
<td>Audition required. Permission of instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 185 (1</td>
<td>Private Bassoon 1</td>
<td>1</td>
<td>Audition required. Permission of instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 186 (1</td>
<td>Private Percussion 1</td>
<td>1</td>
<td>Audition required. Permission of instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 191 (1</td>
<td>Private Instrument 1</td>
<td>1</td>
<td>Audition required. Permission of Instructor</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 201 (0</td>
<td>Concert Choir</td>
<td>1</td>
<td>Audition required. GE-11</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 202 (0</td>
<td>University Chorale</td>
<td>1</td>
<td>No audition required. GE-11</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 203 (0</td>
<td>Chamber Singers</td>
<td>1</td>
<td>Audition required. GE-11</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 208 (0</td>
<td>Contemporary Vocal Ensemble</td>
<td>1</td>
<td>Audition Required GE-11</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 211 (1</td>
<td>Music Productions for Stage</td>
<td>3</td>
<td>Audition required. GE-11</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 214 (0</td>
<td>Vocal Ensemble</td>
<td>1</td>
<td>Audition required. GE-11</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 215 (1</td>
<td>Collaborative Piano</td>
<td></td>
<td>Experience in accompanying. Advanced pianists may participate in chamber ensembles. May be repeated.</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 221 (0</td>
<td>Wind Ensemble</td>
<td>1</td>
<td>Audition Required GE-11</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>MUSP 222 (0</td>
<td>Symphonic Band</td>
<td>1</td>
<td>No Audition Required GE-11</td>
<td>Fall, Spring</td>
</tr>
</tbody>
</table>
MUSP 223 (0,1) University Orchestra
Audition Required
Fall, Spring
GE-11

MUSP 225 (0,1) Jazz Mavericks
Audition Required
Fall, Spring
GE-11

MUSP 226 (0,1) Contemporary Instrumental Ensemble
Audition Required
Fall, Spring
GE-11

MUSP 233 (0,1) Percussion Ensemble
Audition Required
Fall, Spring
GE-11

MUSP 235 (0,1) Theatre Orchestra
Audition Required
Fall, Spring
GE-11

MUSP 239 (0,1) Instrumental Ensemble
Audition Required
Fall, Spring
GE-11

MUSP 251 (1, 3) Private Voice 2
Audition required.
Fall, Spring

MUSP 255 (1, 3) Private Piano 2
Audition required.
Permission of Instructor
Fall, Spring

MUSP 256 (1, 3) Private Harpsichord 2
Audition required.
Permission of instructor

MUSP 257 (1, 3) Private Organ 2
Audition required. May be repeated.
Permission of Instructor
Fall, Spring

MUSP 261 (1, 3) Private Trumpet 2
Audition required. May be repeated.
Fall, Spring

MUSP 262 (1, 3) Private Horn 2
Audition required.
Permission of Instructor
Fall, Spring

MUSP 263 (1, 3) Private Trombone 2
Audition required.
Permission of Instructor
Fall, Spring

MUSP 264 (1, 3) Private Euphonium 2
Audition required.
Permission of Instructor
Fall, Spring

MUSP 265 (1, 3) Private Tuba 2
Audition required.
Permission of Instructor
Fall, Spring

MUSP 271 (1, 3) Private Violin 2
Audition required.
Fall, Spring

MUSP 272 (1, 3) Private Viola 2
Audition required.
Permission of instructor
Fall, Spring

MUSP 273 (1, 3) Private Cello 2
Audition required.
Permission of instructor
Fall, Spring

MUSP 274 (1, 3) Private Double Bass 2
Audition required.
Permission of instructor
Fall, Spring

MUSP 276 (1, 3) Private Classical Guitar 2
Audition required.
Permission of Instructor
Fall, Spring

MUSP 278 (1, 3) Private Electric Guitar 2
Audition required.
Permission of instructor
Fall, Spring

MUSP 279 (1, 3) Private Electric Bass 2
Audition required.
Permission of instructor
Fall, Spring

MUSP 281 (1, 3) Private Flute 2
Audition required.
Fall, Spring

MUSP 282 (1, 3) Private Oboe 2
Audition required.
Permission of instructor
Fall, Spring

MUSP 283 (1, 3) Private Clarinet 2
Audition required.
Permission of instructor
Fall, Spring

MUSP 284 (1, 3) Private Saxophone 2
Audition required.
Permission of instructor
Fall, Spring

MUSP 285 (1, 3) Private Bassoon 2
Audition required.
Permission of instructor
Fall, Spring

MUSP 286 (1, 3) Private Percussion 2
Audition required.
Permission of instructor
Fall, Spring

MUSP 291 (1, 3) Private Instrument 2
Audition required.
Permission of instructor
Fall, Spring

MUSP 299 (0) Sophomore Recital/Project
Capstone experience for the music minor; alternatively, this is an elective course for other music majors.
Permission of instructor
Fall, Spring

MUSP 301 (0-1) Concert Choir
Audition required.
Prerequisite: MUS 299
Fall, Spring

MUSP 302 (0-1) University Chorale
No audition required.
Prerequisite: MUS 299; Permission
Fall, Spring

MUSP 303 (0-1) Chamber Singers
Audition required.
GE-11
MUSP 308 (0-1) Contemporary Vocal Ensemble
Audition required.
Fall, Spring
GE -11

MUSP 311 (0-1) Music Productions for the Stage and Screen
Audition Required

MUSP 314 (0, 1) Vocal Ensemble
Audition required.
Fall, Spring
GE -11

MUSP 315 (1) Collaborative Piano
Experience in accompanying. Advanced pianists may participate in chamber ensembles. May be repeated.
Fall, Spring

MUSP 316 (1) Large Vocal Ensemble Accompanying
Directing and accompanying large vocal ensembles from the keyboard.
Permission of instructor
On Demand: Fall, Spring

MUSP 317 (1) Small Vocal Ensemble and Solo Accompanying
Working collaboratively with smaller vocal ensembles and vocal soloists at the keyboard in different styles and genres.
Permission of instructor
On Demand: Fall, Spring

MUSP 321 (0-1) Wind Ensemble
Audition required.
GE -11

MUSP 322 (0-1) Symphonic Band
No audition required.
GE -11

MUSP 323 (0-1) University Orchestra
Audition required.
GE -11

MUSP 325 (0-1) Jazz Mavericks
Audition required.
GE -11

MUSP 326 (0-1) Contemporary Instrumental Ensemble
Audition required
GE -11

MUSP 331 (0,1) Maverick Machine Athletic Band
Audition required.
Fall, Spring
GE -11

MUSP 333 (0,1) Percussion Ensemble
Audition required.
Fall, Spring
GE -11

MUSP 335 (0-1) Theatre Orchestra
Audition Required

MUSP 339 (0-1) Instrumental Ensemble
Audition required

MUSP 351 (1, 3) Private Voice 3
Audition required.
Permission of Instructor.
Fall, Spring

MUSP 355 (1-3) Private Piano 3
Audition required.
Permission of Instructor required.
Fall, Spring

MUSP 356 (1-3) Private Harpsichord 3
Audition required.
Permission of Instructor required.
Fall, Spring

MUSP 357 (1-3) Private Organ 3
Initial preparations for capstone experience through performances and possible junior recital; Advanced techniques in pedagogy; Collaborative and independent musicianship developed; Introduction to entrepreneurial skills; Service or in-service activities. May be repeated.
Permission of Instructor required.
Fall, Spring

MUSP 358 (1, 3) Private Contemporary Commercial Voice 3
Build upon the principles of vocal production as they apply to singing songs from contemporary commercial genres; including popular songs, jazz, gospel, musical theatre, contemporary worship, and track singing. Emphasis is placed on posture, breathing, resonance, style, microphone technique, movement, program development, and presentation. Literature appropriate for each voice range and ability is studied.
Audition required.
Fall, Spring

MUSP 361 (1, 3) Private Trumpet 3
Audition required.
Permission of Instructor.
Fall, Spring

MUSP 362 (1, 3) Private Horn 3
Audition required.
Permission of Instructor.
Fall, Spring

MUSP 363 (1, 3) Private Trombone 3
Audition required. May be repeated.
Permission of Instructor.
Fall, Spring

MUSP 364 (1, 3) Private Euphonium 3
Audition required.
Permission of Instructor.
Fall, Spring

MUSP 365 (1, 3) Private Tuba 3
Audition required.
Permission of Instructor.
Fall, Spring

MUSP 371 (1, 3) Private Violin 3
Audition required.
Permission of Instructor.
Fall, Spring

MUSP 372 (1, 3) Private Viola 3
Audition required.
Permission of Instructor.
Fall, Spring

MUSP 373 (1, 3) Private Cello 3
Audition required.
Permission of instructor.
Fall, Spring

MUSP 374 (1, 3) Private Double Bass 3
Audition required.
Permission of instructor.
Fall, Spring

MUSP 376 (1, 3) Private Classical Guitar 3
Audition required.
Permission of instructor.
Fall, Spring

MUSP 378 (1, 3) Private Electric Guitar 3
Audition required.
Permission of instructor.
Fall, Spring

MUSP 379 (1, 3) Private Electric Bass 3
Audition required.
Permission of instructor.
Fall, Spring
MUSP 381 (1-3) Private Flute 3
Audition required.
Prerequisite: Upper Level Jury, and consent
Permission of Instructor.
Fall, Spring

MUSP 382 (1, 3) Private Oboe 3
Audition required.
Permission of Instructor.
Fall, Spring

MUSP 383 (1, 3) Private Clarinet 3
Audition required.
Permission of Instructor.
Fall, Spring

MUSP 384 (1, 3) Private Saxophone 3
Audition required.
Permission of Instructor.
Fall, Spring

MUSP 385 (1, 3) Private Bassoon 3
Audition required.
Permission of Instructor.
Fall, Spring

MUSP 386 (1-3) Private Percussion 3
Audition required.
Permission of Instructor.
Fall, Spring

MUSP 391 (1-3) Private Instrument 3
Audition required.
Permission of Instructor required.
Fall, Spring

MUSP 399 (0,1) Junior Recital
Fall, Spring

MUSP 401 (0-1) Concert Choir
Audition required.
Permission of Instructor.
Fall, Spring

MUSP 402 (0-1) University Chorale
No Audition required.
Fall, Spring

MUSP 403 (0-1) Chamber Singers
Audition required.
Permission of Instructor.
Fall, Spring

MUSP 408 (0-1) Contemporary Vocal Ensemble
Audition required.
Fall, Spring

MUSP 411 (0-1) Music Productions for the Stage and Screen
Audition required.
Fall, Spring

MUSP 414 (0, 1) Vocal Ensemble
Audition required.
Permission of instructor
Fall, Spring

MUSP 421 (0, 1) Wind Ensemble
Audition required.
Permission of instructor
Fall, Spring

MUSP 422 (0, 1) Symphonic Band
No Audition required.
Fall, Spring

MUSP 423 (0, 1) University Orchestra
Audition required.
Permission of instructor
Fall, Spring

MUSP 425 (1) Jazz Mavericks
Audition required.
Permission of instructor
Fall, Spring

MUSP 426 (0-1) Contemporary Instrumental Ensemble
Audition required.
Permission of instructor
Fall, Spring

MUSP 433 (0-1) Percussion Ensemble
Audition required.
Permission of instructor
Fall, Spring

MUSP 435 (0-1) Theatre Orchestra
Audition required.
Permission of instructor
Fall, Spring

MUSP 439 (0-1) Instrumental Ensemble
Audition required.
Permission of instructor
Fall, Spring

MUSP 451 (1, 3) Private Voice 4
Audition required.
Permission of instructor
Fall, Spring

MUSP 455 (1, 3) Private Piano 4
Audition required.
Permission of instructor
Fall, Spring

MUSP 456 (1, 3) Private Harpsichord 4
Audition required.
Permission of instructor
Fall, Spring

MUSP 457 (1, 3) Private Organ 4
Audition required.
Permission of instructor
Fall, Spring

MUSP 458 (1, 3) Private Contemporary Commercial Voice 4
Audition required.
Permission of instructor
Fall, Spring

MUSP 461 (1, 3) Private Trumpet 4
Audition required.
Permission of instructor
Fall, Spring

MUSP 462 (1, 3) Private Horn 4
Audition required.
Permission of instructor
Fall, Spring

MUSP 463 (1, 3) Private Trombone 4
Audition required.
Permission of instructor
Fall, Spring

MUSP 464 (1, 3) Private Euphonium 4
Audition required.
Permission of instructor
Fall, Spring

MUSP 465 (1, 3) Private Tuba 4
Audition required.
Permission of instructor
Fall, Spring
<table>
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<tr>
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<th>Course Title</th>
<th>Credit Hours</th>
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<td>MUSP 472</td>
<td>Private Viola</td>
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<td>MUSP 473</td>
<td>Private Cello</td>
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<td>Private Double Bass</td>
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<td>MUSP 476</td>
<td>Private Classical Guitar</td>
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<td>MUSP 478</td>
<td>Private Electric Guitar</td>
<td>1, 3</td>
<td>Fall, Spring</td>
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<td>MUSP 479</td>
<td>Private Electric Bass</td>
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<td>MUSP 481</td>
<td>Private Flute</td>
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<td>Private Percussion</td>
<td>1, 3</td>
<td>Fall, Spring</td>
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<td>Private Instrument</td>
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<td>Fall, Spring</td>
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<td>MUSP 493</td>
<td>Advanced Choral Conducting</td>
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<td>On Demand: Fall, Spring</td>
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<td>MUSP 497</td>
<td>Advanced Instrumental Conducting</td>
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<td>MUSP 498</td>
<td>Senior Capstone Project or Recital</td>
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</tr>
</tbody>
</table>

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- Participate in an interview with a small group of faculty

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1. MUSC 100 Concert Attendance (0 credits) according to degree requirements
2. MUSP xxx Ensemble each semester in residence
3. MUSP xxx Private Lessons (1-3 credits) according to degree requirements

For details on these requirements see a Department of Music Advisor.

---

**Music Education BS**

**College of Arts & Humanities**
Department of Music
202 Earley Center for Performing Arts • 507-389-2118
Website: www.mnsu.edu/music/
Email: music@mnsu.edu

Chair: Douglas Snapp, DMA
Faculty: Gerard Aloisio DMA; David Dickau DMA; David Gadberry Ph.D; Dale Haefner MS; Aaron Humble DMA; John Lindberg Ph.D; Michael Olson DA; Joseph Rodgers DMA; Amy K Roisum Foley Ph.D; Stephanie Thorpe DMA; Michael Thursby MM; David Viscoli DMA

**Accreditation. National Association of Schools of Music (NASM)**

Music at Minnesota State Mankato

We are passionate about music and the people who make music happen. We work with each student individually to reach beyond expectation, creatively and academically, through hands-on experience in real life settings.

**Our Commitment:**
We offer the education, experience, and personal attention you need to succeed in today's professional marketplace.

[Academic Map/Degree Plan at www.mnsu.edu/programs/#All]
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300-level: Initial preparations for capstone experience through performances and possible junior recital; Advanced techniques in pedagogy; Collaborative and independent musicianship developed; Introduction to entrepreneurial skills; Service or service-related activities.

400-level: Prepare for capstone experience; Demonstrate mastery of musicianship skills through performance, conducting, arranging, collaboration and/or other creative activities; Perform in multiple musical genres; Demonstrate awareness of social/historical context of music through a written and/or oral presentation; Demonstrate entrepreneurial skills.

Guidelines for Music Ensembles.

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200-level: Students demonstrate basic leadership within the section; demonstrate mentorship to 100-level students; demonstrate initiative in developing as a soloist; participate effectively in various artistic, educational, recreational and other settings; and participate cooperatively in group artistic performances; Demonstrate growth in artistry, technical skills, collaborative competence and knowledge of repertory.

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400-level: Demonstrate leadership for the ensemble as a whole; Serve as soloist; Demonstrate ability to assist conductor as needed with sectional rehearsals, chamber groups, etc.; Participate effectively in various artistic, educational, recreational and other settings; Participate cooperatively in group artistic performances; Demonstrate growth in artistry, technical skills, collaborative competence and knowledge of repertory.

MUSIC EDUCATION BS
Degree completion = 136 credits

Required for Major (Options)

Students should choose either Vocal/General Music (K-12) or Instrumental/General Music (K-12) as an area of specialization.

Other Graduation Requirements

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

Required General Education

HLTH 240 Drug Education [3]
KSP 220W Human Relations in a Multicultural Society [3]
MUSC 307 Music of the World [3]
Pop Music USA (choose 3 Credits)
MUSC 102 Pop Music USA: Jazz to Country to Blues [3]
MUSC 103 Pop Music USA: R & B to MTV [3]

Goal Area 1--Ensembles (choose 3 credits)
1st Year: Students under the Vocal/General K12 emphasis should register for MUSP 101 or 102; Students pursuing the Instrumental/General K12 emphasis should register for MUSP 121, MUSP 122, MUSP 123, or MUSP 125.

MUSP 101 Concert Choir [1]
MUSP 102 University Chorale [1]
MUSP 121 Maverick Wind Ensemble [1]
MUSP 122 Maverick Symphonic Band [1]
MUSP 123 University Orchestra [1]
MUSP 125 Jazz Mavericks [1]

Prerequisites to the Major

Major Common Core

KSP 202 Technology Integration in the Classroom [2]
KSP 222 Introduction to the Learner and Learning [2]
KSP 330 Planning, Instruction, and Evaluation in the Classroom [5]
KSP 440 Creating Learning Environments to Engage Children, Families, and Community [3]
KSP 442 Reading, Literacy, and Differentiated Instruction in Inclusive Classrooms [3]
KSP 464 Professional Seminar [1]
KSP 476 K12 Student Teaching [11]
MUSC 111 Music Theory 1 [2]
MUSC 112 Music Theory 2 [2]
MUSC 115 Musicianship 1 [2]
MUSC 116 Musicianship 2 [2]
MUSC 119 Class Piano 1 [1]
MUSC 211 Music Theory 3 [2]
MUSC 212 Music Theory 4 [2]
MUSC 215 Musicianship 3 [1]
MUSC 216 Musicianship 4 [1]
MUSC 217 Jazz Pedagogy and Improvisation [1]
MUSC 219 Class Piano 2 [1]
MUSC 240 Music Theory Seminar [2]
MUSC 261 Introduction to Conducting [2]
MUSC 299 Upper Level Admission Assessment [0]
MUSC 320 Musicpreneurship [2]
MUSC 340 Materials and Methods of Teaching Music [2]
MUSC 342 General Music 6-12 [2]
MUSC 499 Senior Capstone Project or Recital [1]
MUSC 152 Introduction to Vocal Studies [1]

Major Restricted Electives (choose 2 - 4 credit)

Please work with your advisor when choosing additional electives. Students pursuing the Instrumental/General K12 emphasis should register for 2 credits; students pursuing the Vocal/General K12 emphasis should register for 4 credits.

MUSP 101 Concert Choir [1]
MUSP 102 University Chorale [1]
MUSP 103 Chamber Singers [1]
MUSP 108 Contemporary Vocal Ensemble [1]
MUSP 111 Music Productions for Stage and Screen [1]
MUSP 114 Vocal Ensemble [1]
MUSP 121 Maverick Wind Ensemble [1]
MUSP 122 Maverick Symphonic Band [1]
MUSP 123 University Orchestra [1]
MUSP 125 Jazz Mavericks [1]
MUSP 126 Contemporary Instrumental Ensemble [1]
MUSP 131  Maverick Machine Athletic Band (1)
MUSP 133  Percussion Ensemble (1)
MUSP 135  Theatre Orchestra (1)
MUSP 139  Instrumental Ensemble (1)
MUSP 201  Concert Choir (1)
MUSP 202  University Chorale (1)
MUSP 203  Contemporary Vocal Ensemble (1)
MUSP 211  Music Productions for Stage and Screen (1)
MUSP 214  Vocal Ensemble (1)
MUSP 215  Collaborative Piano (1)
MUSP 221  Maverick Wind Ensemble (1)
MUSP 222  Maverick Symphonic Band (1)
MUSP 223  University Orchestra (1)
MUSP 225  Jazz Mavericks (1)
MUSP 226  Contemporary Instrumental Ensemble (1)
MUSP 233  Percussion Ensemble (1)
MUSP 235  Theatre Orchestra (1)
MUSP 239  Instrumental Ensemble (1)
MUSP 301  Concert Choir (1)
MUSP 302  University Chorale (1)
MUSP 303  Chamber Singers (1)
MUSP 308  Contemporary Vocal Ensemble (1)
MUSP 311  Music Productions for Stage and Screen (1)
MUSP 314  Vocal Ensemble (1)
MUSP 315  Collaborative Piano (1)
MUSP 321  Maverick Wind Ensemble (1)
MUSP 322  Maverick Symphonic Band (1)
MUSP 323  University Orchestra (1)
MUSP 325  Jazz Mavericks (1)
MUSP 326  Contemporary Instrumental Ensemble (1)
MUSP 331  Maverick Machine Athletic Band (1)
MUSP 333  Percussion Ensemble (1)
MUSP 335  Theatre Orchestra (1)
MUSP 339  Instrumental Ensemble (1)
MUSP 401  Concert Choir (1)
MUSP 402  University Chorale (1)
MUSP 403  Chamber Singers (1)
MUSP 408  Contemporary Vocal Ensemble (1)
MUSP 411  Music Productions for Stage and Screen (1)
MUSP 414  Vocal Ensemble (1)
MUSP 421  Maverick Wind Ensemble (1)
MUSP 422  Maverick Symphonic Band (1)
MUSP 423  University Orchestra (1)
MUSP 425  Jazz Mavericks (1)
MUSP 426  Contemporary Instrumental Ensemble (1)
MUSP 433  Percussion Ensemble (1)
MUSP 435  Theatre Orchestra (1)
MUSP 439  Instrumental Ensemble (1)

Concert Attendance [7 Semesters required]
MUSC 100  Concert Attendance [0]

Music History 1 [choose 2 - 3 credits]
MUSC 301W  Music History 1 (3)
MUSC 305  Music Styles for Music Educators 1 (2)

Music History 2
MUSC 302W  Music History 2 (3)
MUSC 304  Music Styles for Music Educators 2 (2)

Studio Class
Students taking private lessons are required to enroll concurrently in MUSP 150
MUSP 150  Studio Class (0)

Major Emphasis: Instrumental/General Music (K-12)
MUSC 245  Brass Pedagogy and Techniques (1)
MUSC 246  String Pedagogy and Techniques (1)
MUSC 248  Woodwind Pedagogy and Techniques (1)
MUSC 249  Percussion Pedagogy and Techniques (1)
MUSC 251  Instrumental Musicanship 1 (3)
MUSC 252  Instrumental Musicanship 2 (3)

Maverick Machine Athletic Band (choose 1 credit)
MUSP 131  Maverick Machine Athletic Band (1)
MUSP 233  Percussion Ensemble (1)
MUSP 333  Percussion Ensemble (1)
MUSP 433  Percussion Ensemble (1)

String Ensemble (choose 1 credit)
MUSP 139  Instrumental Ensemble (1)
MUSP 239  Instrumental Ensemble (1)
MUSP 339  Instrumental Ensemble (1)
MUSP 439  Instrumental Ensemble (1)

1st Year lessons – Primary Instrument [choose 3 credits]
All lessons should be on the same instrument
MUSP 155  Private Piano 1 (1)
MUSP 204  Private Saxophone 1 (1)
MUSP 262  Private Horn 1 (1)
MUSP 263  Private Trombone 1 (1)
MUSP 264  Private Euphonium 1 (1)
MUSP 265  Private Tuba 1 (1)
MUSP 266  Private Trumpet 1 (1)
MUSP 267  Private Violin 1 (1)
MUSP 268  Private Viola 1 (1)
MUSP 269  Private Cello 1 (1)
MUSP 355  Private Piano 1 (1)

2nd Year lessons – Primary Instrument [choose 3 credits]
All lessons should be on the same instrument
MUSP 186  Private Percussion 1, 3 (1)
MUSP 187  Private Piano 2 (1)
MUSP 207  Private Saxophone 2 (1)
MUSP 268  Private Horn 2 (1)
MUSP 269  Private Trombone 2 (1)
MUSP 270  Private Euphonium 2 (1)
MUSP 271  Private Tuba 2 (1)
MUSP 272  Private Trumpet 2 (1)
MUSP 273  Private Violin 2 (1)
MUSP 274  Private Viola 2 (1)
MUSP 275  Private Cello 2 (1)
MUSP 355  Private Piano 2 (1)

3rd Year lessons – Primary Instrument [choose 3 credits]
All lessons should be on the same instrument
MUSP 355  Private Piano 3 (1)
MUSP 361  Private Trumpet 3 (1)
MUSP 362  Private Horn 3 (1)
MUSP 363  Private Trombone 3 (1)
MUSP 364  Private Euphonium 3 (1)
MUSP 365  Private Tuba 3 (1)
MUSP 366  Private Trumpet 3 (1)
MUSP 367  Private Violin 3 (1)
MUSP 368  Private Viola 3 (1)
MUSP 369  Private Cello 3 (1)
MUSP 370  Private Violin 3 (1)
We are passionate about music and the people who make music happen. We

MUSIC AT MINNESOTA STATE MANKATO

Chair:

Thursby, David Viscoli
berg, Michael Olson, Joe Rodgers, Amy Roisum Foley, Stephanie Thorpe, Mike

Faculty: Gerard Alosio, David Dickau, Dale Haefner, David Gadberry, John Lind

College of Arts & Humanities

Music Industry

Teacher Preparation

College of Education & Human Development

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MUSIC EDUCATION CONTINUED

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<th>Credits</th>
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<td>MUSC 465</td>
<td>Choral Musicianship</td>
<td>1 (3)</td>
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<tr>
<td>MUSC 387</td>
<td>Small Vocal Ensemble and Accompanying</td>
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1st Year Lessons – Primary Performance Area

(choose 1 - 2 credits)

Guitarists should register for two semesters of MUS 176 or 178; Pianists should register for one semester of MUS 451. Singers should register for one semester of MUS 451.

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<td>MUSP 255</td>
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<td>MUSP 276</td>
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<td>Private Electric Guitar</td>
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<td>MUSP 286</td>
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<tr>
<td>MUSP 291</td>
<td>Private Instrument</td>
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2nd Year Lessons – Primary Performance Area

(choose 3 credits)

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<td>MUSP 378</td>
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3rd Year Lessons – Primary Performance Area

(choose 3 credits)

Additional lessons (as electives) in piano or voice are strongly recommended.

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4th Year Lessons – Primary Performance Area

(choose 1 - 2 credits)

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<td>MUSP 497</td>
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MUSIC INDUSTRY BS

Music Industry

College of Arts & Humanities

Department of Music

202 Eastley Center for Performing Arts • 507-389-2118

Website: www.mnsu.edu/music/

Email: music@mnsu.edu

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100-level: Students demonstrate awareness of their responsibilities to the ensemble and director and how their part integrates into the larger ensemble; participate effectively in various artistic, educational, recreational and other settings, and participate cooperatively in group artistic performances; Demonstrate growth in artistry, technical skills, collaborative competence and knowledge of repertory through regular ensemble experiences.
200-level: Students demonstrate leadership within the section; demonstrate mentorship to 100-level students; demonstrate initiative in developing as a soloist; participate effectively in various artistic, education, recreational and other settings; participate cooperatively in group artistic performances; Demonstrate growth in artistry, technical skills, collaborative competence and knowledge of repertory through regular ensemble experiences.
300-level: Students demonstrate leadership within the section; demonstrate mentorship to 100- and 200-level students; demonstrate abilities as a soloist; participate effectively in various artistic, education, recreational and other settings; participate cooperatively in group artistic performances; Demonstrate growth in artistry, technical skills, collaborative competence and knowledge of repertory through regular ensemble experiences.
400-level: Demonstrate leadership for the ensemble as a whole; Serve as soloist; Demonstrate ability to assist conductor as needed with sectionals, rehearsals, chamber groups, etc.; Participate effectively in various artistic, education, recreational and other settings; Participate cooperatively in group artistic performances; Demonstrate growth in artistry, technical skills, collaborative competence and knowledge of repertory through regular ensemble experiences.

MUSIC INDUSTRY BS
Degree completion = 120 credits

Required General Education
MUSC 101 Introduction to Music (3)
MUSC 129 Digital Music 1 (2)

Music Ensembles (Goal Area 11)
Choose 2 - 3 Credits.
MUSP 101 Concert Choir (1)
MUSP 102 University Chorale (1)
MUSP 103 Chamber Singers (1)
MUSP 108 Contemporary Vocal Ensemble (1)
MUSP 111 Music Productions for the Stage and Screen (1)
MUSP 114 Vocal Ensemble (1)
MUSP 121 Maverick Wind Ensemble (1)
MUSP 122 Maverick Symphonic Band (1)
MUSP 123 University Orchestra (1)
MUSP 125 Jazz Mavericks (1)
MUSP 126 Contemporary Instrumental Ensemble (1)
MUSP 131 Maverick Machine Athletic Band (1)
MUSP 133 Percussion Ensemble (1)
MUSP 135 Theatre Orchestra (1)
MUSP 139 Instrumental Ensemble (1)

Major Common Core
MUSC 111 Theory 1 (2)
MUSC 112 Theory 2 (2)
MUSC 115 Music Business (1)
MUSC 116 Music Business 2 (2)
MUSC 119 Class Piano 1 (1)
MUSC 190 Seminar in Music Careers (1)
MUSC 220 Piano Professor (0)
MUSC 199 Admission to Major Interview (0)
MUSC 219 Class Piano 2 (1)
MUSC 222 Social Media in Music Industry (2)
MUSC 230 Songwriting 1 (3)
MUSC 299 Upper Level Admission Assessment (0)
MUSC 320W Music Composition 1 (2)
MUSP 125 Music Management and Concert Production (3)
MUSP 421 Project Development in Music Industry (3)
MUSP 424 Music Promotions (3)
MUSP 425 Music in the Marketplace (3)
MUSP 426 Legal Aspects of the Music Industry (3)
MUSP 428 Music Licensing for Film, TV and Games (3)

Concert Attendance (Choose 0 credits) 7 semesters required.
MUSC 100 Concert Attendance (0)

Studio Class (Choose 0 credits)
Every semester that a student is enrolled in lessons, Studio Class is a required corequisite. 4 semesters required.
MUSP 150 Studio Class (0)

Activity in Music Industry (Choose 2 credits) 2 semesters at 1 credit
MUSC 221 Activity in Music Industry (1)
MUSC 321 Practicum Music Industry (1)

Internship: Choose 4 - 16 Credits.
A minimum of 4 credits is required, but students may elect to take up to 16 credits to meet the graduation requirement of a minimum of 40 credits in upper level courses.

MUSC 498 Internship (4)

Major Restricted Electives
Foundations in Music Industry: Choose 2 - 3 Credits.
MUSC 121 Foundations in Music Industry (2)
MUSC 122 Introduction to Music Industry (3)

Pop Music Literature: (Choose 3 - 6 credits)
Choose either
MUSC 120 Music Money and Success (3)
or Choose 6 Credits
MUSC 103 Pop Music USA: Jazz to Country to Blues (3)

Private Lessons (1st year) – Choose 2 Credits.
MUSP 151 Private Voice 1 (1)
MUSP 152 Introduction to Vocal Studies (1)
MUSP 155 Private Piano 1 (1)
MUSP 156 Private Harpsichord 1 (1)
MUSP 157 Private Organ 1 (1)
MUSP 161 Private Trumpet 1 (1)
MUSP 162 Private Horn 1 (1)
MUSP 163 Private Trombone 1 (1)
MUSP 164 Private Euphonium 1 (1)
MUSP 165 Private Tuba 1 (1)
MUSP 171 Private Violin 1 (1)
MUSP 172 Private Viola 1 (1)
MUSP 173 Private Cello 1 (1)
MUSP 174 Private Double Bass 1 (1)
MUSP 176 Private Classical Guitar 1 (1)
MUSP 178 Private Electric Guitar 1 (1)
MUSP 179 Private Electric Bass 1 (1)
MUSP 181 Private Flute 1 (1)
MUSP 182 Private Oboe 1 (1)
MUSP 183 Private Clarinet 1 (1)
MUSP 184 Private Saxophone 1 (1)
MUSP 185 Private Bassoon 1 (1)
MUSP 186 Private Percussion 1 (1)
MUSP 191 Private Instrument 1 (0.1)

Private Lessons (2nd Year) – Choose 2 Credits.
MUSP 251 Private Voice 2 (1)
MUSP 255 Private Piano 2 (1)
MUSP 256 Private Harpsichord 2 (1)
MUSP 257 Private Organ 2 (1)
MUSP 258 Private Trumpet 2 (1)
MUSP 262 Private Horn 2 (1)
MUSP 263 Private Trombone 2 (1)
MUSP 264 Private Euphonium 2 (1)
MUSP 265 Private Tuba 2 (1)
MUSP 271 Private Violin 2 (1)
MUSP 272 Private Viola 2 (1)
MUSP 273 Private Cello 2 (1)
MUSP 274 Private Double Bass 2 (1)
MUSP 276 Private Classical Guitar 2 (1)
MUSP 278 Private Electric Guitar 2 (1)
MUSP 279 Private Electric Bass 2 (1)
MUSP 281 Private Flute 2 (1)
MUSP 282 Private Oboe 2 (1)
MUSP 283 Private Clarinet 2 (1)
MUSP 284 Private Saxophone 2 (1)
MUSP 285 Private Bassoon 2 (1)
MUSP 286 Private Percussion 2 (1, 3)
MUSP 291 Private Instrument 2 (1)

Music Ensembles (2nd Year) – Choose 2 Credits.
MUSP 131 Maverick Machine Athletic Band (1)
MUSP 141 Maverick Machine Athletic Band (1)
MUSP 201 Concert Choir (1)
MUSP 202 University Choiral (1)
MUSP 203 Chamber Singers (1)
MUSP 208 Contemporary Vocal Ensemble (1)
MUSP 211 Music Productions for the Stage and Screen (1)
MUSP 214 Vocal Ensemble (1)
MUSP 221 Maverick Wind Ensemble (1)
MUSP 222 Maverick Symphonic Band (1)
MUSP 223 University Orchestra (1)
MUSP 225 Jazz Mavericks (1)
MUSP 233 Percussion Ensemble (1)
MUSP 235 Theatre Orchestra (1)
MUSP 239 Instrumental Ensemble (1)

Music Ensembles (3rd Year) – Choose 2 Credits.
MUSP 301 Concert Choir (1)
MUSP 302 University Choiral (1)
MUSP 303 Chamber Singers (1)
MUSP 308 Contemporary Vocal Ensemble (1)
MUSP 311 Music Productions for the Stage and Screen (1)
MUSP 314 Vocal Ensemble (1)
MUSP 321 Maverick Wind Ensemble (1)
MUSP 322 Maverick Symphonic Band (1)
MUSP 323 University Orchestra (1)
MUSP 325 Jazz Mavericks (1)
MUSP 326 Contemporary Instrumental Ensemble (1)
MUSP 331 Maverick Machine Athletic Band (1)
MUSP 333 Percussion Ensemble (1)
MUSP 335 Theatre Orchestra (1)
MUSP 339 Instrumental Ensemble (1)

Music Ensembles (4th Year) – Choose 2 Credits.
MUSP 426 Contemporary Instrumental Ensemble (1)
MUSP 427 Maverick Machine Athletic Band (1)
MUSP 401 Concert Choir (1)
MUSP 402 University Choiral (1)
MUSP 403 Chamber Singers (1)
MUSP 408 Contemporary Vocal Ensemble (1)
MUSP 411 Music Productions for the Stage and Screen (1)
MUSP 414 Vocal Ensemble (1)
MUSP 421 Maverick Wind Ensemble (1)
MUSP 422 Maverick Symphonic Band (1)
MUSP 423 University Orchestra (1)
MUSP 425 Jazz Mavericks (1)
MUSP 426 Contemporary Instrumental Ensemble (1)
MUSP 433 Percussion Ensemble (1)
MUSP 435 Theatre Orchestra (1)
MUSP 439 Instrumental Ensemble (1)

Major Emphasis: Music Business
Choose one of the following minors: Business Administration, Business Law, Entrepreneurship, International Business, Marketing, Mass Media, or Non-Profit Leadership

Major Emphasis: Songwriting
MUSC 330 Songwriting 2 (3)
MUSC 331 Electronic Orchestration (3)
MUSC 431 Film Scoring and Multimedia (3)

M Composition Seminar (Choose 3 Credits) – 3 semesters at 1 credit per semester
MUSC 430 Music Industry Composition Seminar (1)

One 3-credit elective is included in this emphasis. See advisor for details

Major Emphasis: Audio Production Specialist

Note: Please see Department of Music advisor about this degree. It is a joint offering of Hennepin Technical College and Minnesota State Mankato.

Required General Education
MUSC 120 Music Money and Success (3)

Ensemble
Choose 2 credits – 2 semester at 1 credit per semester (1)
Choose from:
MUSP 301 Concert Choir (1)
MUSP 302 University Choiral (1)
MUSP 303 Chamber Singers (1)
MUSP 308 Contemporary Vocal Ensemble (1)
MUSP 311 Music Productions for the Stage and Screen (1)
MUSP 314 Vocal Ensemble (1)  
MUSP 321 Maverick Wind Ensemble (1)  
MUSP 322 Maverick Symphonic Band (1)  
MUSP 323 University Orchestra (1)  
MUSP 325 Jazz Mavericks (1)  
MUSP 326 Contemporary Instrumental Ensemble (1)  
MUSP 333 Percussion Ensemble (1)  
MUSP 335 Theatre Orchestra (1)  
MUSP 339 Instrumental Ensemble (1)  
Additional General Education. Please see your advisor.

MUSC 100 Concert Attendance (0)  
(Choose 0 credits – 3 semester at 0 credit/semester)  
MUSC 111 Music Theory 1 (2)  
MUSC 112 Music Theory 2 (2)  
MUSC 115 Musicianship 1 (2)  
MUSC 116 Musicianship 2 (2)  
MUSC 119 Class Piano 1 (1)  
MUSC 219 Class Piano 2 and Proficiency (1)  
MUSC 220 Piano Proficiency (0)  
MUSC 222 Social Media in the Music Industry (2)  
MUSC 320 Musicpreneurship (2)  
MUSC 321 Practicum in Music Industry (2 semesters at 1 credit/semester) (2)  
MUSC 325 Music Management and Concert Production (3)  
MUSC 421 Project Development in the Music Industry (3)  
MUSC 424 Music Promotion (3)  
MUSC 425 Music in the Marketplace (3)  
MUSC 426 Legal Aspects of the Music Industry (3)  
MUSC 498 Internship (4)

Restricted Electives
Fourth-year Ensemble  
(Choose 1 credit: 1 semester at 1 credit/semester)  
Choose from:  
MUSP 401 Concert Choir (1)  
MUSP 402 University Chorale (1)  
MUSP 403 Chamber Singers (1)  
MUSP 408 Contemporary Vocal Ensemble (1)  
MUSC 411 Music Productions for Stage and Screen (1)  
MUSC 414 Vocal Ensemble (1)  
MUSP 421 Maverick Wind Ensemble (1)  
MUSP 422 Maverick Symphonic Band (1)  
MUSP 423 University Orchestra (1)  
MUSP 425 Jazz Mavericks (1)  
MUSP 426 Contemporary Instrumental Ensemble (1)  
MUSP 433 Percussion Ensemble (1)  
MUSP 435 Theatre Orchestra (1)  
MUSP 439 Instrumental Ensemble (1)

Private Lessons: First Year  
(Choose 2 credits: 2 semester at 1 credit)  
MUSP 151 Private Voice 1 (1)  
MUSP 152 Introduction to Vocal Studies (1)  
MUSP 155 Private Piano 1 (1)  
MUSP 156 Private Harpsichord 1 (1)  
MUSP 157 Private Organ 1 (1)  
MUSP 161 Private Trumpet 1 (1)  
MUSP 162 Private Horn 1 (1)  
MUSP 163 Private Trombone 1 (1)  
MUSP 164 Private Euphonium 1 (1)  
MUSP 165 Private Tuba 1 (1)  
MUSP 171 Private Violin 1 (1)  
MUSP 172 Private Viola 1 (1)  
MUSP 173 Private Cello 1 (1)  
MUSP 174 Private Double Bass 1 (1)  
MUSP 176 Private Classical Guitar 1 (1)  
MUSP 178 Private Electric Guitar 1 (1)  
MUSP 179 Private Electric Bass 1 (1)  
MUSP 181 Private Flute 1 (1)  
MUSP 182 Private Oboe 1 (1)  
MUSP 183 Private Clarinet 1 (1)  
MUSP 184 Private Saxophone 1 (1)  
MUSP 185 Private Bassoon 1 (1)  
MUSP 186 Private Percussion 1 (1,3)  
MUSP 191 Private Instrument 1 (0,1)

Private Lessons: Second Year  
(2 semesters at 1 credit)  
MUSP 251 Private Voice 2 (1)  
MUSP 255 Private Piano 2 (1)  
MUSP 256 Private Harpsichord 2 (1)  
MUSP 257 Private Organ 2 (1)  
MUSP 261 Private Trumpet 2 (1)  
MUSP 262 Private Horn 2 (1)  
MUSP 263 Private Trombone 2 (1)  
MUSP 264 Private Euphonium 2 (1)  
MUSP 265 Private Tuba 2 (1)  
MUSP 271 Private Violin 2 (1)  
MUSP 272 Private Viola 2 (1)  
MUSP 273 Private Cello 2 (1)  
MUSP 274 Private Double Bass 2 (1)  
MUSP 276 Private Classical Guitar 2 (1)  
MUSP 278 Private Electric Guitar 2 (1)  
MUSP 279 Private Electric Bass 2 (1)  
MUSP 281 Private Flute 2 (1)  
MUSP 282 Private Oboe 2 (1)  
MUSP 283 Private Clarinet 2 (1)  
MUSP 284 Private Saxophone 2 (1)  
MUSP 285 Private Bassoon 2 (1)  
MUSP 286 Private Percussion 2 (1,3)  
MUSP 291 Private Instrument 2 (1)

Major Emphasis: Songwriting  
MUSC 330 Songwriting 2 (3)  
MUSC 331 Electronic Orchestration (3)  
MUSC 431 Film Scoring and Multimedia (3)

W Composition Seminar  
(Choose 3 Credits – 3 semesters at 1 credit per semester)  
MUSC 430 * Music Industry Composition Seminar (1)

COURSE DESCRIPTIONS SEE MUSIC
The Nonprofit Leadership Program (NPL) is specially designed to respond to employment needs and opportunities within one of the fastest growing sectors of the United States economy. For those interested in the nonprofit sector and civil society, NPL provides a multidisciplinary program for undergraduate students and nonprofit practitioners. NPL is an applied program for those interested in gaining knowledge and skills for success and advancement in nonprofit leadership and management.

The undergraduate Nonprofit Leadership Minor (21 credits) and Nonprofit Leadership Certificate (18 credits) are a cooperative educational program between the College of Social and Behavioral Science and the College of Allied Health and Nursing. Within these two colleges five departments collaborate and share courses: Gender and Women’s Studies; Recreation, Parks and Leisure Services; Sociology and Corrections; Social Work; and the Urban and Regional Studies Institute. The NPL program is open to all undergraduate students.

The program is designed to address the following entry-level nonprofit competencies:
- Communication skills
- Computer/technology literacy skills
- Historical and philosophical foundations in nonprofit leadership
- Nonprofit marketing
- Public policy
- Fundraising principles and practices
- Human resource development and nonprofit management
- Program planning
- Financial management

These competencies are achieved through the following program requirements.

#### Academic Map/Degree Plan at www.mnsu.edu/programs/NPL

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## NONPROFIT LEADERSHIP CERTIFICATE AND MINOR

### Minor Common Core

- NPL 273 Introduction to the Nonprofit Sector (3)
- NPL 473 Advanced Workshop in Nonprofit Leadership (3)

#### Electives

Students choose one course from each of the three following categories and one additional course of their choice to complete the 21 credits requirement of this minor.

- Program Planning and Evaluation (choose 3-6 credits)
  - GVWS 330 Feminist Research and Action (4)  
  - RPLS 376 Program Planning in Recreation, Parks, and Leisure Services (3)  
  - SOC 466 Program Planning (3)  
  - SOWK 435 Applied Social Work Research (4)  
- URBS 413 Urban Program Evaluation (3)
- Program Administration (choose 3-6 credits)
  - NPL 486 Fundraising for Nonprofits (3)  
  - NPL 488 Financial Management for Nonprofits (3)  
  - RPLS 465 Event Management (3)  
  - RPLS 473 Administration of Leisure Time Programs (3)  
  - URBS 453 Grants Administration (3)  
  - Internship (choose 3 credits) with a nonprofit organization

### Financial Management and Development

- NPL 486 Fundraising for Nonprofits (3)
- NPL 488 Financial Management for Nonprofits (3)
- RPLS 465 Event Management (3)
- RPLS 473 Administration of Leisure Time Programs (3)
- URBS 453 Grants Administration (3)
- Internship (choose 3 credits) with a nonprofit organization

#### Major Restricted Electives

**Program Planning and Evaluation** (choose 3 credits)
- GVWS 330 Feminist Research and Action (4)
- RPLS 376 Program Planning in Recreation, Parks, and Leisure Services (3)
- SOC 466 Program Planning (3)
- SOWK 435 Applied Social Work Research (4)
- URBS 413 Urban Program Evaluation (3)

**Financial Management and Development** (choose 3 credits)
- NPL 486 Fundraising for Nonprofits (3)
- NPL 488 Financial Management for Nonprofits (3)
- RPLS 465 Event Management (3)
- RPLS 473 Administration of Leisure Time Programs (3)
- URBS 453 Grants Administration (3)

**Internship** (choose 3 credits)

The student is required to complete a three (3) credit internship with a qualifying nonprofit organization. The internship will be administered through one of the five sponsoring departments.
- GVWS 498 Internship: Community (1-6)

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## COURSE DESCRIPTIONS

### NPL 273 Introduction to the Nonprofit Sector

Designed as an introduction to the nonprofit sector, this course provides the foundation for students working toward a certificate in Nonprofit Leadership. This workshop addresses the historical and philosophical foundations in nonprofit leadership as well as exploring key leadership issues.

GE-9

### NPL 473 Advanced Workshop in Nonprofit Leadership

Designed as the sequel to NPL 273, this course addresses managing operations, developing and managing financial services, and managing people. This course will include a Service-Learning component.

### NPL 486 Fundraising for Nonprofits

Designed as an overview to fundraising and development for nonprofit organizations, this course addresses the development of a fundraising plan and attracting donors. There will be an emphasis on organizational outreach using both traditional and new media.

Variable

### NPL 488 Financial Management for Nonprofits

Designed as an overview of financial management for nonprofit organizations, this course addresses the integration of mission-driven planning and financial management with an emphasis on tax exemption, accounting systems, financial statements, budgets, and regulatory reporting.

Variable
**NORWEGIAN COURSES**

**Norwegian**

College of Arts and Humanities  
Department of World Languages and Cultures  
227 Armstrong Hall • 507-389-2116  
Website: www.mnsu.edu/languages  
Chair: Adriana Gordillo

Please go to Scandinavian Studies to see course descriptions.  
SCAN 101 Elementary Norwegian I (4)  
SCAN 102 Elementary Norwegian II (4)  
SCAN 292 Intermediate Norwegian I (1.5)  
SCAN 293 Intermediate Norwegian II (1.5)

**NURSING**

**Nursing**

College of Allied Health & Nursing  
School of Nursing  
360 Wissink Hall • 507-389-6022  
Website: http://ahn.mnsu.edu/nursing/  
Email: school-of-nursing@mnsu.edu  
Chair: Patricia Young, PhD, RN

Faculty: Kristen Abbatt-Anderson PhD, RN, CNP; Patricia Beierwaltes DNP, CPNP; Sue Ellen Bell PhD, RN, PHCNs, BC; Rhonda Cornell DNP, APRN, CNP; Barbara Dahlen PhD, RN; Hans-Peter de Ruiter PhD, RN; Sandra Eggenberger PhD, RN; Julie Frederic DBA, MBA, BSN, RN, Amy Haycraft DNP, APRN, CNP, RN-BC, PWHNP-CNPs; Norma Krumviede EdD, RN; Kelly Krumviede PhD, RN; Tammy Nei- man PhD, RN; Laurel Ostraw DNP, RN, APRN; Noreen Reding PhD, RN; Colleen Ryley Royle EdD, MSN, RN; Nicole Schmitz DNP, APRN, PNP-PAC; Laura Schwarz DNP, RN, CNE; Tai Sims DNP, MSN, RN, PHN; Marilyn Swan PhD, RN; Stacey Van Gelderen DNP, RN; Diane Witt PhD, CNP

**Academic Map/Degree Plan at** www.mnsu.edu/programs/#All

**POLICIES/INFORMATION FOR MAJOR PRE-LICENSURE PROGRAM**

**Admission to Major, Pre-Licensure Program** Application for admission to the School of Nursing is a separate process and in addition to being admitted to the University. Requirements for application to the nursing major are:

1. completion of at least 30 semester credits  
2. a minimum career grade point average of 3.0 on a 4.0 scale  
3. minimum grade of “C” in all required prerequisite and support courses  
4. All core science prerequisite courses (BIOL 220, BIOL 330, and CHEM 111) must be completed within 5 years of the program application deadline. Students with science credits older than five years will need to retake the applicable coursework. An appeal is not needed if courses are retaken due to 3-year-limit.

All prerequisite and support courses must be taken for a letter grade; P/N is not acceptable. A prenursing student may repeat a prerequisite class for admission to the School of Nursing once and only once for the purpose of improving a “C+” or lower grade. Students in the applicant pool are rank ordered according to a prenursing GPA figured using grades earned in English Composition, Introduction to Cultural Geography, Human Anatomy, Principles of Human Physiology, Chemistry of Life Processes Part II, Courage, Caring, and Teambuilding, Elementary Statistics, and Human Development. All eight of these courses must be completed at the time of application.

Students are considered for admission into program based on GPA for the eight core prerequisite courses as well as composite score on the Evolve Reach Admission Assessment Exam. The Evolve Reach Admission Assessment Exam includes math, grammar, reading comprehension, vocabulary, anatomy & physiology, and chemistry and must be completed at the time of application.

Applicants must also successfully complete the following support courses prior to admission into the nursing program: Microbiology, Pathophysiology for Healthcare Professionals, Pharmacology for Healthcare Professionals, Relationship-based Care in Nursing Practice, Nutrition for Healthcare Professionals, and Introduction to Psychological Science. A grade of “C” or better must be achieved in these courses for admission.

In addition to the above criteria, an interview may be required in the application process.

**Nursing Assistant Admission Requirement.** Students admitted to the Pre-Licensure Program must be certified as nursing assistants, and listed as active on a Nursing Assistant Registry within the United States.

**English Language Proficiency.** Applicants to the Pre-Licensure Program from non-English speaking countries must demonstrate minimum English proficiency requirements in one of the following ways:

- TOEFL IBT minimum score of 84 with a minimum speaking score of 26
- TOEFL PBT minimum score of 560
- IELTS overall score of 6.5 with a minimum of 6.0 on all modules

**GPA Policy.** A grade of “C” or better must be achieved in all prerequisite and support courses. Nursing courses are sequentially arranged and progression is based on successful completion of the prerequisite nursing course(s). All classroom courses are offered for grade only and all clinical courses are offered for P/N only. To continue in the nursing major, all students must achieve and maintain at least a “C” or “P” grade in each required nursing course. A grade of “D”, “F”, or NC in a nursing course is unacceptable, and the student must repeat the course to continue in the nursing major. In addition, it is required that each student maintain at least a “C” (2.0) average in all courses completed.

**P/N Grading Policy.** All of the pre-nursing and “major” courses must be taken for a letter grade; P/N is not acceptable. A grade of “C” must be achieved.

The School of Nursing utilizes a variety of health-care agencies for students’ clinical experiences including the Twin Cities. All clinical experiences are planned and conducted by the School of Nursing faculty. The student is responsible for travel to clinical agencies and for housing arrangements when necessary. Criminal background studies must be completed each year prior to beginning clinical courses.

**Transfer Students.** It is often possible for students to complete the required pre-nursing curriculum at another college or university and then have these courses and credits apply...
transferred to Minnesota State Mankato. Per-Licensure Program courses begin both fall and spring semesters.

**Standardized Exams.** All students enrolled in the School of Nursing will be required to take standardized achievement examinations at periodic intervals during their program. Exam results are used for student self-evaluation as well as program evaluation of learning outcomes.

**Health.** All nursing students are required to maintain a program of yearly health examinations and immunizations. Students will be advised of these requirements and must assume responsibility for meeting the health requirement before starting clinical experiences each year, beginning with the sophomore year.

**Expenses.** Each student is responsible for costs related to travel for nursing course experiences, student uniforms, health examinations, immunizations, and Mantoux; health insurance, malpractice insurance coverage, and CPR certification. In the case of accidental exposure to blood and body fluids, students are responsible for testing and follow-up care costs.

**General Education requirements** for basic nursing program Students in the Pre-Licensure Program are required to complete 40 credits of General Education courses in 11 Goal Areas for graduation.

### GENERAL EDUCATION REQUIREMENTS FOR
**PRE-LICENSURE PROGRAM**

Students in the Pre-Licensure Program are required to complete 40 credits of General Education courses in 11 Goal Areas for graduation.

#### NURSING BS

Degree completion = 120 credits

**Required General Education**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIOL 270</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>Chemistry of Life Processes Part II</td>
<td>5</td>
</tr>
<tr>
<td>ENG 101</td>
<td>Composition</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 103</td>
<td>Introductory Cultural Geography</td>
<td>3</td>
</tr>
<tr>
<td>NURS 101W</td>
<td>Courage, Caring, and Team Building</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>Introduction to Psychological Science</td>
<td>4</td>
</tr>
<tr>
<td>STAT 154</td>
<td>Elementary Statistics</td>
<td>4</td>
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**Choose 3 - 4 Credits**

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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>KSP 235</td>
<td>Human Development</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 343</td>
<td>Introduction to Developmental Psychology</td>
<td>4</td>
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</table>

**Prerequisites to the Major**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIOL 220</td>
<td>Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 330</td>
<td>Principles of Human Physiology</td>
<td>4</td>
</tr>
<tr>
<td>FCS 242</td>
<td>Nutrition for Healthcare Professionals</td>
<td>3</td>
</tr>
<tr>
<td>NURS 282</td>
<td>Pathophysiology for Healthcare Professionals</td>
<td>3</td>
</tr>
<tr>
<td>NURS 284</td>
<td>Pharmacology for Healthcare Professionals</td>
<td>3</td>
</tr>
<tr>
<td>NURS 286</td>
<td>Relationship-Based Care in Nursing Practice</td>
<td>3</td>
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</table>

**Major Common Core**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>NURS 333</td>
<td>Professional Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NURS 334</td>
<td>Physiologic Integrity I</td>
<td>4</td>
</tr>
<tr>
<td>NURS 335</td>
<td>Family and Societal Nursing Inquiry</td>
<td>3</td>
</tr>
<tr>
<td>NURS 336</td>
<td>Assessment and Nursing Procedures II</td>
<td>5</td>
</tr>
<tr>
<td>NURS 363</td>
<td>Critical Inquiry in Nursing</td>
<td>2</td>
</tr>
<tr>
<td>NURS 364</td>
<td>Physiologic Integrity II</td>
<td>5</td>
</tr>
<tr>
<td>NURS 365</td>
<td>Nursing Care of Families in Transition I</td>
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<td>NURS 366</td>
<td>Quality, Safety, and Informatics in Nursing Practice</td>
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<td>NURS 433</td>
<td>Community Oriented Nursing Inquiry</td>
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<td>NURS 434</td>
<td>Physiologic Integrity III</td>
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<td>NURS 435</td>
<td>Nursing Care of Families in Transition II</td>
<td>3</td>
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<td>NURS 436</td>
<td>Psychosocial Integrity</td>
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<td>NURS 463</td>
<td>Nursing Leadership and Management</td>
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<td>NURS 464</td>
<td>Physiologic Integrity IV</td>
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<td>NURS 465</td>
<td>Nursing Care of Families in Crisis</td>
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<tr>
<td>NURS 466</td>
<td>Professional Role Integration</td>
<td>4</td>
</tr>
</tbody>
</table>

**RN BACCALAUREATE COMPLETION**

**Prerequisites to the Major**

Transfer Credits: In accordance with the statewide MN Articulation Agreement, 30 semester nursing credits and 30 semester non-nursing credits are transferred for RNs.

Admission to RN Baccalaureate Completion Program: Requirements for admission to the RN Baccalaureate Completion Program are:

1. Proof of active unrestricted RN license
2. Completion of at least 30 college semester credits
3. A minimum career grade point average (GPA) of 2.8 on a 4.0 scale
4. Minimum grade of “C” in all previous courses
5. College Statistics Course.

Other requirements:

1. Completion of RN Baccalaureate Completion Program Application
2. Liability insurance-purchased through Minnesota State Mankato
3. CPR certification
4. Background study

Students must be admitted into the School of Nursing prior to taking any nursing courses. RNs accepted during the fall and spring semester. The application for RN Baccalaureate Completion Program admission may be obtained from the School of Nursing website at http://ahn.mnsu.edu/nursing.

**Major Common Core**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>NURS 320W</td>
<td>Critical Inquiry and Evidence-based Practice for RNs</td>
<td>4</td>
</tr>
<tr>
<td>NURS 362</td>
<td>Family and Societal Nursing for RNs</td>
<td>4</td>
</tr>
<tr>
<td>NURS 382</td>
<td>Holistic Nursing Assessment and Practice</td>
<td>4</td>
</tr>
<tr>
<td>NURS 402</td>
<td>Psychosocial/Inter-professional Communication for RNs</td>
<td>4</td>
</tr>
<tr>
<td>NURS 420</td>
<td>Quality, Safety, Value and Informatics in Nursing Practice for RNs</td>
<td>4</td>
</tr>
<tr>
<td>NURS 482W</td>
<td>Population Focused Case for RNs</td>
<td>4</td>
</tr>
<tr>
<td>NURS 492</td>
<td>Nursing Capstone and Leadership for Baccalaureate Practice</td>
<td>4</td>
</tr>
</tbody>
</table>

**LPN OPTION**

The LPN option for completing the BS Degree in Nursing is available only with a sufficient number of applications. Please call the School of Nursing for specific information.

**Required Minor:** None.

**COURSE DESCRIPTIONS**

**NURS 101W (3)** **Courage, Caring, and Team Building**

This experiential course will prepare students for effective participation in a variety of groups. Students can expect to experience various group member roles through structured activities within the Minnesota State Mankato culture and with diverse cultures. Students will learn about risk taking, trust building, cooperation/collaboration in groups and caring for self and others in the larger community.

Variable

WI, GE-11

**NURS 282 (3)** **Pathophysiology for Healthcare Professionals**

A holistic perspective of pathophysiologic processes and their impact on body systems and overall human functioning. Focuses on the risk factors, pathophysiology and clinical manifestations of physiologic disease processes in humans.

Pre-requisite: BIOL 220, BIOL 330

Fall, Spring

**NURS 284 (3)** **Pharmacology for Healthcare Professionals**

Introduction to basic pharmacologic concepts with an emphasis on implications of drug therapy.

Pre-requisite: BIOL 220, BIOL 330, CHEM 111

Co-requisite: BIOL 270

Fall, Spring

**NURS 286 (3)** **Relationship-Based Care in Nursing Practice**

Provides an introduction to the profession of nursing and explores relationship-based care in nursing practice. Provides an overview of concepts related to establishing caring and healing environments, developing therapeutic and professional relationships, and promoting patient and family-centered care.

Fall, Spring, Summer

**NURS 300 (3)** **Transition into Professional Nursing Practice for RNs**

Introduces fundamental professional nursing concepts: roles of professional nurse and the interprofessional team, nursing’s impact on the delivery of healthcare, and accountability for behaviors. Theoretical perspectives on professional nursing and the concepts of lifelong learning, professional development and self-renewal.

Variable

**NURS 301 (3)** **Cultural Health Immersion: Study Abroad**

This is a study abroad course that focuses on the healthcare system and health beliefs of a different culture/country. Students will have the opportunity to interact with professionals and community members to get a better understanding of their health beliefs, care system, the role of family in health etc.

Summer
NURS 320W (4) Critical Inquiry and Evidence-based Practice for RNs
Introduction to fundamental theories, concepts, evidence, and competencies pertaining to scientific inquiry, development of nursing knowledge, evidence-based and informed practice, and research utilization in nursing practice. Prerequisite: RN Licensure, Admission to the RN Baccalaureate Completion Program, College-level statistics.
Fall, Spring, Summer

NURS 333 (3) Professional Nursing
Introduces concepts fundamental to professional nursing: roles of professional nurse and interprofessional team members, regulatory guidelines, standards of practice, therapeutic communication, and cultural sensitivity. Theoretical perspectives on professional nursing and the concepts of persons, health and environment are introduced. Fall, Spring

NURS 334 (4) Physiologic Integrity I
Focuses on global health concerns and related health promotion and prevention and early detection of alterations in physiological integrity. Includes didactic, simulation, and experiential learning components. Fall, Spring

NURS 335 (3) Family and Societal Nursing Inquiry
Critical inquiry into the nursing care of family and society in the context of diverse cultures. Explores concepts related to family and society as clients, the family and societal health experience, and nursing strategies to foster family and societal care. Fall, Spring

NURS 336 (5) Assessment and Nursing Procedures
A focus on assessment of the healthy family and the relationship of health assessment to prevention and early detection of disease, incorporating the processes of interviewing, history-taking, and physical assessment. A laboratory component integrating nursing skills and procedures is included. Fall, Spring

NURS 342 (4) Gerontological Nursing for RNs
Examines society and aging, focusing on the political, social, economic, ethical and moral issues that have implications for an aging society and on the nurse's role in assisting older adults in realizing their potential for continued growth and better health. Fall, Spring, Summer

NURS 352 (3) Altered Human Functioning for RNs
Explores pathophysiology concepts to enhance the RN student's understanding of illness and health. Identifies rational for clinical judgment and therapeutic intervention in disease conditions. Analyzes psychosocial and family concepts that emerge with pathophysiologic alterations. Fall, Spring

NURS 362 (4) Family and Societal Nursing for RNs
Examination of family level approaches that promote health while exploring concepts of family as client, family health experience, and nurse–family relationships. Nursing strategies to enhance family level care during acute, chronic and critical illnesses are analyzed. Prerequisite: RN Licensure.
Fall, Spring, Summer

NURS 363 (2) Critical Inquiry in Nursing
Introduction to fundamental theories, concepts, evidence, and competencies pertaining to scientific inquiry, development of nursing knowledge, evidence-based and informed practice, and research utilization in nursing practice. Fall, Spring

NURS 364 (5) Physiologic Integrity II
Focuses on nursing management of acute alterations in physiological integrity. Includes didactic, simulation, and experiential learning components. Prerequisite: NURS 333, NURS 334, NURS 335, NURS 336
Fall, Spring

NURS 365 (7) Nursing Care of Families in Transition I
Focuses on the critical inquiry of the physiological and psychosocial changes occurring with families during the childbearing/childrearing period. Includes didactic and experiential learning designed to promote family centered nursing care during the childbearing/childrearing period. Prerequisite: NURS 333, NURS 334, NURS 335, NURS 336
Fall, Spring

NURS 366 (2) Quality, Safety, and Informatics in Nursing Practice
Focus on identification, implementation, and evaluation of patient/family quality and safety measures. Includes quality movement history and evolution, current quality of care issues, research and innovations, intervention strategies, and instruments; with an analysis of health care quality management system models.
Fall, Spring

NURS 382 (4) Holistic Nursing Assessment and Practice
This course explores the nurse’s role in interacting with and providing care to individuals and families of diverse religious, ethnic, and cultural backgrounds across the lifespan. Learners perform a holistic health assessment and examine cultural diversity, spirituality and the integration of complementary and alternative therapies to provide holistic care. Prerequisite: RN Licensure, Admission to the RN Baccalaureate Completion Program, College-level statistics.
Co-requisite: NURS 320
Fall, Spring, Summer

NURS 401 (3) Cultural Immersion in Nursing Practice for RNs
An experiential immersion into the healthcare needs of the client and family within another culture with a focus on nursing interventions to promote health. An intense induction into cultural humility will enhance awareness and promote an appreciation for global health.
Variable

NURS 402 (4) Psychosocial/Inter-professional Communication for RNs
Communication is an essential skill for professional RNs. This course will cover professional communication strategies, including patient and family interactions, dealing with mental-health issues, effective inter-professional communication, and issues unique utilizing technology and information systems. Prerequisite: Admission to the RN Baccalaureate Completion Program, College-level statistics.
Co-requisite: NURS 320
Fall, Spring, Summer

NURS 403 (4) Community Oriented Nursing Inquiry
Think critically about the roles and responsibilities of the community oriented nurse in the context of disease prevention, health promotion, protection, maintenance, restoration, and surveillance. Examine foundational pillars of assurance, assessment and policy development to support relationship based nursing care.
Prerequisite: NURS 363, NURS 364, NURS 365, NURS 366
Fall, Spring

NURS 404 (4) Cultural Immersion in Nursing Practice for RNs
An experiential immersion into the healthcare needs of the client and family within another culture with a focus on nursing interventions to promote health. An intense induction into cultural humility will enhance awareness and promote an appreciation for global health.
Variable

NURS 405 (4) Psychosocial/Inter-professional Communication for RNs
Communication is an essential skill for professional RNs. This course will cover professional communication strategies, including patient and family interactions, dealing with mental-health issues, effective inter-professional communication, and issues unique utilizing technology and information systems. Prerequisite: Admission to the RN Baccalaureate Completion Program, College-level statistics.
Co-requisite: NURS 320
Fall, Spring, Summer

NURS 428 (2) Nursing Elective
Several sections on various topics not included in the curriculum. Each section is a different course and expands on the nursing major courses. Examples of topics are ethical dimensions, laughter and wellness in nursing practice, dementia, rural nursing, cancer care, etc. Prerequisite: As appropriate for each section.
Variable

NURS 433 (4) Community Oriented Nursing Inquiry
Think critically about the roles and responsibilities of the community oriented nurse in the context of disease prevention, health promotion, protection, maintenance, restoration, and surveillance. Examine foundational pillars of assurance, assessment and policy development to support relationship based nursing care.
Prerequisite: NURS 363, NURS 364, NURS 365, NURS 366
Fall, Spring

NURS 434 (4) Physiologic Integrity III
Focuses on nursing management of chronic alterations in physiological integrity. Includes didactic, simulation, and experiential learning components. Prerequisite: NURS 363, NURS 364, NURS 365, NURS 366
Fall, Spring

NURS 435 (3) Nursing Care of Families in Transition II
Focuses on the critical inquiry of families’ health and illness experiences. Includes didactic and experiential learning designed to promote family centered nursing care during transitions within child, teenage, adult and older adult family transitions. Prerequisite: NURS 363, NURS 364, NURS 365, NURS 366
Fall, Spring
NURSING CONTINUED

NURS 436 (4) Psychosocial Integrity
Emphasizes the function and responsibility of nursing in promoting and maintaining the psychosocial integrity of all people. Application of communication and caring through therapeutic relationship and evidence-based nursing actions in the care and treatment of common clinical conditions.
Prerequisite: NURS 363, NURS 364, NURS 365, NURS 366, PSYC 101
Fall, Spring

NURS 444 (4) Healthcare Innovation and Entrepreneurship
This course provides an overview of the innovative and entrepreneurial process within healthcare environments. Students conceptualize and develop a workflow or process improvement plan that includes understanding the current state, identifying innovative solutions, forecasting financial and human resource needs, analyzing potential organizational outcomes, and designing an implementation and evaluation strategy.
On Demand: Spring

NURS 445 (4) Healthcare Issues, Trends, and Ethics
This course provides an overview of the issues, trends, and ethical considerations within healthcare organizations as related to accreditation requirements, licensure and regulatory agencies, payment and reimbursement, the internal management of data, information, knowledge, and technology to communicate and disseminate information effectively.
Prerequisite: NURS 286
On Demand: Fall

NURS 452 (3) Advanced Health Assessment for RNs
This course offers theoretical and simulated clinical practice to develop advanced skills in obtaining a health history and physical assessment throughout the life span, inclusive of specific topics including culture, aging, and caring for the healthcare needs of individuals.
Fall, Spring

NURS 463 (3) Nursing Leadership and Management
Focuses on nursing leadership and management skills, organizational structure, care processes, health policy and regulatory processes, quality improvement, and patient/family and consumer advocacy.
Prerequisite: NURS 433, NURS 434, NURS 435, NURS 436
Fall, Spring

NURS 464 (4) Physiologic Integrity IV
Focuses on nursing management of multi-system alterations in physiologic integrity. Includes didactic, simulation, and experiential learning components.
Prerequisite: NURS 433, NURS 434, NURS 435, NURS 436
Fall, Spring

NURS 465 (2) Nursing Care of Families in Crisis
An examination of family dynamics during crisis and the role of the nurse in caring for families in crisis who are experiencing complex alterations in physiologic integrity.
Prerequisite: NURS 433, NURS 434, NURS 435, NURS 436
Fall, Spring

NURS 466 (4) Professional Role Integration
Focuses on experiential learning which promotes the integration of previous learning and the greater development of the roles of the baccalaureate generalist nurse as a provider of care, designer/manager/coordinator of care, and member of a profession.
Prerequisite: NURS 433, NURS 434, NURS 435, NURS 436, NURS 463, NURS 464, NURS 465
Fall, Spring

NURS 472 (5) Provider of Care II
This capstone course focuses on the community as the client and integrates previously learned theory and principles of nursing.
Prerequisite: NURS 382
Spring

NURS 473 (4) Provider of Care II Clinical
Health promotion, disease prevention, and health education are operationalized as principal interventions within the context of community health.
Prerequisite: NURS 472 or concurrent
Spring

NURS 482W (6) Population Focused Care for RNs
This course involves synthesis of nursing and public health theories and practice within the community. Nursing care of individuals, families, and groups is addressed within the context of promoting, maintaining, and restoring health. This course focuses on health promotion, disease prevention and health education using the science of epidemiology, health policy, community assessment, disaster response, and population-focused interventions to promote social justice and reduce health disparities.
Prerequisite: NURS 320, NURS 382: RN Licensure, Admission to the RN Baccalaureate Completion, Program College-level statistics
Fall, Spring, Summer

NURS 490 (1-3) Workshop
Workshop(s) with various topics and titles.
Variable

NURS 491 (1-5) In-Service
Workshop(s) with various topics and titles.
Variable

NURS 492 (4) Nursing Capstone and Leadership for Baccalaureate Practice
This capstone course, learners synthesize the underpinnings of Baccalaureate nursing education and leadership principles to culminate in an evidence-based capstone project designed to enhance or improve health outcomes and incorporate the professional leadership roles. Learners will synthesize program outcomes and be evaluated on achievement of these outcomes as demonstrated through the capstone project and reflection journal. Learners explore leadership and management principles and concepts necessary for the professional nurse to function effectively in a changing health care system incorporating collaborative strategies, technology, financial issues, and the complexity of care.
Prerequisite: RN Licensure; NURS 320, NURS 362, NURS 382
Co-requisites: NURS 402, NURS 420, NURS 482
Fall, Spring, Summer

NURS 497 (1) Summer Internship
This course provides clinical based learning opportunities to encourage application of theory and research based knowledge in clinical practice. Students will engage in experiences to enhance the development of their professional nursing role.

NURS 499 (1-5) Individual Study
Individual study according to outcomes developed by faculty and student(s).
Variable
PHILOSOPHY BA, BS AND MINOR

Philosophy

College of Arts & Humanities
Department of Philosophy
227 Armstrong Hall • 507-389-2012
Website: mnsu.edu/philosophy

Chair: Brandon Cooke
Faculty: Brandon Cooke, John Humphrey, Richard Liebendorfer, Craig Matarrese, Joshua Peiss, Bekka Williams, Julie Wulfemeyer, Sun Kyong Yu

Our mission is to promote our students' development as independent and critical thinkers, and to guide their reflective engagement with fundamental questions about the nature of knowledge and reasoning, of ethical and aesthetic values, and of mind and world.

Students in our programs develop strong critical thinking, research, and communication skills, which are essential for success in any career. Those skills provide philosophy majors with the flexibility to adapt and grow as technologies and economic markets change. Our graduates have gone on to careers in higher education, medicine, law, information technology, business, non-profit leadership, publishing, and government.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

Admission to Major is granted by the department. Minimum university admission requirements are:
- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (“C”).
Contact the department for application procedures.

GPA Policy: None.

P/N Grading Policy: the P/N grading system applies to all courses, but majors and minors may take 300- or 400-level PHIL courses for P/N credit only with the consent of the department.

PHILOSOPHY BA

Degree completion = 120 credits

Major Common Core

PHIL 334W History of Philosophy: Classical Philosophy (3)
PHIL 336W History of Philosophy: Renaissance and Modern Philosophy (3)
Logic Requirement (choose 3 credits)
PHIL 110 Logic and Critical Thinking (3)
PHIL 311 Symbolic Logic (3)

Major Restricted Electives

Cluster 1: History of Philosophy (choose 3 credits)
Each course can fulfill only one cluster requirement.
PHIL 337 19th Century Philosophy (3)
PHIL 338 American Philosophy (3)
PHIL 358W Topics in Asian Philosophy (3)
PHIL 361 Philosophy of Religion (3)
PHIL 400 The Philosophy of Immanuel Kant (3)
PHIL 405 The Philosophy of Ludwig Wittgenstein (3)
PHIL 437 Contemporary Philosophy (3)
PHIL 455 Existentialism and Phenomenology (3)
Cluster 2: Language, Epistemology, Metaphysics, and Mind (choose 6 credits)
Each course can fulfill only one cluster requirement.
PHIL 358W Topics in Asian Philosophy (3)
PHIL 361 Philosophy of Religion (3)
PHIL 410 Philosophy of Language (3)
PHIL 420 Epistemology (3)
PHIL 430 Metaphysics (3)
PHIL 437 Contemporary Philosophy (3)

PHIL 474 Philosophy of the Mind (3)
PHIL 475 Philosophical Issues in Cognitive Science (3)
PHIL 476 Philosophy of Perception (3)
PHIL 477 Animal Minds (3)

Cluster 3: Philosophy of Science (choose 3 credits)
Each course can fulfill only one cluster requirement.
PHIL 112W Scientific Reasoning (3)
PHIL 475 Philosophical Issues in Cognitive Science (3)
PHIL 480 Philosophy of Science (3)
PHIL 481 Philosophy of Biology (3)
PHIL 482 Philosophy of Social Science (3)

Cluster 4: Ethics and Social and Political Philosophy (choose 6 credits)
At least 3 credits must be 300-400 level. Each course can fulfill only one cluster requirement.
PHIL 115W Philosophy of Race, Class, and Gender (3)
PHIL 120W Introduction to Ethics (3)
PHIL 205W Culture, Identity, and Diversity (3)
PHIL 222W Medical Ethics (3)
PHIL 224W Business Ethics (3)
PHIL 226W Environmental Ethics (3)
PHIL 240W Law, Justice, and Society (3)
PHIL 321W Social and Political Philosophy (3)
PHIL 322W Ethical Theory (3)
PHIL 323W Philosophy of Economics (3)
PHIL 440 Philosophy of Law (3)
PHIL 445 Feminist Philosophy (3)

Cluster 5: Aesthetics (choose 3 credits)
Each course can fulfill only one cluster requirement.
PHIL 460 Philosophy of the Arts (3)
PHIL 465 Philosophy of Film (3)

Major Unrestricted Electives (choose 9 credits)
These courses may not also be counter toward the Major Common Core or the Major Restricted Electives.
PHIL 321W Social and Political Philosophy (3)
PHIL 322W Ethical Theory (3)
PHIL 323W Philosophy of Economics (3)
PHIL 337 19th Century Philosophy (3)
PHIL 338 American Philosophy (3)
PHIL 358W Topics in Asian Philosophy (3)
PHIL 361 Philosophy of Religion (3)
PHIL 400 The Philosophy of Immanuel Kant (3)
PHIL 405 The Philosophy of Ludwig Wittgenstein (3)
PHIL 410 Philosophy of Language (3)
PHIL 420 Epistemology (3)
PHIL 430 Metaphysics (3)
PHIL 437 Contemporary Philosophy (3)
PHIL 440 Philosophy of Law (3)
PHIL 445 Feminist Philosophy (3)
PHIL 450 Special Topics (1-3)
PHIL 455 Existentialism and Phenomenology (3)
PHIL 460 Philosophy of the Arts (3)
PHIL 465 Philosophy of Film (3)
PHIL 474 Philosophy of the Mind (3)
PHIL 475 Philosophical Issues in Cognitive Science (3)
PHIL 476 Philosophy of Perception (3)
PHIL 477 Animal Minds (3)
PHIL 480 Philosophy of Science (3)
PHIL 481 Philosophy of Biology (3)
PHIL 482 Philosophy of Social Science (3)
PHIL 499 Individual Study (1-6)

Other Graduation Requirements
Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)
Required Minor: Yes. Any minor outside Philosophy (Critical Thinking, Ethics, Philosophy) is acceptable.

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PHILOSOPHY BS

Degree completion = 120 credits

Major Common Core
PHIL 311 Symbolic Logic (3)
PHIL 334W History of Philosophy: Classical Philosophy (3)
PHIL 336W History of Philosophy: Renaissance and Modern Philosophy (3)

Major Restricted Electives
Cluster 1: History of Philosophy (choose 3 credits)
Each course can fulfill only one cluster requirement.
PHIL 337 19th Century Philosophy (3)
PHIL 338 American Philosophy (3)
PHIL 358W Topics in Asian Philosophy (3)
PHIL 361 Philosophy of Religion (3)
PHIL 400 The Philosophy of Immanuel Kant (3)
PHIL 405 The Philosophy of Ludwig Wittgenstein (3)
PHIL 437 Contemporary Philosophy (3)
PHIL 455 Existentialism and Phenomenology (3)

Cluster 2: Language, Epistemology, Metaphysics, and Mind (choose 6 credits)
Each course can fulfill only one cluster requirement.
PHIL 358W Topics in Asian Philosophy (3)
PHIL 361 Philosophy of Religion (3)
PHIL 410 Philosophy of Language (3)
PHIL 420 Epistemology (3)
PHIL 430 Metaphysics (3)
PHIL 437 Contemporary Philosophy (3)
PHIL 474 Philosophy of the Mind (3)
PHIL 475 Philosophical Issues in Cognitive Science (3)
PHIL 476 Philosophy of Perception (3)
PHIL 477 Animal Minds (3)

Cluster 3: Philosophy of Science (choose 6 credits)
Each course can fulfill only one cluster requirement.
PHIL 112W Scientific Reasoning (3)
PHIL 475 Philosophical Issues in Cognitive Science (3)
PHIL 480 Philosophy of Science (3)
PHIL 481 Philosophy of Biology (3)
PHIL 482 Philosophy of Social Science (3)

Cluster 4: Ethics and Social and Political Philosophy (choose 6 credits)
At least 3 credits must be 300-400 level. Each course can fulfill only one cluster requirement.
PHIL 115W Philosophy of Race, Class, and Gender (3)
PHIL 120W Introduction to Ethics (3)
PHIL 203W Culture, Identity, and Diversity (3)
PHIL 222W Medical Ethics (3)
PHIL 224W Business Ethics (3)
PHIL 226W Environmental Ethics (3)
PHIL 240W Law, Justice, and Society (3)
PHIL 321W Social and Political Philosophy (3)
PHIL 322W Ethical Theory (3)
PHIL 323W Philosophy of Economics (3)
PHIL 440 Philosophy of Law (3)
PHIL 445 Feminist Philosophy (3)

Cluster 5: Aesthetics (choose 3 credits)
Each course can fulfill only one cluster requirement.
PHIL 460 Philosophy of the Arts (3)
PHIL 465 Philosophy of Film (3)

Major Unrestricted Electives (choose 6 credits)
These courses may not also be counter toward the Major Common Core or the Major Restricted Electives.
PHIL 321W Social and Political Philosophy (3)
PHIL 322W Ethical Theory (3)
PHIL 323W Philosophy of Economics (3)
PHIL 337 19th Century Philosophy (3)
PHIL 338 American Philosophy (3)
PHIL 358W Topics in Asian Philosophy (3)
PHIL 361 Philosophy of Religion (3)
PHIL 400 The Philosophy of Immanuel Kant (3)
PHIL 405 The Philosophy of Ludwig Wittgenstein (3)
PHIL 410 Philosophy of Language (3)

PHILOSOPHY MINOR

(18 credits)

Core
PHIL 110 Logic and Critical Thinking (3)
PHIL 334W History of Philosophy: Classical Philosophy (3)
PHIL 336W History of Philosophy: Renaissance and Modern Philosophy (3)

Electives (choose 9 credits)
PHIL 110W Introduction to Philosophy (3)
PHIL 111W Philosophical Problem: The Mind-Body Problem (3)
PHIL 112 Logic of Scientific Method (3)
PHIL 115W Philosophy of Race, Class and Gender (3)
PHIL 120W Introduction to Ethics (3)
PHIL 122W Introduction to Asian Philosophy (3)
PHIL 203W Culture, Identity, and Diversity (3)
PHIL 222W Medical Ethics (3)
PHIL 224W Business Ethics (3)
PHIL 226W Environmental Ethics (3)
PHIL 240W Law, Justice & Society (3)
PHIL 311 Symbolic Logic (3)
PHIL 321W Social & Political Philosophy (3)
PHIL 322W Ethical Theory (3)
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PHIL 410 Philosophy of Language (3)
PHIL 420 Epistemology (3)
PHIL 430 Metaphysics (3)
PHIL 437 Contemporary Philosophy (3)
PHIL 440 Philosophy of Law (3)
PHIL 445 Feminist Philosophy (3)
PHIL 450 Special Topics (1-3)
PHIL 455 Existentialism & Phenomenology (3)
PHIL 460 Philosophy of the Arts (3)
PHIL 465 Philosophy of Film (3)
PHIL 474 Philosophy of the Mind (3)
PHIL 475 Philosophical Issues in Cognitive Science (3)
PHIL 476 Philosophy of Perception (3)
PHIL 477 Animal Minds (3)
PHIL 480 Philosophy of Science (3)
PHIL 481 Philosophy of Biology (3)
PHIL 482 Philosophy of Social Science (3)
PHIL 499 Individual Study (1-6)

HONORS IN PHILOSOPHY

The Honors in Philosophy option provides an enriched experience to the most capable Philosophy majors. Students pursuing Honors in Philosophy work closely...
with a Philosophy faculty member to write a thesis in the final year of study. This option is aimed especially at students who plan on graduate or professional study.

Admission to Honors in Philosophy is granted by the department, and ordinarily happens in the junior year, but no later than the beginning of the final year of study. Participation in the University Honors Program is not required. Admission requirements include a 3.0 cumulative GPA and 3.5 in all PHIL courses completed, with a minimum of 4 PHIL courses completed. In order to graduate with Honors in Philosophy, a student must meet the minimum requirements for graduation with University Honors (3.5 cumulative GPA or better), have a 3.5 or better in all PHIL courses, and complete all program requirements, including the Philosophy Honors Thesis.

Further details and policies on Honors in Philosophy and the Honors Thesis are available from the Department of Philosophy.

### Honors in Philosophy (BA) requirements:
- Philosophy BA requirements, with 3 credits from the Major Unrestricted Electives list
- PHIL 495 Philosophy Honors Thesis I (3)
- PHIL 496 Philosophy Honors Thesis II (3)

### Honors in Philosophy (BS) requirements:
- Philosophy BS requirements, with no credits from the Major Unrestricted Electives list
- PHIL 495 Philosophy Honors Thesis I (3)
- PHIL 496 Philosophy Honors Thesis II (3)

## COURSE DESCRIPTIONS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 100W</td>
<td>Introduction to Philosophy</td>
<td>Introduction to the nature of philosophy and specific, basic problems.</td>
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<td></td>
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<td>Fall, Spring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WI, GE-6</td>
</tr>
<tr>
<td>PHIL 101W</td>
<td>Philosophical Problem: the Mind-Body Problem</td>
<td>This course considers historical and contemporary analyses of the mind in</td>
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<td>relation to the body and the connection of the mind-body problem to other</td>
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<td>issues concerning both religion and science.</td>
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<td>Fall, Spring</td>
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<td>WI, GE-6</td>
</tr>
<tr>
<td>PHIL 110</td>
<td>Logic and Critical Thinking</td>
<td>Traditional syllogistic logic and an introduction to the elements of modern</td>
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<td></td>
<td>symbolic logic.</td>
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<td>Fall, Spring</td>
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<td>GE-2, GE-4</td>
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<tr>
<td>PHIL 112W</td>
<td>Scientific Reasoning</td>
<td>This course explores what makes reasoning scientific as distinguished from</td>
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<td>non-scientific. Issues inductive reasoning, causal reasoning, fallacies,</td>
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<td>hypothetico-deductive reasoning, falsifiability, and scientific knowledge.</td>
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<td>GE-2, GE-4</td>
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<tr>
<td>PHIL 115W</td>
<td>Philosophy of Race, Class and Gender</td>
<td>To what extent do the differences among races and between genders represent</td>
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<td>biological differences, and to what extent are they constructed by society?</td>
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<td>This idea relates to other fundamental ideas in political philosophy, ethics,</td>
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<td>and law.</td>
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<td>WI, GE-6, GE-9</td>
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<tr>
<td>PHIL 120W</td>
<td>Introduction to Ethics</td>
<td>Discussion of theories of value and obligation.</td>
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<td>WI, GE-6, GE-9</td>
</tr>
<tr>
<td>PHIL 122W</td>
<td>Introduction to Asian Philosophy</td>
<td>Survey of Asian philosophical traditions of Hinduism, Jainism, Buddhism,</td>
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<td>Confucianism, and Daoism.</td>
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<td>GE-6, GE-8</td>
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<td>Diverse Cultures - Purple</td>
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<tr>
<td>PHIL 205W</td>
<td>Culture, Identity, and Diversity</td>
<td>Discussion of the ways that a culture both creates human community and</td>
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<td>shapes self-identity. Exploration of similarities and differences between</td>
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<td>and interdependence among cultural traditions, and of vocabularies for</td>
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<td>assessing traditions.</td>
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<td>WI, GE-6, GE-8</td>
</tr>
<tr>
<td>PHIL 222W</td>
<td>Medical Ethics</td>
<td>Ethical perspectives relevant to issues such as euthanasia, genetic</td>
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<td>engineering, organ transplant, patients’ rights, abortion, etc.</td>
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<td>WI, GE-6, GE-9</td>
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<tr>
<td>PHIL 224W</td>
<td>Business Ethics</td>
<td>Introduction to ethical theories and concepts and their application to</td>
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<td>specific cases in the world of business.</td>
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<td>WI, GE-6, GE-9</td>
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<td>PHIL 224W</td>
<td>Business Ethics</td>
<td>Introduction to ethical theories and concepts and their application to</td>
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<td>specific cases in the world of business.</td>
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<td>WI, GE-6, GE-9</td>
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<tr>
<td>PHIL 226W</td>
<td>Environmental Ethics</td>
<td>Questions about human responsibilities to other animals and the environment</td>
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<td>gain urgency as environmental crises become more prevalent, and animal</td>
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<td>species continue to be eliminated. Learn about, critique, and apply the</td>
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<td>principles underlying evaluations of human environmental conduct.</td>
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<td>WI, GE-9, GE-10</td>
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<tr>
<td>PHIL 240W</td>
<td>Law, Justice &amp; Society</td>
<td>Consideration of the basic philosophical approaches to the idea of justice</td>
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<td>and how this idea relates to other fundamental ideas in political</td>
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<td>philosophy, ethics, and law.</td>
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<td>WI, GE-6, GE-9</td>
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<tr>
<td>PHIL 311</td>
<td>Symbolic Logic</td>
<td>Study of the elements of first order symbolic logic, i.e., the propositional</td>
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<td>calculus, and its applications to ordinary language and mathematics.</td>
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<td>Spring</td>
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<td>GE-2, GE-4</td>
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<tr>
<td>PHIL 321W</td>
<td>Social &amp; Political Philosophy</td>
<td>Consideration of the basic philosophical approaches to the formation of</td>
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<td>laws and responsibilities in relation to the organization of society and</td>
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<td>government.</td>
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<td>WI, GE-6, GE-9</td>
</tr>
<tr>
<td>PHIL 322W</td>
<td>Ethical Theory</td>
<td>Topics in normative, meta-ethical, and applied ethical theory.</td>
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<td>WI, GE-6, GE-9</td>
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<tr>
<td>PHIL 323W</td>
<td>Philosophy of Economics</td>
<td>This course will introduce students to important texts in moral and</td>
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<td>social philosophy that provide the foundation for modern economics.</td>
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<td>In addition, we will discuss philosophical accounts of rationality, well</td>
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<td>being, and freedom and their relevance to economic analysis.</td>
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<td>WI, GE-6, GE-9</td>
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<tr>
<td>PHIL 334W</td>
<td>History of Philosophy: Classical Philosophy</td>
<td>This course will introduce students to important texts in moral and</td>
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<td>social philosophy that provide the foundation for modern economics.</td>
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<td>In addition, we will discuss philosophical accounts of rationality, well</td>
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<td>being, and freedom and their relevance to economic analysis.</td>
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<td>WI, GE-6, GE-9</td>
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<tr>
<td>PHIL 336W</td>
<td>History of Philosophy: Renaissance and Modern</td>
<td>Late Medieval Philosophy and its influence on the Renaissance, Descartes,</td>
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<td>Philosophy and its influence on the Renaissance, Descartes, Spinoza,</td>
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<td>Leibniz and Continental Rationalism, Locke, Berkeley, Hume and British</td>
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<td>Empiricism, and Kant.</td>
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<td>WI, GE-6</td>
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<tr>
<td>PHIL 337</td>
<td>19th Century Philosophy</td>
<td>This course will introduce students to important texts in moral and</td>
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<td>social philosophy that provide the foundation for modern economics.</td>
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<td>In addition, we will discuss philosophical accounts of rationality, well</td>
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<td>being, and freedom and their relevance to economic analysis.</td>
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<td>WI, GE-6</td>
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<tr>
<td>PHIL 338</td>
<td>American Philosophy</td>
<td>Cultural diversity and its impact on society and culture.</td>
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<td>Colonial times to the present.</td>
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</tbody>
</table>

Further details and policies on Honors in Philosophy and the Honors Thesis are available from the Department of Philosophy.

### Honors in Philosophy (BA) requirements:
- Philosophy BA requirements, with 3 credits from the Major Unrestricted Electives list
- PHIL 495 Philosophy Honors Thesis I (3)
- PHIL 496 Philosophy Honors Thesis II (3)

### Honors in Philosophy (BS) requirements:
- Philosophy BS requirements, with no credits from the Major Unrestricted Electives list
- PHIL 495 Philosophy Honors Thesis I (3)
- PHIL 496 Philosophy Honors Thesis II (3)
PHIL 358W (3) Topics in Asian Philosophy
Critical discussion of the topics chosen from the Asian philosophical traditions of Hinduism, Buddhism, Confucianism, and Daoism.
Variable
WI, GE-6, GE-8
Diverse Cultures - Purple

PHIL 361 (3) Philosophy of Religion
Structure and logic of religious belief. Problems such as the existence of God, evil, immortality, miracles, and religious language.
Fall

PHIL 400 (3) The Philosophy of Immanuel Kant
This course will undertake a close reading and study of Immanuel Kant's Critique of Pure Reason and other texts.
Variable

PHIL 405 (3) The Philosophy of Ludwig Wittgenstein
A study of the philosophy of Ludwig Wittgenstein.
Variable

PHIL 410 (3) Philosophy of Language
Theories of meaning, speech acts and semantics, relation of language to the world.
Variable

PHIL 420 (3) Epistemology
Theories of knowledge and justification, skeptical attacks on the possibility of knowledge, and anti-skeptical defenses.
Variable

PHIL 430 (3) Metaphysics
An investigation of the most fundamental concepts of reality, including the nature of things, identity over time, modality, causation, free will, space and time, and universals and particulars.
Variable

PHIL 437 (3) Contemporary Philosophy
Major philosophers and philosophies of the late 20th Century.
Variable

PHIL 440 (3) Philosophy of Law
Discussion of philosophical issues in law by way of connecting legal problems to well-developed and traditional problems in philosophy, e.g., in ethics, political philosophy, and epistemology, and investigates the philosophical underpinnings of the development of law. The course takes an analytical approach to law (as opposed to historical sociological, political, or legalistic approaches) and devotes a substantial part of the semester to a major work on law written by a philosopher.

PHIL 445 (3) Feminist Philosophy
Study of philosophy done from a feminist perspective in areas such as metaphysics, epistemology or ethics.
Fall

PHIL 450 (1-3) Special Topics
Intensive study of a single philosopher or topic.
Variable

PHIL 455 (3) Existentialism & Phenomenology
In-depth analysis of major European existentialists such as Kierkegaard, Heidegger, and Sartre.
Variable

PHIL 460 (3) Philosophy of the Arts
Aesthetic principles, theories, and the creative process. Theories of visual arts, music, literature, dance, etc.
Spring

PHIL 465 (3) Philosophy of Film
This course investigates some of the central philosophical issues in our thinking about film, including questions about narrative, ontology, ethical criticism of film, the role of artistic intentions in interpretation, artistic medium, and the art/entertainment distinction.
Spring

PHIL 474 (3) Philosophy of the Mind
The nature of consciousness, mind and body relations, freedom of action.
Variable

PHIL 475 (3) Philosophical Issues in Cognitive Science
This course examines the conceptual and philosophical complexities of efforts to understand the mind in science. Topics include the differences and similarities between humans and other animals, the nature of psychological explanation, and reductive strategies for explaining consciousness, intentionality and language.
Fall

PHIL 476 (3) Philosophy of Perception
Cognitive and epistemic issues surrounding sensory perception, including the nature of perception, its immediate objects, and its ability to deliver knowledge of the world.
Variable

PHIL 477 (3) Animal Minds
Philosophical issues concerning the mental lives of non-human animals, with emphasis on consciousness, rationality, language, and implications for non-human animal ethics.

PHIL 480 (3) Philosophy of Science
Nature of explanations, causality, theoretical entities, and selected problems.
Variable

PHIL 481 (3) Philosophy of Biology
The course examines conceptual and philosophical issues in biology, the nature and scope of biological explanation and conflicts between evolutionary and religious explanations for the origin of life.

PHIL 482 (3) Philosophy of Social Science
Examines the nature and methods of alternative strategies of theory construction in the social sciences and the metaphysical and epistemological assumptions and implications of such strategies. For example can people, their behavior and norms of rationality be understood in naturalistic terms or must they be understood only in culturally local terms?
Variable

PHIL 490 (1-6) Workshop
Special event of less than semester duration.
Variable

PHIL 491 (1-6) In-Service
Variable

PHIL 495 (3) Philosophy Honors Thesis I
Restricted to Philosophy Honors students. Permission of department and instructor required.

PHIL 496 (3) Philosophy Honors Thesis II
Restricted to Philosophy Honors students. Permission of department and instructor required.
Prerequisite: PHIL 495

PHIL 497 (3) Philosophy-Cognitive Science Thesis
Restricted to Cognitive Science Majors in their final year.
Fall, Spring

PHIL 499 (1-6) Individual Study
Individual study of a philosopher or problem.
Variable
## PHILOSOPHY, POLITICS & ECONOMICS (PPE) BA AND BS

### Philosophy, Politics & Economics (PPE)

**College of Arts & Humanities**  
**Department of Philosophy**  
227 Armstrong Hall • 507-389-2012

Co-Directors & Advisors for Philosophy: Craig Matarrese and Joshua Preiss  
Advisor for Political Science: Joe Kunkel  
Advisor for Economics: Ved Sharma

The PPE major integrates the historical, methodological, theoretical, and practical foci of Philosophy, Political Science, and Economics to form a single course of study. The focus of the major is on the dynamic relationships between the economic, political, and legal systems of our society, relationships that require the analytical methods of all three disciplines to be understood fully. For example, the best way to understand our competitive market economy, certainly a fundamental institution of our society, is to explore its empirical, historical, political, and ethical dimensions. Indeed, if one considers the most influential historical figures in each of the three fields, e.g., John Locke, Adam Smith, David Hume, John Stuart Mill, G.W.F. Hegel, and Karl Marx, it is immediately clear that they recognized no rigid disciplinary boundaries between philosophy, political science, and economics, and that the strength of their views lies precisely in their grasp of the dynamic relationships between the systems that these disciplines study. Admittedly, the coherence of the major is expressed at a fairly abstract and analytical level, the content of the major can be broad and diverse, but all students who work through the major’s curriculum will develop an appreciation of the complexity of our society’s central institutions and problems at the same time that they acquire the analytical facility to engage and critically evaluate them. Students in the major take a number of required core courses in Philosophy, Political Science, and Economics, 9 credits from each of the three departments, a total of 27 credits. Majors must also choose which department they will focus in, their “concentration” (so specifically, one is “a PPE major with a concentration in Philosophy,” or “a PPE major with a concentration in Political Science,” etc.) Students then take 5 more upper-level courses in the concentration (15 credits), and two more upper-level courses from each of the other two departments (12 credits). Majors must also take a statistics course (3 credits), and a senior thesis or independent study course (3 credits). The total required number of credits then is 60, and 43 of them must be in upper-division courses. The PPE major, then, qualifies as a “broad major” that does not require a minor.

### Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)

#### POLICIES/INFORMATION

Admission to Major is granted by the Director of the PPE Program. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.0 (“C”).

Contact the director of the program for application procedures.

#### P/N Grading Policy

The P/N grading system applies to all courses, but majors and minors may take 300-400-level courses in philosophy for P/N credit only with the consent of the department.

### PHILOSOPHY, POLITICS & ECONOMICS (PPE) BA

Degree completion = 120 credits

#### Major Common Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ECON 201 Principles of Macroeconomics</td>
<td>3</td>
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<tr>
<td>ECON 202 Principles of Microeconomics</td>
<td>3</td>
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<tr>
<td>ECON 355 Intermediate Microeconomics</td>
<td>3</td>
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<tr>
<td>PHIL 120W Introduction to Ethics</td>
<td>3</td>
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<tr>
<td>POL 111 United States Government</td>
<td>3</td>
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<tr>
<td>PHIL 224W Business Ethics</td>
<td>3</td>
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<tr>
<td>PHIL 240W Law, Justice &amp; Society</td>
<td>3</td>
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<tr>
<td>PHIL 323W Philosophy of Economics</td>
<td>3</td>
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<tr>
<td>PHIL 440 Philosophy of Law</td>
<td>3</td>
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<tr>
<td>POL 231 World Politics</td>
<td>3</td>
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<tr>
<td>POL 241 Introduction to Comparative Politics</td>
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</tbody>
</table>

(choose 3 credits)

#### POL 3xx to POL 4xx, except POL 490, POL 491 and POL 492.

(choose 6 credits)

### Major Emphasis: Philosophy

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PHIL 495 Senior Thesis I</td>
<td>2</td>
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<tr>
<td>PHIL 496 Philosophy Honors Thesis II</td>
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<tr>
<td>PHIL 321 Social &amp; Political Philosophy</td>
<td>3</td>
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<tr>
<td>PHIL 322W Ethical Theory</td>
<td>3</td>
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<td>PHIL 323W Philosophy of Economics</td>
<td>3</td>
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<tr>
<td>PHIL 334W History of Philosophy: Classical Philosophy</td>
<td>3</td>
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<tr>
<td>PHIL 336W History of Philosophy: Renaissance and Modern Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 337 19th Century Philosophy</td>
<td>3</td>
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<tr>
<td>PHIL 338 American Philosophy</td>
<td>3</td>
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<td>PHIL 358W Topics in Asian Philosophy</td>
<td>3</td>
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<tr>
<td>PHIL 437 Contemporary Philosophy</td>
<td>3</td>
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<td>PHIL 440 Philosophy of Law</td>
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<tr>
<td>PHIL 450 Special Topics</td>
<td>1-3</td>
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<tr>
<td>PHIL 455 Existentialism &amp; Phenomenology</td>
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<tr>
<td>PHIL 474 Philosophy of the Mind</td>
<td>3</td>
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<tr>
<td>PHIL 480 Philosophy of Science</td>
<td>3</td>
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<tr>
<td>PHIL 499 Individual Study</td>
<td>1-6</td>
</tr>
</tbody>
</table>

(choose 6 credits)

POL 3xx to POL 4xx, except POL 490, POL 491 and POL 492.

(choose 6 credits)

#### ECON 3xx to ECON 4xx, except ECON 480, ECON 481, ECON 482, ECON 491, ECON 498 and ECON 499.

(choose 15 credits)

### Major Emphasis: Economics

<table>
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<th>Course</th>
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<tr>
<td>PHIL 321 Social &amp; Political Philosophy</td>
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<td>PHIL 322W Ethical Theory</td>
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<td>PHIL 323W Philosophy of Economics</td>
<td>3</td>
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<tr>
<td>PHIL 334W History of Philosophy: Classical Philosophy</td>
<td>3</td>
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<tr>
<td>PHIL 336W History of Philosophy: Renaissance and Modern Philosophy</td>
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<td>PHIL 437 Contemporary Philosophy</td>
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<td>PHIL 440 Philosophy of Law</td>
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<td>PHIL 450 Special Topics</td>
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<tr>
<td>PHIL 499 Individual Study</td>
<td>1-6</td>
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</tbody>
</table>

(choose 6 credits)

POL 3xx to POL 4xx, except POL 490, POL 491 and POL 492.

(choose 3 credits)

#### ECON 3xx to ECON 4xx, except ECON 480, ECON 481, ECON 482, ECON 491, ECON 498 and ECON 499.

(choose 15 credits)

### Major Emphasis: Political Science

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<th>Course</th>
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<tbody>
<tr>
<td>POL 231 World Politics</td>
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<tr>
<td>POL 241 Introduction to Comparative Politics</td>
<td>3</td>
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<tr>
<td>POL 311 Ancient &amp; Medieval Political Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>POL 312 Early Modern Political Philosophy</td>
<td>3</td>
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<tr>
<td>POL 313 Modern Political Philosophy</td>
<td>3</td>
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<tr>
<td>POL 410 Topics in Political Philosophy</td>
<td>1-4</td>
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<tr>
<td>POL 411 Early United States Political Thought</td>
<td>3</td>
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<tr>
<td>POL 413 Recent United States Political Thought</td>
<td>3</td>
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<tr>
<td>POL 415 Recent United States Political Thought</td>
<td>3</td>
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</table>
POL 416 Nonwestern Political Philosophy (3)  
(choose 3 credits)

POL 450 Topics in Public Law (1-4)  
POL 451 Administrative Law (3)  
POL 452 Jurisprudence (3)  
POL 453 Constitutional Law (3)  
POL 454 Civil Liberties (3)  
POL 455 American Legal Philosophy (3)  
(choose 9 credits)

POL 3xx to POL 4xx, except POL 490, POL 491.  
(choose 3 credits)

POL 492 Individual Study (1-5)  
(choose 6 credits)

PHIL 321 Social & Political Philosophy (3)  
PHIL 322W Ethical Theory (3)  
PHIL 323W Philosophy of Economics (3)  
PHIL 334W History of Philosophy: Classical Philosophy (3)  
PHIL 336W History of Philosophy: Renaissance and Modern Philosophy (3)  
PHIL 337 19th Century Philosophy (3)  
PHIL 338 American Philosophy (3)  
PHIL 338W Topics in Asian Philosophy (3)  
PHIL 437 Contemporary Philosophy (3)  
PHIL 440 Philosophy of Law (3)  
PHIL 450 Special Topics (1-3)  
PHIL 455 Existentialism & Phenomenology (3)  
PHIL 474 Philosophy of the Mind (3)  
PHIL 480 Philosophy of Science (3)  
PHIL 499 Individual Study (1-6)  
(choose 6 credits)

ECON 301 Quantitative Methods in Economics (3)  
ECON 305 Money and Banking (3)  
ECON 314W Current Economic Issues (3)  
ECON 355 Intermediate Microeconomics (3)  
ECON 356 Intermediate Macroeconomics (3)  
ECON 403 Labor Economics (3)  
ECON 405 Central Banking (3)  
ECON 406 Economics of Unions (3)  
ECON 411 Urban Economics (3)  
ECON 412 Resource and Environmental Economics (3)  
ECON 416 Sports Economics (3)  
ECON 420 International Economics (3)  
ECON 429 Economic Education (3)  
ECON 440 Public Finance (3)  
ECON 450 Economic Development (3)  
ECON 462 Econometrics (3)  
ECON 463 Applied Econometrics of Financial Markets (3)  
ECON 472 Industrial Organization (3)  

Other Graduation Requirements

Requirement for Bachelor of Arts (BA) degree: Language (8 credits)

PHILOSOPHY, POLITICS & ECONOMICS BS
Degree completion = 120 credits

Major Common Core

ECON 201 Principles of Macroeconomics (3)  
ECON 202 Principles of Microeconomics (3)  
ECON 355 Intermediate Microeconomics (3)  
PHIL 120W Introduction to Ethics (3)  
POL 111 United States Government (3)  
(choose 3 credits)

PHIL 224W Business Ethics (3)  
PHIL 240W Law, Justice & Society (3)  
(choose 3 credits)

PHIL 323W Philosophy of Economics (3)  
PHIL 440 Philosophy of Law (3)  
(choose 3 credits)

POL 231 World Politics (3)  
POL 241 Introduction to Comparative Politics (3)  
(choose 3 credits)

POL 311 Ancient & Medieval Political Philosophy (3)  
POL 312 Early Modern Political Philosophy (3)  
POL 313 Modern Political Philosophy (3)  
POL 410 Topics in Political Philosophy (1-4)  
POL 414 Early United States Political Thought (3)  
POL 415 Recent United States Political Thought (3)  
POL 416 Nonwestern Political Philosophy (3)  
(choose 3-4 credits)

ECON 207 Business Statistics (4)  
MATH 354 Concepts of Probability & Statistics (4)  
POL 221 Introduction to Political Analysis (3)  
PSYC 201 Statistics for Psychology (4)  
SOC 202 Introductory Social Statistics (3)  
STAT 154 Elementary Statistics (4)

Major Emphasis: Philosophy

PHIL 495 Senior Thesis I (2)  
PHIL 496 Philosophy Honors Thesis II (1)  
(choose 15 credits)

PHIL 321 Social & Political Philosophy (3)  
PHIL 322W Ethical Theory (3)  
PHIL 323W Philosophy of Economics (3)  
PHIL 334W History of Philosophy: Classical Philosophy (3)  
PHIL 336W History of Philosophy: Renaissance and Modern Philosophy (3)  
PHIL 337 19th Century Philosophy (3)  
PHIL 338 American Philosophy (3)  
PHIL 338W Topics in Asian Philosophy (3)  
PHIL 437 Contemporary Philosophy (3)  
PHIL 440 Philosophy of Law (3)  
PHIL 450 Special Topics (1-3)  
PHIL 455 Existentialism & Phenomenology (3)  
PHIL 474 Philosophy of the Mind (3)  
PHIL 480 Philosophy of Science (3)  
PHIL 499 Individual Study (1-6)  
(choose 6 credits)

POL 3xx to POL 4xx, except POL 490, POL 491 and POL 492.  
(choose 6 credits)

ECON 3xx to ECON 4xx, except ECON 480, ECON 481, ECON 482,  
ECON 491, ECON 498 and ECON 499.

Major Emphasis: Economics (choose 15 credits)

ECON 3xx to ECON 4xx, except ECON 480, ECON 481, ECON 482,  
ECON 491, ECON 498 and ECON 499.  
(choose 6 credits)

PHIL 321 Social & Political Philosophy (3)  
PHIL 322W Ethical Theory (3)  
PHIL 323W Philosophy of Economics (3)  
PHIL 334W History of Philosophy: Classical Philosophy (3)  
PHIL 336W History of Philosophy: Renaissance and Modern Philosophy (3)  
PHIL 337 19th Century Philosophy (3)  
PHIL 338 American Philosophy (3)  
PHIL 338W Topics in Asian Philosophy (3)  
PHIL 437 Contemporary Philosophy (3)  
PHIL 440 Philosophy of law (3)  
PHIL 450 Special Topics (1-3)  
PHIL 455 Existentialism & Phenomenology (3)  
PHIL 474 Philosophy of the Mind (3)  
PHIL 480 Philosophy of Science (3)  
PHIL 499 Individual Study (1-6)  
(choose 6 credits)

POL 3xx to POL 4xx, except POL 490, POL 491, POL 492.  
(choose 3 credits)

ECON 499 Individual Study (1-3)

Major Emphasis: Political Science (choose 3 credits)

POL 231 World Politics (3)  
POL 241 Introduction to Comparative Politics (3)  
POL 311 Ancient & Medieval Political Philosophy (3)  
POL 312 Early Modern Political Philosophy (3)  
POL 313 Modern Political Philosophy (3)  
POL 410 Topics in Political Philosophy (1-4)  
POL 414 Early United States Political Thought (3)  
POL 415 Recent United States Political Thought (3)  
POL 416 Nonwestern Political Philosophy (3)  
(choose 3 credits)

POL 450 Topics in Public Law (1-4)  
POL 451 Administrative Law (3)  
POL 452 Jurisprudence (3)  
POL 453 Constitutional Law (3)  
POL 454 Civil Liberties (3)  
POL 455 American Legal Philosophy (3)  
(choose 9 credits)

POL 3xx to POL 4xx, except POL 490, POL 491.  
(choose 3 credits)

ECON 499 Individual Study (1-5)
Physics

College of Science, Engineering & Technology
Department of Physics & Astronomy
141 Trafton Science Center N • 507-389-5743
Website: cset.mnsu.edu/pa/
Chair: Thomas R. Brown
Faculty: Paul Eskridge, Analia Dall’Asen, Steven Kipp, Igor Kogutshauk, Jorge Mendez, Russell I. Palma, Andrew D. Roberts, Hai-Sheng Wu, Mark A. Pickar

Physics is a science concerned with understanding the fundamental laws of nature. It explains physical phenomena in everyday life, such as motion, heat, electricity, magnetism and light. It studies the origin of the universe, the behavior of atoms and subatomic particles, and everything in between. Physics is the foundation of all fields of science and engineering.

The physics curriculum consists of sequences of interrelated courses that must be taken in the appropriate order. Mathematics is an important tool for physics. The courses taken by physics majors cover a variety of topics in classical and modern physics, and require significant preparations in mathematics. Well prepared students should complete the physics major in four years. The physics B.S. program prepares students for:

1. Further study in physics, engineering, or other fields for advanced degrees,
2. Entry into work in the public or private sectors,
3. Teaching physics in high schools if the B.S. in physics teaching degrees is earned.

Training in physics gives students strong abilities in critical thinking and problem solving, the two skills that are essential in any occupations.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

Admission to the major is granted by the department. To be admitted to the major, a student must have a minimum of 30 earned credit hours and a minimum cumulative GPA of 2.00 (“C”).

Contact the College of Science, Engineering and Technology Advising Center for application procedures.

GPA policy: A minimum GPA of 2.0 in physics courses is required for graduation.

P/N grading policy: All physics courses except PHYS 105 and PHYS 480 are open to P/N grading. However, a student majoring or minoring in physics must elect the grade option for all of the required courses except where P/N grading is mandatory.

Residency: A minimum of 25 percent of the required credits in physics must be taken at Minnesota State University, Mankato for both the major and the minor. Testing for credit by examination is available on a case-by-case basis as determined by the chairperson of the Physics and Astronomy department.

BS degree, Double major: Students majoring in physics often find a second major in mathematics to be an attractive option. If the BS degree in physics is combined with a BS degree in mathematics, then the following math courses are recommended: MATH 345, MATH 422, MATH 425, and MATH 447.

Degree completion = 120 credits

Students interested in physics preparation leading to professional opportunities or graduate study are encouraged to select this major.

Required General Education

MATH 121 Calculus I (4)
PHYS 211 General Physics I (4)

Major Common Core

CS 110 Computer Science I (4)
MATH 122 Calculus II (4)
MATH 223 Calculus III (4)
MATH 247 Linear Algebra I (4)
MATH 321 Ordinary Differential Equations (4)
PHYS 150 Explorations in Physics I (1)
PHYS 222 General Physics II (3)
PHYS 223 General Physics III (3)
PHYS 232 General Physics Laboratory I (11)
PHYS 233 General Physics III Laboratory (1)
PHYS 335 Modern Physics I (3)
PHYS 336 Modern Physics II (3)
PHYS 441 Mechanics (4)
PHYS 447 Electricity & Magnetism I (3)
PHYS 448 Electricity & Magnetism II (3)
PHYS 457 Optics (3)
PHYS 461 Quantum Mechanics (4)
PHYS 465 Computer Applications in Physics (3)
PHYS 473 Statistical Physics (3)
PHYS 475W Advanced Laboratory (3)
PHYS 492 Seminar I (1)

Major Restricted Electives

Choose either CS 111 (4 credits) or both EE 230 (3 credits) and EE 240 (1 credit)

CS 111 Computer Science II (4)
EE 230 Circuit Analysis I (3)
EE 240 Evaluation of Circuits (1)

Major Unrestricted Electives

Required Electives (choose 4 credits)

AST 351 Telescope Operations (2)
AST 353 Photometry I (3)
AST 355 Astrometry (2)
AST 357 Spectroscopy (2)
AST 420 Stellar Astrophysics (3)
AST 430 Galactic Structure (3)
EE 303 Introduction to Solid State Devices (3)
EE 304 Lab. Introduction to Solid State Devices (1)
MATH 354 Concepts of Probability & Statistics (3)
MATH 411 Introduction to Complex Variables (4)
MATH 422 Partial Differential Equations (4)
MATH 470 Numerical Analysis I (4)
PHYS 417 Biophysics (2)

PHYSICS BS

PHYSICS BS AND MINOR

ECON 305 Money and Banking (3)
ECON 314W Current Economic Issues (3)
ECON 355 Intermediate Microeconomics (3)
ECON 356 Intermediate Macroeconomics (3)
ECON 403 Labor Economics (3)
ECON 405 Central Banking (3)
ECON 406 Economics of Unions (3)
ECON 411 Urban Economics (3)
ECON 412 Resource and Environmental Economics (3)
ECON 416 Sports Economics (3)
ECON 420 International Economics (3)
ECON 429 Economic Education (3)
ECON 440 Public Finance (3)
ECON 450 Economic Development (3)
ECON 462 Econometrics (3)
ECON 463 Applied Econometrics of Financial Markets (3)
ECON 472 Industrial Organization (3)

http://www.mnsu.edu/programs/#All

ECON 301 Quantitative Methods in Economics (3)
PHIL 321 Social & Political Philosophy (3)
PHIL 322W Ethical Theory (3)
PHIL 333W Philosophy of Economics (3)
PHIL 334W History of Philosophy: Classical Philosophy (3)
PHIL 336W History of Philosophy: Renaissance and Modern Philosophy (3)
PHIL 337 19th Century Philosophy (3)
PHIL 338 American Philosophy (3)
PHIL 358W Topics in Asian Philosophy (3)
PHIL 417 Biophysics (2)
PHIL 422 Partial Differential Equations (4)
PHIL 425 MATH 322 Partial Differential Equations (4)
PHIL 425 MATH 422 Partial Differential Equations (4)
PHIL 425 MATH 425 Partial Differential Equations (4)
PHIL 425 MATH 447 Partial Differential Equations (4)

http://www.mnsu.edu/programs/#All

ECON 301 Quantitative Methods in Economics (3)
PHIL 321 Social & Political Philosophy (3)
PHIL 322W Ethical Theory (3)
PHIL 333W Philosophy of Economics (3)
PHIL 334W History of Philosophy: Classical Philosophy (3)
PHIL 336W History of Philosophy: Renaissance and Modern Philosophy (3)
PHIL 337 19th Century Philosophy (3)
PHIL 338 American Philosophy (3)
PHIL 358W Topics in Asian Philosophy (3)
PHIL 417 Biophysics (2)
PHIL 422 Partial Differential Equations (4)
PHIL 425 MATH 322 Partial Differential Equations (4)
PHIL 425 MATH 422 Partial Differential Equations (4)
PHIL 425 MATH 425 Partial Differential Equations (4)
PHIL 425 MATH 447 Partial Differential Equations (4)
PHYSICS CONTINUED

Required Minor: None.

PHYS 453 Solid State Physics (3)
PHYS 493 Undergraduate Research (1-6)
PHYS 499 Individual Study (1-8)
STAT 354 Concepts of Probability & Statistics (3)

PHYSICS MINOR

Required General Education
MATH 121 Calculus I (4)
PHYS 221 General Physics I (4)

Required Support Course
MATH 122 Calculus II (4)

Required for Minor
PHYS 222 General Physics II (3)
PHYS 223 General Physics III (3)
PHYS 335 Modern Physics I (3)
PHYS 336 Modern Physics II (3)

Required Elective (2-4 credits)
Choose a minimum of one course from the following courses:
PHYS 441 Mechanics (4)
PHYS 447 Electricity & Magnetism I (3)
PHYS 457 Optics (3)
PHYS 465 Computer Applications in Physics (3)
PHYS 473 Statistical Physics (3)
PHYS 475 Advanced Laboratory (3)

PHYSICS SCIENCE TEACHING BS

Degree completion = 120 credits

PHYS 100 (3) Cultural Physics
A one semester course which covers the basic principles of physics on a conceptual level and with a minimal amount of math. The course provides an understanding of natural processes and their applications. Topics generally include mechanics, simple machines, atomic structure, heat, light and sound. Lecture and laboratory components. Fall, Spring
GE-3

PHYS 102 (3) Physics in the World Around Us
A one semester course which covers the basic principles of physics on a conceptual level. The course provides an understanding of natural processes and their applications to technology (or how things work), including the greenhouse effect and nuclear power. Lecture only. Variable
GE-3

PHYS 105 (3) Time, Atomic Clocks, and Relativity
A self-paced format. Includes readings on time; telling time from sundials to atomic clocks; Albert Einstein (a biography of the primary developer of the Theory of Relativity); and the Theory of Relativity. All the readings are written to be understood by non-scientists. Fall, Spring
GE-3

PHYS 150 (1) Explorations in Physics
This course offers an introduction to the field of physics, and prepares students for academic success in the program. Students will become familiar with current topics of physics research within the department, and better understand the career paths available with a physics major.
Fall

PHYS 211 (4) Principles of Physics I
General background in physical concepts for those who do not plan advanced study in physics or engineering. Topics include mechanics, fluids, heat and thermodynamics. Lecture and laboratory. Prerequisite: Either MATH 112 and MATH 113, or MATH 115; and high school physics or PHYS 101.
Fall, Spring
GE-2, GE-3

PHYS 212 (4) Principles of Physics II
Includes waves and sound, electricity and magnetism, light and optics, and topics in modern physics. Lecture and laboratory. Prerequisite: PHYS 211.
Fall, Spring

PHYS 221 (4) General Physics I
Designed for science and engineering students. Calculus-based physics. Covers elementary mechanics including kinematics, statics, equilibrium and dynamics of particles, work and energy, rotational motion, gravitation, and oscillation. Lecture and laboratory. Prerequisite: MATH 121 with a “C” or better; and high school physics or PHYS 101.
Fall, Spring
GE-2, GE-3

PHYS 222 (3) General Physics II
Designed for science and engineering students. Calculus-based physics. Covers electrical charge and field; magnetic field and its sources; current and resistance; simple DC and AC circuits; and electromagnetic induction. Lecture only. (Associated laboratory course is PHYS 222.) Prerequisite: MATH 122 with a “C” or better; and PHYS 221 with a “C” or better.
Fall, Spring

PHYS 223 (3) General Physics III
Designed for science and engineering students. Calculus-based physics. Covers fluids, thermodynamics, mechanical and sound waves, geometrical optics, physical optics, and modern physics. Lecture only. (Associated laboratory course is PHYS 223.) Prerequisite: MATH 122 with a “C” or better; and PHYS 221 with a “C” or better.
Spring

PHYS 232 (1) General Physics II Laboratory
Designed for science and engineering students. Laboratory course accompanying PHYS 222. Experiments involving electric and magnetic fields, electric potential, electric and magnetic forces, and simple circuits. Laboratory only. Prerequisite: PHYS 221 with a “C” or better; and PHYS 222 or concurrent.
Fall, Spring
PHYS 280 (3) Lab Experiences in Physical Science
For prospective teachers in elementary schools. Topics include weather, weather forecasting and record keeping, simple machines, electricity, chemistry, sound, light, and others. May not count as a physics elective. Not available for P/N grading.
Fall, Spring

PHYS 233 (1) General Physics III Laboratory
Designed for science and engineering students. Laboratory course accompanying PHYS 223. Experiments involving fluids, thermodynamics, mechanical waves, geometrical optics, and physical optics. Laboratory only. Prerequisite: PHYS 221 with a “C” or better, and PHYS 223 or concurrent. Spring

PHYS 335 (3) Modern Physics I
Special Theory of Relativity. Quantum nature of waves and particles: photons, de Broglie wavelength of matter and wave packet description of particles, Bohr model of hydrogen. Schrödinger wave equation in one-dimension: energy quantization, potential barriers, simple harmonic oscillator. One-electron atoms. X-ray and optical excitation of multielectron atoms. Lecture and laboratory. Prerequisite: MATH 122; PHYS 222 and concurrently with PHYS 223 or PHYS 212. Spring

PHYS 336 (3) Modern Physics II
Topics include the basics of molecular structure and spectra, classical and quantum statistical physics, solid state physics, nuclear physics, and particle physics. The lab component will teach the operation of various radiation detectors, and use them to study the interaction of radiation with matter. Prerequisite: PHYS 335 Fall

PHYS 381 (1-3) Tutoring Physics
Supervised experience as an instructional assistant. Must demonstrate ability in basic physics. Prerequisite: Consent Variable

PHYS 417 (2) Biophysics
This course bridges the gap between introductory physics and its application to the life and biomedical sciences. Topics include fluid flow, membrane transport, nerve conduction, imaging methods including MRI, CT, and nuclear imaging, radiotherapy, and health physics. Prerequisite: MATH 121, PHYS 212 or PHYS 222 Variable

PHYS 441 (4) Mechanics
Rectilinear motion of a particle, general motion of a particle in three dimensions, Newtonian mechanics including harmonic oscillations, forced oscillations, central forces and orbital motion, collisions, non-inertial reference systems, dynamics of a system of particles, rigid body motion, Lagrangian and Hamiltonian mechanics, normal coordinates. Prerequisite: PHYS 222 or PHYS 223, and MATH 321 or consent. Fall

PHYS 447 (3) Electricity & Magnetism I
Electrostatic fields, magnetostatic fields, steady currents, electromagnetic induction. Review of vector algebra. Prerequisite: MATH 223 and MATH 321 and PHYS 222 Fall

PHYS 448 (3) Electricity & Magnetism II
Electromagnetic waves, propagation and radiation of waves, electrodynamics and relativity. Prerequisite: PHYS 223 and PHYS 447 Spring

PHYS 453 (3) Solid State Physics
Atoms in crystals, wave in crystals, thermal vibrations of the crystal lattice, free electron model, band theory of solids, semiconductors and PN junctions, magnetism, and superconductivity. Prerequisite: PHYS 335 Variable

PHYS 457 (3) Optics
Geometric optics, wave optics, properties of light and matter, optics of transformations, and quantum optics. Lecture and laboratory. Prerequisite: MATH 122 and PHYS 223 ODD-Spring

PHYS 461 (4) Quantum Mechanics
A systematic development of foundations of quantum mechanics. Observables, operators, state functions, expectation values. Matrix formulation of eigenvalue problems. The hydrogen atom, electron spin, angular momentum, and perturbation theory. Prerequisite: PHYS 335, PHYS 441, MATH 247, MATH 321 Fall

PHYS 465 (3) Computer Applications in Physics
Numerical solutions of physics problems and computer simulations of physical systems. Lecture and laboratory. Prerequisite: MATH 122, CS 110 and PHYS 222 or PHYS 223. Fall

PHYS 473 (3) Statistical Physics
Fundamental principles of statistical physics, including theory of probability, kinetic theory of transport process, entropy, classical and quantum statistical ensembles, Bose and Fermi systems. Applications to thermodynamics and magnetic properties of solids. Prerequisite: MATH 321 and PHYS 223 All-Spring

PHYS 475 (3) Advanced Laboratory
Experiments in modern physics, including solid-state physics and optics. Requires more independent work than introductory laboratories. Prerequisite: PHYS 336 or consent Spring

PHYS 475W (3) Advanced Laboratory
Experiments in modern physics, including solid-state physics and optics. Requires more independent work than introductory laboratories. Prerequisite: PHYS 336 or consent Spring

PHYS 482 (4) Teaching Methods and Materials in Physical Science
Current methods of teaching all physical sciences with emphasis on physics and chemistry. For students planning to teach at a middle school, secondary school, college, or a university. Prerequisite: one year of chemistry and one year of physics, or consent Spring

PHYS 490 (2-4) Workshop
A short course devoted to a specific topic in physics. May be repeated for credit on each new topic. Variable

PHYS 491 (1-8) In-Service
A course designed to upgrade the qualifications of persons on-the-job. Variable

PHYS 492 (1) Seminar
Students will attend research seminars presented by faculty in the department, or speakers from other institutions. Students also make and critique presentations made by themselves and other students. May be repeated for credit. Prerequisite: Completed at least two upper division physics courses. Spring

PHYS 493 (1-6) Undergraduate Research
Prerequisite: Consent Variable

PHYS 495 (1-2) Selected Topics
A course in an area of physics not regularly offered. Topic and credit assigned by department each time offered. Prerequisite: PHYS 335 and PHYS 336 Variable

PHYS 497 (1-16) Internship
Provides a student with the opportunity to gain expertise and experience in a special field under the supervision of a qualified person. Prerequisite: Usually Sr. standing Variable

PHYS 499 (1-8) Individual Study
Special arrangements must be made with an appropriate faculty member of the department office. May be repeated for credit on each new topic. Prerequisite: Consent Variable
POLITICAL SCIENCE

POLITICAL SCIENCE BA, BS AND MINORS

Political Science

College of Social & Behavioral Sciences
Department of Government
109 Morris Hall • 507-389-2721
Website: sbs.mnsu.edu/government/pscience

Program Coordinator: Fred Slocum Ph.D.

Political science is the systematic study of politics, power relationships and government. Political science is in one sense an ancient discipline; Aristotle called it the “queen of the sciences.” Yet the focus for much of today’s political science was developed in the last century. Scientific observations have now joined older philosophical traditions. Modern political science examines politics in the United States, countries and regions of the world and in international relations. It explains how and why public decisions are made. Political science majors can qualify for a wide variety of careers in public and private sector organizations, including business, law, government, journalism, international organizations and finance, political campaigns, interest groups and secondary and college teaching. The study of public affairs and government is essential for developing effective citizenship. This training prepares one for professional or volunteer involvement in community organizations, issue movements, electoral politics, and other activities in the public arena.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

Admission to Major is granted by the department. Minimum university admission requirements are:
- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (“C”).

Contact the department for application procedures.

Students must consult with the program advisor who will approve and file the program of courses selected and approve changes in the program.

The combination of a Political Science major and Public Administration minor is not allowed.

Minimum Credit Requirement. All students (including transfer students) majoring in Political Science must take a minimum of 15 credits of Political Science courses at Minnesota State Mankato before graduation with BA in Political Science.

Minimum Credit Requirement. All students (including transfer students) majoring in Political Science must take a minimum of 15 credits of Political Science courses at Minnesota State Mankato before graduation with BS in Political Science.

Minimum Credit Requirement. All students (including transfer students) minoring in Political Science must take a minimum of 9 credits of Political Science courses at Minnesota State Mankato before graduation.

Minimum Credit Requirement. All students (including transfer students) minoring in Public Administration must take a minimum of 9 credits of Political Science courses at Minnesota State Mankato before graduation.

No more than six (6) credit hours of POL 491 (Internship) may be counted (as P/N basis, no more than one-fourth of the credits in a political science major or minor may be taken as P/N). Internship credits will not be counted as part of the one-fourth limitation, but will be subtracted from the total hours required for the major or minor prior to the computation of the one-fourth limitation.

GPA Policy. Students must maintain an overall GPA of 2.0 in the Political Science major AND must earn a “C-” or better for all courses in the Political Science major.

Pass/No Credit Policy. With the exception of internship credits, which must be taken on a P/N basis, no more than one-fourth of the credits in a political science major or minor may be taken as P/N. Internship credits will not be counted as part of the one-fourth limitation, but will be subtracted from the total hours required for the major or minor prior to the computation of the one-fourth limitation.

Area 1: American Politics and Policy

POL 260 - Introduction to Public Administration (3)
POL 321 - Democracy and Citizenship (2)
POL 322 - In-Service: Public Achievement (1-2)
POL 361 - Public Budgeting (3)
POL 371 - State & Local Government (3)
POL 420 - Topics in Participation and Behavior (3)
POL 422 - Campaigns & Elections (3)
POL 423 - Political Parties (3)
POL 424 - Women & Politics (3)
POL 425 - Terrorism & Political Violence (3)
POL 426 - Racial and Ethnic Politics (3)
POL 427 - Political Psychology (3)
POL 460 - Topics in Public Policy/Administration (1-4)
POL 461 - Environmental Politics (3)
POL 462 - Collective Bargaining: Public Sector (3)
POL 463 - Public Personnel Administration (3)
POL 470 - Topics in Institutions & Process (1-4)
POL 471 - Public Opinion and Polling Methods (3)
POL 472 - Urban Government (3)
POL 473 - Legislative Process (3)
POL 474 - Executive Process (3)
POL 475 - Judicial Process (3)
POL 476 - Southern Politics (3)

Area 2: International Relations and Comparative Politics

POL 231 - World Politics (3)
POL 340 - Topics in International Relations (1-4)
POL 431 - International Relations (3)
POL 432 - International Law (3)
POL 433 - International Organization (3)
POL 434 - United States Foreign Policy (3)
POL 435 - Capitalism, Nationalism, and Democracy (3)
POL 436 - International Political Economy (3)
POL 437 - International Conflict Resolution (3)
POL 438 - International Relations of East Asia (3)

Area 3: Theory and Public Law

POL 311 - Ancient & Medieval Political Philosophy (3)
POL 312 - Early Modern Political Philosophy (3)
POL 313 - Modern Political Philosophy (3)
POL 410 - Topics in Political Philosophy (1-4)
POL 414 - Early United States Political Thought (3)
Major Unrestricted Electives

From the list below, complete at least 6 credit hours of courses at any (100 through 400) level, and at least 6 additional credit hours of courses at the 300 or 400 level (electives requirement: at least 12 credit hours total). The twelve credit hours of Political Science Major Unrestricted Electives must be different courses than those taken as Major Restricted Electives.

Political Science Electives

POL 100 Introduction to Politics (3)
POL 101 Introduction to Public Life (3)
POL 105W Thinking About Politics (3)
POL 104 Understanding the U.S. Constitution (3)
POL 106 Politics in the World Community (3)
POL 201 Issues in Politics (1-3)
POL 231 World Politics (3)
POL 234 Model United Nations (3)
POL 260 Introduction to Public Administration (3)
POL 311 Ancient & Medieval Political Philosophy (3)
POL 312 Early Modern Political Philosophy (3)
POL 313 Modern Political Philosophy (3)
POL 321 Democracy and Citizenship (2)
POL 322 In-Service: Public Achievement (1-2)
POL 361 Public Budgeting (3)
POL 371 State & Local Government (3)
POL 410 Topics in Political Philosophy (1-4)
POL 414 Early United States Political Thought (3)
POL 415 Recent United States Political Thought (3)
POL 416 Nonwestern Political Philosophy (3)
POL 420 Topics in Participation and Behavior (3)
POL 422 Campaigns & Elections (3)
POL 423 Political Parties (3)
POL 424 Women & Politics (3)
POL 425 Terrorism & Political Violence (3)
POL 426 Racial and Ethnic Politics (3)
POL 427 Political Psychology (3)
POL 430 Topics in International Relations (1-4)
POL 431 International Relations (3)
POL 432 International Law (3)
POL 433 International Organization (3)
POL 434 United States Foreign Policy (3)
POL 435 Capitalism, Nationalism, and Democracy (3)
POL 436 International Political Economy (3)
POL 437 International Conflict Resolution (3)
POL 438 International Relations of East Asia (3)
POL 439 Comparative Social Policy: The Welfare State in Europe and the Americas (3)
POL 440 Topics in Comparative Politics (1-4)
POL 441 Russia & Neighboring States Politics (3)
POL 442 South Asia: Politics & Policy (3)
POL 443 Middle East Politics (3)
POL 444 Latin American Politics (3)
POL 445 Asian Pacific Rim: Politics & Policy (3)
POL 446 African Politics (3)
POL 447 Comparative Criminal Justice Systems (3)
POL 448 Political Development & Change (3)
POL 449 Comparative Criminal Justice Systems (3)

Minor Required: Any.

Other Graduation Requirements

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)

POLITICAL SCIENCE BS

Degree completion = 120 credits

Major Common Core

POL 111 United States Government (3)
POL 221 Introduction to Political Analysis (3)
POL 241 Introduction to Comparative Politics (3)

Major Restricted Electives

Choose Area 1, Area 2 or Area 3 as your concentration area. Within your chosen concentration area, complete at least 15 credit hours (concentration requirement: minimum 15 credit hours). Within the other two (non-concentration) areas, complete at least 3 credit hours each (distribution requirement: minimum 6 credit hours total).

Area 1: American Politics and Policy

POL 260 Introduction to Public Administration (3)
POL 321 Democracy and Citizenship (2)
POL 322 In-Service: Public Achievement (1-2)
POL 361 Public Budgeting (3)
POL 371 State & Local Government (3)
POL 420 Topics in Participation and Behavior (3)
POL 422 Campaigns & Elections (3)
POL 423 Political Parties (3)
POL 425 Terrorism & Political Violence (3)
POL 426 Racial and Ethnic Politics (3)
POL 427 Political Psychology (3)
POL 460 Topics in Public Policy/Administration (1-4)
POL 461 Environmental Politics (3)
POL 462 Collective Bargaining: Public Sector (3)
POL 463 Public Personnel Administration (3)
POL 470 Topics in Institutions & Process (1-4)
POL 471 Public Opinion and Polling Methods (3)
POL 472 Urban Government (3)
POL 473 Legislative Process (3)
POL 474 Executive Process (3)
POL 475 Judicial Process (3)
POL 476 Southern Politics (3)

Area 2: International Relations and Comparative Politics

POL 231 World Politics (3)
POL 430 Topics in International Relations (1-4)
POL 431 International Relations (3)
POL 432 International Law (3)
POL 433 International Organization (3)
POL 434 United States Foreign Policy (3)
POL 435 Capitalism, Nationalism, and Democracy (3)
POL 436 International Political Economy (3)
POL 437 International Conflict Resolution (3)
POL 438 International Relations of East Asia (3)
POL 439 Comparative Social Policy: The Welfare State in Europe and the Americas (3)
POL 440 Topics in Comparative Politics (1-4)
POL 441 Russia & Neighboring States Politics (3)
POL 442 South Asia: Politics & Policy (3)
POL 443 Middle East Politics (3)
POL 444 Latin American Politics (3)
POL 445 Asian Pacific Rim: Politics & Policy (3)
POL 446 African Politics (3)
POL 447 European Democracies (3)
POL 448 Political Development & Change (3)
POL 449 Comparative Criminal Justice Systems (3)
Area 3: Theory and Public Law

**POLITICAL SCIENCE MINOR**

Required Minor: Yes, Any

**POLITICAL SCIENCE CONTINUED**

Other Course Choices
With permission of advisor, any of the following courses may substitute for courses in the three areas above. No more than 6 credits of POL 491, Internship, can be counted toward completing the Political Science major.

**POL 391 Colloquium (1-4)**
**POL 480 Topics in Political Methods (3)**
**POL 490 Workshop (1-16)**
**POL 491 Internship (1-12)**
**POL 492 Individual Study (1-5)**

**Major Unrestricted Electives**
From the list below, complete at least 6 credit hours of courses at any (100 through 400) level and at least 6 additional credit hours of courses at the 300 or 400 level (electives requirement: at least 12 credit hours total). The twelve credit hours of Political Science Major Unrestricted Electives must be different courses than those taken as Major Restricted Electives.

**Political Science Electives**

**POL 100 Introduction to Politics (3)**
**POL 101 Introduction to Public Life (3)**
**POL 103W Thinking About Politics (3)**
**POL 104 Understanding the U.S. Constitution (3)**
**POL 105 Politics in the World Community (3)**
**POL 201 Issues in Politics (1-3)**
**POL 231 World Politics (3)**
**POL 234 Model United Nations (3)**
**POL 260 Introduction to Public Administration (3)**
**POL 311 Ancient & Medieval Political Philosophy (3)**
**POL 312 Early Modern Political Philosophy (3)**
**POL 313 Modern Political Philosophy (3)**
**POL 314 Early Modern Political Philosophy (3)**
**POL 321 Democracy and Citizenship (2)**
**POL 322 In-Service: Public Achievement (1-2)**
**POL 361 Public Budgeting (3)**
**POL 371 State & Local Government (3)**
**POL 410 Topics in Political Philosophy (1-4)**
**POL 411 Early United States Political Thought (3)**
**POL 412 Recent United States Political Thought (3)**
**POL 413 Nonwestern Political Philosophy (3)**
**POL 420 Topics in Participation and Behavior (3)**
**POL 422 Campaigns & Elections (3)**
**POL 423 Political Parties (3)**
**POL 424 Women & Politics (3)**
**POL 425 Terrorism & Political Violence (3)**
**POL 426 Racial and Ethnic Politics (3)**
**POL 427 Political Psychology (3)**
**POL 430 Topics in International Relations (1-4)**
**POL 431 International Relations (3)**
**POL 432 International Law (3)**
**POL 433 International Organization (3)**
**POL 434 United States Foreign Policy (3)**
**POL 435 Capitalism, Nationalism, and Democracy (3)**
**POL 436 International Political Economy (3)**
**POL 437 International Conflict Resolution (3)**
**POL 438 International Relations of East Asia (3)**
**POL 440 Topics in Comparative Politics (1-4)**
**POL 441 Russia & Neighboring States Politics (3)**
**POL 442 South Asia: Politics & Policy (3)**
**POL 443 Middle East Politics (3)**
**POL 444 Latin American Politics (3)**
**POL 445 Asian Pacific Rim: Politics & Policy (3)**
**POL 446 African Politics (3)**

**POL 447 European Democracies (3)**
**POL 448 Political Development & Change (3)**
**POL 449 Comparative Criminal Justice Systems (3)**
**POL 450 Topics in Public Law (1-4)**
**POL 451 Administrative Law (3)**
**POL 452 Constitutional Law (3)**
**POL 453 Civil Liberties (3)**
**POL 454 American Legal Philosophy (3)**
**POL 455 American Legal Philosophy (3)**
**POL 460 Topics in Public Policy/Administration (1-4)**
**POL 461 Environmental Politics (3)**
**POL 462 Collective Bargaining: Public Sector (3)**
**POL 463 Public Personnel Administration (3)**
**POL 470 Topics in Institutions & Process (1-4)**
**POL 471 Public Opinion and Polling Methods (3)**
**POL 472 Urban Government (3)**
**POL 473 Legislative Process (3)**
**POL 474 Executive Process (3)**
**POL 475 Judicial Process (3)**
**POL 476 Southern Politics (3)**

**POLITICAL SCIENCE MINOR**

Required for Minor (18 credits)
Choose at least 18 credits, 12 credits at the 300-400 level.

**POL 300-400**

**POL 300**

**POL 491 Internship (1-12)**

**PUBLIC ADMINISTRATION MINOR**

The study of Public Administration provides students with the skills needed to succeed in public-sector management. Skills include leadership and management, data and policy analysis, budgeting and finance, human resources as well as a working knowledge of public-sector governments and political environments.

**Minor Core**
(The following courses are required)

**POL 111 United States Government (3)**
**POL 221 Introduction to Political Analysis (3)**
**POL 260 Introduction to Public Administration (3)**
**POL 371 State & Local Government (3)**

**Elective (0 credits)**
Choose up to six credits from the courses listed below. At least three of the six credits must come from the Restricted Electives category.

**Restricted Electives** choose 3-6 credits

At least three of the six elective credits must come from these courses.

**POL 361 Public Budgeting (3)**
**POL 451 Administrative Law (3)**
**POL 460 Topics in Public Policy/Administration (1-4)**
**POL 462 Collective Bargaining: Public Sector (3)**
**POL 463 Public Personnel Administration (3)**

**Unrestricted Electives** choose 0-3 credits

**POL 471 Public Opinion and Polling Methods (3)**
**POL 472 Urban Government (3)**
**POL 474 Executive Process (3)**
**POL 491 Internship (1-12)**

**COURSE DESCRIPTIONS**

**POL 100 (3) Introduction to Politics**
Study of the nature of politics and government and their influence on society and human behavior.
Fall, Spring
GE-5

**POL 101 (3) Introduction to Public Life**
Combine study with action to remake yourself into a democratic citizen. Consider your beliefs, debate issues and learn political skills. Integrate these in practical public work on a real issue or project in a student group or community organization.
GE-9, GE-11
POL 103W (3) Thinking About Politics
This course is designed to help you to read, think and write critically about important concepts and issues in the study and practice of politics. It is intended to acquaint you with some of the great debates in political thought, increase your understanding of how political systems work and help you develop your research and writing skills.
WI, GE2

POL 104 (3) Understanding the U.S. Constitution
Join the political debates of 1787 to understand the US Constitution. Compare the founding document with amendments, later usage and Supreme Court interpretations. Examine controversies over the meaning of the Constitution using the methods of political philosophers, historians, and legal scholars.
GE-5

POL 106 (3) Politics in the World Community
This introductory course examines key concepts and issues in contemporary world politics. It is a survey course covering topics including political culture, the political impact of economic globalization, the changing role of the state, nationality and ethnic identity, and issues of oppression and empowerment.
GE-8

POL 111 (3) United States Government
Become informed enough to play your part in governing the United States. Start by learning about the Constitution, our rights and freedoms, how the national government works and the opportunities and challenges of citizen influence. Political Science methods, and the challenges of citizenship are emphasized.
GE-5, GE-9

POL 201 (1-3) Issues in Politics
Various topics of current interest. Topics covered in the past include political corruption, contemporary ideologies, revolution, understanding the United States Constitution, political films. Course may be taken more than once for credit.
Fall, Spring

POL 221 (3) Introduction to Political Analysis
Elementary analytical concepts and basic techniques for understanding and doing research in political science.
Fall, Spring

POL 231 (3) World Politics
An introduction to the dynamics of interactions among sovereign states and other global actors.
Fall, Spring

POL 234 (3) Model United Nations
The course is intended to prepare students to participate in the model UN. Students learn about issues before the UN and acquire a variety of communication and negotiating skills as they model the role of ambassadors.
Variable
GE-1B, GE-8

POL 241 (3) Introduction to Comparative Politics
This course is designed to acquaint undergraduates with the data and methods of comparative politics. Approaches to the study of comparative politics may include country studies, regional studies, global surveys focusing on specific policy areas or other issues, and general comparative theory.
Fall, Spring

POL 260 (3) Introduction to Public Administration
A survey of the topics relative to administration in the public sector, including the history of public administration, organization theory, leadership and management, human resources management, budgeting and finance, policy analysis, program evaluation, and government regulation.
Fall, Spring

POL 311 (3) Ancient & Medieval Political Philosophy
A survey of Western political philosophy from Plato through the Conciliar Movement. An examination of the origin and development of basic concepts defining the relationship between the person and the state: human nature, community, authority, power, legitimacy, obligation, accountability, government, liberty and personal responsibility.
Fall

POL 312 (3) Early Modern Political Philosophy
A survey of Western political philosophy from Machiavelli through Edmund Burke. An examination of the development of ideas about government from the 15th Century through the 18th Century. Emphasis is placed on origins of political authority, purposes for which government exists, relationships between government authority and individual rights, civic virtue, republicanism and democracy.
Spring

POL 313 (3) Modern Political Philosophy
A survey of Western political philosophy from Hegel through the postmodernist writers. An examination of 19th and 20th Century political philosophers emphasizing German transcendentalism, utilitarianism, economic determinism, state socialism, neoliberalism, communitarianism and postmodernism.
Variable

POL 321 (3) Democracy and Citizenship
Students learn about active citizenship from readings and discussions on the theory and practice of democracy. Students should become more motivated to participate, feel a greater sense of empowerment, improve political skills, and better understand and appreciate democracy.
Prerequisites: POL 322
Fall, Spring

POL 361 (3) Public Budgeting
An overview of the budgetary and fiscal processes of public budgeting, including the politics surrounding public budgeting and fiscal policy decisions.
Variable

POL 371 (3) State & Local Government
Institutions, processes, intergovernmental relations, and politics of U.S. state and local governments.
Fall, Spring

POL 401 (1-4) Topics in Political Philosophy
This course explores topics in political philosophy beyond what is covered in the existing curriculum. Students study specialized topics of current importance in the field. Specific topics will change depending on the term and instructor. May be retaken with change of topic.
Variable

POL 414 (3) Early United States Political Thought
Political thought in the United States from the colonial period to the Civil War. Puritans, American revolution, republicanism, debate over United States Constitution, Jacksonian Democracy, Thoreau, reformers and religious and secular utopias, women’s rights, state’s rights, abolitionism, proslavery.
Variable

POL 415 (3) Recent United States Political Thought
Political thought in United States from reconstruction to present. Controversies over industrial capitalism: Social Darwinism, Utopian Socialism, Populism, Socialism, Progressivism. Women’s Rights, suffrage movement and contemporary feminism; African American political thought: liberalism, conservatism.
Variable

POL 416 (3) Nonwestern Political Philosophy
This course introduces students to the political philosophies of major thinkers from Asia, Africa and the Middle East. The course is designed to enhance students’ analytical and writing skills.
Variable

POL 420 (3) Topics: Participation and Behavior
This course explores topics in political participation and behavior beyond what is covered in the existing curriculum. Students study specialized topics of current importance in the field. Specific topics will change depending on the term and instructor. May be retaken with change of topic.
Variable

POL 422 (3) Campaigns & Elections
Elections in the United States at the federal, state and local levels. Election law, history, factors affecting elections, voting behavior, campaign finance, role of parties and groups, campaign strategy and tactics. Analysis of contemporary elections.
Fall

POL 423 (3) Political Parties

POL 424 (3) Women & Politics
Politics impact on women: women’s impact on politics and governance, primary focus on United States but some comparative considerations.
Variable
History, philosophy, techniques and countermeasures to terroristic and low intensity threats to public order. Both domestic and international terror. The blurring of the lines between low intensity conflict/terrorism and multinational high intensity crime. Same as LAVE 438
Variable

Racial and ethnic minorities in U.S. politics. Public opinion on racial issues, minority representation, race (partisanship and voting behavior), and racial issues (affirmative action, school busing, immigration).

POL 427 [3] Political Psychology
Applications of psychological concepts to politics. Intergroup relations, stereotyping, political authoritarianism, presidential character and psychology, foreign policy decision-making, political tolerance, and mass violence and genocide.

POL 430 (1-4) Topics in International Relations
This course explores topics in international relations beyond what is covered in the existing curriculum. Students study specialized topics of current importance in the field. Specific topics will change depending on the term and instructor. May be retaken with a change of topic.
Prerequisite: POL 231
Variable

POL 431 [3] International Relations
An advanced theoretical survey of the dynamics of politics and political change at the global level.
Prerequisite: POL 231
Spring

POL 433 [3] International Organization
Study of the function and process of the United Nations and other international organizations.
Prerequisite: POL 231
Spring

POL 434 [3] United States Foreign Policy
This course is a general overview of US foreign policy institutions, processes, and policies. U.S. foreign policy is examined in historical, global and domestic contexts.
Prerequisite: POL 231
Variable

POL 435 [3] Capitalism, Nationalism, and Democracy
This course explores the interaction of the three complex contemporary political and socioeconomic phenomena: the continuing expansion of global capitalism, the rise of nationalism(s), and the new wave of democratization around the world. The following topics are covered and discussed in class, with references to specific country and regional examples, (1) the impact of international economic institutions and democratization, (2) new forms of political participation in emerging democracies, (3) cultural and ethnic determinants of democratization, (4) problems of economic inequality in new democracies, (5) social and gender issues of democratic transitions, and (6) the relationship between democratic expansion and world peace.
Course format will be lecture, discussion, student presentations and occasional films.
Prerequisite: POL 241

POL 436 [3] International Political Economy
Focusing on patterns, processes, and problems of international trade, monetary, technological, and investment relations, this course examines the roles played by key government organizations in managing conflict and cooperation among states.
Prerequisite: POL 231

POL 437 [3] International Conflict Resolution
This interdisciplinary proseminar focuses on conflict resolution in the international arena. We will discuss causes of conflict, examine approaches to the study of conflict resolution, and analyze the varieties of nonviolent strategies of conflict resolution, emphasizing third party mediation.
Prerequisite: POL 231

POL 438 [3] International Relations of East Asia
An overview of the international relations of East Asia, the course examines cooperation and conflict among major powers in the area: China, Japan and the United States. Topics include Japan’s pre-WWII expansionism, China’s political transformation and North Korea’s nuclear controversy.
Fall, Spring

This course offers a cross-national perspective on the politics of social policy and the welfare state in industrialized parts of the world, including North and South America and different regions of Europe. It also explores distinct national patterns of public policy solutions to the common contemporary problems of social security, poverty, and health care by paying close attention to both domestic factors and the forces of globalization that work to constrain government decisions. This multidimensional approach is designed to enable students to better understand how politics work in different ways to produce collective or social choices.
Prerequisite: POL 241

POL 440 [1-4] Topics in Comparative Politics
This course explores topics in comparative politics beyond what is covered in the existing curriculum. Students study specialized topics of current importance in the field. Specific topics will change depending on the term and instructor. May be retaken with a change of topic.
Prerequisite: POL 241
Variable

This course focuses on the Russian political system in relation to domestic social and economic environments and also on the role of Russia as a global actor. It examines the post-communist transformation in Russia and other former Soviet republics.
Prerequisite: POL 241
Variable

POL 442 [3] South Asia: Politics & Policy
This course introduces students to the governments and politics of the South Asian countries. The historical and cultural context of politics are explored, as well as contemporary issues.
Prerequisite: POL 241
Variable

POL 443 [3] Middle East Politics
This class explores the dynamics that determine politics and effect change in the region. Using a comparative perspective for the major countries in the region, we examine such issues as Islam, nationalism, resources, regional conflicts, impact of the international system, and political development.
Prerequisite: POL 241
Fall

POL 444 [3] Latin American Politics
This course includes a detailed analysis of select countries and theoretical concerns in Latin American studies. Its general goal is to provide students with the knowledge of Latin American politics and societies in both regional and comparative contexts.
Prerequisite: POL 241
Variable

Survey of the political processes, governmental institutions and policies of the countries of the Asian Pacific Rim, with special emphasis on China, Japan and the newly industrializing states of Southeast Asia.
Prerequisite: POL 241
Variable

This course is designed to acquaint undergraduate and graduate students with key concepts and issues in the study of African politics. The historical and cultural context of politics is explored, as well as topics of current importance in the field.
Prerequisite: POL 241
Spring

POL 447 [3] European Democracies
This course discusses government institutions, political developments, and policy-making structures of contemporary Europe, including the former communist countries of East/Central Europe and the Balkans. It will also cover the ongoing process of European integration (European Union) and democratization of the former Soviet bloc countries. Some of the topics covered will include: elections, party systems, federalism and devolution, ethnic and minority policy, social policy, economic reforms, gender and politics, and cross-Atlantic relations with the US.
Prerequisite: POL 241

POL 448 [3] Political Development & Change
This course introduces students to key issues and concepts in the study of political and economic development. Both theoretical approaches and empirical data are presented. The course is also designed to enhance students’ analytical and research skills.
Prerequisite: POL 241
Fall
PORTUGUESE COURSES

POL 449 (3) Comparative Criminal Justice Systems
A comparison of criminal justice philosophies, structures, and procedures found in various countries around the world. Same as LAWE 434 Variable

POL 450 (1-4) Topics in Public Law
This course explores topics in public law beyond what is covered in the existing curriculum. Students study specialized topics of current importance in the field. Specific topics will change depending on the term and instructor. May be retaken with a change of topic. Variable

POL 451 (3) Administrative Law
Legal procedures by which state and federal administrative agencies exercise legislative, judicial and executive powers. Emphasis is placed on the constitutional position of administrative agencies, the rule making process, the power of agencies to decide rights and obligations concerning individual cases, and judicial control of administrative action. Variable

POL 452 (3) Constitutional Law
Review of selected U.S. Supreme Court decisions relating to the powers of the President, Congress and the Judiciary, as well as the division of power between the states and the federal government. Focus is on case briefing, underlying rationales, and the development of individual analytical abilities. Variable

POL 453 (3) Civil Liberties
Review of selected U.S. Supreme Court decisions interpreting areas such as substantive due process, abortion, speech, press, religion, and equal protection. Focus is on the rationale which underlies decisions and the development of individual analytical abilities. Same as LAWE 436 Variable

POL 454 (3) American Legal Philosophy
This course examines major schools in American legal thought from the dawn of the 20th century to the present day. Our focus will lie with turn-of-the-century formalism; legal realism; the legal process school, law and economics; and critical legal studies. We will apply legal reasoning from these schools to selected controversial 20th-century Supreme Court cases on church-state issues, gay and lesbian rights, privacy rights, criminal defendants’ rights and other issues as appropriate. Variable

POL 455 (3) Environmental Politics
Politics of the natural environment [U.S. focus]. Environmental and opposition values; roles of public opinion, Congress, presidency and courts in environmental policy making. Policy areas include: air/water pollution, climate change, hazardous/nuclear waste, sustainable development, and common problems like overfishing. Variable

POL 456 (3) Collective Bargaining: Public Sector
A broadly based introduction to the issues, processes, and techniques of public sector labor relations. Variable

POL 460 (1-4) Topics in Policy/Administration
This course explores topics in public policy and public administration beyond what is covered in the existing curriculum. Students study specialized topics of current importance in the field. Specific topics will change depending on the term and instructor. May be retaken with a change of topic. Variable

POL 461 (3) Environmental Politics
Politics of the natural environment [U.S. focus]. Environmental and opposition values; roles of public opinion, Congress, presidency and courts in environmental policy making. Policy areas include: air/water pollution, climate change, hazardous/nuclear waste, sustainable development, and common problems like overfishing. Variable

POL 462 (3) Collective Bargaining: Public Sector
A broadly based introduction to the issues, processes, and techniques of public sector labor relations. Variable

POL 463 (3) Public Personnel Administration
The development of public personnel management in federal, state and local governments; strategic planning and policy making, position management, staffing, performance management, workplace relations. Fall

POL 470 (1-4) Topics in Institutions & Process
This course explores topics in political institutions and process beyond what is covered in the existing curriculum. Students study specialized topics of current importance in the field. Specific topics will change depending on the term and instructor. May be retaken with a change of topic. Variable

POL 471 (3) Public Opinion and Polling Methods
This course examines public opinion in American politics. Topics include the definition, nature and consequences of public opinion; political socialization; public opinion on selected issues; intergroup differences in public opinion, and public opinion polling methods. Variable

POL 472 (3) Legislative Process
United States Congress and state legislatures, with some cross-national comparisons. Legislative structure, powers; districting, elections, representation, constituency relations; committee system, parties, law-making process, rules and procedure, decision-making, relations with executives and courts. Reforms. Spring

POL 473 (3) Executive Process
Examination of executive politics in United States at a federal and state level, with some cross-national comparisons. United States presidency and executive branch, governors and state executive branches, mayors, and other local executives. Variable

POL 474 (3) Judicial Process
An examination of the structure, jurisdiction and processes of federal and state courts. Also studied are judicial decision-making, the selection of judges and justices. Same as LAWE 437 Variable

POL 475 (3) Southern Politics
The course examines politics in the American South. It examines the historical and cultural roots of Southern distinctiveness, traditionalistic political culture, racial conflicts, hostility toward organized labor, religious fundamentalism, tolerance of state violence, and social and moral conservatism. Major attention is paid to the realignment of white Southerners toward the Republican Party. Variable

POL 490 (1-6) Workshop
Selected topics. May be repeated with change of topic. Variable

POL 491 (1-12) Internship
Field placement with a governmental agency or related organization. Provides a learning experience in which the student can integrate and apply knowledge and theory derived from curriculum. P/N only Variable

PORTUGUESE COURSES

Portuguese
College of Arts and Humanities
Department of World Languages and Cultures
227 Armstrong Hall • 507-389-2116
Website: www.mnsu.edu/languages
Chair: Adriana Gordillo

Please see to World Languages and Cultures to view course descriptions.
WIC: 310 Portuguese for Spanish Speakers [4]
PSYCHOLOGY BS AND MINOR

Psychology

College of Social & Behavioral Sciences
Department of Psychology
103 Armstrong Hall • 507-389-2724
Website: www.mnsu.edu/psych/
Chair: Andi Lassiter
Faculty: Angelica Aquirre, Bradley Arsznov, Jeffrey Brown, Jeffrey Buchanan, Kristie Campana, Elizabeth Fillon, Kevin Fitter, Daniel Houlihan, Rosemary Krawczyk, Moses Langley, Karla Lassonde, Carlos Panahon, Lisa Perez, Shawna Petersen-Brown, Barry Ries, Daniel Sachau, Eric Sprankle, Emily Stark

Psychology is the scientific study of the effects of individual, social, physiological, developmental, and environmental factors on thoughts, feelings, and behavior. Psychology courses seek to teach students about the methods of psychological inquiry and the findings of psychological research.

Students study psychology because they wish to prepare for a professional career as a psychologist or social scientist, because they are planning a career in which the understanding of human behavior is important, or simply because they wish to develop a greater understanding of themselves and others. The practice of psychology at the professional level requires a graduate degree beyond the bachelor's degree.

Academic Map/Degree Plan at www.mnsu.edu/programs/

POLICIES/INFORMATION

Admission to Major is granted by the department. Department admissions requirements are:

- a minimum cumulative GPA of 2.7
- completion of PSYC 201 (Statistics) with a grade of "C-" or better.

Contact the department for application procedures.

Residency Requirement. All majors must complete 28 of the required 40 credits within the Department of Psychology at Minnesota State University, Mankato. The department will not accept transfer courses at the 200-level for our major restricted electives, except in a case by case basis.

GPA Policy. Any Psychology course in which a grade of less than "C-" (or P) is earned will not be counted toward a major or minor in psychology.

Teaching Psychology. Students who intend to gain initial licensure to teach psychology in Minnesota schools need to meet the requirements of the social studies teaching psychology in Minnesota schools need to meet the requirements of the social studies

Required General Education

Choose one course: (choose 4 credits)

PSYC 101 Introduction to Psychological Science (4)

Major Common Core

PSYC 201 Statistics for Psychology (4)
PSYC 211W Research Methods and Design (4)
PSYC 409 History and Systems (4)

Major Restricted Electives

Choose one course from each of the four areas Biological (choose 4 credits)

PSYC 321 Brain and Behavior (4)
PSYC 413 Sensation & Perception (4)
PSYC 420 Psychopharmacology (4)
PSYC 421 Behavior Neuroscience (4)
PSYC 425W Behavior Genetics (4)

Cognition (choose 4 credits)

PSYC 325 Introduction to Cognitive Psychology (4)
PSYC 414 Learning (4)
PSYC 415 Human Memory (4)

Developmental (choose 4 credits)

PSYC 343 Introduction to Developmental Psychology (4)
PSYC 433 Child Psychology (4)
PSYC 436 Adolescent Psychology (4)
PSYC 466 Psychology of Aging (4)

Social/Cultural (choose 3-4 credits)

PSYC 340 Social Psychology (4)
PSYC 358 Cultural Psychology (4)
PSYC 455 Abnormal Psychology (4)
PSYC 460W Psychology of Women (3)

Major Unrestricted Electives

Choose 12 - 13 Credit(s).

Choose from any psychology courses not previously used.

PSYC 102 - 499

Required Minor: Yes. Any.

PSYCHOLOGY MINOR

Core

PSYC 101 Introduction to Psychological Science (4)

Elective

Choose 17 credits of elective courses in Psychology, including at least 8 upper-level credits (300- or 400-level)

EXPERIMENTAL PSYCHOLOGY CERTIFICATE

The purpose of this certificate is to provide undergraduate students with hands-on research experience in psychology. Psychology majors who are considering applying to graduate school are highly recommended to complete this certificate. Policies: Students must earn a grade of C- or better in all certificate courses for that course to count towards the certificate. No more than 4 credits in the certificate may be taken for P/N credit.

Admission Requirements: Students must meet requirements of admission to the Psychology major in order to complete this certificate. This includes completion of Psy 201 (Statistics) with a grade of C- or above, a cumulative GPA of 2.70 and above, and at least 30 earned credits at the college level.

Required General Education

PSYC 101 Introduction to Psychological Science (4)

Major Common Core

PSYC 201 Statistics for Psychology (4)
PSYC 211W Research Methods and Design (4)
PSYC 496 Laboratory Research in Psychology (2)

Major Restricted Electives

Choose 2 courses, 7-8 credits, from the list below.

PSYC 419 Psychometric Theory (4)
PSYC 423 Cognitive Neuroscience (4)
PSYC 430 Advanced Topics in Biological Psychology (4)
PSYC 443 Advanced Social Psychology (3)
PSYC 450 Advanced Cognitive Psychology (4)

COURSE DESCRIPTIONS

PSYC 101 (4) Introduction to Psychological Science
This course is designed to provide a thorough introduction to the broad spectrum of theories and applications that make up the field of psychology. Fall, Spring

GE-5
PSYC 103W (3) Psychology Today
Introduces students to major issues in society that impact their lives, behaviors, and the way they think. Course requires student to critically address controversial and non-controversial issues through clear arguments, intensive writings, research and presentations.
On Demand: Fall, Spring
WI, GE2

PSYC 201 (4) Statistics for Psychology
The course emphasizes understanding the conceptual basis of common statistical procedures and applying those procedures to the problems of organizing information and making inferences from data. Topics include: summarizing data, the logic of inference, estimation, analysis of variance, and correlations.
Prerequisite: MATH 112, MATH 113, MATH 115, MATH 121, MATH 130 or STAT 154
Fall, Spring

PSYC 202 (1) Careers in Psychology
Exploration of various degrees and types of careers available in psychology, and what psychologists do.
Fall, Spring

PSYC 205 (3) Psychology of Sexual Health
An overview of the psychological aspects of sexuality including the assessment and treatment of sexual disorders, gender development and identity, sexual orientation, behavioral effects on sexual health, and sexual offending and trauma.
Variable

PSYC 206 (4) Introduction to Cognitive Science
This course introduces a multidisciplinary approach to the scientific study of cognition. Contributions from the fields of biology, computer science, neuroscience, philosophy, and psychology are emphasized. Topics include the mind-body problem, perception, memory, linguistics, problem solving, artificial intelligence, and robotics. This course is a prerequisite for the cognitive science major. For the psychology major, it serves as unrestricted elective credit; it does not satisfy the cognitive restricted elective requirement.
On Demand: Fall, Spring
GE-5

PSYC 211W (4) Research Methods and Design
An introduction to the major components of research methodology in psychology. This is a writing intensive course and involves the processing, interpretation, and exposition of behavioral data.
Prerequisite: Must have a minimum total cumulative GPA of 2.70 or instructor permission to enroll; PSYC 201
Fall, Spring
WI

PSYC 230 (3) Child Care Psychology
This course is designed to develop an understanding of major variables that impact the psychological development of children. Emphasis will be placed on what parents and other caregivers can do to maximize the healthy psychological development of their children.
Fall, Spring
Diverse Cultures - Gold

PSYC 240 (3) Personal Adjustment
Understanding oneself and increasing one's satisfaction in living.
Fall, Spring

PSYC 291 (1-4) Tutoring Psychology
Application of the principles of learning to the instruction of students.
Permission required. Prerequisite: PSYC 101
Fall, Spring

PSYC 303 (3) Introduction to Clinical Psychology
This course is designed for psychology majors who plan careers in professional psychology (clinical, school, etc.). The purpose of the course is to assist students in developing the skills necessary to compete for graduate school placement. It is advised that students complete this course during their sophomore or junior year.
Fall

PSYC 304 (2) Introduction to School Psychology
This course is designed to introduce students to school psychology. The course will broadly address prominent topics in the field as well as assist students in deciding on graduate school and career objectives.
Spring

PSYC 321 (4) Introduction to Brain and Behavior
This course will introduce students to the relationship between the structure and function of the nervous system to the underlying biological processes of behavior.
Prerequisite: PSYC 201
Fall, Spring

PSYC 325 (4) Introduction to Cognitive Psychology
Explores the scientific study of human cognition and provides students with broad coverage of the mental processes used to acquire, process, and retain knowledge.
Students will examine basic concepts and research findings in topics of human cognition such as perception, attention, memory, reading, and problem solving. Concepts in Cognitive Psychology will be related to everyday behaviors and experiences.
Prerequisite: either PSYC 101 or PSYC 206, not both
On Demand: Fall, Spring

PSYC 340 (4) Introduction to Social Psychology
An exploration of theories and research related to the ways that the social environment affects people's behavior.
Prerequisite: PSYC 101
Fall, Spring

PSYC 343 (4) Introduction to Developmental Psychology
This course examines changes in human behavior over the entire lifespan from conception to death. Topics cover developmental changes in physical, cognitive, and social domains. Traditional theories are integrated with current findings of developmental researchers.
Prerequisite: PSYC 101
On Demand: Fall, Spring, Summer

PSYC 358 (4) Introduction to Cultural Psychology
Cultural psychology is an interdisciplinary field that unites psychologists, anthropologists, linguists and philosophers to study how cultural meanings, practices and institutions influence and reflect individual human psychologies. Cultural influences on cognition, perception, emotion, motivation, moral reasoning, and well-being will be discussed with a view towards understanding divergent mentalities by drawing primarily from studies comparing Eastern and Western cultures, as well as some ethnic group companions within the United States. Students should come out of this course with an appreciation for the capacity for humans to create psychological diversity.
On Demand: Fall, Spring

PSYC 363 (4) Introduction to Industrial/Organizational Psychology
An examination of the psychological aspects of human behavior in the workplace. Topics include history of Industrial/Organizational psychology, job analysis, performance measurement, predictors of performance, making personnel decisions, training, satisfaction, social perception, motivation, communication, group process, leadership, and organizational culture.
On Demand: Fall, Spring, Summer

PSYC 389 (3) Psychology and the Law
This course will introduce you to specific psychological theories and research that have been applied to the United States legal system. Course topics include eyewitness testimony and memory, false confessions, lie detection, gender and ethnicity, and jury processes, among others.
Variable

PSYC 398 (0) CPT: Co-Operative Experience
Curricular Practical Training. Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.
Prerequisite: PSYC 101. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.
Fall, Spring, Summer

PSYC 405 (4) Motivation
Major concepts of human motivation and emotion, presentation of learned cognitive and biological influences on sustained behavior.
Prerequisite: PSYC 211W
Fall

PSYC 409 (4) History and Systems
Examination of the historical origins of the principal contemporary psychological theories.
Fall, Spring
PSYCHOLOGY CONTINUED

PSYC 410 (4) Communicating Psychological Science
This course will provide students with knowledge and strategies to describe, identify, and write about Psychological Science. This course will reinforce the science of Psychology through the teaching of successful communication strategies of psychological concepts. Students will complete the course demonstrating how to successfully communicate the discipline to the public.
Prerequisite: PSYC 201, PSYC 211W
Fall, Spring

PSYC 413 (4) Sensation & Perception
How the senses respond to environmental stimuli and how the information they provide is organized into meaningful patterns that make up our experience of the physical world. The effects of maturation and learning in altering those patterns as also considered.
Prerequisite: PSYC 201
On Demand: Fall, Spring, Summer

PSYC 414 (4) Learning
This course provides a broad overview and analysis of the major theories of human and animal learning.
Prerequisite: PSYC 101
On Demand: Fall, Spring, Summer

PSYC 415 (4) Human Memory
This course covers experimental and behavioral studies of human memory including long- and short-term memory, memory for text, pictures, spatial information, and autobiographical events. Emphasis on real-world situations, including education, in which memory and learning play a role.
Prerequisite: PSYC 211W
On Demand: Fall, Spring, Summer

PSYC 417 (4) Advanced Topics in Cognitive Psychology
This course provides students with an overview of the fundamental principles and current research on selected topics in cognitive psychology through critical evaluation, discussion, and application. May be re-taken for credit. Specific course topics will be determined by the instructor.
Prerequisite: PSYC 325, PSYC 414, PSYC 415 (ONE course from that list, not all 3)
On Demand: Fall, Spring

PSYC 419 (4) Psychometric Theory
An overview of development, use, and validation of psychological tests. Topics include reliability and validity, test construction, item analysis, ethics, test administration and scoring, and computerized testing.
Prerequisite: PSYC 211W
On Demand: Fall, Spring, Summer

PSYC 420 (4) Psychopharmacology
Biological foundations of the actions of psychoactive drugs. Neuroanatomy structure and function, neuropsychology, pharmacokinetics and pharmacodynamics will be covered in detail. Relevant classes of drugs will be highlighted with an eye toward their history, mechanisms of action, effects, and treatments.
Prerequisite: PSYC 211W
On Demand: Fall, Spring, Summer

PSYC 421 (4) Behavioral Neuroscience
Biological basis of psychological processes and behavior: Neuroanatomy, neural function, and laboratory methods of investigation will be explored in relation to topics such as sleep, memory, language, intelligence and psychological disorders.
Prerequisite: PSYC 201, PSYC 211W
Fall, Spring

PSYC 423 (4) Cognitive Neuroscience
The goal of neuroscience is to understand the human mind. This goal is approached by revealing the brain processes involved in how we perceive, think, remember, and move. Brain development, communication, and plasticity at the neural level are all described.
Prerequisite: PSYC 211W, PSYC321
On Demand: Fall, Spring

PSYC 425W (4) Behavior Genetics
This writing intensive course provides an overview of the application of genetics methods to the study of behavior. We will examine the basic concepts in genetics with an emphasis on behavioral phenotypes, evolution and evolutionary psychology and the genetics of the individual differences.
Prerequisite: PSYC 211W
Variable
WI

PSYC 430 (4) Advanced Topics in Biological Psychology
This course provides students with an overview of the fundamental principles and current research on selected topics in biological psychology through critical evaluation and discussion.
Prerequisite: PSYC 211W, PSYC 321
On Demand: Fall, Spring

PSYC 431 (4) Advanced Behavioral Neuroscience
The course is an extension of Psy 421 and includes an advanced examination of topics including: brain organization, neuronal signaling, and specific topics in the field of biological psychology.
Prerequisite: PSYC 420, PSYC 421, PSYC 425W (ONE course from that list, not all 3)
On Demand: Fall, Spring

PSYC 432 (1-4) Advanced Topics in Developmental Psychology
This course provides students with an overview of the fundamental principles and current research on selected topics in developmental psychology through critical evaluation, discussion, and application. May be re-taken for credit. Specific course topics will be determined by the instructor.
Prerequisites: Psyc 433, Psyc 436, Psyc 343, Psyc 466: One course from this list, not all 4
On Demand: Fall, Spring

PSYC 433 (4) Child Psychology
Physical, social, emotional, intellectual, and personality development from conception to preadolescence. Focus on interplay between maturation and experience.
Prerequisite: PSYC 101
Fall, Spring

PSYC 435 (4) Developmental Psychopathology
This course is designed to provide a survey of psychopathology in children. It introduces selected topics and issues relating to the emotional, social, cognitive, and behavioral health of children. The course will address problems in infants to adolescents in the home, school, and community. Topics will include models of “normal” and abnormal development, environmental and dispositional factors relating to behavior, psychopathology, etiology, assessment, and diagnosis of major childhood emotional and behavioral disorders. Discussion of treatment of behavior disorders will be included.
Prerequisite: PSYC 101
On Demand: Fall, Spring, Summer

PSYC 436 (4) Adolescent Psychology
This class covers the development of the individual from the age of 11 to 19 years of age. Discussion will include aspects of both normal and abnormal development.
Fall, Spring

PSYC 442 (3) Group Psychology
Exploring factors affecting leadership and effective group processes through lectures and discussion of theories and findings and through experiential activities.
Prerequisite: PSYC 101
Variable

PSYC 443 (4) Advanced Social Psychology
An in-depth examination of social psychological research in laboratory and field settings.
Prerequisite: PSYC 211W, PSYC 340 or PSYC 358
ALT

PSYC 445 (1-4) Advanced Topics in Social Psychology
This course provides students with an overview of the fundamental principles and current research on selected topics in social psychology through critical evaluation, discussion, and application. May be re-taken for credit. Specific course topics will be determined by the instructor.
Prerequisites: PSYC 440, PSYC 358, PSYC 455, PSYC 460W (ONE course from list, not all 4)
On Demand: Fall, Spring

PSYC 450 (4) Advanced Cognitive Psychology
Advanced Cognitive Psychology introduces students to key research papers in the field of human cognition. Through reading, writing, and the study of experimental design, students will advance their understanding of cognitive psychology and develop their ability to critically review and evaluate research.
Prerequisite: PSYC 211W, PSYC 325
Fall [On Demand], Spring [On Demand]

PSYC 455 (4) Abnormal Psychology
This course is designed to increase the student’s awareness and understanding of abnormal psychology. Students will become familiar with clinical descriptions, course of onset, and treatment regimens specific to various disorders.
Prerequisite: PSYC 101
Fall, Spring
PSYC 460W (3) Psychology of Women
A critical examination of current psychological approaches to the study of women’s behavior and experience. The course will emphasize empirical ways of knowing and address psychological questions of central concern to women. Development of gender differences also will be explored.
Prerequisite: PSYC 101
Spring
WI
Diverse Cultures - Purple

PSYC 461 (3) Marketing Psychology
Analysis of product marketing and consumer purchasing strategies and their determinants.
Prerequisite: 8 PSYC credits
Fall

PSYC 466 (4) Psychology of Aging
Aging process and development during the adult years; psychology and psychological concerns of the aging individual; dealing with death.
Prerequisite: PSYC 101
Spring

PSYC 476 (4) Applied Behavior Analysis
This course provides an overview of the procedures and processes of behavior change in applied contexts. Topics include functional assessment, behavioral intervention planning, and specific applied behavioral analytic interventions with an emphasis on non-invasive options.
Prerequisite: PSYC 211V
Spring

PSYC 478 (4) Health Psychology
The interface of behavioral and medical science is explored. Research on environmental and learning factors in the etiology and treatment of physical disease and rehabilitation is examined. Specific topics include pain management, medical compliance, behavior disorders in nursing homes and on chronic illnesses.
Prerequisite: Three courses in PSYC
Spring

PSYC 485 (1-4) Topics in Applied Psychology
Specific topics depend on the instructor; all will focus on applications of psychology in current contexts and/or issues. May be retaken for credit.
Prerequisite: PSYC 101
On Demand: Fall and Spring

PSYC 489 (1-5) Advanced Topics
Application of psychology to topics of current interest. May be retaken for credit.
Variable

PSYC 490 (1-3) Workshop
Topics to be announced. May be retaken for credit.
Fall, Spring

PSYC 497 (1-8) Field Experience
A learning experience integrated with the student’s course of study, to be developed with an advisor and the field experience coordinator. May be retaken for credit up to an 8 credit total for all enrollments. Available for P/N grading only.
Prerequisite: 9 credits of PSYC
Fall, Spring

PSYC 498 (1-4) Individual Study
Individualized learning under faculty supervision.
Fall, Spring

RECREATION, PARKS & LEISURE SERVICES CONTINUED

Recreation, Parks & Leisure Services
College of Allied Health & Nursing
Department of Recreation, Parks And Leisure Services
213 Highland North • 507-389-2127
Website: http://ahn.mnsu.edu/rpls/
Email: rec-park-leisure-services@mnsu.edu
Chair: Rachelle H. Fuller Ph.D.
Faculty: Brooke Burk, Robyn Ceurvorst, Rachelle H. Fuller, Jonathan Hicks, Kristi Montandon, James Wise

Accreditations. Council on Accreditation of Parks, Recreation, Tourism and Related Professions. (COAPRT)
This program prepares a graduate to become a professional leader, supervisor and/or administrator within the private for profit, private nonprofit, and the public sectors of the recreation and leisure services field. The program includes preparation for youth programs, community education, municipal and leisure service programs, a broad variety of therapeutic recreation settings including hospitals, long-term care, advocacy organizations, consultant services, a wide variety of commercial recreation and tourism settings, nature and historical interpretation; private and public park systems including park ranger, research, educational outreach, planning, marketing, park operations; and military recreation.

The Department offers a professional core that is accredited by the Council on Accreditation of Parks, Recreation, Tourism, and Related Professions (COAPRT) with three career tracks: Leisure Planning and Management, Therapeutic Recreation, and Resource Management.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
Admission to Major is granted by the department. Department admissions requirements are:
- A minimum of 32 semester credit hours
- A minimum cumulative GPA (Minnesota State Mankato and Transfer) of 2.0 or better, preference given to candidates with 2.5 or better
- Completion of RPLS 272 (Introduction to Recreation, Parks and Leisure Services) with a “C” or better or departmental permission
- An advisor in the department
- Completion of an application for admission that includes an essay and an evaluation from the student’s RPLS 272 (Introduction to Recreation, Parks and Leisure Services) instructor.

Students who have earned fewer than 32 semester credits can declare as Pre-RPLS. This enables them to select an advisor. Once students meet the entrance requirements, as listed above, they must then apply for formal admittance to the major.

Majors and Pre-RPLS students must also earn a “C” or better in each RPLS class to remain in good standing in the major and be permitted to advance in the program.

To declare an RPLS minor students must have a cumulative GPA of 2.0 or better. RPLS minors must receive a “C” or better in RPLS courses applied to the minor in order to fulfill minor requirements.

Practicum Policy. Each student must complete the practicum requirement. Students are required to enroll in RPLS 495 (9 credits) after completing all RPLS course work. Students must also meet the following requirements to be eligible to register for Practicum:
- Completion of all other required RPLS coursework with a “C” (2.0) or better in each RPLS class,
- A minimum cumulative GPA of 2.5 in the major,
- Completion of RPLS 302 (Pre-Practicum Seminar)
- Completion of RPLS Field Experience form,
- Completion of an Application for Practicum one semester before the Practicum begins. The application must be approved by the student’s faculty advisor; and
- Permission to register from the student’s faculty advisor.

P/N Grading Policy. Recreation, Parks and Leisure Services majors and minors must take required courses for a letter grade with the exception that the field experience, pre-practicum seminar and practicum courses must be taken on a P/N basis. Non-majors may elect RPLS courses for pass/no credit where this option is available.
Transfer Policy. Transfer students are required to complete a minimum of 40 semester credits of the major at Minnesota State Mankato.

RECREATION, PARKS & LEISURE SERVICES BS
Degree completion = 120 credits

Prerequisites to the Major
Students must earn a “C” or better in RPLS 272 prior to admission to the major. In special circumstances, the department may grant admission to students who have not first completed RPLS 272. However, all RPLS majors must complete RPLS 272 as a requirement for graduation.

RPLS 272 Introduction To Recreation, Parks & Leisure Services (3)

Major Common Core
RPLS 277 Recreation Leadership (3)
RPLS 302 Pre-Practicum Seminar (2)
RPLS 375 Recreational Technology (3)
RPLS 376 Program Planning in Recreation, Parks, and Leisure Services (4)
RPLS 377W Public Relations (3)
RPLS 379 Recreation Management I: Facility Resources (3)
RPLS 473 Recreation Management II: Financial Resources (3)
RPLS 483 Recreation Management III: Human Resources (3)
RPLS 495 Practicum (9)

Major Restricted Electives
Optional Courses. Choose 0 - 9 Credits.
RPLS 260 Planes, Trains, and Automobiles: An Introduction to the Travel Industry (3)
RPLS 275 Natural Resources and Conservation in RPLS (3)
RPLS 278 Leisure and Lifestyle (3)
RPLS 457W Transdisciplinary Research in Health-Related Fields (3)

Major Emphasis: Resource Management
GEOG 373 Introduction to Geography Information Systems (4)
RPLS 282 Wildlife as a Recreational Resource (3)
RPLS 350 Methods of Interpretation in RPLS (3)
RPLS 475 Public Land Use Policies (3)
RPLS 478 Review of Outdoor Recreation Research (3)
RPLS 479 Wildland Recreation Management (3)
RPLS 481 Park Planning (3)

Major Emphasis: Leisure Planning and Management
RPLS 274 Therapeutic Recreation Services (3)
RPLS 325 Programming for Outdoor Settings (3)
RPLS 378 Commercial Recreation and Tourism (3)
RPLS 451 Advanced Program Delivery Methods (3)
RPLS 465 Event Management (3)

Major Emphasis: Therapeutic Recreation
RPLS 274 Therapeutic Recreation Services (3)
RPLS 440 Therapeutic Recreation Assessment (3)
RPLS 447VV Therapeutic Recreation Process (3)
RPLS 450 Therapeutic Recreation Techniques (3)
RPLS 489 Advancement of the Therapeutic Recreation Profession (3)

Required for National Certification
Choose 0 - 14 Credits
Please see Advisor for Therapeutic Recreation
BIOL 220 Human Anatomy (4)
HP 348 Structural Kinesiology and Biomechanics (3)
KSP 235 Human Development (3)
PSYC 455 Abnormal Psychology (4)

Required Minor: None.

RECREATION, PARKS & LEISURE SERVICES MINOR

Core
RPLS 272 Introduction To Recreation, Parks & Leisure Services (3)
RPLS 277 Recreation Leadership (3)
RPLS 376 Program Planning in Recreation, Parks, and Leisure Services (4)
RPLS 472 Recreation Management II: Financial Resources (3)

Electives
Select 9 additional credits from RPLS upper division courses in consultation with an advisor.

COURSE DESCRIPTIONS

RPLS 260 (3) Planes, Trains, and Automobiles: An Introduction to Travel and Tourism
The travel and tourism industry is integral to the success of other areas of RPLS. This course will provide an overview of the use of travel and tourism as a form of leisure for people around the world and the professions that are associated with it.

On Demand: Fall & Spring
GE-5

RPLS 272 (3) Introduction to Recreation, Parks & Leisure Services
A foundation course that introduces the student to the profession of leisure services. Emphasis is placed on recreation in the student’s life, the development of the profession, the community leisure service system and careers in recreation, parks and leisure services.

Fall, Spring
GE-9

RPLS 274 (3) Therapeutic Recreation Services
This course is designed to be an overview of Therapeutic Recreation Services in a variety of human service settings with emphasis on the assessment, planning, implementation and evaluation of leisure and recreation programs performed by therapeutic recreation specialists serving persons with physical, mental, emotional or social limitations.

Spring
Diverse Cultures - Purple

RPLS 275 (3) Natural Resources and Conservation in RPLS
This fully online course will fulfill General Education Goal Area 9: Ethical and Civic Responsibility. The course meets the general education need for students to develop a global understanding of natural resource philosophies/ethics (in parks and protected areas with recreation access), illustrate critical historical and current natural resource ecosystem management concerns, and identify sustainable environmental management techniques across global societies for public health.

On Demand: Fall, Spring, Summer
GE-9

RPLS 277 (3) Recreation Leadership
Through interactive classroom assignments, students develop expertise in planning, leading and evaluating a recreational experience. Foundations of leadership, group dynamics and motivation are also included.

Fall, Spring
GE-9

RPLS 278 (3) Leisure and Lifestyle
This course addresses leisure wellness and incorporates leisure into life as a balancing force for healthy living. Leisure is studied in relation to: work, time and money management, stress management, healthy relationships, life choices and decisions, personal and community resources, career opportunities and in relation to current issues in politics and in the work place.

Fall, Spring
GE-11

RPLS 282 (3) Wildlife as a Recreational Resource
A broad survey course that is concerned with game and non-game wildlife species. Habitat is stressed throughout the course as a necessity for maintaining a species. Funding of wildlife programs and changing attitudes of the public are concerns throughout this course.

Fall, Spring
GE-10

RPLS 302 (2) Pre-Practicum Seminar
This course is designed to be taken two semesters before students complete their practicum. It will help students identify and secure a practicum. It will also help students establish reasonable expectations for a quality practicum experience.

Fall, Spring
GE-10

RPLS 325 (3) Programming for Outdoor Settings
This course exposes the parks and recreation major to basic outdoor skills. The camping movement in America is discussed as well as progression planning strategies for outdoor recreation.

Fall

RPLS 350 (3) Methods of Interpretation in RPLS
Students will be introduced to various methods and skills used to design and deliver interpretive programs and materials to various audiences. Students will also apply the philosophies, concepts, theories and practical skills necessary for implementing effective interpretive programs.

Fall
RPLS 375 (3) Recreation Technology
This course is designed to provide students with knowledge, skills, and tools to effectively implement technology in recreation. Students will have the opportunity to explore practical applications of technological in recreation. The objective of this class is to introduce the student to the variety of ways computers and other technologies are used in everyday recreation management.
Fall, Spring

RPLS 376 (4) Program Planning in Recreation, Parks, & Leisure Services
The emphasis of this course is on the program planning process from creating the idea through evaluation of the program and how it fits into the agency profile. Various formats such as leisure learning, tournaments, trips and outings, and special events are highlighted for a variety of leisure service agencies.
Fall, Spring

RPLS 377 (3) Public Relations
Focuses on the total planning, implementation and techniques of effective public relations.
Fall, Spring

RPLS 378 (3) Commercial Recreation and Tourism
This course is a survey of commercial recreation and tourism that examines the basic types of commercial recreation and tourism providers, some basic trends in commercial recreation and the social, economic and environmental impacts of commercial recreation and tourism.
Fall

RPLS 379 (3) Recreation Management I-Facility Resources
This course introduces students to basic management and planning techniques for a wide variety of indoor and outdoor recreation facilities.
Fall, Spring

RPLS 384 (1) Field Experience
Students are required to complete the Field Experience in order to be eligible to enroll in RPLS 495 Practicum. Students will contract with the advisor to complete 100 hours of volunteer or paid experience in a leisure services organization.
Fall, Spring, Summer

RPLS 398 (0) CPT: Co-Operative Experience
Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and one adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.
Prerequisite: At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.
Fall, Spring, Summer

RPLS 440 (3) Therapeutic Recreation Assessment
Students will learn about and gain experience with assessment as it is practiced in therapeutic recreation settings. The course focuses on the basis of assessment, the four most frequently utilized information gathering techniques, and commonly used assessment instruments.
Prerequisite: RPLS 274
Fall

RPLS 447W (3) Therapeutic Recreation Process
This course details the Therapeutic Recreation process: assessment, planning, implementation and evaluation in relation to individual treatment programs in Therapeutic Recreation Service. Emphasis is on interpreting assessment data, writing measurable goals and objectives, implementing an actual program and documenting program results in terms currently used in human service settings.
Prerequisite: RPLS 274
Fall

RPLS 450 (3) Therapeutic Recreation Techniques
This course is designed to teach a wide variety of interventions and facilitation techniques used in therapeutic recreation programs to give the student knowledge, practice and ability in the implementation of leisure and recreation programs for persons with special needs.
Prerequisite: RPLS 274 and RPLS 447W
Spring

RPLS 451 (3) Advanced Program Delivery Methods
Students will study the recreation needs of various groups of people and learn the best practices for serving those needs. The emphasis will be on program planning guidelines appropriate for each group across the lifespan and for diverse groups.
Spring

RPLS 457W (3) Transdisciplinary Research in Health-Related Fields
This course will explore transdisciplinary research design with emphasis related to the areas of allied health and nursing sciences and disciplines. Basic overview of research methodologies commonly utilized in health sciences and approaches to transdisciplinary research will be explored through review of original research. Students will be required to produce and revise scientific writing with specific focus on inter/transdisciplinary studies. Team-based problem centered research questions will be developed and investigated using transdisciplinary methodology with current health-related issues.
Fall

RPLS 465 (3) Event Management
This course introduces students to special event planning, development, budgeting, promotion and evaluation. The use, recruitment, evaluation and recognition of volunteers as well as fundraising strategies are discussed and employed.
Prerequisite: RPLS 377W
Spring

RPLS 471W (3) Research Design in Recreation, Parks and Leisure Services
This course guides the student through the survey process including the creation and implementation of a questionnaire. The data collected are then analyzed and a formal report is prepared. Computer skills are emphasized.
Fall, Spring

RPLS 473 (3) Recreation Management II-Fiscal Resources
This course investigates basic economic principles behind managing finances and budgets in recreation, sport and tourism settings. Particular attention will be applied to revenue generation, specifically via grant writing, and creating and managing budgets.
Permission required from professor.
Fall, Spring

RPLS 475 (3) Public Land Use Policies
Traces the history of public lands in the United States, their acquisition and dispos- al. Congressional charges to executive agencies managing national lands and state and local government responsibilities for managing nonfederal public lands. Attention is given to international oceanic resources and how the international community will manage these resources.
Spring

RPLS 478 (3) Review of Outdoor Recreation Research
This course examines major topics of social science research aimed at learning the preferences, attitudes, behaviors, experiences and benefits of visitors to outdoor recreation areas.
Spring

RPLS 479 (3) Wildland Recreation Management
This course introduces students to some basic natural resource and visitor manage- ment techniques in outdoor recreation settings. Topics such as interpretation and environmental education, visitor management and ecosystem management are among those discussed.
Spring

RPLS 481 (3) Park Planning
Traces the history of the parks movement in the United States, selected legislation establishing parks and the enactment of funding legislation. The importance of public participation, planning and political strategies are stressed.
Fall

RPLS 482 (3) Leisure and Older Adults
Leisure as an integral aspect of successful aging is the focus of this course which includes: leisure in relation to physical, intellectual, social and psychological aspects of aging and successful leisure programming in community based settings and in long term care.
Variable

RPLS 483 (3) Recreation Management III: Human Resources
This course investigates legislative and budgetary processes utilized in the public, nonprofit, and private sectors of the leisure services profession.
Fall, Spring

RPLS 485 (1-3) Selected Topics
Fall, Spring
RPLS 486 (1-4) Minor Practicum  
Course work set through student/advisor agreement.  
Fall, Spring

RPLS 489 (3) Advancement of the Therapeutic Recreation Profession  
This course is designed to develop the student's ability to function as a member of the interdisciplinary treatment team and practice critical thinking, writing and oral skills related to treatment decisions, ethical issues, professional issues, and health care delivery systems.  
Fall

RPLS 490 (2-4) Workshop  
Variable

RPLS 495 (9) Practicum  
The Practicum, which is one full semester of professional work experience, is completed at the end of the student's course work and requires 560 hours of service at a department approved agency where the student works full time for 14 consecutive weeks. Written permission is required from the student's advisor one semester in advance.  
Summer

RPLS 497 (1-8) Internship  
Course based on student/advisor agreement.  
Fall, Spring, Summer

RPLS 498 (1-8) Internship  
Course based on student/advisor agreement.  
Fall, Spring, Summer

RPLS 499 (1-4) Individual Study  
Course work set by student/advisor discussion.  
Fall, Spring

________________________________________________________________________________

REHABILITATION COUNSELING COURSES

Rehabilitation Counseling
College of Allied Health and Nursing  
Department of Speech, Hearing & Rehabilitation Services  
314 Clinical Sciences Building • 507-389-1414 • MRS/TTY: 800-627-3529  
http://ahn.mnsu.edu/rehabilitation/

Chair: Bonnie Berg PhD  
Faculty: Andrew Phemister PhD

The Rehabilitation Counseling Program prepares graduate students to become fully competent, dedicated, and effective Rehabilitation Counselors, who embrace and practice the rehabilitation core values.

People with disabilities share all of the rights, privileges, and responsibilities enjoyed by all members of society and shall be treated as full and equal participants in society without regard to type or degree of disability.

When people with disabilities require or request assistance in order to achieve the rights, privileges, and responsibilities afforded by society, that assistance will be provided by a qualified, conscientious, and dedicated provider who promotes informed choice, empowerment, and the integrity of the individual.

In addition to being guided by the mission statement listed above, the Program has adopted and advocates for practices that follow the Code of Professional Ethics for Rehabilitation Counselors, adopted by the Commission on Rehabilitation Counselor Certification, effective January 1, 2010. All Rehabilitation Counseling Program faculty and staff strive to conduct themselves in a manner that is consistent with this Code, while encouraging and educating students to do the same.

The Rehabilitation Counseling Program at Minnesota State University, Mankato has been offered at the Master's degree level since 1959, with its first graduate completing the program in 1960.

___________________________________________________________________

COURSE DESCRIPTIONS

REHB 110W (3) Sensitivity to Disability  
Promotes an understanding of the impact of physical and mental disabilities on people in their daily lives through in-class contacts and exercises with and about people with disabilities.  
Fall, Spring  
WI, GE-7  
Diverse Cultures - Gold

REHB 499 (1-4) Individual Study  
A project performed under the prior approval and close supervision of a faculty member to enhance the student's education.  
Prerequisite: Consent  
Variable

________________________________________________________________________________

RUSSIAN COURSES

Russian
College of Arts & Humanities  
Department of World Languages & Cultures  
227 Armstrong Hall • 507-389-2116  
Website: www.mnsu.edu/languages

Chair: Adriana Gordillo

Although Minnesota State Mankato does not offer a degree in Russian, students may register for Russian courses offered at Gustavus Adolphus College for Minnesota State Mankato credit.
SCANDINAVIAN STUDIES BA AND MINOR

Scandinavian Studies

College of Arts and Humanities
Department of World Languages & Cultures
227 Armstrong Hall • 507-389-2917
Website: www.mnsu.edu/languages
Fax: 507-389-5887
Chair: Adriana Gordinilo
Director: Rennesa Osterberg Jessup, Ph.D.

The Scandinavian Studies Program is an interdisciplinary program that combines acquisition of a Scandinavian language with study of the diversity and richness of the greater Nordic cultural region of Norway, Sweden, Denmark, Finland, and Iceland. With a major or minor in Scandinavian Studies, students become familiar with the heritage of Scandinavia from the Vikings to the modern day and learn more about the role of the Nordic nations in communications technology, environmental awareness, social equality, and international peace initiatives in the contemporary world. A Scandinavian Studies minor can enhance a traditional major and serve to provide a global focus to students' education, whether in engineering or health sciences, international relations or international business, art or literature. It is recommended that students combine a Scandinavian Studies major or minor with studies in fields such as art, history, international business, international relations, World Languages & Cultures, political science, engineering or social work.

The Scandinavian Studies Program involves a variety of Minnesota State Mankato departments and programs. Minnesota State Mankato also has study abroad options in Norway, Sweden, and Finland for Scandinavian Studies majors and minors. Additional courses, particularly for majors, may also be completed in language, literature, history, and peace studies at Gustavus Adolphus College in nearby St. Peter, Minnesota. Minnesota State Mankato students carrying 12 semester credits may pay Minnesota State Mankato tuition to take a course at Gustavus Adolphus College that is not offered at Minnesota State Mankato.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

GPA Policy. A grade of "C" or better must be earned for major or minor credit.

P/N Grading Policy. Work done for a minor or major must be done for a letter grade.

SCAN 101, SCAN 102, SCAN 111, and SCAN 112 meet General Education requirements for Goal Area 8: Global Perspectives.

SCAN 250, SCAN 299, SCAN 450, SCAN 460 and SCAN 499 may be repeated with different topics.

SCANDINAVIAN STUDIES BA

Degree completion = 120 credits

The Bachelor of Arts major in Scandinavian Studies requires 32 semester credits, including a core of language courses [usually at least two years], a 3-credit "capstone" experience, and approved electives. Students interested in focusing on Scandinavian languages and literature may choose to major in Scandinavian Studies, but they are strongly encouraged to pursue a second major in other BA program or two minors in other BA programs that will complement students' interdisciplinary studies. One minor is required. Majors will work closely with the Scandinavian Studies advisor to develop a course of study that offers flexibility to suit students' needs and interests.

Major Common Core

SCAN 490 Major Project in Scandinavian Studies (3)

(Choose 1 Cluster (choose four semesters of either Norwegian or Swedish)

Norwegian language: - (choose 10-16 credit)

SCAN 101 Elementary Norwegian I (4)
SCAN 102 Elementary Norwegian II (4)
SCAN 292 Intermediate Norwegian I (1-4)
SCAN 293 Intermediate Norwegian II (1-4)

Swedish language: - (choose 10-16 credits)

SCAN 111 Elementary Swedish I (4)
SCAN 112 Elementary Swedish II (4)
SCAN 294 Intermediate Swedish I (1-4)
SCAN 295 Intermediate Swedish II (1-4)

Required for Minor

A minor in Scandinavian Studies requires 20 semester credits and can be completed at Minnesota State Mankato. The core of at least 8 credits in Norwegian or Swedish language is supplemented by a 1-credit "capstone" experience plus approved electives. This interdisciplinary minor can be combined with any major at Minnesota State Mankato. Because the minor is tailored to the individual interests, students should consult the Scandinavian Studies program director as well as the major advisor.

SCANDINAVIAN STUDIES MINOR

Major Unrestricted Electives (choose 13-19 credits)

You need to receive approval by the director of Scandinavian Studies before the beginning of the semester to ensure that you will be able to apply credit achieved in courses from affiliated programs (courses with a prefix other than "SCAN") toward a major or minor in Scandinavian Studies. If you wish to take any course not listed below at Gustavus Adolphus, please see their catalog and consult the director of Scandinavian Studies.

ANTH 436W Anthropology of Aging (3)
ART 413 Scandinavian Art (3)
ART 492 Art History Seminar I (1-6)
ART 494 Topics (3)
ART 499 Individual Study I (1-6)
ENG 499 Individual Study I (1-4)
GERO 200 Aging: Interdisciplinary Perspectives (3)
GERO 485 Topics in Gerontology I (1-3)
GERO 499 Individual Study in Gerontology I (1-4)
LAWVE 434 Comparative Criminal Justice Systems (3)
MASS 499 Individual Study in Mass Media (1-2)
POL 439 Comparative Social Policy: The Welfare State in Europe and the Americas (3)
POL 447 European Democracies (3)
POL 449 Comparative Criminal Justice Systems (3)
SCAN 150W The Nordic Countries: An Introduction (4)
SCAN 250 Selected Topics I (1-4)
SCAN 251W Scandinavian Cultures: The Sami (4)
SCAN 299 Individual Study I (1-4)
SCAN 450 Special Topics I (1-4)
SCAN 451 Scandinavian Crime Fiction (4)
SCAN 460 Topics in Scandinavian Film (4)
SCAN 499 Individual Study I (1-4)
SOVK 255 Global Responses to Human Need (3)

Required Minor: Yes. Any.
SCANDINAVIAN STUDIES CONTINUED

GEO 200 Aging: Interdisciplinary Perspectives (3)
GEO 485 Topics in Gerontology (1-3)
GEO 499 Individual Study in Gerontology (1-4)
LAW 434 Comparative Criminal Justice System (3)
MASS 499 Individual Study in Mass Media (1-2)
POL 439 Comparative Social Policy: The Welfare State in Europe and the Americas (3)
POL 447 European Democracies (3)
POL 449 Comparative Criminal Justice Systems (3)
SCAN 150W The Nordic Countries: An Introduction (4)
SCAN 250 Selected Topics (1-4)
SCAN 251W Scandinavian Cultures: The Sami (4)
SCAN 292 Intermediate Norwegian I (1-4)
SCAN 293 Intermediate Norwegian II (1-4)
SCAN 294 Intermediate Swedish I (1-4)
SCAN 295 Intermediate Swedish II (1-4)
SCAN 299 Individual Study (1-4)
SCAN 350 Vikings & Norse Mythology (4)
SCAN 450 Special Topics (1-4)
SCAN 451 Scandinavian Crime Fiction (4)
SCAN 460 Topics in Scandinavian Film (4)
SCAN 499 Individual Study (1-4)
SOVK 255 Global Responses to Human Need (3)

Elective courses at Gustavus Adolphus College. See the current Gustavus Adolphus College Catalog for course offerings in advanced Swedish language, literature, history, and peace studies.

COURSE DESCRIPTIONS

SCAN 101 (4) Elementary Norwegian I
An introduction to the basic skills of listening, speaking, reading, and writing coupled with culture.
Fall
GE-8

SCAN 102 (4) Elementary Norwegian II
An introduction to the basic skills of listening, speaking, reading, and writing coupled with culture.
Prerequisite: SCAN 101
Spring
GE-8

SCAN 111 (4) Elementary Swedish I
An introduction to the basic skills of listening, speaking, reading, and writing, coupled with cultural notes.
Fall (On Demand), Spring (On Demand)
GE-8

SCAN 112 (4) Elementary Swedish II
An introduction to the basic skills of listening, speaking, reading, and writing, coupled with cultural notes.
Prerequisite: SCAN 111
Fall (On Demand), Spring (On Demand)
GE-8

SCAN 150W (4) The Nordic Countries: Interdisciplinary Introduction
This course offers an interdisciplinary introduction to the Nordic countries (Norway, Sweden, Denmark, Finland, Iceland, Greenland, Faroe Islands); it provides an overview of their geography, history, culture, and current political situation in comparison to the U.S.
Fall, Spring
WI, GE-6, GE-8

SCAN 250 (1-4) Selected Topics
Special topics courses in Scandinavian Studies will deal with a variety of topics regarding the history, literature, art, and culture of the Nordic countries. SCAN 250 courses are planned with the interests and needs of beginning students in mind; they offer broad introductions to the most important artifacts and discourses in the respective field. Writing assignments offer opportunities to learn to discuss accurately and critically central issues and theories. The course may be repeated for credit.
Fall, Spring

Diverse Cultures - Purple

SCAN 251W (4) Scandinavian Cultures: The Sami
In this course, students will learn about the indigenous population of Scandinavia, the Sami. Students will investigate Sami traditions and cultural production along with the historical and contemporary sociopolitical standing of the Sami within the majority cultures of Scandinavia.
Variable
WI, GE-6, GE-8

Diverse Cultures - Purple

SCAN 292 (1-4) Intermediate Norwegian I
Development of reading and listening skills, oral and writing practice within a cultural context. To be arranged with instructor prior to registration.
Prerequisite: SCAN 102 or equivalent.
Fall

SCAN 293 (1-4) Intermediate Norwegian II
Development of reading and listening skills, oral and writing practice within a cultural context. To be arranged with instructor prior to registration.
Prerequisite: SCAN 102 or equivalent
Spring

SCAN 294 (1-4) Intermediate Swedish I
Development of reading and listening skills, oral and writing practice within a cultural context. To be arranged with instructor prior to registration.
Prerequisite: SCAN 112 or equivalent

SCAN 295 (1-4) Intermediate Swedish II
Development of reading and listening skills, oral and writing practice within a cultural context. To be arranged with instructor prior to registration.
Prerequisite: SCAN 112 or equivalent

SCAN 299 (1-4) Individual Study
Variable

SCAN 350 (4) Vikings & Norse Mythology
This course is designed to provide an overview of the Viking Age and Norse mythology. Students will begin by learning about the sources that provide scholars with information about the Vikings, such as archeological finds, Icelandic sagas, place names, historical annals, and other written texts. Students will then explore the daily lives of the Vikings in their homelands, their religious beliefs, their expansion to other lands, and what led to the end of the Viking Age.
GE-6, GE-8

On Demand

SCAN 450 (1-4) Special Topics
Special topics courses in Scandinavian Studies will deal with a variety of topics regarding the history, literature, art, and culture of the Nordic countries. SCAN 450 courses are planned with the interests and needs of more advanced students in mind; they build on and expand upon clearly defined methods and critical approaches which the students will explore both in class discussions and writing assignments. The course may be repeated for credit.
Fall, Spring

SCAN 451 (4) Scandinavian Crime Fiction
In this course, students will read about crime and deviance in Scandinavia and will develop an understanding of how a culture conceptualizes its ethico-political struggles through literature.
Variable

Diverse Cultures - Purple

SCAN 460 (4) Topics in Scandinavian Film
Revolving topics in Scandinavian Film. Students will explore issues of cultural and historical importance as presented through the medium of film. Written assignments and exams allow students to practice and display analytical and interpretive techniques. May be repeated for credit.
Variable

SCAN 490 (3) Major Project in Scandinavian Studies
Individual project demonstrating ability to synthesize experience in interdisciplinary major, drawing together different areas of study focusing on specific topic, problem or concern and demonstrating ability to use a Scandinavian language. Approval of Scandinavian Studies program director required.
Prerequisite: Admission to college as Scandinavian Studies Major.

SCAN 492 (1) Minor Project in Scandinavian Studies
Individual project demonstrating ability to synthesize experience in interdisciplinary minor, drawing together different areas of study focusing on specific topic, problem or concern. Approval of the Scandinavian Studies program director required.

SCAN 499 (1-4) Individual Study
Advanced study of works by selected Swedish or Norwegian authors.
Prerequisite: SCAN 299 or SCAN 299
Variable
Admission Requirements.
School Health Education major admission requirements include:
- completion of a minimum of 32 credit hours,
- a minimum cumulative G.P.A. of 2.5,
- a “C” or better in ENGL 101,
- a “C” or better in general education MATH,
- a “C” or better in HLTH 101, and
- a “C” or better in HLTH 260.

Professional Education admission requirements include:
- a minimum of 32 credit hours,
- a minimum of cumulative G.P.A. of 2.75,
- evidence of registration for MTEL Basic Skills Exam,
- enrollment in or completion of KSP 220W,
- a “C” or better in ENGL 101, and
- a “C” or better in general education MATH.

SCHOOL HEALTH EDUCATION BS
Degree completion = 120 credits

The School Health Education (5-12) teaching program meets national and state standards for the preparation of school health educators. This program prepares future teachers for what they should know and be able to do in order to help their students develop health-related knowledge and skills to engage in healthy behaviors. This major meets Minnesota Board of Teaching (BOT) requirements for licensure in Health Education.

Required for General Education
BIOL 100 Our Natural World (4)
CMST 102 Public Speaking (3)
FCS 140 Introduction to Nutrition (3)
HLTH 210 First Aid and CPR (3)
KSP 220W Relations in the Multicultural Society (3)

Major Common Core
BIOL 220 Human Anatomy (4)
BIOL 310 Basics of Human Physiology (4)
CHEM 106 Chemistry of Life Processes I (3)
HLTH 212 Consumer Health (3)
HLTH 240 Drug Education (3)
HLTH 260 Introduction to Health Education (3)
HLTH 311 Family Life and Sex Education (3)
HLTH 320 Health Teaching Methods I (3)
HLTH 410 Current Health Issues (3)
HLTH 420W Health Teaching Methods II (3)
HLTH 451 Emotional Health and Stress (3)
HLTH 454 Chronic and Infectious Diseases (3)
HLTH 475 Biostatistics (3)

Major Restricted Electives (choose 3 credits)
HLTH 361W Health Communication and Advocacy (4)
HLTH 440 Teaching First Aid and CPR (2)
HLTH 441 Death Education (3)
HLTH 450 Environmental Health (3)
HLTH 459 Critical Topics in Health (1-3)
HLTH 460 Introduction to Epidemiology (3)
HP 414 Physiology of Exercise (3)

Other Graduation Requirements
Secondary Education: Refer to the list of required professional education courses. KSP 220W Human Relations in a Multicultural Society is included in the required general education section.

COURSE DESCRIPTIONS
LOCATED UNDER HEALTH SCIENCE (HLTH) COURSE DESCRIPTIONS
## SCIENCE TEACHING PROGRAMS

### SCIENCE TEACHING PROGRAMS BS

#### Science Teaching

**Website**: cset.mnsu.edu/biology/  
cset.mnsu.edu/chemistry/  
sbs.mnsu.edu/earthscience

**Coordinators:**  
Thomas Brown, Physics  
Phillip Larson, Earth Science  
Bryce Hoppie, Geology  
Beth Lavoie, Biological Sciences  
Jeffrey R. Pribyl, Chemistry

The State of Minnesota grants science teacher licensure for grades 5-8 general science, 9-12 Chemistry, 9-12 Earth Science, 9-12 Life Science, and 9-12 Physics. Students earning a degree in Earth Science Teaching, Life Science Teaching or Physics Teaching from Minnesota State Mankato will qualify for two licenses (1) 5-8 general science and (2) 9-12 specialty. Students earning a degree in Chemistry Teaching will qualify only for the 9-12 Chemistry license.

**Policies/Information**

The Earth Science Teaching, Life Science Teaching, and Physics Teaching majors require the 31 credit general core. All science teaching majors require a science emphasis that ranges from 27-35 credits of science and science teaching methods courses. In addition, the student must complete a 30 credit professional education component and the 3 credit Drug Education course.

The University Science Teaching Program must meet specific competencies to meet professional accreditation and licensure requirements. To stay within the required credit limits of 120 credit hours, students are strongly advised to select courses within the 44 credit general education program that meet both teaching program and general education needs. It is important for the student to meet with his or her advisor to assist with program planning.

A minor is not required for any of the science teaching programs; however, to broaden one’s teaching opportunities, double majors are encouraged. For further details, the student should check with one of the science teaching advisors for an overview of available opportunities.

**GPA Policy**: Students obtaining a degree in science teaching must maintain a minimum cumulative GPA of 2.50 in the sciences. Students who are not science teaching majors should consult an advisor concerning possible additional course requirements.

**Life Science Teaching Policies**: Admission to Major is granted by the department. Admission requirements are 32 earned semester hours including BIOL 105, BIOL 106, BIOL 211, and CHEM 201 with a grade of "C" or better; completed General Education Goal Area 1, Part A (English Composition); and a minimum cumulative GPA of 2.2, with a cumulative GPA in Biology courses of 2.0. For Life Science Teaching majors, the combined GPA for BIOL 105, BIOL 106, BIOL 211, and CHEM 201 must be 2.4 or better.

A minimum GPA of 2.5 in the sciences and a “C” or better in all science courses is required for graduation with a BS Life Science Teaching degree.

**P/N Grading Policy**: Courses leading to a degree in science teaching may not be taken on a P/N basis except where P/N grading is mandatory.

#### Required General Science Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 201</td>
<td>Physical Chemistry I (4)</td>
</tr>
<tr>
<td>CHEM 202</td>
<td>Physical Chemistry II (4)*</td>
</tr>
<tr>
<td>PHYS 211</td>
<td>Principles of Physics I (4)*</td>
</tr>
<tr>
<td>PHYS 212</td>
<td>Principles of Physics II (4)*</td>
</tr>
</tbody>
</table>

* PHYS 221, PHYS 222, PHYS 232, and PHYS 233 MAY SUBSTITUTE. THE ADDITIONAL CREDIT HOURS WILL REDUCE THE NUMBER OF CREDITS IN THE ADVANCED PHYSICS COURSES.

#### Required for All Science Teaching Program Majors

**Professional Education, 30 credits***

See the SECONDARY EDUCATION section for additional information about admissions to Professional Education, and course requirements.

**Professional Education**

<table>
<thead>
<tr>
<th>Level</th>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEVEL 1</td>
<td>KSP 220W</td>
<td>Human Relations in a Multicultural Society (3)</td>
</tr>
<tr>
<td>LEVEL 1</td>
<td>KSP 222</td>
<td>Introduction to the Learner and Learning (2)</td>
</tr>
<tr>
<td>LEVEL 2</td>
<td>KSP 202</td>
<td>Technology Integration in the Classroom (1)</td>
</tr>
<tr>
<td>LEVEL 3</td>
<td>KSP 330</td>
<td>Planning and Instruction in the Classroom (3)</td>
</tr>
<tr>
<td>LEVEL 3</td>
<td>KSP 334</td>
<td>Assessment and Evaluation (3)</td>
</tr>
<tr>
<td>LEVEL 3</td>
<td>KSP 440</td>
<td>Creating Learning Environments to Engage Children, Families, and Community (3)</td>
</tr>
<tr>
<td>LEVEL 3</td>
<td>KSP 442</td>
<td>Reading, Literacy, and Differentiated Instruction in the Inclusive Classrooms (3)</td>
</tr>
<tr>
<td>LEVEL 4</td>
<td>KSP 464</td>
<td>Professional Seminar (1)</td>
</tr>
<tr>
<td>LEVEL 4</td>
<td>KSP 477</td>
<td>5-12 Student Teaching (11)</td>
</tr>
</tbody>
</table>

**CHEMISTRY 9-12 BS TEACHING**

Degree completion = 120 credits

**Required General Education**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 105</td>
<td>General Biology I (4)</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>General Chemistry I (5)</td>
</tr>
<tr>
<td>HLTH 240</td>
<td>Drug Education (3)</td>
</tr>
<tr>
<td>MATH 121</td>
<td>Calculus I (4)</td>
</tr>
</tbody>
</table>

**Major Common Core**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 202</td>
<td>General Chemistry II (5)</td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Analytical Chemistry (4)</td>
</tr>
<tr>
<td>CHEM 316</td>
<td>Descriptive Main Group Chemistry (3)</td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Organic Chemistry I (4)</td>
</tr>
<tr>
<td>CHEM 324</td>
<td>Organic Chemistry II (3)</td>
</tr>
<tr>
<td>CHEM 325</td>
<td>Organic Chemistry II Lab (1)</td>
</tr>
<tr>
<td>CHEM 340</td>
<td>Quant for Chem and Biochem I (1)</td>
</tr>
<tr>
<td>CHEM 341</td>
<td>Quant for Chem and Biochem II (1)</td>
</tr>
<tr>
<td>CHEM 360</td>
<td>Principles of Biochemistry (4)</td>
</tr>
<tr>
<td>CHEM 381W</td>
<td>Introduction to Research (2)</td>
</tr>
<tr>
<td>CHEM 440</td>
<td>Physical Chemistry I (3)</td>
</tr>
<tr>
<td>CHEM 450</td>
<td>Physical Chemistry Laboratory I (1)</td>
</tr>
<tr>
<td>CHEM 479</td>
<td>Teaching Physical Science (4)</td>
</tr>
<tr>
<td>CHEM 495</td>
<td>Senior Seminar (1)</td>
</tr>
<tr>
<td>PHYS 211</td>
<td>Principles of Physics I (4)</td>
</tr>
<tr>
<td>PHYS 212</td>
<td>Principles of Physics II (4)</td>
</tr>
</tbody>
</table>

**Required Minor**: None.

**Other Graduation Requirements**

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

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**SCIENCE TEACHING PROGRAMS**

**Required for all Science Teaching Programs unless otherwise noted.**

**Required General Education**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 240</td>
<td>Drug Education (3)</td>
</tr>
</tbody>
</table>
EARTH SCIENCE 5-12 BS TEACHING

Degree completion = 120 credits

Required General Education (3 credits)

Required General Science Core (31 credits)

Required Professional Education (30 credits)

Required for Major

AST 125L Observational Astronomy (3)
GEOG 217 Weather (4)
GEOG 315 Geomorphology (3)
GEOG 410 Climatic Environments (3)
GEOL 122 Earth History (4)
GEOL 201 Elements of Mineralogy (4)
CHEM 479 Teaching Physical Science (4)

Required for Major

(Research, 1-3 credits)

GEOG 440 Field Studies (1-4)
GEOG 480 Seminar (1-4)
GEOG 499 Individual Study (1-3)
GEOL 499 Individual Study (1-5)

Required for Major

(Electives, 9 credits)

(Must choose from at least two departments)

AST 102 Introduction to the Planets (3)
AST 104 Introduction to Experimental Astronomy (2)
GEOG 373 Introduction to Geographic Information Systems (4)
GEOG 420 Conservation of Natural Resources (3)
GEOL 330 Structural Geology (4)
GEOL 350 Environmental Geology (4)
GEOL 450 Hydrogeology (3)

Required Minor: None.

Other Graduation Requirements

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

LIFE SCIENCE 5-12 BS TEACHING

Degree completion = 120 credits

Required General Education

AST 101 Introduction to Astronomy (3)
BIOL 105 General Biology I (4)
CHEM 201 General Chemistry I (5)
GEOL 121 Physical Geology (4)
HLTH 240 Drug Education (3)
KSP 220W Human Relations in a Multicultural Society (3)
MATH 121 Calculus I (4)

Math Requirement (choose 3-4 credits)

MATH 113 Trigonometry (3)
MATH 115 Precalculus Mathematics (4)

Major Common Core

BIOL 106 General Biology II (4)
BIOL 211 Genetics (4)
BIOL 215 General Ecology (4)
BIOL 220 Human Anatomy (4)
BIOL 270 Microbiology (4)
BIOL 301 Evolution (2)
BIOL 485 Biology Teaching Methods and Materials (4)
GEOL 310 Earth and Space Systems (3)
PHYS 211 Principles of Physics I (4)

Independent Study (choose 1 credits)

At least one credit is required. Additional credits will be counted as electives.

BIOL 499 Individual Study (1-4)

Major Restricted Electives (choose 4 credits)

BIOL 408 Vertebrate Ecology (4)
BIOL 409 Advanced Field Ecology (4)

Major Unrestricted Electives

Choose at least 9 additional credits of 300-400 level Biology courses.

Other Graduation Requirements

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

PHYSICS 5-12 BS TEACHING

Degree completion = 120 credits

Required General Education

AST 101 Introduction to Astronomy (3)
BIOL 105 General Biology I (4)
CHEM 201 General Chemistry I (5)
GEOL 121 Physical Geology (4)
HLTH 240 Drug Education (3)
KSP 220W Human Relations in a Multicultural Society (3)
MATH 121 Calculus I (4)

Major Common Core

PHYS 221, PHYS 222, PHYS 223, PHYS 232 and PHYS 233 may substitute for
PHYS 211 and PHYS 212. The additional credit hours will reduce the number of
credits on the advanced physics courses.

BIOL 106 General Biology II (4)
GEOL 310 Earth and Space Systems (3)
PHYS 211 Principles of Physics I (4)
PHYS 212 Principles of Physics II (4)
PHYS 335 Modern Physics I (3)
PHYS 336 Modern Physics II (3)
PHYS 465 Computer Applications in Physics (3)
PHYS 482 Teaching Methods and Materials in Physical Science (4)

(choose 2 credits)

2 credits are required for the core.

PHYS 381 Tutoring Physics (1-3)

(choose 2 credits)

2 credits are required for the core.

PHYS 493 Undergraduate Research (1-6)

Physics Electives (choose 8 credits)

This is reduced to 4 credits if PHYS 221, PHYS 222, PHYS 223, PHYS 232 and
PHYS 233 have been taken in place of PHYS 211 and PHYS 212 in partial fulfill-
ment of the General Science Core requirements. If PHYS 211 and PHYS 212 are
completed successfully, PHYS 221, PHYS 222, PHYS 223, PHYS 232 and PHYS
233 may be used to fulfill the Physics Elective credits.

PHYS 300-499

Other Graduation Requirements

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.
SECONDARY 5-12 & K-12 PROFESSIONAL EDUCATION

Secondary 5-12 & K-12

Professional Education

Art Education (K-12)
Business Education (collaborative program with Winona) (5-12)
Communication Arts and Literature (5-12)
Dance Education (K-12)
Developmental Adapted Physical Education (K-12)
English as a Second Language (K-12)
Family Consumer Science (5-12)
Health Sciences (5-12)
Instrumental and Vocal Music (K-12)
Mathematics (5-12)
Physical Education (K-12)
Science (Life Science, Chemistry, Earth & Space Sciences, Physics) (5-12)
Social Studies (5-12)
Visual Arts (K-12)
World Languages and Cultures (Spanish, German, and French) (K-12)

College of Education
Department of Educational Studies: K-12 & Secondary Programs (KSP)
313 Armstrong Hall • 507-389-1965
Website: ed.mnsu.edu/ksp/
Chair: Scott Page

Faculty: Johnson Afolayan, Qi-Jie Cao, Bernadette Castillo, Carrie Chapman, Stephanie Hanson, Deborah Jessemson, Teresa Kruizenga, Rick Lybeck, Mark Savignano, Amy Scheuermann

Accreditation: Both the undergraduate and graduate teacher licensure programs, and the MS in Teaching and Learning and the MS in Educational Technology online programs are accredited by the Council for the Accreditation of Education Preparation (CAEP). Additionally, the MS in School Library Information Studies is also accredited by the American Library Association/American Association of School Librarians (ALA/AASL).

The K-12 and Secondary Programs department prepares undergraduate and graduate students for initial licensure as professional educators in K-12, middle and high school classrooms. Program emphasis is placed upon facilitating students to gain the knowledge, skills, and dispositions needed to function effectively in diverse educational settings.

This section describes ONLY the professional education requirements for completion of teaching degrees at the 5-12 and K-12 levels. Students interested in teaching at the 5-12 and K-12 levels must be admitted to BOTH their major program and professional education.

Formal evaluation of prior academic professional education preparation will be evaluated by the coordinator of Initial Licensure at either the undergraduate or graduate level. Formal approval of coursework is based on course descriptions, syllabi, samples of completed work and/or field experience evaluations.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

Admission to Professional Education

All students working toward a 5-12 or K-12 teaching degree must be admitted to professional education prior to enrollment in Level 1 coursework. Application to professional education should be made when the following requirements have been met:

• a minimum of 32 earned semester credit hours
• a minimum 2.75 cumulative GPA
• evidence of registration for the Minnesota Teacher Licensure
• Examinations (MTLE) Basic Skills exam
• enrollment or completion of KSP 220
• “C” grade in ENG 101

A multifaceted Professional Education application exists. Students are required to attend orientation and application session. Please consult the Office of Academic Advising (117 Armstrong Hall) for deadlines.

Admission is competitive. Achievement at the 2.75 level and completion of all prerequisites course qualifies students for the applicant pool but does not guarantee admission to the K12 and Secondary program.

Advising. Students are assigned an advisor in their content area (major). In addition, the KSP department provides advising prior to registration each semester. For more information stop by 313 Armstrong Hall. Faculty in each level provide individual and group advising. Career counseling is integrated throughout all levels.

Academic Advising Office: 117 Armstrong Hall • 507-389-1215

Field Experiences. A major component of professional education coursework involves field experiences in various settings. These experiences are gradual in expectation, time commitment, and skills practice throughout all four levels. Multiple methods of assessment are used and evidence collected to provide a view of the teacher candidates’ knowledge, skills and dispositions. Successful completion of each field experience is necessary for progression into future levels and field activities (e.g., student teaching).

Many level 3 and Level 4 field experiences will be long-term placements. Long-term placements are two consecutive placements during the last two semesters, in one setting. Priority will be given to teacher candidates requesting placement in a long-term placement for their level 3 and student teaching placements. These placements will most likely take place in our Professional Development Schools.

Background Checks. All field placements are initiated by the Office of Field and International Experience. Students involved in any field experience need to undergo a national criminal background check prior to admittance to professional education. Students are responsible for the fees associated with the background checks. This information is provided to districts for their determination of suitability for placement. The Office of Field and International Experience coordinates the background check process.

Teacher Licensure. Please contact Marisel Riquelme, Licensure Coordinator, in 118 Armstrong Hall for questions in regard to the licensure process. The University recommends licensure to a state upon students’ completion of a licensure program. Licensure does not occur automatically through graduation and the awarding of a diploma. Students need to make application for a Minnesota teaching license at the close of the term in which they graduate. The College of Education, 118 Armstrong Hall, coordinates the licensure process. In addition to program requirements, students must successfully complete the Minnesota Teacher Licensure Examinations (MTLE) including the Basic Skills exam, the pedagogical exam, and the content specific exam(s) for licensure. Minnesota state law requires that all candidates applying for initial licensure in this state be fingerprinted for national background checks. A conduct review statement will also need to be completed and signed. There is a fee for the criminal background check. There is also a fee for the issuance of a State of Minnesota teaching license.

GPA Policy. Coursework in professional education requires a grade of “C” or better. A cumulative career GPA of 2.75 is required.

Admission to Major. Admission to major is granted by the academic department in which the student proposes to major. Earned grade of “C” or better in Goal Area 1 (ENG Comp) and Goal Area 4 (MATH).

P/N Grading Policy. Grades are required in all professional education coursework except courses that are offered on a P/N basis only.

SECONDARY 5-12 & K-12 PROFESSIONAL EDUCATION

Required for General Education
HITH 240 Drug Education (3)

Required Professional Education (30 credits)

LEVEL 1
KSP 220W Human Relations in a Multicultural Society (3)
KSP 222 Introduction to the Learner and Learning (2)
KSP 202 Technology Integration in the Classroom (1)

This is a floating course can be taken with Level 1 or 2

LEVEL 2
KSP 330 Planning and Instruction in the Classroom (3)
KSP 334 Assessment and Evaluation (3)

LEVEL 3
KSP 440 Creating Learning Environments to Engage Children, Families and Communities (3)
KSP 442 Reading, Literacy, and Differentiated Instruction in the Inclusive Classroom (3)
and off-campus service learning with school-age youth and adolescents.
Fall, Spring
GE-2
Diverse Cultures - Gold

KSP 200 (3) Critical Issues in Public Education Today
This course will engage students in an in-depth exploration of how the challenges and demands imposed by an ever-evolving diverse, legalistic, politically minded, and technologically driven society impact public education in America today. Students will research central issues and critically analyze to foster ethical and civil responsible decision making.
Fall, Spring, Summer
GE-2, GE-9
Diverse Cultures - Gold

KSP 202 (1) Technology Integration in the Classroom
Teacher candidates will develop skills to access information and integrate technology to improve learning for PK-12 students. Teacher candidates research, select, and evaluate information about diverse populations to design classroom applications using a wide variety of instructional technology.
Fall, Spring

KSP 220W (3) Human Relations in a Multicultural Society
Study of interpersonal skills, motivation, and group skills. Applied to educational settings. Requires 18 hours clinical service learning experience (out of class). Meets State of Minnesota human relations requirement for teacher licensure.
VI, GE-7, GE-11
Diverse Cultures - Gold

KSP 222 (2) Introduction to the Learner and Learning
Teacher candidates develop understanding of cognitive, language, personal and social development for implications on teaching in the inclusive classroom. Dispositions and skills will be developed for recognizing and accommodating exceptionalities in student learning.
Fall, Spring
Co-requisite: KSP 220W, KSP 222

KSP 235 (3) Human Development
Designed for non-teacher education students, this is a general education course considering human development from a life span perspective.
GE-5

KSP 250 (3) Social Justice in School and Community
Analyzing justice as it relates to education and the criminal justice system. Emphasis is on comparing Retributive Systems with the newer Restorative Justice. Active learning methods in the classroom, schools and communities, including service-learning.
GE-9

KSP 251 (3) Coming of Age: Gender and Culture
Students will become aware of diverse experiences of coming of age and will reflect on their own experiences. Diversity of experiences presented will include: race/ethnicity, gender, sexual orientation, religion, socio-economic class, ability/disability and nationality.
GE-6, GE-7

KSP 260 (3) Creating Global Awareness through Studying Abroad
A companion course for students studying abroad. Pre-departure preparation, in country experiential learning and reflection and reentry debriefing will maximize the study abroad experience. Students develop critical thinking, interpersonal communication skills and dispositions for living in a global environment.
On Demand
GE-7, GE-8
Diverse Cultures - Gold

KSP 290 (1-2) Workshop

KSP 301 (2) Instructional Media Utilization
Instructional media used in the elementary classroom is demonstrated and used by the students. Resource selection and evaluation is stressed. Electronic media, computer-aided instruction, telecommunications, and standard classroom media applications are stressed.

KSP 320 (2) Special Student in the General Classroom
Provides general education majors with information and strategies including the special needs students in the regular classroom.

COURSE DESCRIPTIONS

KSP 101 (3) Exploring and Applying Values
This course focuses on students' personal history, ethical views and values. Students will be asked to state and apply those views and values to current political and social issues. A service-learning experience is required for this class.
GE-9

KSP 105 (1) Library Orientation
A basic course to help students become familiar with the library of Minnesota State Mankato and the use of information resources.

KSP 106 (1) Education & Culture in the United States
Course gives students new to this country and to the U.S. higher education a broad overview of the U.S. educational system and provides a forum for discussion and comparison of customs and beliefs as they affect relationships among students and professors.
Prerequisite: International Student

KSP 150 (3) Exploring Careers in Education
Students will explore a variety of careers in education (teaching, counseling, social work, psychology, library media, administration) through research, off-campus observation and participation along side a practicing professional in education,
KSP 330 (3) Planning and Instruction in the Classroom
The course is designed to guide K-12 teacher candidates through the design, implementation, and assessment of a standards-based curriculum. Candidates will analyze standards, create assessments, and design and deliver instruction in a field site. Fall, Spring

KSP 334 (3) Assessment & Evaluation
Course content addresses formal and informal, standardized evaluation of learner achievement in the classroom and programmatic evaluation. Assigned projects will accommodate the student's present/future professional career track.

KSP 404 (2) Curriculum Applications of Technology in Education
To prepare pre-service and in-service teachers to use technology in the elementary classroom. Applications to each content area will be considered. Graduate students will have additional course requirements.

KSP 407 (2) Teaching in a Multicultural Society
Adaptation of curriculum, classroom organization and teaching practices. Graduate students will have additional course requirements.

KSP 408 (3) Teaching to the K-12 ELL Student
Instructional media used in the elementary classroom is demonstrated and used by the students. Resource selection and evaluation is stressed. Electronic media, computer-aided instruction, telecommunications, and standard classroom media applications are stressed. Graduate students will have additional course requirements.

KSP 417 (3) Materials for Children
Print, audiovisual and electronic media: their selection, evaluation, and use with children in grades K-6. Three credit section includes storytelling. Graduate students will have additional course requirements.

KSP 425 (2) Reading and Writing in the Secondary School
Concepts, objectives, procedures and reading in subject matter field. Graduate students will have additional course requirements.

KSP 440 (3) Creating Learning Environments to Engage Children, Families, and Community
Teacher candidates will further develop processes for creating and sustaining a classroom learning environment that enables success for all learners, including interacting with diverse families, school colleagues, and representatives from community agencies to support student engagement and learning. Fall, Spring
Co-requisite: KSP 440, KSP 442

KSP 442 (3) Reading, Literacy, and Differentiated Instruction in Inclusive Classrooms
Teacher candidates will develop skills in differentiated instruction, reading and content-based literacy in inclusive classrooms. Teacher candidates will integrate prior knowledge of diverse learners, developmental models of learning, and curriculum and instruction into a comprehensive understanding of teaching. Fall, Spring
Co-requisite: KSP 440, KSP442

KSP 450 (3) Human Relations in a Multicultural Society
Study of interpersonal skills. Motivation, and group skills. Applied to educational settings. Required 18 hours clinical service learning experience (out-of-class). Meets State of Minnesota human relations requirement for teacher licensure. Graduate students will have additional course requirements.

KSP 451 (1-3) Cultural Diversity Internship
Opportunity for “hands-on” immersion experience in a culturally diverse setting. This may be faculty-led or self-designed by students with prior approval by the instructor. The experience will include: cultural orientation, site-based experience, debriefing and reflection. Prerequisite: KSP 220W or KSP 450

KSP 460 (2-4) Practicum
Practical experience set up between faculty, student, and on-site supervisor.

KSP 461 (3) Service Learning: Theory and Practice
A focus on service-learning, planning, implementation, evaluation and celebration of service-learning as program, activity, class and integration into academic study.

KSP 464 (1) Professional Seminar
Fall, Spring

KSP 465 (3) Film Making
Students will produce a short digital film incorporating the five phases and ten planning stages of filmmaking. The role independent film plays in a culturally diverse world will be illustrated and discussed. Examples of each genre will be examined.

KSP 475 (1) The Social Context of Learning
Explores the relationship of the school and community as well as the relationships and roles of the teacher, student, and the school. Knowledge of the social, historical, philosophical foundations of education, school law, finance and governance, ethics, democracy and multiculturalism is explored. Requires twelve hours of out-of-class clinical experience. Prerequisite: Recommended for final semester of Professional Education.

KSP 476 (11) K-12 Student Teaching
Student teaching in the K-12 schools including weekly seminar for K-12 majors. Prerequisite: Admission to student teaching. Co-requisite: KSP 475

KSP 477 (11) 5-12 Student Teaching
Student teaching in the secondary school including weekly seminar for 5-12 majors. Prerequisite: admission to student teaching.

KSP 478 (5) Supplementary Student Teaching
Student teaching in the elementary school including weekly seminar for K-12 majors. Prerequisite: Admission to student teaching. Co-requisite: KSP 476 and KSP 475

KSP 480 (1-3) Seminar
In-depth study and narrow focus on an educational topic. Students do extended research outside of class and defend their research in class. Graduate students will have additional course requirements.

KSP 482 (3-6) Enrichment Experience Secondary
Student teaching projects determined jointly between student and advisor. Co-requisite: KSP 477 or KSP 476

KSP 483 (1) Supervision of Student Teaching
To assist K-12 classroom teachers in developing their skills for supervising pre-service and student teachers. Graduate students will have additional course requirements.

KSP 489 (1-3) Selected Topics
Specific focus on an educational topic that may be taught as a regular course such as Web Resources for the Classroom (usually a group requests a specific topic.) Graduate students will have additional course requirements.

KSP 490 (1-6) Workshop
Specific focus on an educational topic that is conducted for a special group. Graduate students will have additional course requirements.

KSP 491 (1-4) In-Service
Specific course designed to meet changing educational trends. Graduate students will have additional course requirements.

KSP 497 (1-8) Internship
On-the-job training. Work is jointly supervised by the academic unit and the cooperating institution.

KSP 499 (1-6) Individual Study
Student and faculty agree upon a specific unit of study. Student presents unit to faculty member for evaluation.
Students enrolling in SOST 450 must complete one course in each of the following areas:
- URBS 100 - URBS 499
- SOC 100 - SOC 499
- POL 100 - POL 499
- HIST 100 - HIST 499
- GWS 100 - GWS 499
- GEOG 100 - GEOG 499
- ETHN 100 - ETHN 499
- ECON 100 - ECON 499
- ANTH 100 - ANTH 499

multicultural understanding.

Gender & Women Studies and Urban Studies.

Students are encouraged to work closely with their advisor to prepare for admission to the Social Studies Program.

A minimum global, multicultural, civic, and community service experience.

for admission to the program is given to students who have a 3.0 GPA and who have had significant global, multicultural, civic, and community service experience.

The social studies program is designed to prepare students to teach social studies in secondary schools. This challenging program draws upon faculty from nine areas (anthropology, economics, ethnic studies, gender and women's studies, geography, history, political science, psychology, and sociology) and works with the College of Education to promote effective teaching practice for future and in-service teachers.

A major emphasis: Area of Concentration

A minimum of 24 credits must be taken in ONE of the following areas: Europe, Third World (i.e. Latin America, Middle East, Asia, and African and United States)

ANTH 100 - ANTH 499
ECON 100 - ECON 499
ETHN 100 - ETHN 499
GEOG 100 - GEOG 499
GWS 100 - GWS 499
HIST 100 - HIST 499
POL 100 - POL 499
PSYC 100 - PSYC 499
SOC 100 - SOC 499

Required Minor: None.

COURSE DESCRIPTIONS

SOST 200 (2) Introduction to Social Studies Teaching
Acquaints students majoring in social studies (teaching) with the social studies major and fundamental ideas that will help students integrate what they are learning in social sciences and history within the context of secondary social studies classroom. Fall, Spring

SOST 222 (1-4) Selected Topics
Designed to provide students the opportunity to explore a variety of topics related to social studies. Fall, Spring

SOST 299 (1-6) Individual Study
Designed to provide students the opportunity to explore a variety of topics related to social studies. Fall, Spring

SOCIAL STUDIES BS

Degree completion = 120 credits

Major Restricted Electives
A minimum of 27 credits (of which 17 need to be upper division) must be taken on a widely distributed basis from the social sciences and history OUTSIDE the area of concentration and/or from the interdisciplinary programs of: Ethnic Studies, Gender & Women Studies and Urban Studies.

Students are encouraged to take a mixture of courses that reflect a global and multicultural understanding.

ANTH 100 - ANTH 499
ECON 100 - ECON 499
ETHN 100 - ETHN 499
GEOG 100 - GEOG 499
GWS 100 - GWS 499
HIST 100 - HIST 499
POL 100 - POL 499
PSYC 100 - PSYC 499
SOC 100 - SOC 499
URBS 100 - URBS 499

Students should enroll in SOST 299, Individual Study in the subsequent semester to declaring the Social Studies non-teaching major. Students will work with the social studies coordinator to define personal learning goals and objectives and begin the development of a personal learning portfolio. In the senior year, the student will take SOST 499, Individual Study. (choose 1-14 credits)

SOST 299 Individual Study (1-6)
SOST 499 Individual Study (1-8)

SOCIAL STUDIES BS

Degree completion = 120 credits

Major Restricted Electives
A minimum of 27 credits (of which 17 need to be upper division) must be taken on a widely distributed basis from the social sciences and history OUTSIDE the area of concentration and/or from the interdisciplinary programs of: Ethnic Studies, Gender & Women Studies and Urban Studies.

Students are encouraged to take a mixture of courses that reflect a global and multicultural understanding.

ANTH 100 - ANTH 499
ECON 100 - ECON 499
ETHN 100 - ETHN 499
GEOG 100 - GEOG 499
GWS 100 - GWS 499
HIST 100 - HIST 499
POL 100 - POL 499
PSYC 100 - PSYC 499
SOC 100 - SOC 499
URBS 100 - URBS 499
Students enrolling in SOST 450 must take ETHN 410 Foundations of Oppression (3), Major Restricted Electives SOST 450 Teaching Social Studies Secondary School (4), SOST 200 Introduction to Social Studies Teaching (2), SOC 101 Introduction to Sociology (3), HIST 302 World History: An Overview (4), ECON 202 Principles of Microeconomics (3)

Major Common Core
HIST 191W United States Since 1877 (4)
HIST 190W United States to 1877 (4)
U.S. History to 1877 (4)

Required General Education
ANTH 101 Introduction to Anthropology (4)
GEOG 100 Elements of Geography (3)
POL 111 United States Government (3)
PSYC 101 Introduction to Psychological Science (4)

Other Graduation Requirements
Professional Education, 30 credits. See the SECONDARY EDUCATION section of this catalog for admission requirements to Professional Education and a list of specific professional education courses required for Social Studies Majors. NOTE: Students must also meet a drug and alcohol education requirement (1-3 credits)
KSP 200- KSP 499

ECONOMICS OPTION

Required General Education
ANTH 101 Introduction to Anthropology (4)
GEOG 100 Elements of Geography (3)
POL 111 United States Government (3)
PSYC 101 Introduction to Psychological Science (4)

Other Graduation Requirements
Professional Education, 30 credits. See the SECONDARY EDUCATION section of this catalog for admission requirements to Professional Education and a list of specific professional education courses required for Social Studies Majors. NOTE: Students must also meet a drug and alcohol education requirement (1-3 credits)
KSP 200- KSP 499

GEOGRAPHY OPTION

Required General Education
ANTH 101 Introduction to Anthropology (4)
GEOG 100 Elements of Geography (3)
POL 111 United States Government (3)
PSYC 101 Introduction to Psychological Science (4)

U.S. History to 1877 (choose 4 credits from the following)
HIST 190 United States to 1877 (4)
HIST 190W United States to 1877 (4)
U.S. History Since 1877 (choose 4 credits from the following)
HIST 191 United States Since 1877 (4)
HIST 191W United States Since 1877 (4)

Major Common Core
ECON 201 Principles of Macroeconomics (3)
ECON 202 Principles of Microeconomics (3)
GEOG 340 United States (3)
HIST 302 World History: An Overview (4)
POL 321 Democracy and Citizenship (3)
SOC 101 Introduction to Sociology (3)
SOST 200 Introduction to Social Studies Teaching (2)
SOST 450 Teaching Social Studies Secondary School (4)

Major Restricted Electives
Expansion Course (choose 3 credits of the following)
ETHN 410 Foundations of Oppression (3)
GWS 220 Sex and Gender Worldwide (4)
GWS 220W Sex and Gender Worldwide (4)

Major Emphasis: Geography (15 credits)
GEOG 101 Introductory Physical Geography (3)
GEOG 103 Introductory Cultural Geography (3)
Physical Geography (choose 3 credits from the following)
GEOG 313 Natural Disasters (3)
GEOG 315 Geomorphology (3)
GEOG 410 Climatic Environments (3)
GEOG 420 Conservation of Natural Resources (3)
Regional Geography Course (choose 3 credits)
GEOG 445 Latin America (3)
GEOG 450 Europe (3)
GEOG 454 Russian Realm (3)
GEOG 456 Africa (3)
GEOG 458 Geography of East Asia (3)
Culture Geography (choose 3 credits from the following)
GEOG 425 Economic Geography (3)
GEOG 435 Urban Geography (3)
GEOG 436 Rural Geography (3)
GEOG 438 Social Geography (3)

Other Graduation Requirements
See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

KSP 200 - KSP 499
Alcohol & Drug Education (choose 1 credit)
PSYC 490 Workshop (1-3)

HISTORY OPTION

Required General Education
ANTH 101 Introduction to Anthropology (4)
GEOG 100 Elements of Geography (3)
POL 111 United States Government (3)
PSYC 101 Introduction to Psychological Science (4)

U.S. History to 1877 (choose 4 credits from the following)
HIST 190 United States to 1877 (4)
HIST 190W United States to 1877 (4)
U.S. History Since 1877 (choose 4 credits from the following)
HIST 191 United States Since 1877 (4)
HIST 191W United States Since 1877 (4)

Major Common Core
ECON 201 Principles of Macroeconomics (3)
ECON 202 Principles of Microeconomics (3)
GEOG 340 United States (3)
HIST 302 World History: An Overview (4)
POL 321 Democracy and Citizenship (3)
SOC 101 Introduction to Sociology (3)

SOST 200 Introduction to Social Studies Teaching (2)
SOST 450 Teaching Social Studies Secondary School (4)

Major Restricted Electives
Expansion Course (choose 3 credits of the following)
ETHN 410 Foundations of Oppression (3)
GWS 220 Sex and Gender Worldwide (4)
GWS 220W Sex and Gender Worldwide (4)

Major Emphasis: History (15 credits)
Select 15 credits of 300-400 level courses, including at least one 400 level course from each of the following areas: Europe, Third World, and the U.S.
HIST 300 - HIST 499

Other Graduation Requirements
Professional Education, 30 credits.
See the SECONDARY EDUCATION section of this catalog for admission requirements to Professional Education and a list of specific professional education courses required for Social Studies Majors. NOTE: Students must also meet a drug and alcohol education requirement (1-3 credits)
KSP 200 - KSP 499

POLITICAL SCIENCE OPTION

Required General Education
ANTH 101 Introduction to Anthropology (4)
GEOG 100 Elements of Geography (3)
POL 111 United States Government (3)
PSYC 101 Introduction to Psychological Science (4)

U.S. History to 1877 (choose 4 credits)
HIST 190 United States to 1877 (4)
HIST 190W United States to 1877 (4)
U.S. History Since 1877 (choose 4 credits)
HIST 191 United States Since 1877 (4)
HIST 191W United States Since 1877 (4)

Major Common Core
ECON 201 Principles of Macroeconomics (3)
ECON 202 Principles of Microeconomics (3)
GEOG 340 United States (3)
HIST 302 World History: An Overview (4)
POL 321 Democracy and Citizenship (3)
SOC 101 Introduction to Sociology (3)

SOST 200 Introduction to Social Studies Teaching (2)
SOST 450 Teaching Social Studies Secondary School (4)

Major Restricted Electives
Expansion Course (choose 3 credits of the following)
ETHN 410 Foundations of Oppression (3)
GWS 220 Sex and Gender Worldwide (4)
GWS 220W Sex and Gender Worldwide (4)

Major Emphasis: Political Science (15 credits)
POL 371 State & Local Government (3)
POL 414 Early United States Political Thought (3)
POL 473 Legislative Process (3)

(choose 3 credits)
POL 231 World Politics (3)
POL 241 Introduction to Comparative Politics (3)

(choose 3 credits)
POL 422 Campaigns & Elections (3)
POL 423 Political Parties (3)
POL 454 Civil Liberties (3)
POL 474 Executive Process (3)

Other Graduation Requirements
Professional Education, 30 credits.
See the SECONDARY EDUCATION section of this catalog for admission requirements to Professional Education and a list of specific professional education courses required for Social Studies Majors. NOTE: Students must also meet a drug and alcohol education requirement (1-3 credits)
KSP 200 - KSP 499

Alcohol & Drug Education (choose 1 credit)
PSYC 490 Workshop (1-3)
### PSYCHOLOGY OPTION

#### Required General Education
- ANTH 101 Introduction to Anthropology (4)
- GEOG 100 Elements of Geography (3)
- POL 111 United States Government (3)
- PSYC 101 Introduction to Psychological Science (4)
- U.S. History to 1877 (choose 4 credits)
- HIST 190 United States to 1877 (4)
- HIST 190W United States to 1877 (4)
- U.S. History Since 1877 (choose 4 credits)
- HIST 191 United States Since 1877 (4)
- HIST 191W United States Since 1877 (4)

#### Major Common Core
- ECON 201 Principles of Macroeconomics (3)
- ECON 202 Principles of Microeconomics (3)
- GEOG 340 United States (3)
- HIST 302 World History: An Overview (4)
- POL 321 Democracy and Citizenship (3)
- SOC 101 Introduction to Sociology (3)
- SOST 200 Introduction to Social Studies Teaching (2)
- SOST 450 Teaching Social Studies Secondary School (4)

#### Major Restricted Electives
- **Expansion Course** (choose 3 credits)
  - ETHN 410 Foundations of Oppression (3)
  - GWS 220 Sex and Gender Worldwide (4)
  - GWS 220W Sex and Gender Worldwide (4)

#### Major Emphasis: Psychology (15 credits)
- PSYC 201 Statistics for Psychology (4)
- PSYC 211 Research Methods and Design (4)
  - (choose 4 credits)
- PSYC 407 Advanced Behavior Analysis (4)
- PSYC 413 Sensation & Perception (4)
- PSYC 421 Behavior Neuroscience (4)
  - (choose 3 credits)
- PSYC 340 Social Psychology (4)
- PSYC 433 Child Psychology (4)
- PSYC 436 Adolescent Psychology (4)
- PSYC 455 Abnormal Psychology (4)
- PSYC 456 Personality Theories (3)

#### Other Graduation Requirements
Professional Education, 30 credits.
See the SECONDARY EDUCATION section of this catalog (insert page) for admission requirements to Professional Education and a list of specific professional education courses required for Social Studies Majors. NOTE: Students must also meet a drug and alcohol education requirement (1-3 credits)

KSP 200-KSP 499
Alcohol & Drug Education (choose 1 credit)
PSYC 490 Workshop (1-3)

### SOCIOLOGY OPTION

#### Required General Education
- ANTH 101 Introduction to Anthropology (4)
- GEOG 100 Elements of Geography (3)
- POL 111 United States Government (3)
- PSYC 101 Introduction to Psychological Science (4)
- U.S. History to 1877 (choose 4 credits)
- HIST 190 United States to 1877 (4)
- HIST 191 United States Since 1877 (4)
- HIST 191W United States Since 1877 (4)
- U.S. History Since 1877 (choose 4 credits)
- HIST 192 United States Since 1877 (4)
- HIST 192W United States Since 1877 (4)

#### Major Common Core
- ECON 201 Principles of Macroeconomics (3)
- ECON 202 Principles of Microeconomics (3)
- ECON 429 Economic Education (3)
- GEOG 340 United States (3)
- HIST 302 World History: An Overview (4)
- POL 321 Democracy and Citizenship (3)
- SOC 101 Introduction to Sociology (3)
- SOST 200 Introduction to Social Studies Teaching (2)
- SOST 450 Teaching Social Studies Secondary School (4)

#### Major Restricted Electives
- **Expansion Course** (choose 3 credits)
  - ETHN 410 Foundations of Oppression (3)
  - GWS 220 Sex and Gender Worldwide (4)
  - GWS 220W Sex and Gender Worldwide (4)

#### Major Emphasis: Sociology (15 credits)
- Theory
  - SOC 458 Sociological Theory (3)
- Issues
  - (choose 3 credits from the following)
  - SOC 255 Juvenile Delinquency (3)
  - SOC 307 Sex & Gender in Contemporary Society (3)
  - SOC 425 Social Movements (3)
  - SOC 441 Social Deviance (3)
  - SOC 446 Race, Culture & Ethnicity (3)
  - SOC 463 Social Stratification (3)
  - SOC 482 Social Change (3)
- Methods
  - (choose 3 credits from the following)
  - SOC 201 Social Research I (3)
  - SOC 469 Survey Research (3)
  - SOC 479 Sociological Methods (3)
  - SOC 480 Qualitative Methods (3)
- Family
  - SOC 408 Family Life Dynamics (3)
  - SOC 409 Family Violence (3)
  - SOC 483 The Family and Society (3)
- Macro
  - SOC 351 Social Psychology (3)
  - SOC 407 Population Dynamics (3)
  - SOC 423 Complex Organizations (3)
  - SOC 461 Urban Sociology (3)

#### Other Graduation Requirements
Professional Education, 30 credits.
See the SECONDARY EDUCATION section of this catalog for admission requirements to Professional Education and a list of specific professional education courses required for Social Studies Majors. NOTE: Students must also meet a drug and alcohol education requirement (1-3 credits)

KSP 200-KSP 499
Alcohol & Drug Education (choose 1 credit)
PSYC 490 Workshop (1-3)

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**COURSE DESCRIPTIONS SEE SOCIAL STUDIES**
Social Work

College of Social & Behavioral Sciences
Department of Social Work
358 Trafton Science Center N • 507-389-6504
Website: www.sbs.mnsu.edu/socialwork

BSSW Program Director: Debra Gohagan
Dept Chair: David Beimers

Faculty: Ross Aalgaard, Jennifer Andrashko, David Beimers, Laura Benesch, Christine Black-Hughes, Kofi Danso, Nancy Fitzsimons, Debra Gohagan, Annelies Hageman, Paul Mackie, Jennifer Parker, Sky Smith, Laurie Strunk, Kimberly Zammitt


The BSSW Program is built on a strong liberal arts program. Graduates are prepared for generalist social work practice with individuals, families, organizations, and communities. The program's graduates are committed to ethical and professional practice that enhances human well-being and supports social, economic, and environmental justice for all members of our diverse and global society.

This major prepares students for graduate education in social work and related fields. This nationally accredited major meets licensure requirement to practice social work in most settings in Minnesota. A major in social work does not require that students pursue a minor degree. However, students can choose to complete a minor, add a second major, or pursue certification programs; most of which will require additional coursework and semester(s).

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

Admission to the BSSW Program. An application for admission to the BSSW program is required before students are given permission to complete the advanced curriculum (SOWK 441, SOWK 443, SOWK 446, SOWK 450 and SOWK 455). Admission is limited to 34 students per semester. Admission criteria include:

- 2.8 Cumulative and 2.8 Social Work GPA(s).
- Earned at least 75 credits at the end of the semester applying.
- Completed (or in process of completing) all university and social work general education requirements
- Completed (or in process of completing) SOWK 200 & 300 level courses
- Earned a minimum grade of "C" in all BSSW Program required courses.

Admission to the major is not necessary for enrollment in SOWK 200 & 300 level courses. However, students registering for SOWK 300 level courses will need to meet with a BSSW Program Advisor to get permission to register for upper division courses. Students must also complete an application form for permission to complete SOWK 315, Junior Field Experience, and SOWK 450 and SOWK 455, Senior Practicum and Practicum Seminar.

Advising. Students are assigned to a BSSW Program Faculty Advisor as early as possible and should meet with their advisor every semester.

GPA Policy. Formal admission to the Social Work major requires that applicants have achieved a 2.8 GPA in the required social work general education and social work specific courses, including courses completed in other departments/institutions and a 2.8 cumulative GPA. A minimum grade of "C" is required in Social Work and required supporting courses. Once formally admitted to the BSSW Program, students are to maintain continued satisfactory academic performance by earning a minimum grade of "C" in Social Work required courses.

P/N Grading Policy. SOWK 315 (Social Work Junior Field Experience), SOWK 450, and SOWK 455 (Senior Practicum and Practicum Seminar), are offered only on a P/N basis. Students cannot take any other social work courses (for major or for a social welfare minor) as P/N.

Residency and Transfer Requirements. Transfer students must complete a minimum of 30 credit hours at Minnesota State Mankato. Students who wish to transfer credits in Social Work from another institution must have left prior institution(s) in good standing. Students transferring Social Work course credits from other institutions must complete at least 24 credits within the BSSW Program curriculum.

Credit for classroom courses completed at other institutions is evaluated on an individual basis by the BSSW Program Director and/or faculty. The student must present course syllabi including assignments and texts used and meet all other admission to the BSSW Program requirements. All transfer students must see a BSSW Program Faculty Advisor for course planning before registering for social work courses.

The BSSW Program does not substitute life experience for coursework credit.

Criminal Background Check. A criminal back ground check is required prior to SOWK 315, Junior Field Experience and SOWK 450/455, Senior Practicum and Practicum Seminar.

SOCIAL WORK BSSW

Degree completion = 120 credits

Required General Education

Values, Ethics, and Critical Thinking (choose 3 - 4 credits)
- Select one course from the following:
  - ENG 213W Perspectives: Ethics and Civic Responsibility in Literature (4)
  - PHIL 110 Logic and Critical Thinking (3)
  - PHIL 120W Introduction to Ethics (3)
  - PHIL 222W Medical Ethics (3)
  - PHIL 240W Law, Justice & Society (3)

Biological Systems (choose 3 - 4 credits)
- Select one course from the following:
  - BIOL 100 Our Natural World (4)
  - BIOL 102 Biology of Women (3)

Diversity and Social Justice A (choose 3 - 4 credits)
- Select one course from the following:
  - ANTH 230 People and Cultures of the World (4)
  - ANTH 240 Language and Culture (4)
  - ANTH 340 Language and Power (4)

Diversity and Social Justice B (choose 3 - 4 credits)
- Select one course from the following:
  - AHS 101 Introduction to American Indigenous Studies (3)
  - AHS 210W Oral Traditions (3)
  - AHS 230W American Indians of Minnesota (3)
  - AHS 240W American Indian Women (3)

GWS 100 Introduction to Gender (4)
- Select two courses each from different departments from the following:
  - Values, Ethics, and Critical Thinking
  - Diversity and Social Justice

GWS 220 Sex and Gender Worldwide (4)
- Select two courses each from different departments from the following:
  - Biological Systems
  - Diversity and Social Justice

GWS 220 Sex and Gender Worldwide (4)
- Select two courses each from different departments from the following:
  - Values, Ethics, and Critical Thinking
  - Diversity and Social Justice

GWS 225 Introduction to Lesbian, Gay, Bisexual, and Transgender Studies (4)
- Select two courses each from different departments from the following:
  - Biological Systems
  - Diversity and Social Justice

GWS 225 Introduction to Lesbian, Gay, Bisexual, and Transgender Studies (4)
- Select two courses each from different departments from the following:
  - Values, Ethics, and Critical Thinking
  - Diversity and Social Justice

REHB 110W Sensitivity to Disability (3)
- Select two courses each from different departments from the following:
  - Biological Systems
  - Diversity and Social Justice

Social, Economic, and Political Sciences (choose 6 credits)
- Select two courses each from different departments from the following:
  - ECON 100 An Introduction to the U.S. Economy (3)
  - ECON 201 Principles of Macroeconomics (3)
  - ECON 202 Principles of Macroeconomics (3)
  - POL 101 Introduction to Public Life (3)
  - POL 104 Understanding the U.S. Constitution (3)
  - POL 106 Politics in the World Community (3)
  - POL 111 United States Government (3)

SOC 101 Introduction to Sociology (3)
- Select two courses each from different departments from the following:
  - Biological Systems
  - Diversity and Social Justice

SOC 150 Social Problems (3)
- Select two courses each from different departments from the following:
  - Biological Systems
  - Diversity and Social Justice

URBS 150 Sustainable Communities (3)
**Fall, Spring**

Students are provided with information about the BSSW curriculum. An introduction to social work as a profession including the history of the profession, professional behaviors, values and Codes of Ethics, fields of practice, roles and tasks, and core theories and social work skills required for generalist social work practice. Students will develop skills in critical thinking, professional communication and behaviors, demonstrate self-awareness as they prepare to work in a diverse society, and apply values, ethics, and theories through group-based projects. Students are provided with information about the BSSW curriculum. Fall, Spring

**Elective Courses**

- **Major Common Core**
  - SOWK 215W may be completed for SOWK 215. SOWK 310 may be completed for SOWK 310W.
  - Required for Minor: None.

- **Major Restricted Electives**
  - Please choose one course from the following:
    - SOWK 415 Child-Family Welfare Services (3)
    - SOWK 417 Co-morbidity of Mental Health & Substance Use Disorders in Social Work (3)
    - SOWK 419 Social Work and Aging (3)
    - SOWK 422 Social Work and Chemical Dependency (3)
    - SOWK 425 Social Work in Health Care Setting (3)
    - SOWK 427 Social Work Response to Intimate Partner Violence (3)
    - SOWK 430 Social Work in the School Setting (3)
    - SOWK 432 Social Work and Disabilities (3)
  - Required for Minor: None.

**SOCIAL WELFARE MINOR**

- **Required Minor**
  - SOWK 212 Introduction to Social Work (4)
  - SOWK 215 Introduction to Social Welfare Services (4)
  - SOWK 310 Human Behavior in the Social Environment (4)
  - SOWK 410 Social Welfare Policy (4)

**COURSE DESCRIPTIONS**

**SOWK 212 (4) Introduction to Social Work**

An introduction to social work as a profession including the history of the profession, professional behaviors, values and Codes of Ethics, fields of practice, roles and tasks, and core theories and social work skills required for generalist social work practice. Students will develop skills in critical thinking, professional communication and behaviors, demonstrate self-awareness as they prepare to work in a diverse society, and apply values, ethics, and theories through group-based projects. Students are provided with information about the BSSW curriculum. Fall, Spring

**SOWK 215 (4) Introduction to Social Welfare Services**

The objective of this course is to explore social welfare as a social institution. Consideration will be given to formal and informal efforts to meet common social needs of diverse populations. This course emphasizes social challenges and impact of oppression facing American society and the program and policy prescriptions designed to minimize or eliminate these problems. Fall, Spring, Summer.

**SOWK 255 (3) Global Responses to Human Need**

This course exposes students to some of the major realities of life among the poor and socially deprived in all parts of the world, primarily developing countries. Students will confront conditions that impede development and keep people locked into poverty and despair, and will discuss how a person who sees her/himself as a global citizen can act in tangible ways to make that “citizenship” more meaningful. Fall, Spring.

**SOWK 291 (1-3) Exploratory Studies**

Under faculty mentorship, students can pursue subjects of individual interest related to social work and social welfare. Fall, Spring.

**SOWK 310 (4) Human Behavior in the Social Environment**

Applies theoretical frameworks for assessing and organizing knowledge of human behavior and the social environment in conjunction with social systems, to understand individual, family, group, organizational, and community systems. Attention is paid to human diversity, discrimination, and oppression. Prerequisite: SOWK 212, SOWK 215.

**SOWK 315 (4) Junior Field Experience**

Beginning level supervised field experience with a social service agency. Students complete 120 hours of observation and agency service and attend a seminar which integrates the field experience and social work values, knowledge and practice skills. Application required during the semester before registration. Prerequisite: SOWK 215W.

**SOWK 410 (4) Social Welfare Policy**

Exploration of the interconnectedness of social services, social policy formulation and analysis, and generalist social work practice. Presentation of contemporary social issues and social welfare policies, the introduction of a framework for policy analysis, and an overview of policy, practice, advocacy and action skills. Critical analysis of issues and policy from a social work perspective, drawing from the values and ethics of the profession, with examination of how issues differentially impact groups within our diverse society. Prerequisite: SOWK 212, SOWK 215 or SOWK 215W.

**SOWK 415 (3) Child-Family Welfare Services**

This course provides an overview of social services that support the well-being of children and families in a diverse society. Students, regardless of disciplinary affiliation, identify personal and professional values, develop a working knowledge of the theories that inform practice with children and families, and understand the roles and legal responsibilities of child welfare workers and professionals from multiple disciplines in the delivery of child welfare services. Fall, Spring.

**SOWK 417 (3) Co-morbidity of Mental Health & Substance Use Disorders in Social Work**

Co-morbid substance abuse and mental health disorders will be encountered by social workers in all areas of practice. Current research on dual diagnosis indicates integrated treatment of substance misuse and mental illness is the most effective approach to treatment. This course will provide an understanding of the intersection of multiple diagnoses, and enable social worker professionals to effectively treat multiple diagnoses in their area of practice. This course examines the interaction of addictive and other mental health disorders. Particular focus is placed on case-conceptualization, assessment, and intervention with multiply diagnosed clients in specific populations. Fall [On Demand], Spring [On Demand], Summer [On Demand].

**SOWK 419 (3) Social Work and Aging**

Service delivery issues and social work practice with older persons, their families and communities. Fall [On Demand], Spring [On Demand], Summer [On Demand].
SOWK 422 (3) Social Work and Chemical Dependency
This course is designed to provide upper level (junior and senior) undergraduate social work students with a comprehensive introduction to the epidemiology, (scientific study of disease), etiology (causes of disease), history, policy, and treatment modalities of substance abuse from a person-in-environment and systems theory social work perspective.
Fall (On Demand), Spring (On Demand), Summer (On Demand)

SOWK 425 (3) Social Work in Health Care Setting
Service delivery issues and skills for working in hospitals, nursing homes, and community programs.
Fall (On Demand), Spring (On Demand), Summer (On Demand)

SOWK 427 (3) Social Work Response to Intimate Partner Violence
Course provides an overview of intimate partner violence from a theoretical and evidence-based, social work perspective. Students learn about intervention strategies from direct practice to advocacy and policy change. Multiple systems are explored. The intersection of gender, class, sexual orientation, age, and culture with intimate partner violence is covered.
Fall (On Demand), Spring (On Demand), Summer (On Demand)

SOWK 430 (3) Social Work in the School Setting
Service delivery issues, knowledge and skills for providing social services within school settings.
Fall (On Demand), Spring (On Demand), Summer (On Demand)

SOWK 432 (3) Social Work and Disabilities
Course focuses on service delivery issues and skills, using a strengths-based, family systems, and empowerment approach for working with individuals with developmental and other disabilities and their families across the life span. Students who are planning to do a practicum in a disability services setting should complete this course prior to beginning the practicum.
Fall (On Demand), Spring (On Demand), Summer (On Demand)

SOWK 435 (4) Applied Social Work Research
Explores research issues and techniques, needs assessments, and program and practice evaluations. In addition, there is a lab designed to supplement class discussions and to assist students in understanding some of the technical details and specific skills associated with conducting research and writing a research proposal. The lab enhances skills in developing questionnaires, reviewing previous studies, using American Psychological Association (APA) citations and data analysis using SPSS. Prerequisite: ECON 207 or HIST 475 or PSYC 201 or SOC 202 or STAT 154 or other statistics course as approved by BSSW Program Advisor.
Fall, Spring

SOWK 441 (4) Generalist Social Work Practice
Overview of generalist social work practice including assessment and intervention methodology and strategies; social work with diverse populations; ethical issues/dilemmas; importance of social work research. Application required during semester before registration.
Prerequisite: Admission to the BSSW Program/major. Permission to register given by BSSW Program.
Fall, Spring

SOWK 444 (3) Social Work Interviewing and Counseling Skills
Intervention skills for working with individuals, families, and groups.
Prerequisite: SOWK 441. Permission to register given by BSSW Program.
Fall, Spring

SOWK 446 (4) Organizations and Community Practice
This course prepares students for direct and indirect macro generalist social work practice in organizations and communities. Students will learn: 1) to recognize characteristics and assets of organizations and communities, 2) to identify and respond to changing community and organizational needs, and 3) strategies for planned change process in organizations and communities. Emphasis is placed on engaging, assessment, intervening and evaluating consumer services across mezzo and macro systems through the process of participating in task-oriented groups.
Prerequisite: SOWK 441. Permission to register given by BSSW Program.
Fall, Spring

SOWK 450 (4) Integrative Seminar
Integration of senior field practicum with academic content and concepts. Serves as the capstone experience. Taken with SOWK 455.
Prerequisite: SOWK Foundation, Practice Sequence, and permission
Co-requisite: SOWK 455
Fall, Spring

SOWK 455 (8) Social Work Practicum
Culminating practicum experience with 32 hour per week placement in a social service setting with supervision provided by a degreed social worker. Taken with SOWK 450.
Prerequisite: SOWK Foundation, Practice Sequence, and permission
Co-requisite: SOWK 450
Fall, Spring

SOWK 485 (1-6) Selected Topics
Topics announced when offered
Variable

SOWK 490 (1-3) Workshop
SOWK 492 (1-3) Honors Reading
SOWK 495 (1-3) Social Work Honors Paper
This elective is for those students who desire to complete an advanced writing assignment in preparation for employment or graduate education.

SOWK 497 (1-10) Internship: Social Work
Additional field experience in approved social agency.

SOWK 499 (1-6) Individual Study
Under faculty mentorship, students may pursue in-depth library or field research on topics of their choice.
mission statement, program goals, career information and more are available on our website (http://sbs.mnsu.edu/soccorr).

Policies/Information
Admission to Major is granted by the Department. Minimum University admission requirements are:
• a minimum of 32 earned semester credit hours.
• a minimum cumulative GPA of 2.00.

P/N Grading Policy. Courses leading to a major or minor in sociology may not be taken on a P/N basis, except where P/N grading is mandatory.

Combined BS, BA/MS, MA Program: Undergraduates students in our Sociology and Corrections programs interested in pursuing a master’s degree in either of these two fields may be granted permission to double count up to 12 credits for both the undergraduate and the graduate program. To apply for this option, students must have completed their sophomore year, have and maintain a GPA of at least 3.0, and declare their intent to complete the graduate program following the completion of the baccalaureate degree. If accepted, students must obtain special permission to register for double counted courses and will receive graduate student credit when the undergraduate degree has been conferred and they have been fully admitted into one of our graduate programs. Please contact the Department Graduate Coordinator for detailed information.

Residency Requirements. Excluding SOC 101, all Sociology majors must complete 27 of the required 39 credit hours within the Department of Sociology and Corrections. Transfer courses that will not be accepted are Internship, capstone and experiential learning courses such as GERQ 200, SOC 200, and SOC 493.

Normally the department will not accept transfer courses at the 200-level for our upper-level courses (exceptions are on a case-by-case basis).

Excluding SOC 101, all students minoring in sociology must complete 12 of the required 18 credit hours within the Department of Sociology and Corrections at Minnesota State Mankato.

GPA Policy. A minimum grade of “C” is required for all courses counting towards the Sociology major.

Sociology BA
Degree completion = 120 credits

Option I: General Sociology

Required General Education
SOC 101 Introduction to Sociology (3)

Major Common Core (choose 2) credits
SOC 200 Foundations of Sociology (3)
SOC 202 Introductory Social Statistics (3)
SOC 301W Social Research I (3)
SOC 351 Social Psychology (3)
SOC 458 Sociological Theory (3)
SOC 463 Social Stratification (3)
SOC 495W Senior Seminar (3)

Major Restricted Electives (choose one of the following)
SOC 469 Survey Research (3)
SOC 479 Sociological Ethnography (3)
SOC 480 Qualitative Methods (3)

Major Unrestricted Electives
Choose 15 credits from the following listing of courses
SOC 100-400: Any level (0-3); 300-400 (12-15 credits)
SOC 150 Social Problems (3)
SOC 208 Families in Society (3)
SOC 209 Sociology of Human Sexualities (3)
SOC 255 Juvenile Delinquency (3)
SOC 285 Selected Topics in Sociology (3)
SOC 285W Selected Topics in Sociology (3)
SOC 291 Exploratory Studies (1-3)
SOC 307 Sex & Gender in Contemporary Society (3)
SOC 325 Sociology of Popular Culture (3)
SOC 360 Indigenous People and Environmental Struggles (3)
SOC 402 Medical Sociology (3)
SOC 403 Sociology of Mental Health (3)
SOC 404 Sociology of Aging (3)
SOC 405 Sociology of Death (3)
SOC 407 Population Dynamics (3)
SOC 409 Family Violence (3)
SOC 417 Program Administration (3)
SOC 420 Identity Work in Women’s Reentry Experiences (3)
SOC 423 Complex Organizations (3)
SOC 425 Social Movements (3)
SOC 430 Sociology of Globalization (3)
SOC 441 Social Deviance (3)
SOC 442 Criminology (3)
SOC 446 Race, Culture & Ethnicity (3)
SOC 451 Law & Social Justice in Society (3)
SOC 460 Environmental Sociology (3)
SOC 461 Urban Sociology (3)
SOC 465 Law & Chemical Dependency (3)
SOC 466 Program Planning (3)
SOC 469 Survey Research (3)
SOC 470 Sociology of Parent-Child Interaction (3)
SOC 479 Sociological Ethnography (3)
SOC 480 Qualitative Methods (3)
SOC 482 Social Change (3)
SOC 483 The Family and Society (3)
SOC 484 Sociology of Religion (3)
SOC 485 Selected Topics (2-6)
SOC 490 Workshop (1-3)
SOC 491 In-Service (1-6)
SOC 492 Honors Reading (1)
SOC 493 Sociology in Action (3)
SOC 497 Internship: Sociology (1-12)
SOC 499 Individual Study (1-6)

Other Graduation Requirements
Required for Bachelor of Arts (BA) ONLY: Language (8 credits)

Required Minor. Yes. Any.

Option II: Applied Sociology

Required General Education
SOC 101 Introduction to Sociology (3)

Major Common Core (choose 27-30 credits)
SOC 200 Foundations of Sociology (3)
SOC 202 Introductory Social Statistics (3)
SOC 301W Social Research I (3)
SOC 351 Social Psychology (3)
SOC 458 Sociological Theory (3)
SOC 463 Social Stratification (3)
SOC 495W Senior Seminar (3)

Major Restricted Electives (choose one of the following)
SOC 469 Survey Research (3)
SOC 479 Sociological Ethnography (3)
SOC 480 Qualitative Methods (3)

Major Unrestricted Electives (choose 6 to 9 credits)
SOC 100-400: Any level (0-3); 300-400 (6 to 9 credits)
SOC 150 Social Problems (3)
SOC 208 Families in Society (3)
SOC 209 Sociology of Human Sexualities (3)
SOC 255 Juvenile Delinquency (3)
SOC 285 Selected Topics in Sociology (3)
SOC 285W Selected Topics in Sociology (3)
SOC 291 Exploratory Studies (1-3)
SOC 307 Sex & Gender in Contemporary Society (3)
SOC 325 Sociology of Popular Culture (3)
SOC 360 Indigenous People and Environmental Struggles (3)
SOC 402 Medical Sociology (3)
SOC 403 Sociology of Mental Health (3)
SOC 404 Sociology of Aging (3)
SOCIology Continued

SOC 465 Law & Chemical Dependency (3)
SOC 466 Program Planning (3)
SOC 469 Survey Research (3)
SOC 470 Sociology of Parent-Child Interaction (3)
SOC 479 Sociological Ethnography (3)
SOC 480 Qualitative Methods (3)
SOC 482 Social Change (3)
SOC 483 The Family and Society (3)
SOC 484 Sociology of Religion (3)
SOC 485 Selected Topics (2-6)
SOC 490 Workshop (1-3)
SOC 491 In-Service (1-6)
SOC 492 Honors Reading (1)
SOC 499 Individual Study (1-6)

Required Minor: Yes. Any.

SOciology Minor

Required for Minor
SOC 101 Introduction to Sociology (3)

Required Electives (18 credits)
At least 12 credits must be at the 300-400 level.
SOC Any Level
SOC Any Level
SOC 300-400 Level
SOC 300-400 Level
SOC 300-400 Level
SOC 300-400 Level

Course Descriptions

SOC 101 (3) Introduction to Sociology
Overview of the nature and characteristics of human societies; the structure and processes of social life; impact of social forces on individuals and groups; independence of society and the individual; emphasis on culture diversity and globalization. Fall, Spring. GE-5, GE-8
Diverse Cultures - Purple

SOC 150 (3) Social Problems
A critical description and analysis of selected social problems, with emphasis on the sociological perspective, critical thinking, roots of group inequality, and exploration of solutions and alternatives to existing social problems. Fall, Spring. GE-5, GE-7
Diverse Cultures - Purple

SOC 200 (3) Foundations of Sociology
Elements of the sociological perspective; overview of theoretical and methodological orientations; sociological practice and application; initial development of student portfolio. Prerequisite: SOC 101. Fall, Spring
Diverse Cultures - Purple

SOC 202 (3) Introductory Social Statistics
Basic descriptive and inferential statistics used in the analysis of sociological data. Fall, Spring. GE-4

SOC 208 (3) Families in Society
Relationships, marriages and families are studied as social and cultural phenomena. Focuses on the sociological connections between society, culture, social institutions, families and individuals especially as they are affected by social change. GE-5, GE-7
Diverse Cultures - Purple

SOC 209 (3) Sociology of Human Sexualities
Explores the social construction of sex and sexuality, including the organization of human bodies and activities into particular categories such as female and male or homosexual and heterosexual. How this is done in specific institutional settings like the law, media, and science is a primary focus. The effects of such practices and their associated meanings, as well as resistance to them, are also investigated. Fall, Spring. GE-5, GE-7
Diverse Cultures - Purple

SOC 214W (3) Animals and Society
This course examines the role of animals in society and the social relationships between humans and other animals. Students will explore how culture and society shape the ways other animals are integrated and treated in our families, schools, economy, legal system, and other social institutions. Through dialogue and writing students will identify their own perspectives on nonhuman animals and their relationships to them. Fall. GE-2, GE-9

SOC 255 (3) Juvenile Delinquency
A critical consideration of definitions of juvenile delinquency, emphasis on micro and macro level of struggle in which delinquent behavior takes place, critique of current theories on delinquency, and the juvenile justice response to delinquency. Fall, Spring. GE-5, GE-9

SOC 285 (3) Selected Topics in Sociology
Topics vary as announced in class schedule. May be retaken for credit if topic varies. On Demand: Fall, Spring, Summer

SOC 285W (3) Selected Topics in Sociology
Topics vary as announced in class schedule. May be retaken for credit if topic varies. On Demand: Fall, Spring, Summer

SOC 291 (1-3) Exploratory Studies
May be used to explore areas of interest to students which are not covered in regular courses. A maximum of three hours applicable toward a major or minor in the department with consent of an advisor. Prerequisite: Consent. Fall, Spring

SOC 301W (3) Social Research I
Fundamentals of research methods focusing on the research process and research design and including hypothesis testing, basic analysis and interpretation; students will develop and practice research skills. Prerequisite: SOC 101. Fall, Spring

SOC 307 (3) Sex & Gender in Contemporary Society
Description and analysis of sex/gender systems, interpersonal power, language and communication, the role of gender in social institutions such as the family, work, and politics, and the role of social movements in creating change in gender relations. Prerequisite: SOC 101. Fall, Spring

SOC 325 (3) Sociology of Popular Culture
This course examines the sociological significance of popular culture and focuses on how popularized aspects of social life are produced, consumed and experienced by members of society. Includes discussion of celebrities, sports, music, television, movies, commercials and consumption practices. Prerequisite: SOC 101. Variable

SOC 351 (3) Social Psychology
The study of symbolic interaction as the basis of the mind, the self, and society. Prerequisite: SOC 101. Fall, Spring

SOC 360 (3) Indigenous Peoples and Environmental Struggles
Introduces students to the differences between indigenous and Western views of the environment. Analyzes the impact of invasion and encroachment on indigenous societies' interactions with nature. Compares historical and contemporary environmental issues in indigenous societies. Variable. GE-10
Diverse Cultures - Purple

SOC 398 (0) CPT: Co-Operative Experience
Curricular Practical Training. Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information. Prerequisite: At least 60 credits earned, in good standing; instructor permission; co-op contract; other prerequisites may also apply. Fall, Spring, Summer
SOC 402 (3) Medical Sociology
Introduces students to central topics in medical sociology including, social factors responsible for people's health outcomes; social construction of health and illness; health inequalities; evolution of the social institution of medicine; and/or issues related to race/ethnicity, social class and gender.
Fall

SOC 403 (3) Sociology of Mental Health
This course brings a sociological perspective to the understanding of mental health and illness. Students review the history and the perception of mental illness in Western society, and critically examine how social factors influence the definition and the responses to mental disorders.
Fall, Spring

SOC 404 (3) Sociology of Aging
Social and social-psychological focus in later life. Problems and prospects of growing old in the United States.
Prerequisite: SOC 101
Fall
Diverse Cultures - Purple

SOC 405 (3) Sociology of Death
Study of the structure of human response to death, dying, and bereavement in their socio-cultural, interpersonal, and personal context. Formation of children's perception of death, functions of the funeral, euthanasia, and suicide are among the topics to be discussed.
Prerequisite: SOC 101
Fall

SOC 407 (3) Population Dynamics
The course will acquaint students with dynamic forces operating in the field of population and development. Includes an introduction to basic theories and techniques of population analysis, with coverage of global economic forces: fertility, mortality, and migration. The causes and consequences of over-population are discussed with special attention to resource depletion and food shortages.
Prerequisite: SOC 101
Variable

SOC 409 (3) Family Violence
Various forms of family violence including dating violence, spouse abuse, and child abuse; social theory, empirical research and social policy on family violence; social context, responses and solutions.
Fall

SOC 417 (3) Program Administration
Implications of sociological knowledge for the administration of Human Services programs. Theoretical and practical aspects of administration within social service systems.
Spring

SOC 420 (3) Identity Work in Women's Reentry Experiences
Applies sociological theories of identity to the experience of women being released from prison. Taught at the women's prison in Shakopee, Minnesota and integrates Minnesota State Mankato students with students drawn from the educational program located within the women's prison in Shakopee.
Fall, Spring
Diverse Cultures - Gold

SOC 423 (3) Complex Organizations
Analysis of the development, structure, and functioning of social processes in large-scale, formal organizations.
Prerequisite: SOC 101
Fall

SOC 425 (3) Social Movements
Survey of major sociological perspectives on social movements, including theoretical approaches and empirical research on the causes, processes, and outcomes of social movements.
Prerequisite: SOC 101
Spring

SOC 430 (3) Sociology of Globalization
Overview of the role of the United States in an increasingly globalized society with a focus on economic and political inequality, the class structure, the labor process, race and gender relations, the global dimensions of capitalism, and modern crisis tendencies.
Prerequisite: SOC 101
Variable
Diverse Cultures - Purple

SOC 441 (3) Social Deviance
Sociological perspectives on social deviance; overview of theoretical approaches; emphasis on symbolic interactionism; issues of social control; research examples and policy implications.
Prerequisite: SOC 101
Fall, Spring

SOC 442 (3) Criminology
A critical consideration of myths concerning crime, perspectives on crime and their assumptions, current criminology theory, and construction of alternative explanations related to crime.
Prerequisite: SOC 101
Fall, Spring

SOC 446 (3) Race, Culture & Ethnicity
Study of minority racial and cultural groups in U.S. society. An examination of how the lives of the members of these groups are affected by racism, prejudice, and discrimination.
Prerequisite: SOC 101
Fall, Spring
Diverse Cultures - Purple

SOC 451 (3) Law & Social Justice in Society
A critical look at the construction of the concepts of law and justice as it operates in the United States and an application of the principles of justice to community issues.
Prerequisite: SOC 101 and CORR 106
Variable

SOC 458 (3) Sociological Theory
An overview of sociological theory that surveys the classical tradition and emphasizes contemporary theories including functionalism, conflict theory, rational choice theory, and symbolic interactionism as well as recent trends in theoretical developments.
Prerequisite: SOC 101
Spring

SOC 460 (3) Environmental Sociology
Examines the sociological relationship between people and the environment including: ways various societies view the environment, social changes from ecological degradation, and solutions to environmental problems. Topics may include a sociological analysis of climate change, agriculture, and resource extraction.
Spring
Diverse Cultures - Purple

SOC 461 (3) Urban Sociology
A survey of sociological theory and research on the ecology, demography, and social organization of the urban community. Presents a sociological interpretation of the development of urban society and how the process of urbanization affects the basic societal institutions and individual behavior.
Prerequisite: SOC 101
Variable
Diverse Cultures - Purple

SOC 463 (3) Social Stratification
An overview of the causes, processes and consequences of social stratification in society. Includes an overview of classical statements about stratification and focuses on social inequalities rooted in social class structures, the organization of political power, and social hierarchies based on race and gender differences in society.
Prerequisite: SOC 101
Spring
Diverse Cultures - Purple

SOC 465 (3) Law & Chemical Dependency
Addresses aspects of criminal and civil law pertinent to substance abuse.
Fall

SOC 466 (3) Program Planning
Theoretical and practical aspects of the planning process within social service systems. Examines the social context of planning and the use of a sociological knowledge base for planning in Human Services.
Prerequisite: SOC 101
Spring

SOC 469 (3) Survey Research
Techniques of survey research, interview, and questionnaire construction, field administration, and sampling methodology.
Fall
SOC 470 (3) Sociology of Parent-Child Interaction
Parent-child relationships in societal context; socialization theories; classic and contemporary research; parenting applications; current issues.
Spring

SOC 479 (3) Sociological Ethnography
Examination of ethnographic methodologies in sociology with emphasis on analytic, performance, and autoethnography. Exploration of ethics in ethnography, visual sociology, and firsthand experience in both crafting and presenting ethnographic works.
Prerequisite: SOC 101; SOC 301W or similar science research course with instructor permission.
Spring

SOC 480 (3) Qualitative Methods
Participant observation, focused interviews, and qualitative analysis; students actively participate in a field research project.
Prerequisite: SOC 101; SOC 301W or similar social science research course with instructor permission.
Fall

SOC 482 (3) Social Change
Analysis of social forces and processes involved in changing norms, values, and structures in traditional and modern societies. Examines both planned and unplanned change.
Prerequisite: SOC 101
Variable

SOC 483 (3) The Family and Society
Theory development and research findings about family systems with a special emphasis on societal influences (social, economic, political) on the changing family.
Variable

SOC 484 (3) Sociology of Religion
Analysis of the structures, functions, and origins of religion, its relationship to other social institutions, and its role in modern secular society. Examines processes of individual religiosity and explores current religious movements and trends.
Prerequisite: SOC 101
Variable

SOC 485 (2-6) Selected Topics
Topics vary as announced in class schedule. May be retaken for credit if topic varies.
Prerequisite: SOC 101
Variable

SOC 490 (1-3) Workshop
Workshop topics vary as announced in class schedule. May be retaken for credit.
Variable

SOC 491 (1-6) In-Service
Topics vary as arranged by students and instructor. May be retaken for credit.
Variable

SOC 492 (1) Honors Reading
For Honors students only.
Variable

SOC 493 (3) Sociology in Action
Focuses on ways sociological theories, perspectives, and methods can be applied to address human concerns; how sociologists make a better world. Participants learn to use sociological methods and concepts (such as theories about social structure, social organization, and social movements) to identify, investigate, and implement solutions to problems of social organization, social process, and social change. Potential applications include issues encountered in various workplace and social situations including community agencies and organizations, government, business, health care, and other social institutions.
Prerequisite: SOC 301W or equivalent; Senior Standing.
Fall

SOC 495W (3) Senior Seminar
Reviews sociological competencies and their applications in a variety of professional settings. A faculty-supervised, student-designed capstone project will integrate sociological knowledge, theory and research. Students must have completed or be currently enrolled in all other required courses for the major.
Prerequisite: SOC 200, SOC 301W and SOC 458
Fall, Spring

SOC 497 (1-12) Internship: Sociology
The internship in sociology is designed to provide opportunity to apply classroom learning, to practice and enhance skills, to experience professional socialization, and to explore a career. It also serves as a vehicle for the student to become more aware of personal strengths and identify areas in which further growth is needed.
Prerequisite: Consent
Fall, Spring

SOC 499 (1-6) Individual Study
A maximum of six credits is applicable toward a single major in the department; three credits toward a minor.
Prerequisite: Consent
Fall, Spring

SOCIODY GLOBALIZATION STUDIES BA AND BS

Sociology Globalization Studies

College of Social & Behavioral Sciences
Department of Sociology & Corrections
113 Armstrong Hall • 507-389-1561
Website: http://sbs.mnsu.edu/soccorr

Chair: Luis Posas

Faculty: Afroza Anwary, Emily Boyd, Barbara Carson, Jeffery Dennis, Donald Ebel, Sarah Epplen, Catarina Fritz, Carol Glasser, Diane Graham, Vicki Hunter, Barbara Keating, Luis Posas, Paul Prew, Pedro Thomas, Sherriese Truestdale-Moore, Dennis Waskul

Sociology is the scientific study of society and culture examining the patterns of human social behavior. The sociology program at Minnesota State University, Mankato is dedicated to the pursuit, transmission and application of sociological knowledge in order to understand and transform the social world. The pursuit of sociological knowledge involves scholarly inquiry by faculty and students. The transmission of sociological knowledge entails teaching and learning within and beyond the academy. The application of sociological knowledge translates the unique insights of sociological perspectives into our professional activities and daily lives. The sociology program at Minnesota State, Mankato leads to careers in academic and applied settings including human services, government, business, nonprofit organizations and social action organizations.

The Sociology undergraduate major includes three options: Option I: General Sociology provides a liberal arts curriculum along with research skill development for students interested in a comprehensive education or preparation for graduate education. Option II: Applied Sociology prepares students for careers in a variety of applied settings. This applied program includes an internship. Option III: The Globalization Studies Emphasis provides students a global perspective to understand social processes and the role of the United States in an increasingly interconnected world.

Students planning to major in sociology should take SOC 200: Foundations of Sociology as soon as possible after being accepted into the major. Our program mission statement, program goals, career information and more are available on our website (http://sbs.mnsu.edu/soccorr).

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
Admission to Major is granted by the Department. Minimum University admission requirements are:
  • a minimum of 32 earned semester credit hours.
  • a minimum cumulative GPA of 2.00.

P/N Grading Policy. Courses leading to a major or minor in sociology may not be taken on a P/N basis, except where P/N grading is mandatory.

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**Combined BS, BA/MS, MA Program:** Undergraduate students in our Sociology and Corrections programs interested in pursuing a master’s degree in either of these two fields may be granted permission to double count up to 12 credits for both the undergraduate and the graduate program. To apply for this option, students must have completed their sophomore year, have and maintain a GPA of at least 3.0, and declare their intent to complete the graduate program following the completion of the baccalaureate degree. If accepted, students must obtain special permission to register for double counted courses and will receive graduate student credit when the undergraduate degree has been conferred and they have been fully admitted into one of our graduate programs. Please contact the Department Graduate Coordinator for detailed information.

**Residency Requirements.** Excluding SOC 101, all majors must complete 33 of the required 39 credit hours within this Department of Sociology and Corrections at Minnesota State Mankato. Transfer courses that will not be accepted are Internship, Capstone and Experiential learning courses such as GERO 200, SOC 200, and SOC 406.

Normally the department will not accept transfer courses at the 200-level for our upper level courses, except on a case-by-case basis.

Excluding SOC 101, all students minoring in sociology must complete 12 of the required 18 credit hours within the Department of Sociology and Corrections at Minnesota State Mankato.

**GPA Policy.** A minimum grade of “C” is required for all courses counting towards the Sociology major.

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**SOCIOMETRY: GLOBALIZATION STUDIES BA**

**Required General Education**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>SOC 101</td>
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**Major Common Core**

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<td>SOC 458</td>
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<td>SOC 463</td>
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<td>SOC 495W</td>
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**Add ONE of the following (choose 3 credits)**

<table>
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<tr>
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<tbody>
<tr>
<td>SOC 459</td>
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<td>SOC 479</td>
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<td>SOC 480</td>
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**Major Restricted Electives**

Please select a total of 18 credits of major restricted electives.

<table>
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<td>SOC 307</td>
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<td>SOC 407</td>
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**Other College of Social and Behavioral Sciences Electives**

<table>
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<tbody>
<tr>
<td>ANTH 436W</td>
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<tr>
<td>ETHN 330</td>
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**SOCIOMETRY: GLOBALIZATION STUDIES BS**

**Required General Education**

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**Choose 3 credits - one course from the following**

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**Major Restricted Electives**

Please select a total of 18 credits of major restricted electives.

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</table>

**Required Minor. Yes. Any.**

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**COURSE DESCRIPTIONS SEE SOCIOLOGY**
Spanish

College of Arts & Humanities
Department of World Languages & Cultures
227 Armstrong Hall  •  507-389-2116
Website: www.mnsu.edu/languages
Chair: Adriana Gordillo
Faculty: Kimberly Conatg Ph.D.; Alfredo Duplat Ph.D.; Adriana Gordillo Ph.D.; James Grabowska Ph.D.; Gregory Taylor Ph.D.; Enrique Torner Ph.D.

The undergraduate Spanish program seeks students who want to go further! The undergraduate Spanish degree programs serve students who are seeking high proficiency in the Spanish language and cultural studies. These students understand the impact that advanced language proficiency and cultural expertise can have on a successful career, whether they continue in the study of Spanish at the postgraduate level or utilize their skill in a vast number of areas such as business, international relations, social work, law, government, education or health care. An ability to speak to many more people in different cultural environments and write with an eye to cultural and linguistic diversity for a variety of professional settings here and around the world, is one of the most sought after skills in nearly all professional fields. Candidates with high competency can often earn more and can advance more rapidly in their careers.

Choosing an undergraduate degree program in Spanish

The Spanish program offers the Spanish BA, Spanish BS, and the BS Spanish for the Professions degree programs to prepare students for using Spanish in a variety of fields or for graduate work in Spanish and works collaboratively with the College of Education to offer the BS Spanish Teaching degree program for preparing future K-12 Spanish teachers.

BA or BS Choosing a Spanish degree program with an academic or career goal in mind

More than 60% of our BA and BS students are double majors in a variety of disciplinary areas (e.g. Sociology, Law Enforcement, Creative Writing, Biology, Mass Media, etc.) and select the BA if both their selected majors offer a BA so they need to meet the requirements for only one undergraduate degree program plus the requirements for their two majors (e.g., Chemistry, International Relations, English, Communication Disorders, Law Enforcement, Psychology). In instances where the second major does not offer a BA but only a BS degree program (e.g., Accounting, Environmental Science, Biology, Nursing, Social Work, Marketing, Physics etc.), students can select the undergraduate BS Spanish so they can meet the requirements for only one undergraduate degree program along with the requirements for both selected majors.

Explore other undergraduate majors in Spanish: Choosing the BS Spanish for the Professions degree means you are committed to gaining a higher level of language proficiency, developing a broad understanding of Spanish-speaking people and environments in which they live and work through general education, internships, and experiencing culture first-hand through a required study abroad in one or more environments where Spanish is spoken. The collaborative BS Spanish Teaching degree prepares Spanish teachers and involves learning methods of how to teach a world language in the K-12 environment. For additional information, contact a Spanish faculty member to help you decide which major and learning opportunities are best for you! Check out these majors by searching BS Spanish for the Professions or BS Spanish Teaching in the program list of the Undergraduate Catalog.

Coursework in the Spanish undergraduate program encourages you to go further by connecting language and cultural perspectives!

The focus on real-world communication in our courses prepares a student-centered environment with opportunities to exchange ideas and open minds to different ways of interpreting events from a variety of cultural perspectives. In depth study of language and cultures develops a deeper and more comprehensive understanding of other peoples’ worldviews. Coursework fosters respect for other cultures through reading, practice and discussion, and offers opportunities for interaction with cultural products and perspectives from the broad variety of cultures in Puerto Rico and the United States and the twenty countries and numerous cultures where Spanish is an official language. Spanish is spoken by over 400 million speakers in diverse communities in North, Central and South America, the Caribbean, island and continental communities in Europe and Africa.

An experience abroad in a Spanish-speaking community can take you further as you gain expertise in specific cultural environments appropriate to your educational and career goals.

Study abroad is required for the BS Spanish for the Professions and is highly recommended for all Spanish undergraduate degree programs. The department currently has Minnesota State University, Mankato-approved fall, spring and summer study abroad options that meet degree requirements for Spanish in Ecuador, Spain and Costa Rica. By enrolling in a department-sponsored Spanish study abroad program, students will have the opportunity to experience language and culture in action in an environment that is unlike the U.S. and that is uniquely designed for them (all courses meet program degree requirements) and that is suitable for developing first-hand experience that will be invaluable to them in future graduate study or their career of choice. Students who study abroad learn to negotiate meaning in new ways and, in some cases, decide to tie their cultural experience to their double major or minor and long-term academic and career goals by returning to conduct research or an internship in that country or by focusing on their expertise for area studies in their graduate program or career.

A Spanish undergraduate experience in the workplace can take you further by providing a career-focused internship experience while you are still an undergraduate student.

The BS Spanish for the Professions degree requires study abroad and encourages students to seek internship or CoOp placement in a field where they would like to work. Undergraduate Spanish students can also take Spanish internship credits as elective credits toward their Spanish major and can work with an advisor to conduct an internship associated with their Spanish and/or second major, as long as they are also using Spanish in the internship experience.

The Spanish undergraduate program sets you on a new path for higher learning and cultural engagement for your future career!

Students in Spanish undergraduate programs are also encouraged to pursue scholarly activities, such as presenting at conferences like the SUR PLUS ULTRA Undergraduate Language Conference in our region or the Minnesota State University Undergraduate Research Symposium on our campus. This is particularly important for undergraduate Spanish majors who plan to continue on to a Masters degree or doctoral degree program. All Spanish undergraduate majors are encouraged to participate in curricular activities that enhance language proficiency and encourage cultural engagement with native Spanish speakers through study abroad, Spanish Club, Spanish conversation table, Spanish language film events, international poetry recitals or Spanish-language theatrical performances, and by attending lectures and activities associated with broad topics that center on Latino and Spanish-speaking cultural events on campus.

Students with prior Spanish language experience or expertise should contact the Department of World Languages and Cultures for advanced placement testing before enrolling in our first Spanish course on our campus or for credit by exam, if they are seeking credit for prior experience.

Students at the end of their programs will meet the National Standards for Foreign Language Learning.

Communicate in Languages Other Than English
Standard 1.1: Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.
Standard 1.2: Students understand and interpret written and spoken language on a variety of topics.
Standard 1.3: Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.

Gain Knowledge and Understanding of Other Cultures
Standard 2.1: Students demonstrate understanding of the relationship between the practices and perspectives.
Standard 2.2: Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.

Connect with Other Disciplines and Acquire Information
Standard 3.1: Students reinforce and further their knowledge of other disciplines through the foreign language.
Standard 3.2: Students acquire information and recognize the distinctive viewpoints that are available through the foreign language and its cultures.

Develop Insight into the Nature of Language and Culture
Standard 4.1: Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.
Standard 4.2: Students demonstrate understanding of the concept of culture.
through comparisons of the cultures studied and their own.

Participate in Multilingual Communities at Home & Around the World

Standard 5.1:  Students use the language both within and beyond the school setting.

Standard 5.2:  Students show evidence of becoming lifelong learners by using the language for personal enjoyment and enrichment.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

Admission to Major: is granted by the department. Minimum University admission requirements are:
- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (“C”).

Contact the department for application and placement procedures.

GPA Policy: A grade of “C” or better must be earned for major or minor credit.

P/N Grading Policy: Work done for a major or minor must be done for a letter grade above the second-year level. A grade of “P” must be earned for major or minor credit in all work done on a P/N basis.

Proficiency Policies: Students who wish to receive credit by examination may take tests to have their proficiency evaluated. Students may not take a proficiency test for a course in which they are enrolled. Students who have any previous Spanish experience must see a Spanish faculty member for placement advice before enrolling in a Spanish course. Contact the Department for details and see the department website for guidance.

Fulfilling BA Language Requirement: Students who wish to validate the BA language requirement for previous study in French, German, Spanish, Swedish or Norwegian may do so by taking credit by exam. Students do not meet the BA language requirement merely because they have taken two years of high school language.

Residency Requirement: Transfer credits will be applied only if they are the equivalent of work offered by the Department of World Languages & Cultures for the major or minor in that language. In addition, a minimum of work must be taken at Minnesota State Mankato as follows:
- Major: A minimum of three upper-division courses other than SPAN 492 or SPAN 499, for a total of at least 8 credits. At least two of these courses must be at the 400 level. Minor: A minimum of two upper-division courses other than SPAN 492 or SPAN 499, for a total of at least six credits.

Courses not required for a student’s specific baccalaureate degree should be chosen according to the following guidelines:
- BA: Emphasis on literature in upper-division courses; students will most likely pursue their education beyond the baccalaureate level.
- BS: Emphasis on the ability to communicate in the language; presupposes knowledge of culture and civilization; students frequently have career goals in other disciplines for which a language is either required or recommended.
- BS Spanish Education: Emphasis is on meeting the National Standards for Foreign Language Learning and Minnesota Board of Teaching competencies.
- BS Spanish for the Professions: Emphasis is on the development of communicative competency, cultural competency and literacy to work in the 21st century workplace where Spanish is required.

SPANISH BA
Degree completion = 120 credits

Prerequisites to the Major
SPAN 101  Elementary Spanish I (4)
SPAN 102  Elementary Spanish II (4)
SPAN 193  Individual Study Abroad: Elementary Spanish I (1-6)
SPAN 194  Individual Study Abroad: Elementary Spanish II (1-6)

Major Common Core
SPAN 210W Composition & Conversation (4)

Major Restricted Electives
Language/Linguistics (choose 3-6 credits)
SPAN 301  Topics in Language (1-4)
SPAN 394  Supervised Study Abroad: Advanced Spanish II (1-6)
SPAN 401  Topics in Linguistics (1-4)

Conversation (choose 3-6 credits)
SPAN 310  Conversation and Composition (1-4)
SPAN 393  Individual Study Abroad: Advanced Spanish I (1-6)

Reading (choose 3-6 credits)
SPAN 365  Selected Readings (1-4)
SPAN 395  Individual Study Abroad: Readings in Hispanic Lit. (1-6)
Spanish Peninsular Civilization (choose 3-6 credits)
SPAN 355  Spanish Civilization (1-4)
SPAN 497  Ind. Study Abroad: Topics in Spanish Peninsular Culture (1-6)
Spanish American Civilization (choose 3-6 credits)
SPAN 356  Latin American Civilization (1-4)
SPAN 496  Ind. Study Abroad: Topics in Spanish American Culture (1-6)
Spanish Peninsular Literature (choose 3-6 credits)
SPAN 402  Topics in Spanish Peninsular Literature (1-4)
SPAN 495  Ind. Study Abroad: Topics in Spanish Peninsular Lit. (1-6)
SPAN 357  Spanish American Civilization (choose 3-6 credits)
SPAN 403  Topics in Spanish American Literature (1-4)
SPAN 494  Ind. Study Abroad: Topics in Spanish American Lit. (1-6)

Major Unrestricted Electives (choose 1-11 credits)
SPAN 201 through SPAN 499

Other Graduation Requirement
Required for Bachelor of Arts (BA) degree: Language (8 credits) or other proof of proficiency

Required Minor: Yes. Any

SPANISH BS
Degree completion = 120 credits

Prerequisites to the Major
Language (8 credits) or other proof of proficiency
SPAN 101  Elementary Spanish I (4)
SPAN 102  Elementary Spanish II (4)
SPAN 193  Individual Study Abroad: Elementary Spanish I (1-6)
SPAN 194  Individual Study Abroad: Elementary Spanish II (1-6)

Major Common Core
SPAN 210W Composition & Conversation (4)

Major Restricted Electives
Language/Linguistics (choose 3-6 credits)
SPAN 301  Topics in Language (1-4)
SPAN 394  Supervised Study Abroad: Advanced Spanish II (1-6)
SPAN 401  Topics in Linguistics (1-4)

Conversation (choose 3-6 credits)
SPAN 310  Conversation and Composition (1-4)
SPAN 393  Individual Study Abroad: Advanced Spanish I (1-6)

Reading (choose 3-6 credits)
SPAN 365  Selected Readings (1-4)
SPAN 395  Individual Study Abroad: Readings in Hispanic Lit. (1-6)
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Spanish American Civilization (choose 3-6 credits)
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Spanish Peninsular Literature (choose 3-6 credits)
SPAN 402  Topics in Spanish Peninsular Literature (1-4)
SPAN 495  Ind. Study Abroad: Topics in Spanish Peninsular Lit. (1-6)
SPAN 357  Spanish American Civilization (choose 3-6 credits)
SPAN 403  Topics in Spanish American Literature (1-4)
SPAN 494  Ind. Study Abroad: Topics in Spanish American Lit. (1-6)

Major Unrestricted Electives (choose 1-11 credits)
SPAN 201 through SPAN 499

Required Minor: Yes. Any.

SPANISH MINOR (24 credits)

Minor Core

Integrated Productive Skills I
Students must have sufficient language proficiency in Spanish before enrolling in this course. If students demonstrate an intermediate level of proficiency (or equivalent on ACTFL scale) or complete the equivalent of SPAN 201, they have the required productive skills for success in this course. Due to intensive writing in this course, students may want to complete 202 to build stronger productive skills before attempting 210W.
SPAN 210W Composition & Conversation (4)
Integrated Productive Skills II (choose 3-6 credits) Choose one course
SPAN 310 Conversation and Composition (1-4)
SPAN 393 Individual Study Abroad: Advanced Spanish I (1-6)
SPAN 394 Supervised Study Abroad: Advanced Spanish II (1-6)

Restricted Electives (choose 1 Cluster from the following)

Perspectives on Language and Linguistics (choose 3-6 credits)
SPAN 301 Topics in Language (1-4)
SPAN 493 Ind. Study Abroad: Topics in Language and Linguistics (1-6)

Perspectives on Literature (choose 3-6 credits)
SPAN 365 Selected Readings (1-4)

Minor Elective
Unrestricted Electives (On campus, online and overseas) (choose 8-14 credits)
Choose Spanish courses from the approved elective list according to proficiency level and student interest to meet the 24 credit requirement. Student must consult with Spanish faculty since some courses have overseas course equivalents and may not be repeated for credit.

SPAN 201 Intermediate Spanish I (4)
SPAN 202 Intermediate Spanish II (4)
SPAN 256 Individual Study Abroad: Supervised Project (1-6)
SPAN 293 Individual Study Abroad: Intermediate Spanish I (1-6)
SPAN 294 Individual Study Abroad: Intermediate Spanish II (1-6)
SPAN 299 Individual Study (1-4)
SPAN 301 Topics in Language (1-4)
SPAN 310 Conversation and Composition (1-4)
SPAN 355 Spanish Civilization (1-4)
SPAN 356 Latin American Civilization (1-4)
SPAN 365 Selected Readings (1-4)
SPAN 393 Individual Study Abroad: Advanced Spanish I (1-6)
SPAN 394 Supervised Study Abroad: Advanced Spanish II (1-6)
SPAN 395 Ind. Study Abroad: Readings in Hispanic Literature (1-6)
SPAN 396 Experiencing Diverse Cultures (1-3)
SPAN 401 Topics in Linguistics (1-4)
SPAN 402 Topics in Spanish Peninsular Literature (1-4)
SPAN 403 Topics in Spanish American Literature (1-4)
SPAN 407 Topics in Translation (1-4)
SPAN 450 Spanish for the Professions (4)
SPAN 464 Internship: FLES (1-6)
SPAN 492 Independent Study (1-3)
SPAN 493 Ind. Study Abroad: Topics in Language and Linguistics (1-6)
SPAN 494 Ind. Study Abroad: Topics in Spanish American Literature (1-6)
SPAN 495 Ind. Study Abroad: Topics in Spanish Peninsular Literature (1-6)
SPAN 496 Ind. Study Abroad: Topics in Spanish American Culture (1-6)
SPAN 497 Ind. Study Abroad: Topics in Spanish Peninsular Culture (1-6)
SPAN 498 Internship: Spanish for the Professions (1-4)
SPAN 499 Individual Study (1-4)
SPAN 450 Spanish for the Professions (4)

Course Descriptions

SPAN 101 (4) Elementary Spanish I
An introduction to the basic language skills of listening, speaking, reading and writing. Presentation of condensed cultural notes. GE-8

SPAN 102 (4) Elementary Spanish II
An introduction to the basic language skills of listening, speaking, reading and writing. Presentation of condensed cultural notes. Prerequisite: SPAN 101 or equivalent GE-8

SPAN 193 (1-6) Individual Study Abroad: Elementary Spanish I
Introductory work toward proficiency in reading, writing, speaking and listening skills. Content varies. May be repeated for credit. Study for credit must be approved by the department prior to departure.

SPAN 194 (1-6) Individual Study Abroad: Elementary Spanish II
Introductory work toward proficiency in reading, writing, speaking and listening skills. Content varies. May be repeated for credit. Study for credit must be approved by the department prior to departure.

SPAN 201 (4) Intermediate Spanish I
A review of the fundamentals of grammar, practice in written and oral expression, development of listening and reading skills, brief cultural components. Prerequisite: one year university level Spanish or equivalent GE-8

SPAN 202 (4) Intermediate Spanish II
A review of the fundamentals of grammar, practice in written and oral expression, development of listening and reading skills, brief cultural components. Prerequisite: one year university level Spanish or equivalent GE-8

SPAN 210W (4) Composition and Conversation
Includes basic communication exchanges, common vocabulary and experiences. Emphasis is on improving written expression through compositions related to socio-cultural topics of the countries in which Spanish is the primary language. WI, GE-8

SPAN 256 (1-6) Individual Study Abroad: Supervised Project
Topics will vary. May be repeated for credit.

SPAN 293 (1-6) Individual Study Abroad: Intermediate Spanish I
Development of reading, writing, speaking and listening skills at the intermediate level. Content varies. May be repeated for credit. Study for credit must be approved by the department prior to departure. Prerequisite: One year university level Spanish or equivalent

SPAN 294 (1-6) Individual Study Abroad: Intermediate Spanish II
Development of reading, writing, speaking and listening skills at the intermediate level. Content varies. May be repeated for credit. Study for credit must be approved by the department prior to departure. Prerequisite: One year university level Spanish or equivalent

SPAN 299 (1-4) Individual Study
Variable topics.

SPAN 301 (1-4) Topics in Language
Topics will vary and course may be repeated for credit. Language topics include pronunciation and intonation, advanced grammar, Spanish for the marketplace, etc. The focus is on advanced oral or written communication. Prerequisite: Two years of university level Spanish or equivalent

SPAN 310 (1-4) Conversation and Composition
Emphasis on development of oral communication skills and improvement in writing.

SPAN 311W (4) Intensive Reading and Writing for Spanish Speakers
Develop writing and reading skills for academic and professional settings for students with intermediate/high oral language proficiency who would like to develop their critical reading skills and improve their writing for academic and professional purposes. Practice of orthography, stylistics, compositional elements characteristic of writing in Spanish for a variety of cultural settings, etc. and development of communicative competence for a Spanish-speaking audience based on multicultural readings. Variable WI

SPAN 355 (1-4) Spanish Civilization
Major cultural and historical aspects of Spain from ancient times to the present. Prerequisite: Two years university level Spanish or equivalent

SPAN 356 (1-4) Latin American Civilization
Major cultural and historical aspects of Latin America from pre-colonial times to the present. Prerequisite: Two years university level Spanish or equivalent

SPAN 365 (1-4) Selected Readings
Discussion and analysis of major themes and movements based on selected readings from representative authors from the Spanish speaking world. Prerequisite: Two years university level Spanish or equivalent

SPAN 393 (1-6) Individual Study Abroad: Advanced Spanish I
Increase proficiency of reading, writing, speaking and listening skills. Content varies. May be repeated for credit. Study for credit must be approved by the department prior to departure. Prerequisite: Two years university level Spanish or equivalent

SPAN 394 (1-6) Supervised Study Abroad: Advanced Spanish II
Emphasis is on reading, writing, speaking and listening skills. Content varies. May be repeated for credit. Study for credit must be approved by the department prior to departure. Prerequisite: Two years university level Spanish or equivalent

SPAN 395 (1-6) Ind. Study Abroad: Readings in Hispanic Literature
An introduction to reading literature in Spanish. Discussion and analysis of representative works by major authors from the Spanish speaking world.
SPAN 396 (1-3) Experiencing Diverse Cultures
This course will focus on acquisition of cultural, personal & universal dimensions of cultural learning that will lead to recognition and (appropriate) response to conditions of marginalized populations as they experience first-hand diverse cultures. Prerequisite: SPAN 201, SPAN 202 Fall, Spring, Summer

SPAN 401 (1-4) Topics in Linguistics
Topics may vary. Course may be repeated for credit. Discussion and analysis of Spanish linguistics (syntax, sociolinguistics, historical linguistics, translation theory and practice.) Prerequisite: Completion of 4 credits of 300 level or equivalent

SPAN 402 (1-4) Topics in Spanish Peninsular Literature
Topics vary: Spanish literature from Medieval to Modern Times. May be repeated for credit. Prerequisite: Completion of 4 credits of 300 level or equivalent

SPAN 403 (1-4) Topics in Spanish American Literature
Topics vary: major writers from Spanish America; Spanish American novel, Spanish American poetry; Spanish American drama; Spanish American short story; romanticism, the Mexican novel. May be repeated for credit. Prerequisite: Completion of 4 credits of 300 level or equivalent

SPAN 407 (1-4) Topics in Translation
Introduction to the theory and practice of translation. This course is targeted at Spanish students and language professionals interested in developing translation skills, as well as in finding out what is involved in becoming a professional translator.

SPAN 450 (4) Spanish for the Professions
This course is targeted at language professionals including teachers, business professionals, law enforcement professionals. The purpose is to improve overall oral proficiency and address communication issues and vocabulary associated with the students’ field of expertise.

SPAN 464 (1-6) Internship: FLES
Field Experience in the Elementary School setting for students earning licensure in Spanish or Elementary Education Teaching Specialty in Spanish.

SPAN 492 (1-3) Independent Study
Variable topics. Prerequisite: Completion of eight 300-level credits, or equivalent

SPAN 493 (1-6) Ind. Study Abroad: Topics in Language and Linguistics
Topics will vary. May be repeated for credit. Study for credit must be approved by the department prior to departure. Prerequisite: Two years university level Spanish

SPAN 494 (1-6) Ind. Study Abroad: Topics in Spanish American Lit.
Topics will vary. May be repeated for credit. Study for credit must be approved by the department prior to departure. Prerequisite: Two years university level Spanish

SPAN 495 (1-6) Ind. Study Abroad: Topics in Spanish Peninsular Lit.
Topics will vary. May be repeated for credit. Prerequisite: Two years university level Spanish

SPAN 496 (1-6) Ind. Study Abroad: Topics in Spanish American Culture
Topics will vary. May be repeated for credit. Prerequisite: Two years university level Spanish

SPAN 497 (1-6) Ind. Study Abroad: Topics in Spanish Peninsular Culture
Topics will vary. May be repeated for credit.

SPAN 498 (1-4) Internship: Spanish for the Professions
Internship in Spanish is designed to provide opportunities to apply classroom learning to practice and enhance skills, to experience the workplace and professional demands, and to explore a career.

Spanish for the Professions
College of Arts & Humanities
Department of World Languages & Cultures
227 Armstrong Hall • 507.389.2116
Website: www.mnsu.edu/languages
Chair: Adriana Gordillo
Faculty: Kimberly Contag Ph.D.; Alfredo Duplait Ph.D.; Adriana Gordillo Ph.D.; James Grabowska Ph.D.; Gregory Taylor Ph.D; Enrique Torner Ph.D.

The undergraduate Spanish program seeks students who want to go further!

The undergraduate Spanish degree programs serve students who are seeking intermediate and advanced proficiency in the Spanish language and immersion in cultural studies. These students understand the impact that advanced language proficiency and cultural expertise can have on a successful career, whether they continue in the study of Spanish at the postgraduate level or utilize their skill in a vast number of areas such as business, international relations, social work, law, government, education or health care. An ability to speak to many more people in different cultural environments, and write with an eye to cultural and linguistic diversity for a variety of professional settings here and around the world, is one of the most sought after skills in nearly all professional fields. Candidates with high competency can often earn more and can advance more rapidly in their careers.

Choosing BS Spanish for the Professions as your degree program
The BS in Spanish for the Professions degree program prepares students for using Spanish in a variety of professional fields or for graduate work in Spanish where a higher level of language proficiency and cultural knowledge about Spanish-speaking communities is required. The coursework emphasizes the development of communicative competency, cultural competency and literacy (reading skills, translation of documents for the professions, etc.) to work in the 21st century workplace where Spanish is required. General education courses are incorporated from a variety of areas to develop greater familiarity with areas studies associated with Spanish-speaking communities around the world. Specifically, courses focus on ethnic studies, anthropology, philosophy, environmental studies, etc. to develop a strong understanding of Spanish-speaking people and the environments where they work and live (Puerto Rico and the US, islands in the Caribbean, Central and South America, Europe and Africa). Over 400 million people speak Spanish around the world so the core competencies for this degree program centers on demonstration of skills in written and oral communication and competencies in multicultural literacy and cultures. This degree program requires study abroad immersion in a Spanish-speaking country or environment and encourages students to conduct internships that tie their minor and work in Spanish to their academic and career goals.

The Spanish program also offers other undergraduate degree programs (Spanish BA, Spanish BS) and works collaboratively with the College of Education to offer the BS Spanish Teaching degree program for preparing future K-12 Spanish teachers. For additional information on other undergraduate Spanish degree programs, check out Spanish or Spanish Teaching in the Online Undergraduate Catalog where you will find a discussion of the Spanish BA, BS and collaborative BS Spanish Teaching program. Then contact a Spanish faculty member to help you decide which major and learning opportunities are best for you!

Spanish for the Professions degree program
Choosing the BS Spanish for the Professions degree means you are committed to gaining a higher level of language proficiency, developing a broad understanding of Spanish-speaking people and environments in which they live and work through general education, internships, and experiencing culture firsthand through a required study abroad in one or more environments where Spanish is spoken. While many of our BA and BS students are double majors in a variety of disciplinary areas, students in the BS Spanish for the Professions program develop greater breadth of knowledge through recommended general education courses and greater depth in knowledge of cultural and linguistic aspects of using Spanish in diverse environments through required study abroad, additional language study, a strong minor area of study and coursework focused on developing their careers through Spanish for the Professions 450, internships and study abroad coursework.

www.mnsu.edu 2018-2019 Undergraduate Catalog 311
Coursework in the Spanish undergraduate program encourages you to go further by connecting language and cultural perspectives!

The focus on real-world communication in our classes promotes a student-centered environment with opportunities to exchange ideas and open minds to different ways of interpreting events from a variety of cultural perspectives. In depth study of language and cultures develops a deeper and more comprehensive understanding of other peoples’ viewworlds. Coursework fosters respect for other cultures through reading, practice and discussion, and offers opportunities for interaction with cultural products and perspectives from the broad variety of cultures in Puerto Rico and the United States and the twenty countries and numerous cultures where Spanish is an official language. Spanish is spoken in diverse communities in North, Central and South America, the Caribbean, islands and continental communities in Europe and Africa and coursework in the BS Spanish for the Professions helps you develop the competencies and knowledge needed for working in the multifaceted environment where we use Spanish here in the US and abroad.

An experience abroad in a Spanish-speaking community can take you further as you gain expertise in specific cultural environments appropriate to your educational and career goals.

Study abroad is required for the BS Spanish for the Professions and is highly recommended for all Spanish undergraduate degree programs. The department currently has Minnesota State University, Mankato-approved fall, spring and summer study abroad options that meet degree requirements for Spanish in Ecuador, Spain and Costa Rica. By enrolling in a department-sponsored Spanish study abroad program, students will have the opportunity to experience language and culture in action in an environment that is unlike the U.S. and that is both designed for them (all courses meet program degree requirements) and that is suitable for developing firsthand experience that will be invaluable to them in future graduate study or their career of choice. Students who study abroad learn to negotiate meaning in new ways and, in some cases, decide to tie their cultural experience to their long-term academic and professional goals by returning to conduct research or an internship workplace. Meet with a Spanish faculty advisor early to determine which program is best suited to your personal and professional goals!

A Spanish undergraduate experience in the workplace can take the Spanish for the Professions major further by providing a career-focused internship experience while you are still an undergraduate student.

The BS Spanish for the Professions degree requires study abroad and encourages students to seek internship or CoOp placement in a field where they would like to work while still an undergraduate major. Credits earned through the Spanish 498 internship count toward the integrative skills required for the program. This is an opportunity to explore the workplace environment associated with the minor as long as students are also using Spanish in the internship experience. These experiential credits count toward your Spanish for the Professions major! If appropriate, a student in this degree program. Students in this major who have already completed their study abroad experience and most of their academic courses in Spanish might also consider engaging in a unique longer term practical CoOp experience in the professional workplace (SPAN 398 or WVC 398) before they complete their final 8-12 credits of Spanish coursework. Students who are interested in experiential learning opportunities should contact their faculty advisor early to map out the most appropriate path forward through graduation.

Spanish 450: Spanish for the Professions is a career exploration course designed just for you!

In this Major Common Core course we ask you to conduct research on your desired career path with Spanish and to explore the workplace through research, development of a Career Day for World Language majors, development of broader professional integrative skills for the professions (writing letters, exploring translation and interpretation, development of broad professional vocabulary in Spanish for health, business and educational fields, development of presentational skills in Spanish, development of a bilingual CV, for example), and highlights opportunities for attendance at Career fairs for real job exploration.

The Spanish undergraduate program sets you on a new path for higher learning and cultural engagement for your future career!

All students in Spanish undergraduate programs are also encouraged to pursue scholarly activities, such as presenting at conferences like the SUR PLUS ULTRA Undergraduate Language Conference in our region or the Minnesota State University Undergraduate Research Symposium on our campus. This is particularly important for undergraduate Spanish majors who plan to continue on to a Masters degree or doctoral degree program but research can also play an important role in the BS Spanish for the Professions degree program.

All Spanish undergraduate majors are encouraged to participate in co-curricular activities that enhance language proficiency and encourage cultural engagement with native Spanish speakers through study abroad, Spanish Club, Spanish conversations, Spanish language film events, international poetry recitals or Spanish-language theatrical performances, World Language Career Day, and by attending lectures and activities associated with broad topics that center on Latino and Spanish-speaking cultural events on campus.

Students with prior Spanish language experience or expertise should contact the Department of World languages and Cultures for advanced placement testing before enrolling in their first Spanish course on our campus or for credit by exam, if they are seeking credit for prior experience.

Students at the end of their programs will meet the National Standards for Foreign Language Learning.

Communicate in Languages Other Than English

Standard 1.1: Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.

Standard 1.2: Students understand and interpret written and spoken language on a variety of topics.

Standard 1.3: Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.

Gain Knowledge and Understanding of Other Cultures

Standard 2.1: Students demonstrate an understanding of the relationship between the practices and perspectives of the culture studied.

Standard 2.2: Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.

Connect with Other Disciplines and Acquire Information

Standard 3.1: Students reinforce and further their knowledge of other disciplines through the foreign language.

Standard 3.2: Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures.

Develop Insight into the Nature of Language and Culture

Standard 4.1: Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.

Standard 4.2: Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.

Participate in Multilingual Communities at Home & Around the World

Standard 5.1: Students use the language both within and beyond the school setting.

Standard 5.2: Students show evidence of becoming life-long learners by using the language for personal enjoyment and enrichment.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

Admission to Major: Minimum University admission requirements are:

- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 ("C").

Contact the department for application and placement procedures.

GPA Policy: A grade of "C" or better must be earned for major or minor credit.

P/N Grading Policy: Work done for a major or minor must be done for a letter grade above the second-year level. A grade of "P" must be earned for major or minor credit in all work done on a P/N basis.

Proficiency Policies: Students who wish to receive credit by examination may take tests to have their proficiency evaluated. Students may not take a proficiency test for a course in which they are enrolled. Students who have any previous Spanish experience must see a Spanish faculty member for placement advice before enrolling in a Spanish course. Contact the Department for details and see the department website for guidance.

Fulfilling BA Language Requirement: Students who wish to validate the BA language requirement for previous study in French, German, Spanish, Swedish or Norwegian may do so by taking credit by exam. Students do not meet the BA language requirement merely because they have taken two years of high school language.

Residency Requirement: Transfer credits will be applied only if they are the equivalent of work offered by the Department of World Languages & Cultures for the major or minor in that language. In addition, a minimum of work must be taken at Minnesota State Mankato as follows: Major: A minimum of three upper division courses other
than SPAN 492 or SPAN 499, for a total of at least 8 credits. At least two of these
courses must be at the 400 level. Minor: A minimum of two upper division courses
other than SPAN 492 or SPAN 499, for a total of at least six credits.

Courses not required for a student’s specific baccalaureate degree should be
collected according to these general guidelines:
- **BA:**
  Emphasis on literature in upper-division courses; students will most likely pursue their
  education beyond the baccalaureate level.
- **BS:**
  Emphasis on the ability to communicate in the language; presupposes knowledge
  of culture and civilization; students frequently have career goals in other disciplines
  for which a language is either required or recommended.
- **BS Spanish Education:**
  Emphasis is on meeting the National Standards for Foreign Language Learning and
  Minnesota Board of Teaching competencies.
- **BS Spanish for the Professions:**
  Emphasis is on the development of communicative competency, cultural competency
  and literacy to work in the 21st century workplace where Spanish is required.

### SPANISH FOR THE PROFESSIONS BS

Degree completion = 120 credits

Spanish for the Professions is a degree that prepares students to work in a variety of
fields where a high level of Spanish language and cultural competency associated
with the Spanish-speakers of the 21st century are required. The required coursework
emphasizes the development of communicative competency, cultural competency and
literacy (reading, translation, writing, speaking, and listening) to work in the
21st century workplace where Spanish is required. Required general education courses
in a variety of areas (geography, ethnic studies, anthropology, philosophy, environmental
studies, for example) and courses in multilingual communication, history enhance
the student’s understanding of the people, cultures, and environments where Spanish
is used in the workplace (here in the US and in Spain, Mexico, the Caribbean and
Central America and South America). Core competencies include demonstration of
ability of written and oral communication and competencies in literacy and cultures. This
program requires study abroad immersion in a Spanish-speaking country.

**Required General Education**

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<tr>
<td>ANTH 240</td>
<td>Language and Culture (4)</td>
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<td>CMST 203</td>
<td>Intercultural Communication (3)</td>
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<td>CMST 212</td>
<td>Professional Communication and Interviewing (3)</td>
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<td>ENV 101</td>
<td>Perspectives in Environmental Science (4)</td>
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<td>ETHN 150</td>
<td>Multi-Cultural/Ethnic Experience (3)</td>
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<td>ETHN 204W</td>
<td>Perspectives on Latinos/Hispanics (3)</td>
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<tr>
<td>GEOG 103</td>
<td>Introductory Cultural Geography (3)</td>
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Select two (choose 6-8 credits)

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<tr>
<td>BLAW 131</td>
<td>Consumer Law &amp; Ethics (3)</td>
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<td>PHIL 224W</td>
<td>Business Ethics (3)</td>
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<tr>
<td>PHIL 240W</td>
<td>Law, Justice &amp; Society (3)</td>
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<tr>
<td>PHIL 321W</td>
<td>Social &amp; Political Philosophy (3)</td>
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**Prerequisites to the Major**

Spanish language equivalency (choose 4-5 credits)

Students must have the equivalent proficiency level of 102 to enter the major. One
language course 101-202 may be used in General Education. Students whose proficiency
level exceeds the minimum required should complete an elective course
in Spanish or at the appropriate level in another language of their choice.

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<thead>
<tr>
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<th>Title</th>
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<tr>
<td>SPAN 101</td>
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<td>SPAN 102</td>
<td>Elementary Spanish II (4)</td>
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<td>SPAN 192</td>
<td>Individual Study Abroad: Elementary Spanish I (1-6)</td>
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<tr>
<td>SPAN 194</td>
<td>Individual Study Abroad: Elementary Spanish II (1-6)</td>
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<td>SPAN 293</td>
<td>Individual Study Abroad: Intermediate Spanish I (1-6)</td>
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<td>SPAN 294</td>
<td>Individual Study Abroad: Intermediate Spanish II (1-6)</td>
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**Major Common Core**

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<tr>
<td>ENG 272W</td>
<td>Business Communication (4)</td>
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<tr>
<td>SPAN 210W</td>
<td>Composition &amp; Conversation (4)</td>
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<td>SPAN 450</td>
<td>Spanish for the Professions (4)</td>
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**Major Restricted Electives**

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<tr>
<td>SPAN 393</td>
<td>Individual Study Abroad: Advanced Spanish I (1-6)</td>
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<td>SPAN 394</td>
<td>Supervised Study Abroad: Advanced Spanish II (1-6)</td>
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<td>SPAN 396</td>
<td>Experiencing Diverse Cultures (1-3)</td>
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<td>SPAN 407</td>
<td>Topics in Translation (1-4)</td>
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<td>SPAN 498</td>
<td>Internship: Spanish for the Professions (1-4)</td>
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**Cultural Competency** (choose 7-8 credits)

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<tr>
<td>HIST 442</td>
<td>History of Latin America (4)</td>
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<tr>
<td>SPAN 335</td>
<td>Spanish Civilization (1-4)</td>
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<tr>
<td>SPAN 356</td>
<td>Latin American Civilization (1-4)</td>
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<tr>
<td>SPAN 496</td>
<td>Ind. Study Abroad: Topics in Spanish American Culture (1-6)</td>
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<td>SPAN 497</td>
<td>Ind. Study Abroad: Topics in Spanish Peninsular Culture (1-6)</td>
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**Literacy Competency** (choose 8 credits)

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<td>SPAN 365</td>
<td>Selected Readings (1-4)</td>
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<tr>
<td>SPAN 395</td>
<td>Individual Study Abroad: Readings in Hispanic Literature (1-6)</td>
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<td>SPAN 402</td>
<td>Topics in Spanish Peninsular Literature (1-4)</td>
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<td>SPAN 403</td>
<td>Topics in Spanish American Literature (1-4)</td>
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**Major Unrestricted Electives**

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<td>SPAN 493</td>
<td>Individual Study Abroad: Advanced Study in Hispanic Literature (1-6)</td>
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<td>SPAN 394</td>
<td>Supervised Study Abroad: Advanced Study in Spanish American Literature (1-6)</td>
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<td>SPAN 497</td>
<td>Ind. Study Abroad: Topics in Spanish American Literature (1-6)</td>
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<tr>
<td>SPAN 498</td>
<td>Ind. Study Abroad: Topics in Spanish American Literature (1-6)</td>
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**Choose electives in consultation with an advisor.**

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<th>Course</th>
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<td>SPAN 256</td>
<td>Individual Study Abroad: Supervised Project (1-6)</td>
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<td>SPAN 301</td>
<td>Topics in Language (1-4)</td>
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<td>SPAN 310</td>
<td>Conversation and Composition (1-4)</td>
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<td>SPAN 365</td>
<td>Selected Readings (1-4)</td>
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<td>SPAN 401</td>
<td>Topics in Linguistics (1-4)</td>
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<tr>
<td>SPAN 402</td>
<td>Topics in Spanish Peninsular Literature (1-4)</td>
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<tr>
<td>SPAN 403</td>
<td>Topics in Spanish American Literature (1-4)</td>
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<tr>
<td>SPAN 464</td>
<td>Internship: FLES (1-6)</td>
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<tr>
<td>SPAN 492</td>
<td>Independent Study (1-3)</td>
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<tr>
<td>SPAN 493</td>
<td>Ind. Study Abroad: Topics in Language and Linguistics (1-6)</td>
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<tr>
<td>SPAN 494</td>
<td>Ind. Study Abroad: Topics in Spanish American Literature (1-6)</td>
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</tr>
</tbody>
</table>

**Required Minor. Yes. Any**

Recommended minors for Spanish for the Professions vary in credit length. The following minors fit within the 120 credit limit as they are 20 credits or less and
pair well with this major: Corrections, Environmental Studies, Financial Planning,
Human Resource Management, Marketing, Political Science, Social Welfare and
Technical Communication. Other minors that exceed 20 credits that would also
be an appropriate pair for this major are: Business Administration, Community
Health, French, German, International Relations, Nonprofit Leadership, Psychology,

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**Course Descriptions See Spanish**

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[www.mnsu.edu](http://www.mnsu.edu) 2018-2019 Undergraduate Catalog 313
The undergraduate Spanish program seeks students who want to go further! The undergraduate Spanish degree programs serve students who are seeking high proficiency in the Spanish language and cultural studies. These students understand the impact that advanced language proficiency and cultural expertise can have on a successful career, whether they continue in the study of Spanish at the postgraduate level or utilize their skill in a vast number of areas such as business, international relations, social work, law, government, education or health care. An ability to speak to many more people in different cultural environments, and write with an eye to cultural and linguistic diversity for a variety of professional settings here and around the world, is one of the most sought after skills in nearly all professional fields. Candidates with high competency can often earn more and can advance more rapidly in their careers.

Seek a career in the World Languages and Cultures K-12 classroom by completing the BS Spanish Teaching degree program

The BS Spanish Teaching degree program prepares future Spanish teachers for careers as World Language Teachers in the K-12 environment. Students in this degree program take similar courses to the Spanish BA or Spanish BS but are also required to complete world language and cultures methods courses on how to teach a world languages and cultures for the K-12 environment and the required courses in Secondary and K-12 Professional Education from the College of Education. This is a collaborative degree program in the College of Arts and Humanities and in the College of Education. See also Secondary S-12 and K-12 and Professional Education sections of the Undergraduate Catalog for information about accreditation, teacher licensure, field experiences, admission to the major, and for professional education requirements for the BS Spanish Teaching degree program.

Graduates from this program will become teachers and need to be able to teach in the Spanish language. Study abroad experience is essential both for development of language and cultural competency. Spanish teachers want to incorporate a significant experience so their own future students can learn from their lived experience in a Spanish-speaking community. Today’s Spanish teachers also work with heritage speakers as well as second and third language speakers. Students in this program benefit from extended experiences in a Spanish-speaking environment early in their academic coursework to be able to focus the last two years of their degree program on required courses in Education and their practical experiences/student teaching in the K-12 classroom environment.

If BS Teaching is not for you, explore non-teaching undergraduate degree programs in Spanish

The Spanish program offers the Spanish BA, Spanish BS, and the BS Spanish for the Professions degree programs to prepare students for using Spanish in careers in fields such as Biology, Nursing, Social Work, Marketing, Physics etc., and that is suitable for developing firsthand experience that will be invaluable to them in future graduate study or their career of choice. Students who study abroad learn to negotiate meaning in new ways and, in some cases, decide to tie their cultural experience to their double major or minor and long-term academic and career goals by returning to conduct research or an internship in that country or by focusing on their expertise for area studies in their graduate program or career.

A Spanish undergraduate experience in the workplace can take you further by providing a career-focused internship experience while you are still an undergraduate student.

The BS Spanish Teaching degree requires practical experience in the WLC 461 and WLC 463 methods courses so students will get the opportunity to work side by side with a practicing teacher before they head into the student teaching experience. BS Spanish Teaching students can also take Spanish internship credits (for practical experiences in the Elementary School, for example) or as elective credits toward their Spanish major, if other proficiency areas and requirements are being met. Students in this program will work with an advisor in Spanish and another in K-12 Education in the College of Education to ensure both areas of the majors are on track for completion.

The Spanish undergraduate program sets you on a new path for higher learning and cultural engagement for your future career.

Students in Spanish undergraduate programs are also encouraged to pursue scholarly activities, such as presenting at conferences like the SUR PLUS ULTRA Undergraduate Language Conference in our region or the Minnesota State University Undergraduate Research Symposium on our campus. This is particularly important for undergraduate Spanish majors who plan to continue on to a Masters degree or doctoral degree program. All Spanish undergraduate majors are encouraged to participate in curricular activities that enhance language proficiency and encourage cultural engagement with native Spanish speakers through study abroad, Spanish Club, Spanish conversation table, Spanish language film events, international poetry recitals or Spanish-language theatrical performances, and by attending lectures and activities associated with broad topics that center on Latinx and Spanish-speaking cultural events on campus.

Students with prior Spanish language experience or expertise should contact the Department of World Languages and Cultures for advanced placement testing before enrolling in their first Spanish course on our campus or for credit by exam, if they are seeking credit for prior experience.

Students at the end of their programs will meet the National Standards for Foreign Language Learning.

Communicate in Languages Other Than English

**Standard 1.1:** Students engage in conversations, provide and obtain information express feelings and emotions, and exchange opinions.

**Standard 1.2:** Students understand and interpret written and spoken language
Emphasis is on the development of communicative competency, cultural competency and literacy to work in the 21st century workplace where Spanish is required.

Gain Knowledge and Understanding of Other Cultures
Standard 2.1: Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.
Standard 2.2: Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.

Connect with Other Disciplines and Acquire Information
Standard 3.1: Students reinforce and further their knowledge of other disciplines through the foreign language.
Standard 3.2: Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures.

Develop Insight into the Nature of Language and Culture
Standard 4.1: Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.
Standard 4.2: Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.

Participate in Multilingual Communities at Home & Around the World
Standard 5.1: Students use the language both within and beyond the school setting.
Standard 5.2: Students show evidence of becoming life-long learners by using the language for personal enjoyment and enrichment.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
Admission to Major is granted by the department. Minimum University admission requirements are:
- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (“C”).
Contact the department for application and placement procedures.

GPA Policy. A grade of “C” or better must be earned for major or minor credit.

P/N Grading Policy. Work done for a major or minor must be done for a letter grade above the second-year level. A grade of “P” must be earned for major or minor credit in all work done on a P/N basis.

Proficiency Policies. Students who wish to receive credit by examination may take proficiency tests to have their proficiency evaluated. Students may not take a proficiency test for a course in which they are enrolled. Students who have any previous Spanish experience must see a Spanish faculty member for placement advice before enrolling in a Spanish course. Contact the Department for details and see the department website for guidance.

Fulfilling BA Language Requirement. Students who wish to validate the BA language requirement for previous study in French, German, Spanish, Swedish or Norwegian may do so by taking credit by exam. Students do not meet the BA language requirement merely because they have taken two years of high school language.

Residency Requirement. Transfer credits will be applied only if they are the equivalent of work offered by the Department of World Languages & Cultures for the major or minor in that language. In addition, a minimum of work must be taken at Minnesota State Mankato as follows. Major: A minimum of three upper division courses other than SPAN 492 or SPAN 499, for a total of at least 8 credits. At least two of these courses must be at the 400 level. Minor: A minimum of two upper division courses other than SPAN 492 or SPAN 499, for a total of at least six credits.

Courses not required for a student’s specific baccalaureate degree should be chosen according to these general guidelines:
- BA: Emphasis on literature in upper-division courses; students will most likely pursue their education beyond the baccalaureate level.
- BS: Emphasis on the ability to communicate in the language; presupposes knowledge of culture and civilization; students frequently have career goals in other disciplines for which a language is either required or recommended.
- BS Spanish Education: Emphasis is on the development of communicative competency, cultural competency and literacy to work in the 21st century workplace where Spanish is required.

Required for the Major. Students must demonstrate “Intermediate-high level speaking proficiency” as defined in the ACTFL Proficiency Guidelines established by the American Council on the Teaching of Foreign Languages or equivalent.

Required for the Major. First-hand experiences with the target cultures.

Other Graduation Requirements
See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

Required Minor: None.

COURSE DESCRIPTIONS SEE SPANISH
Special Education: Academic and Behavioral Strategist

College of Education
Department of Special Education
316 Armstrong Hall • 507-389-1122
Website: ed.mnsu.edu/sped/undergrad_programs/

Chair: Alexandra Panahon Ph.D.
Undergraduate Major Coordinator: Kiersten Hensley Ph.D.

Academics. Council for the Accreditation of Educator Preparation (CAEP).
The Department of Special Education serves the needs of undergraduate and graduate students at Minnesota State Mankato seeking to become licensed Special Educators in the state of Minnesota. The Special Education undergraduate program is designed to meet the licensure standards as determined by the Minnesota Board of Teaching. The program employs a cohort model for the preparation of undergraduates, with all students from a given year considered members of the same cohort. Cohort students concurrently enroll in the same block of courses. Applications for the program are submitted during the fall semester, with cohorts beginning in the spring. Students are encouraged to apply when they are close to or have completed all general education requirements. All interested students are highly encouraged to contact the Program Coordinator for program information and guidance for admission procedures.

POLICIES/INFORMATION
Incoming and Transfer Student Orientation. Orientation makes a significant difference in a student’s success and persistence in college. All new and transfer students are required to attend an orientation program before registering for classes. The College of Education Student Relations Coordinator conducts the Academic Success session. This session includes explanation of general education and general education coursework required for program, cultural diversity requirements, academic performance, and assignment of program advisors. Students are accompanied to a registration lab to complete their upcoming term schedule.

Transfer Credit Evaluation. Evaluation of prior academic course work will be based on evidence presented through (a) transcripts, (b) course syllabi, (c) course description. Students have a right to appeal this decision.

Required General Education Course and Credits
CDIS 205 Beginning Sign Language (3 cr) OR HLTH 210 First Aid and CPR
(Goal Area 11: Human Performance)
HLTH 240 Drug Education (3 cr)
(Goal Area 5: History and the Social & Behavioral Sciences)
MATH 201 Elements of Mathematics I (3 cr)
(Goal Area 4: Math & Logical Reasoning)

Admission to the Special Education Program
Undergraduate Major Coordinator: Kiersten Hensley
In order to apply for the Special Education Academic and Behavioral Strategist (ABS) program: Apply online at http://ed.mnsu.edu/sped/

Admission to Professional Education
Coordinator of Admission to Professional Education: Myrnique Baxter, 117 Armstrong Hall

Mankato Program
Students working toward a teaching degree must be admitted to Professional Education during their first semester in the program to allow continued registration.
1. Minimum of 40 earned semester credits
2. Minimum of 2.75 cumulative GPA
3. Evidence of registration for the MTLE Basic Skills Exams
4. Completion of MATH 201, HLTH 240, and CDIS 205 or HLTH 210

Program Continuation. The Special Education Department will monitor block entrance and continuance in program. Students must maintain a 3.0 cumulative GPA in Program coursework.

Admission to Student Teaching. Student teaching at Minnesota State University, Mankato is a performance-based, 16-week program, requiring the demonstration of an acceptable level of performance in the areas of planning and preparation, classroom management, instruction, and professionalism. Multiple methods of assessment are used and evidence is collected to assess the student teacher’s skills and dispositions. These methods include direct observations of teaching activities by cooperating teachers and university faculty, the use of videotaped lessons and activities for self-assessment, participation in online activities, and participation in activities reflective of the professional responsibilities of teachers (e.g., parent conferences). The Office of Field and International Experience (OFIE) requests placements for all student teachers in partner districts. Application materials are available in 119 Armstrong Hall. Admission to the student teaching experience is contingent upon completion of:
1. General Ed and Diverse Cultures program requirements.
2. a grade point average of 3.0, grades of “C” or better for all major coursework
3. admittance to Professional Education
4. all methods and professional education course work
5. formal application materials one year prior to student teaching semester (obtain specific dates from 119 Armstrong Hall)
6. attendance at all preliminary student teaching meeting(s)
7. submission of scores on the Basic Skills Exam(s)
8. recommendation of advisor
9. approval of placement by school district administration and cooperating teacher, OFIE, and completion of Minnesota State University, Mankato and district-approved background checks.

Teacher Licensure Coordinator: Marisol Riquelme, 118 Armstrong Hall
The University recommends licensure upon satisfactory completion of a licensure program. Licensure does not occur automatically through graduation and the awarding of a diploma. Students need to apply for a Minnesota teaching license at the close of the term in which they graduate. The College of Education, 118 Armstrong Hall, coordinates the licensure process. In addition to meeting all program requirements, the Basic Skills exam(s) (e.g., ACT Plus Writing, MTLE, NES, SAT, GRE) need to be successfully completed along with the Pedagogy and Content examinations. Minnesota State Law requires that all individuals applying for initial licensure in this state be fingerprinted for national background checks. A conduct review statement will need to be completed and signed. There is a fee for the criminal background check and a fee for the issuance of a State of Minnesota teaching license.

Application for Graduation. No special departmental activities are required of students in this major for graduation. Students must follow the university procedure for application for graduation. See front section of this catalog for the steps in this process and the corresponding timelines

Clinical Experiences. A major component of professional education coursework involves clinical experiences in schools. Multiple methods of assessment are used to document competencies. The successful completion of each clinical experience is necessary for progression in the program. All clinical placements are arranged by the Office of Field and International Experience.

Background Checks. Students involved in any clinical experience undergo a background check once per academic year to assess misdemeanor and felony conviction records maintained at the Minnesota Bureau of Criminal Apprehension. This information is provided to districts for their determination of suitability. The Office of Field and International Experience coordinates the background check process.

GPA Policy. All non-clinical courses that make up the program must be taken on a graded basis. Students must maintain a cumulative GPA of 3.0 and earn at least a “C” in all major coursework for program continuance.

SPECIAL EDUCATION: ACADEMIC AND BEHAVIORAL STRATEGIST BS
Degree completion = 120 credits

This program will prepare individuals to work as special education teachers for students with mild/moderate disabilities and will prepare them for licensure as a Special Education: Academic and Behavioral Strategist teacher.

There are five structured and sequenced semesters in the Special Education ABS major program leading to the Bachelor of Science Degree. Each semester is made up of required courses that meet one or more Minnesota Board of Teaching require-
ments for (A) Standards of Effective Practice, (B) Core Teaching Skills for Special Educators, (C) and specific content requirements. The first semester courses are taken prior to admission to Professional Education. Continued enrollment in semesters 2 through 5 is contingent upon the academic status of the student.

Prerequisites to the Major
- HTH 240 Drug Education (3)
- MATH 201 Elements of Mathematics I (3)
- Choose one of the following (choose 3 credits)
  - CDIS 205 Beginning Sign Language (3)
  - HTH 210 First Aid & CPR (3)

Major Common Core
- SPED 333 Transition Plan/Secondary Methods for Students w/Mild Moderate Disabilities (4)
- SPED 401 IEP Writing and Professional Practice (4)
- SPED 404 Instructional Decision Making (4)
- SPED 406 Strategies for Teaching Learners with Special Needs: Reading & Writing (4)
- SPED 407 Positive Behavioral Interventions and Supports (3)
- SPED 408 Individuals with Diverse and Exceptional Needs (4)
- SPED 409 Learning and Human Development for Diverse Learners (4)
- SPED 410 Assessment, Evaluation, and Individualized Planning for Diverse Learners (4)
- SPED 411 Effective Strategies for the Inclusive Classroom (4)
- SPED 412 Due Process, Planning & Design of the Individual Education Program (4)
- SPED 413 Professional Growth and Development for Teachers of Diverse Learners (4)
- SPED 414 Literary Methods for an Inclusive Classroom: Diverse Learners (4)
- SPED 422 Strategies for Teaching Learners with Special Needs: Math and Science (4)
- SPED 448 Behavior Management and Learning Environments for Diverse Learners (4)
- SPED 458 Seminar: Student Teaching (4)
- SPED 459 Student Teaching: Developmental Disabilities (8)

COURSE DESCRIPTIONS

SPED 108 (3) Human Services and Disabilities
Exploration of human service professions serving and interacting with individuals with disabilities.
Fall, Spring, Summer
Diverse Cultures - Purple
GE-7, GE-9

SPED 333 (4) Transition Plan/Secondary Methods for Students w/Mild Moderate Disabilities
This course is designed to teach secondary assessment, instructional and transition planning methods needed by students in the undergraduate program of study in Special Education – Academic and Behavioral Strategist. The course focuses on strategies that promote choice and quality of life for young adults with mild to moderate disabilities.
Spring

SPED 401 (4) IEP Writing and Professional Practice
This course will introduce teacher candidates to different aspects of being a Special Educator, including writing Individualized Education Program plans, working collaboratively, addressing strategies for working with paraprofessionals, and developing an understanding of collaboration including co-teaching, and using technology in the classroom to assist student learning.
Spring

SPED 404 (4) Instructional Decision Making
This course provides the student learner with the knowledge and skills necessary to make effective data-based decisions within the instructional context. Students will gain training in and knowledge of instructional decision making at the individual and systems level.
Spring

SPED 405 (3) Individuals with Exceptional Needs
This course provides a rigorous overview to the education of children and youth who differ greatly from the average in physical, cognitive, emotional or social characteristics. It introduces the student to Minnesota’s Graduation Standards Rule in relation to the needs of children and youth who receive special education services.
Spring

SPED 406 (4) Strategies for Teaching Learners with Special Needs: Reading and Writing
This course teaches how to select and apply specific evidence-based reading and writing strategies for students with mild/moderate disabilities. Students will learn basic instructional principles behind validated instructional models and how to use these models in different instructional settings.
Fall

SPED 407 (3) Positive Behavioral Interventions and Supports
This course is designed to teach the principles of Positive Behavior Supports and Intervention planning. Students will learn how PBS can be applied at the school, classroom, and individual levels. Students will apply learned information to identify successful interventions.
Spring

SPED 408 (4) Individuals with Diverse and Exceptional Needs
Designed to provide an introduction and overview of the characteristics and educational needs of children and youth with diverse and exceptional needs in the public school. The course introduces Minnesota Graduation Standards Rules in relationship to the needs of students with diverse and exceptional needs.

SPED 409 (4) Learning and Human Development for Diverse Learners
Introduces students to theories of learning and human development as they relate to regular and diverse learning populations. Students will acquire an understanding of the many factors that affect learning and human development and strategies that can be used to enhance learning for all learning populations.
Spring

SPED 410 (4) Assessment, Evaluation, and Individualized Planning for Diverse Learners
Provides the student learner with the knowledge and skills to assess the individual needs of the student learner and to design an educational program based on the assessment information collected. Emphasis will be placed on providing the student learner with the opportunity to learn and administer a variety of norm-referenced and criterion-referenced test instruments and apply test results to developing individual education programs for a variety of learners with diverse educational needs.

SPED 411 (4) Effective Strategies for the Inclusive Classroom
Describes and demonstrates strategies that teachers can use to differentiate the curriculum to meet the needs of special learners in an inclusive classroom. Course will also examine the latest knowledge related to intelligence, creativity, holistic education and classroom differentiation.

SPED 412 (4) Due Process, Planning & Design of the Individual Education Program
This course provides individuals with the knowledge and skills to plan, develop, and implement the IEP for students with mild/moderate disabilities. In addition, students will develop an understanding of the alternative dispute processes in the state of Minnesota and learn the legal requirements of the IEP process and parental participation including a) how to operate the IEP process, b) conciliation process, c) participation in mediation, and d) due process as outlined in IDEA 2004. Legal issues and requirements will be discussed.

SPED 413 (4) Professional Growth and Development for Teachers of Diverse Learners
Introduces students to methods and strategies for personal and professional growth and development. As a result of taking this course, students will be able to a) engage in reflective inquiry for personal and professional growth, b) identify and demonstrate dispositions necessary for teaching special needs learners, c) understand the cultural, social, and other environmental effects on learning and human development, and d) use strategies for personal and professional growth.

SPED 414 (4) Literary Methods for an Inclusive Classroom: Diverse Learners
Provides an introduction to reading and language arts instruction for special needs individuals with diverse and exceptional needs in the public school. The course introduces Minnesota Graduation Standards Rules in relationship to the needs of students with diverse and exceptional needs.

SPED 422 (4) Strategies for Teaching Learners with Special Needs: Math and Science
This course provides instruction in the connections between critical content concepts, standards, research-based practices in mathematics and science, and students with mild-moderate disabilities for the purpose of developing goals and objectives in order to implement effective instruction.
Fall

SPED 448W (4) Behavior Management and Learning Environments for Diverse Learners
This course is designed to teach pre-service special education teachers the basics of Applied Behavior Analysis as well as classroom management skills that foster positive interactions among students in pre-K through 12th grade. Students will learn to conduct behavioral assessments and report results through professional writing.
Fall

SPED 458 (4) Seminar: Student Teaching
Focuses on competencies, strategies, issues and trends to prepare the student to teach persons with mild/moderate disabilities.
Corequisite: SPED 459
SPED 459 (8) Student Teaching: Mild and Moderate Disabilities
Focuses on documenting the university student’s ability to apply the knowledge and skills learned in coursework and teach youth with mild/moderate disabilities in the public school. The university student will assess students with mild/moderate disabilities, develop individual goals and objectives, design instructional units and lesson plans, implement instruction in the IRE, and evaluate the effectiveness of instructional interventions.
Corequisite: SPED 458

SPORT MANAGEMENT BS

Sport Management
College of Allied Health and Nursing
Department of Human Performance
1400 Highland Center • 507-389-6313
Website: ahn.mnsu.edu/hp/sm/

Chair: Lynnette Engeswick
Program Coordinator: Vicki Schull
Faculty: Suzannah Armentrout, Jon Lim, Vicki Schull

Mission Statement of the Sport Management Program: The sport management program at Minnesota State Mankato is committed to excellence in teaching, research and service in and for the sport industry.

Program Purpose. The Sport Management program is designed to provide professional preparation that develops competitive sport management leaders through a comprehensive education in both theory and its application in sports business. The Sport Management major offers students a broad base educational foundation to prepare them for a career in sport management through a comprehensive education in both theory and its application in sports business. The major prepares students with sport business concepts and develops skills and knowledge in the following areas: management, marketing, promotions, communication, legal preparation, public relations, consumer behavior, facilities, and finance.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

Policies/Information
Admission to Major. All sport management majors and potential sport management majors who plan on applying to the sport management program need to have sport management as their declared major.

Criteria Considered for Admission to the Sport Management Program
1. Completion of at least 30 semester credits.
2. Minimum career grade point average (GPA) of a 2.7 on a 4.0 scale.
3. Minimum grade of a “C-” in all required prerequisite and support courses.

Please note: Meeting these minimum requirements does not guarantee admission to the major.

The following courses must be completed before applying:
ENG 101 English Composition (4)
PSYC 101 Introduction to Psychological Science (4)
ECON 201 Principles of Macroeconomics (3) OR
ECON 202 Principles of Microeconomics (3)
CMST 100 Fundamentals of Communication (3) OR
CMST 102 Public Speaking (3)
SOC 101 Introduction to Sociology (3)
MATH 112 College Algebra (4)

From all eligible applicants, students will be admitted on the basis of their rank order on the criterion of cumulative GPA and their GPA in the six courses listed above. If all six courses are not complete when a student applies, their application will not be considered. In the past two admission periods, the pre-sport management GPA of admitted students varied between 2.95 and 4.0.

SPED 490 (1-3) Workshop in Special Education
Authentic applications of special education knowledge.

SPED 491 (1-2) In-Service: Special Education
Teaching students with disabilities.

SPED 499 (1-3) Individual Study
Advanced independent study in a specified area.
SPORT MEDICINE MINOR

Sport Medicine Minor

College of Allied Health & Nursing

Department of Human Performance
1400 Highland Center • 507-389-6313
Website: http://ahn.mnsu.edu/hp/undergraduate/sportsmedminor.html
Advisor Patrick Sexton EdD, ATR, ATC
Advisor Theresa Mackey EdD, ATR, ATC
Faculty: Theresa Mackey, Patrick Sexton

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

COURSE DESCRIPTIONS
LOCATED UNDER HUMAN PERFORMANCE (HP) COURSE DESCRIPTIONS

STATISTICS BS AND MINOR

Statistics

College of Science, Engineering, & Technology
Department of Mathematics & Statistics
273 Wissink Hall • 507-389-1453
Website: www.cset.mnsu.edu/dept/mathstat/

Chair: Ruijun Zhao, PhD
Faculty: Hyekyung Min, PhD; Galkande Premaratna, PhD; Mezbahur Rahman, PhD; Han Wu, PhD

Statistics is the mathematical science of studying and learning from data. Statisticians acquire, organize, analyze, present and draw inferences from data. Inferences about a population are communicated with measures of likelihood. Statistical analysis is used in a variety of disciplines to communicate uncertainties for the purpose of making informed decisions. Applications of statistics are all around us such as in weather forecasting, surveys, quality control, market demand, causality, and effectiveness of treatments, to name only a few.

The Department offers a major and minor in statistics. The major provides a sufficient background in statistics, mathematics, and computer science to enable students to pursue a career in business, industry, or actuarial science as well as to pursue advanced study in statistics. The major is organized into 4 tracks to allow an emphasis in actuarial science, applied mathematics, computer science, or biological science. A well-prepared student can expect to complete the major in four years. The minor gives students a basic core of statistics that would complement majors in many areas by providing a thorough grounding in basic statistical principles, methods of data analysis, and a knowledge base to assist in understanding statistical procedures applied to a variety of disciplines.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

A student must be admitted to a major to be permitted to take 300- and 400-level courses. Admission is granted by the department. In addition to university admission requirements of: a minimum of 32 earned semester credit hours and a minimum cumulative GPA of 2.00, students must complete T10 credits in mathematics and statistics counting towards the Major with a 2.5 GPA or higher. Contact the College of Science, Engineering and Technology Student Relations Office for application procedures.

GPA Policy. Statistics majors and minors must earn a grade of "C" (2.0) or better in all courses applied to the major or minor.

Course Application Policy. Within each major or minor, no course may be applied to more than one requirement.

P/N Grading Policy. All 300- and 400-level courses are offered for grade only with the exception of STAT 498 and STAT 499 which are available for both P/N and letter grade.

Credit by Examination. Credit by examination will not be approved for courses in which a student has already received a grade.

Credit Limitation. A student may not receive credit for STAT 354 or MATH 354 after completing MATH 455 or STAT 455.

Students seeking enrollment in MATH 112 College Algebra, MATH 113 Trigonometry, MATH 115 Precalculus, MATH 121 Calculus I, MATH 130 Finite Mathematics and Introductory Calculus, MATH 201Elements of Mathematics I, or STAT 154 Elementary Statistics must demonstrate readiness to succeed by satisfying the placement table below.
<table>
<thead>
<tr>
<th>Course</th>
<th>Minimum ACT/SAT Math Subscore</th>
<th>Minimum Accuplacer Intermediate Algebra Score</th>
<th>Minimum Accuplacer College Level Math Score</th>
<th>Minimum Accuplacer Calculus Readiness Score</th>
<th>Course Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math 112</td>
<td>OR Old SAT 520, New SAT* 550, 2-digit SAT 27.5** MCA 1158</td>
<td>OR 60</td>
<td>N/A</td>
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<td>OR Grade of P in MATH 098</td>
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<tr>
<td>Math 113</td>
<td>OR Old SAT 520, New SAT* 550, 2-digit SAT 27.5**</td>
<td>OR 60 AND 84</td>
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<td>OR Math 112 with &quot;C&quot; or better</td>
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<tr>
<td>Math 115</td>
<td>OR Old SAT 520, New SAT* 550, 2-digit SAT 27.5**</td>
<td>OR 60 AND 96</td>
<td>N/A</td>
<td>OR Grade of P in MATH 098</td>
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</tr>
<tr>
<td>Math 121</td>
<td>OR Old SAT 550 New SAT* 580, 2-digit SAT 28**</td>
<td>OR 60 AND 84 AND 21</td>
<td>OR MATH 115, or both MATH 112 and MATH 115, with a &quot;C&quot; (2.0) or better</td>
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</tr>
<tr>
<td>Math 130</td>
<td>OR Old SAT 550 New SAT* 580, 2-digit SAT 28**</td>
<td>OR 60 AND 84</td>
<td>N/A</td>
<td>OR MATH 112 or MATH 115 with a &quot;C&quot; (2.0) or better</td>
<td></td>
</tr>
<tr>
<td>Math 181</td>
<td>OR Old SAT 550 New SAT* 580, 2-digit SAT 28**</td>
<td>OR 60 AND 84</td>
<td>N/A</td>
<td>OR MATH 112 or MATH 115 with a &quot;C&quot; (2.0) or better</td>
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<tr>
<td>Math 201</td>
<td>OR Old SAT 520, New SAT* 550, 2-digit SAT 27.5** MCA 1148</td>
<td>OR 60</td>
<td>N/A</td>
<td>N/A</td>
<td>OR Grade of P in MATH 098 or &quot;C&quot; (2.0) or better in MATH 112, MATH 115, or MATH 121</td>
</tr>
<tr>
<td>Stat 154</td>
<td>OR Old SAT 560 New SAT* 600, 2-digit SAT 29**</td>
<td>OR 60</td>
<td>N/A</td>
<td>N/A</td>
<td>OR Grade of P in MATH 098 or &quot;C&quot; (2.0) or better in MATH 112, MATH 115, or MATH 121</td>
</tr>
</tbody>
</table>

*New SAT is June 2016 or later
**Two digit SAT score is also called the SAT Math Composite Score
ACT, SAT, and MCA scores are valid for 5 years

**Procedures:** Students may substitute for the above requirements based on documentation of:
1. equivalent or higher scores on standardized college admissions tests that report a separate mathematics sub-score within two calendar years;
2. successful completion of equivalent prior post-secondary education, such as course transfer evaluations or Cambridge International Examinations; or
3. enrollment exclusively in non-credit courses or programs.

Students requesting such substitutions should submit the documentation to the Chair of the Department of Mathematics and Statistics for evaluation. The evaluation will be based on nationally accepted concordances between the testing instruments and/or courses. The Chair of the Department of Mathematics and Statistics or designee should respond in writing to student requests within three weeks of receiving them.

**Procedure for Waiver:**
1. Students not meeting the requirements for enrollment in Math 112, Math 201 or Stat 154 may request a waiver to this policy.
2. Written requests for waivers to the policy must be submitted to the Chair of the Department of Mathematics and Statistics, and should include evidence of alternate means of demonstrating readiness for college algebra including but not limited to:
   a. High school or recent post-secondary coursework which would indicate adequate preparation (transcripts or other records which include course titles, levels and grades are acceptable), or
   b. Verification of extenuating circumstances which may have affected performance on previous exams.

3. Requests for waivers should be submitted by the following deadlines:
   a. August 5th for fall semester enrollment,
   b. December 1st for spring semester enrollment, and
   c. May 1st for summer session enrollment.

4. The Chair of the Department of Mathematics and Statistics or designee should respond in writing to student requests within three weeks of receiving them.

5. Students whose initial requests are denied may submit a written appeal to the Dean of the College of Science, Engineering and Technology. The Dean should respond in writing, with a copy to the Chair of the Department of Mathematics and Statistics.

6. The Dean’s decision is the final step in this appeal process.

**Policy Rationale:** The purpose of the policy is to place students in a course that is developmentally appropriate to help ensure their long term success. Data suggests students not meeting these guidelines have a higher likelihood of having to repeat a course.

**STATISTICS BS**

**Required General Education**

**MAST 121 Calculus I [4]**

**Major Common Core**

**IT 210 Fundamentals of Programming [4]**
**IT 214 Fundamentals of Software Development [4]**
**MATH 122 Calculus II [4]**
**MATH 223 Calculus III [4]**
**MATH 247 Linear Algebra I [4]**
**STAT 154 Elementary Statistics [4]**
**STAT 354 Concepts of Probability & Statistics [4]**
**STAT 356 Introduction to Programming in SAS [3]**
**STAT 450 Regression Analysis [3]**
**STAT 451 Experimental Designs [3]**
**STAT 455 Theory of Statistics I [4]**
**STAT 456 Theory of Statistics II [4]**
**STAT 457 Sample Survey, Design and Analysis [3]**
**STAT 458 Categorical Data Analysis [3]**
**STAT 459 Nonparametric Methods [3]**
**STAT 492 Statistics Capstone Experience [3]**

**Major Emphasis: Applied Mathematics Track**

(Minimum 16 credits from the following list)FINA 480 may substitute for FINA 467

**MAST 290 Foundations of Mathematics [4]**
**MAST 321 Ordinary Differential Equations [4]**
**MAST 375 Introduction to Discrete Mathematics [4]**
**MAST 422 Partial Differential Equations [4]**
**MAST 425 Mathematical Modeling [4]**
**MAST 470 Numerical Analysis I [4]**
**MAST 471 Numerical Analysis II [4]**

**Major Emphasis: Biological Science Track**

(Minimum of 16 credits from the following list)

**BIOL 105 General Biology I [4]**
**BIOL 106 General Biology II [4]**
**BIOL 211 Genetics [4]**
**BIOL 320 Cell Biology [4]**
**BIOL 479 Molecular Biology [4]**

**Major Emphasis: Actuarial Track**

(Minimum 16 credits from the following list)FINA 480 may substitute for FINA 467

**FINA 362 Business Finance [3]**
**FINA 460 Investments [3]**
**FINA 467 Insurance and Risk Management [3]**
**MAST 460 Actuarial Applications in Probability [3]**
**MAST 461 Mathematical Theory of Interest [4]**

**Major Emphasis: Information Technology Track**

(Minimum 16 credits from the following list)

**IT 310 Data Structures & Algorithms [4]**
**IT 320 Machine Structures and Operating Systems [4]**
**IT 340 Introduction to Database Systems [4]**
**IT 350 Information Security [4]**
STATISTICS MINOR

Core
MATH 121 Calculus I (4)
MATH 122 Calculus II (4)
STAT 354 Concepts of Probability and Statistics (4)
STAT 450 Regression Analysis (3)
STAT 451 Design and Analysis of Experiments (3)

Restricted Electives (choose 3 - 4 credits)
STAT 455 Theory of Statistics I (4)
STAT 457 Sample Survey, Design and Analysis (3)
STAT 458 Categorical Data Analysis (3)
STAT 459 Nonparametric Methods (3)

COURSE DESCRIPTIONS

STAT 154 (4) Elementary Statistics
An introduction to statistical concepts and methods that is applicable to all disciplines. Topics include descriptive measures of data, probability and probability distributions, statistical inference, tests of hypotheses, confidence intervals, correlation, linear regression, and analysis of variance. The use of statistical software will be emphasized. Prerequisite: Satisfy Placement Table in this section, or MATH 098 with grade of P. Fall, Spring, Summer GE-2

STAT 221 (3) Applied Probability and Statistics for Engineers
An introduction to statistics with emphasis on the applied probability models used in Science and Engineering. Topics covered include samples, probability, probability distributions, estimation, one and two samples hypotheses tests, correlation, simple and multiple linear regressions. Prerequisite: MATH 112 with grade of “C” (2.0) or better Spring

STAT 354 (4) Concepts of Probability & Statistics
A calculus based introduction to probability and statistics. Topics include probability, random variables, probability distributions (discrete and continuous), joint probability distributions (discrete and continuous), statistical inference (both estimation and hypothesis testing), confidence intervals for distribution of parameters and their functions, sample size determinations, analysis of variance, regression, and correlation. This course meets the needs of the practitioner and the person who plans further study in statistics. Same as MATH 354. Prerequisite: MATH 122 with grade of “C” (2.0) or better Fall, Spring, Summer

STAT 356 (4) Introduction to Programming in SAS
Introduction to basic programming techniques: creating DATA and PROC statements, libraries, functions, programming syntax, and formats. Descriptive and Inferential statistics in SAS. Emphasis is placed on using these tools for statistical analyses. Working with arrays, loop and SAS macro. Prerequisite: STAT 154 or instructor’s approval Odd Years: Spring

STAT 398 (0) CPT: Co-Operative Experience
Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one semester and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information. Prerequisite: At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply. Fall, Spring, Summer

STAT 450 (3) Regression Analysis
Simple and multiple linear regression, model adequacy checking and validation, identification and influence, polynomial regression, variable selection and model building strategies, nonlinear regression, and generalized linear regression. Prerequisite: MATH 354 / STAT 354 or STAT 455 with “C” (2.0) or better or consent MATH 455/STAT 455 Spring

STAT 451 (3) Design and Analysis of Experiments
Randomized complete block design, Latin squares design, Greco-Latin squares design, balanced incomplete block design, factorial design, fractional factorial design, response surface method, fixed effects and random effects models, nested and split plot design. Prerequisite: MATH 354 / STAT 354 or STAT 455 with “C” (2.0) or better or consent Fall

STAT 455 (4) Theory of Statistics I
A mathematical approach to statistics with derivation of theoretical results and of basic techniques used in applications. Includes probability, continuous probability distributions, multivariate distributions, functions of random variables, central limit theorem and statistical inference. Same as MATH 455. Prerequisite: MATH 223 with “C” (2.0) or better or consent Fall

STAT 456 (4) Theory of Statistics II
A mathematical approach to statistics with derivation of theoretical results and of basic techniques used in applications, including sufficient statistics, additional statistical inference, theory of statistical tests, inferences about normal models and nonparametric methods. Same as MATH 456. Prerequisite: MATH 455; STAT 455 with “C” (2.0) or better or consent Spring

STAT 457 (3) Sample Survey, Design and Analysis
Sampling distributions: means and variances. Bias, robustness and efficiency. Random sampling, systematic sampling methods including stratified random sampling, cluster sampling and two-stage sampling, ratio, regression, and population size estimation. Suitable statistical software is introduced, for example, MATLAB, R, SAS, etc. Prerequisite: MATH 354, STAT 354 or STAT 154 with “C” (2.0) or better or consent Fall (Even Years)

STAT 458 (3) Categorical Data Analysis
Forms of multivariate analysis for discrete data, two dimensional tables, models of independence, log linear models, estimation of expected values, model selection, higher dimensional tables, logistic models and incompleteness. Logistic regression. Suitable statistical software is introduced, for example, MATLAB, R, SAS, etc. Prerequisite: MATH 354, STAT 354 or STAT 154 with “C” (2.0) or better or consent Fall (Odd Years)

STAT 459 (3) Nonparametric Methods
Derivation and usage of nonparametric statistical methods in univariate, bivariate, and multivariate data. Applications in count, score, and rank data, analysis of variance for ranked data. Nonparametric regression estimation. Suitable statistical software is introduced, for example, MATLAB, R, SAS, etc. Prerequisite: MATH 354, STAT 354 or STAT 154 with “C” (2.0) or better or consent Spring (Even Years)

STAT 488 (1-3) Seminar
The study of a particular topic primarily based upon recent literature. May be repeated for credit on each new topic.

STAT 491 (1-4) In-Service
A course designed to upgrade the qualifications of persons on-the-job. May be repeated for credit on each new topic.

STAT 492 (3) Statistics Capstone Experience
This course is designed to allow undergraduate students an opportunity to integrate their statistics experiences by engaging each student in working on problems in applied or theoretical statistics. Prerequisite: STAT 457, STAT 458, STAT 459, STAT 450 (at least two of these) Spring

STAT 495 (1-4) Selected Topics
A course in an area of statistics not regularly offered. May be repeated for credit on each new topic.

STAT 498 (1-12) Internship
Provides a student the opportunity to gain expertise and experience in a special field under the supervision of a qualified person.

STAT 499 (1-4) Individual Study
Independent individual study under the guidance and direction of a faculty member. Special arrangements must be made with an appropriate faculty member. May be repeated for credit of each new topic.
Swedish Courses

College of Arts & Humanities
Department of World Languages & Cultures
227 Armstrong Hall • 507-389-2116
Website: www.mnsu.edu/languages

Chair: Adriana Gordillo

Swedish

THEATRE ARTS BFA, BA, BS AND MINOR

The Department of Theatre and Dance is dedicated to two primary goals: to provide students with the highest caliber of training in theatre and dance that will allow them to create performances of any kind at any level, and to provide the southern Minnesota region with a multi-faceted, high quality theatrical and dance experience. These goals interweave to provide entertainment and education to those on both sides of the curtain.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
Admission to Major is granted by the department. Contact the department for application procedures.

See “Dance” for Dance Major and Minor requirements.

GPA Policy: A grade of “C” or better must be earned for major or minor credit.

P/N Grading Policy: Courses applied to a major or minor in the department may not be taken on a P/N basis, except by permission of the chair.

Limit on Number of Activity Credits: Students must take 5 activity credits from three areas, and no more than 6 activity credits total. No student may take more than 4 activity credits per summer.

Summer Stock Activity Credits: No one may take more than 4 summer stock activity credits per summer.

Required General Education
THEA 100 Introduction to Theatre (3)

Major Core
THEA 110 Fundamentals of Acting (3)
THEA 235 Fundamentals of Directing (3)
THEA 381V Play Analysis (3)
THEA 481 Theatre History I (3)
THEA 482 Theatre History II (3)
Theatre Activity (choose 5 credits from at least three different areas)
THEA 102 Theatre Activity: Acting (1-2)
THEA 103 Theatre Activity: Management (1-2)
THEA 105 Theatre Activity: Stagecraft (1-2)

THEA 107 Theatre Activity: Costume (1-2)
THEA 108 Theatre Activity: Lighting (1-2)
THEA 109 Theatre Activity: Sound (1-2)

Major Restricted Electives (choose 1 Cluster) Admission through audition only.

BFA ACTING OPTION
Degree completion = 120 credits

Choose any 6 credits of studio dance; must have 3 credits of THEA 300, must have 4 credits of THEA 302, must have 3 credits of any approved Theatre elective.

BFA MUSICAL THEATRE OPTION
Degree completion = 120 credits

Must have 3 credits of THEA 300; must have 4 credits of THEA 302; must have 4 years of Private Voice for the Actor.

THEA 109 Theatre Activity: Sound (1-2)
THEA 108 Theatre Activity: Lighting (1-2)
THEA 107 Theatre Activity: Costume (1-2)

Major Restricted Electives (choose 1 Cluster) Admission through audition only.

BFA ACTING OPTION
Degree completion = 120 credits

Choose any 6 credits of studio dance; must have 3 credits of THEA 300, must have 4 credits of THEA 302, must have 3 credits of any approved Theatre elective.

BFA MUSICAL THEATRE OPTION
Degree completion = 120 credits

Must have 3 credits of THEA 300; must have 4 credits of THEA 302; must have 4 years of Private Voice for the Actor.
THEA 270 Lighting Technology (3)
THEA 260 Costume Construction (3)
THEA 255 Stagecraft (3)
THEA 252 Theatre Technology (3)

Professional Prep
THEA 110 Fundamentals of Acting (3)
THEA 235 Fundamentals of Directing (3)
THEA 381W Play Analysis (3)
THEA 481 Theatre History I (3)
THEA 482 Theatre History II (3)

THEA 275 Sound Technology (3)

THEA 100 Introduction to Theatre (3)

Major Common Core
THEA 102 Theatre Activity: Acting (1-2)
THEA 103 Theatre Activity: Management (1-2)
THEA 105 Theatre Activity: Stagecraft (1-2)
THEA 107 Theatre Activity: Costume (1-2)
THEA 108 Theatre Activity: Lighting (1-2)
THEA 109 Theatre Activity: Sound (1-2)

Major Restricted Electives
Professional Prep (choose 1 credit)
THEA 315 Careers in Theatre (1)
THEA 400 Portfolio Seminar (1)

Theatre Technology (choose 3 credits) (may not be repeated)
THEA 275 Sound Technology (3)
THEA 255 Stagecraft (3)
THEA 260 Costume Construction (3)
THEA 270 Lighting Technology (3)

Degree completion = 120 credits

THEA 270 Lighting Technology (3)
THEA 260 Costume Construction (3)
THEA 255 Stagecraft (3)

THEA 252 Theatre Technology (3)
THEA 255 Stagecraft (3)
THEA 260 Costume Construction (3)
THEA 270 Lighting Technology (3)

THEA 275 Sound Technology (3)

Theatre Technology (choose 3 credits) (may not be repeated)
THEA 252 Theatre Technology (3)
THEA 255 Stagecraft (3)
THEA 260 Costume Construction (3)
THEA 270 Lighting Technology (3)
THEA 275 Sound Technology (3)

Theatre Technology (choose 9 credits) (may also choose any 2-credit Dance class)
THEA 121 Movement for Theatre (1)
THEA 210 Intermediate Acting (3)
THEA 214 Singing for the Actor (1)
THEA 215 Audition Methods (2)
THEA 231 Stage Management (1)
THEA 240 Basic Design (3)
THEA 252 Theatre Technology (3)
THEA 255 Stagecraft (3)
THEA 260 Costume Construction (3)
THEA 265 Stage Makeup (2)
THEA 270 Lighting Technology (3)
THEA 275 Sound Technology (3)

Theatre Technology (choose 9 credits) (may also choose any 2-credit Dance class)
THEA 121 Movement for Theatre (1)
THEA 210 Intermediate Acting (3)
THEA 214 Singing for the Actor (1)
THEA 215 Audition Methods (2)
THEA 231 Stage Management (1)
THEA 240 Basic Design (3)
THEA 252 Theatre Technology (3)
THEA 255 Stagecraft (3)
THEA 260 Costume Construction (3)
THEA 265 Stage Makeup (2)
THEA 270 Lighting Technology (3)
THEA 275 Sound Technology (3)

Other Graduation Requirements
Required for Bachelor of Arts (BA) ONLY: Language (8 credits)

Required Minor: None.

THEATRE ARTS CONTINUED

Required General Education
THEA 100 Introduction to Theatre (3)

Major Common Core
THEA 110 Fundamentals of Acting (3)
THEA 235 Fundamentals of Directing (3)
THEA 381W Play Analysis (3)
THEA 481 Theatre History I (3)
THEA 482 Theatre History II (3)

Theatre Activity (choose 5 credits)
From at least three different areas
THEA 102 Theatre Activity: Acting (1-2)
THEA 103 Theatre Activity: Management (1-2)
THEA 105 Theatre Activity: Stagecraft (1-2)
THEA 107 Theatre Activity: Costume (1-2)
THEA 108 Theatre Activity: Lighting (1-2)
THEA 109 Theatre Activity: Sound (1-2)

Major Restricted Electives
Professional Prep (choose 1 credit)
THEA 315 Careers in Theatre (1)
THEA 400 Portfolio Seminar (1)

Theatre Technology (choose 3 credits) (may not be repeated)
THEA 252 Theatre Technology (3)
THEA 255 Stagecraft (3)
THEA 260 Costume Construction (3)
THEA 270 Lighting Technology (3)

Degree completion = 120 credits

THEA 270 Lighting Technology (3)
THEA 260 Costume Construction (3)
THEA 255 Stagecraft (3)

THEA 252 Theatre Technology (3)
THEA 255 Stagecraft (3)
THEA 260 Costume Construction (3)
THEA 270 Lighting Technology (3)
THEA 275 Sound Technology (3)

Theatre Technology (choose 9 credits) (may also choose any 2-credit Dance class)
THEA 121 Movement for Theatre (1)
THEA 210 Intermediate Acting (3)
THEA 214 Singing for the Actor (1)
THEA 215 Audition Methods (2)
THEA 231 Stage Management (1)
THEA 240 Basic Design (3)
THEA 210 Intermediate Acting (3)
THEA 214 Singing for the Actor (1)
THEA 215 Audition Methods (2)
THEA 231 Stage Management (1)
THEA 240 Basic Design (3)
THEA 252 Theatre Technology (3)
THEA 255 Stagecraft (3)
THEA 260 Costume Construction (3)
THEA 265 Stage Makeup (2)
THEA 270 Lighting Technology (3)
THEA 275 Sound Technology (3)
THEA 285W Theatre of Diversity (3)
Advanced (choose 15 credits)
DANC 322 Dance Improvisation (2)
THEA 410 Musical Theatre Acting I (3)
THEA 412 Theatre Speech I (2)
THEA 413 Theatre Speech II (2)
THEA 414 Stage Dialects I (2)
THEA 415 Stage Dialects II (2)
THEA 416 Acting Scene Studies (3)
THEA 417 Acting Techniques (3)
THEA 418 Acting Styles (3)
THEA 419 Acting for Radio/TV (3)
THEA 430 Theatre Management (3)
THEA 435 Advanced Directing Methods (3)
THEA 440 Scene Design I (3)
THEA 451 Drafting for the Theatre (3)
THEA 455 Technical Direction (3)
THEA 460 Costume Design I (3)
THEA 470 Lighting Design I (3)
THEA 475 Sound Design I (3)
THEA 483 Musical Theatre History (3)
THEA 485 Theatre Dramaturgy (3)
THEA 487 Playwriting (3)
Required Minor: None.

THEATRE ARTS MINOR

Core
THEA 235 Fundamentals of Directing (3)
THEA 252 Theatre Technology (3)
THEA 381 Play Analysis (3)
(choose 3 credits)
THEA 101 Acting for Everyone (3)
THEA 110 Fundamentals of Acting (3)

Theatre Activity (choose 5 credits)
From at least three different areas
THEA 102 Theatre Activity: Acting (1-2)
THEA 103 Theatre Activity: Management (1-2)
THEA 105 Theatre Activity: Stagecraft (1-2)
THEA 107 Theatre Activity: Costume (1-2)
THEA 108 Theatre Activity: Lighting (1-2)
THEA 109 Theatre Activity: Sound (1-2)
(choose 3 credits)
THEA 481 Theatre History I (3)
THEA 482 Theatre History II (3)

Elective
In addition, choose 3 credits of any Theatre course except THEA 100, or more than 5 Theatre Activity classes.

COURSE DESCRIPTIONS

THEA 100 (3) Introduction to Theatre
Survey of theatre arts, lectures, with lab experience available.
Note: Students may not take both THEA 115 and this class.
Fall, Spring
GE-6

THEA 101 (3) Acting for Everyone
Performance scenes and exercises for the beginner.
Fall, Spring
GE-6

THEA 102 (1-2) Theatre Activity: Acting
Acting in a mainstage or approved production. May be repeated.
Prerequisite: Consent
Fall, Spring
GE-11

THEA 103 (1-2) Theatre Activity: Management
Work on stage or house management, or public relations. May be repeated.
Prerequisite: Consent
Fall, Spring
GE-11

THEA 104 (1-2) Theatre Activity: Stagecraft
Work on stage crew in a mainstage production. May be repeated.
Prerequisite: Consent
Fall, Spring
GE-11

THEA 105 (1-2) Theatre Activity: Costume
Work on costumes or wardrobe crew in a mainstage production. May be repeated.
Prerequisite: Consent
Fall, Spring
GE-11

THEA 107 (1-2) Theatre Activity: Lighting
Work on lighting crew in a mainstage production. May be repeated.
Prerequisite: Consent
Fall, Spring
GE-11

THEA 108 (1-2) Theatre Activity: Sound
Work on sound crew in a mainstage production. May be repeated.
Prerequisite: Consent
Fall, Spring
GE-11

THEA 109 (1-2) Theatre Activity: Dance Captain
Serve as Dance Captain, to assist the Choreographer, for a mainstage or approved production. May be repeated.
Prerequisite: Consent
Fall, Spring

THEA 110 (3) Fundamentals of Acting
Performance scenes and acting exercises for the beginning theatre major.
Prerequisite: Consent
Fall

THEA 111 (0) Private Voice for the Actor
Private lessons in developing the actor's singing voice. May be repeated.
Prerequisite: Consent
Fall, Spring

THEA 121 (1) Movement for Theatre
Instructs the student through a series of movement exercises in body alignment, breathing, flexibility, strength and coordination.
Prerequisite: Consent
Fall

THEA 210 (3) Intermediate Acting
The process of character structuring through script analysis and scene work.
Prerequisite: THEA 110 or consent
Fall

THEA 212 (2) Music Skills for Theatre I
A group instruction course covering fundamental music theory and skills applicable to the theatre artist including the study of music notation, style, harmony and literature. Skills learned will include basic keyboarding, sight reading and sight singing music.
Alt-Fall
Prerequisite: THEA 212

THEA 213 (2) Music Skills for Theatre II
A continuation of Music Skills for Theatre I, this course will focus on recent developments in the American Musical Theatre while increasing skills learned in the previous class.
Alt-Spring
Prerequisite: THEA 212

THEA 214 (1) Singing for Actor
Study and exercise to prepare actors to sing for the musical theatre with the focus on competence and musicianship.
Prerequisite: Permission of Instructor
THEA 215 (2) Audition Methods
The development of a repertoire of audition pieces to increase the ability to perform with confidence on short notice.
Prerequisite: THEA 110 or consent
Spring

THEA 231 (1) Stage Management
Exploration of all aspects of theatrical stage management activities through specific theoretical and practical study.
Alt-Fall

THEA 235 (3) Fundamentals of Directing
Introduction to the theory and practice of directing for the theatre.
Prerequisite: THEA 100 and THEA 101 or THEA 110
Fall

THEA 240 (3) Basic Design
Introduction to the concepts, process, and practices of theatrical scenic, lighting, and costume design including script analysis and historical overviews.
Prerequisite: THEA 100
Spring

THEA 245 (3) Scene Painting I
Introductory course examining the basics of materials and techniques of scenic painting with a large amount of lab time for experimentation with technique.
Prerequisite: Consent
Variable

THEA 252 (3) Theatre Technology
Fundamental concepts of technical theatre, an overview of basic stagecraft, costuming, lighting, and sound in the contemporary theatre.
Prerequisite: THEA 100
Spring

THEA 255 (3) Stagecraft
Introduction to the theory and practice of construction techniques used in the theatre.
Prerequisite: THEA 100
Alt-Fall

THEA 260 (3) Costume Construction
Theory and techniques in stage costume construction.
Prerequisite: THEA 100
Spring

THEA 262 (1) Dance Production: Costumes
Fundamental concepts of costume design and production for the Dance.
Alt-Spring

THEA 265 (2) Stage Makeup
Theory and practical laboratory work in stage makeup applications.
Prerequisite: Consent
Fall

THEA 266 (1) Makeup Module
Exposes K-12 teachers to a practical methodology of applying stage makeup.
Prerequisite: Consent
Fall

THEA 270 (3) Lighting Technology
The study of lighting technology and its effect on lighting design.
Prerequisite: THEA 100
Fall

THEA 272 (1) Dance Production: Lighting
Fundamental concepts of lighting design and production for the Dance.
Alt-Fall

THEA 275 (3) Sound Technology
The study of sound technology and its effect on sound design.
Prerequisite: THEA 100
Spring

THEA 276 (1) Dance Production: Sound
Fundamental concepts of sound design and production for the Dance.
Alt-Spring

THEA 285W (3) Theatre of Diversity
A survey of literature, artists and performances with specific regard to the theatre of diversity including, but not restricted to: Feminist Theatre, Gay and Lesbian Theatre, African-American Theatre, Asian American Theatre, Hispanic Theatre, etc.
Alt-Fall
WI, GE-6, GE-7 Diverse Cultures - Purple

THEA 291 (1-4) Individual Study
Prerequisite: Consent
Fall, Spring

THEA 295 (1-4) Touring Theatre
Work on the actual mounting and performance of a touring theatrical production.
Prerequisite: Consent
Spring

THEA 300 (1-4) Summer Stock
Technical work and/or acting in summer theatre productions. May be repeated.
Prerequisite: Consent
Summer

THEA 301 (1-2) Practicum: Directing
A considerable production responsibility which utilizes skills in script analysis, actor coaching, design coordination and general production management, or assistant directing for a mainstage production. May be repeated.
Prerequisite: Consent
Fall, Spring

THEA 302 (1-2) Practicum: Acting
A considerable production responsibility dealing with the preparation and performance of a major acting role. May be repeated.
Prerequisite: Consent
Fall, Spring

THEA 303 (1-2) Practicum: Theatre Management
Special assignments in stage management, house and/or concessions management, public relations or related areas. May be repeated.
Prerequisite: Consent
Fall, Spring

THEA 304 (1-2) Practicum: Scene Design
Preparation and execution of a major scene design assignment. Requires a design and construction schedule, preliminary and final design concepts, and necessary drafting details. May be repeated.
Prerequisite: Consent
Fall, Spring

THEA 305 (1-2) Practicum: Tech Theatre
A considerable production responsibility dealing with some technical aspects including technical drawings, budget management, or construction techniques. May be repeated.
Prerequisite: Consent
Fall, Spring

THEA 306 (1-2) Practicum: Costume Design
Full and assistant costume design assignments for theatre productions. May be repeated.
Prerequisite: Consent
Fall, Spring

THEA 307 (1-2) Practicum: Costume Design
The construction of costumes for theatre productions. May be repeated.
Prerequisite: Consent
Fall, Spring

THEA 308 (1-2) Practicum: Costume Design
The construction of costumes for theatre productions. May be repeated.
Prerequisite: Consent
Fall, Spring

THEA 309 (1-2) Practicum: Sound
Preparation and execution of a major sound design assignment including all sound effects, reinforcement and amplification. May be repeated.
Prerequisite: Consent
Fall, Spring

THEA 310 (1-2) Practicum: Stage Management
Preparation and execution of a major stage management assignment. May be repeated.
Prerequisite: Consent
Fall, Spring
THEA 311 (0) Private Voice for the Actor
Continuation of THEA 111. May be repeated.
Prerequisite: THEA 111
Fall, Spring

THEA 315 (1) Careers in Theatre
Introduction to the various career opportunities directly in or appertaining to theatrical arts performance.
Prerequisite: THEA 100
ALT-Fall

THEA 324 (3) Methods and Materials for Teaching Creative Dramatics
Exploration of teaching creative dramas in the K-12 setting.
Prerequisite: THEA 121
On Demand

THEA 381W (3) Play Analysis
The study and application of various analytical approaches to play texts in preparation for production.
Prerequisite: THEA 100
Spring
WI

THEA 400 (1) Portfolio Seminar
Exploring the techniques of building a working design/technology portfolio and resume.
Prerequisite: Consent

THEA 410 (3) Musical Theatre Acting I
Introduction to musical theatre performance techniques for the American Musical Theatre actor.
Prerequisite: THEA 210 or consent
Spring

THEA 411 (3) Musical Theatre Acting II
Scene studies from the American Musical Theatre, as well as performance techniques for the singing actor.
Prerequisite: THEA 210 and consent
ALT-Fall

THEA 412 (2) Theatre Speech I
Study and exercises in vocal development emphasizing the demands of stage speech.
Prerequisite: THEA 210 or consent
Spring

THEA 413 (2) Theatre Speech II
Study and exercises in vocal development, including the study of the International Phonetic Alphabet.
Prerequisite: THEA 210 or consent
Fall

THEA 414 (2) Stage Dialects I
A study and practice of vocal dialects most often used in performance.
Prerequisite: THEA 413
ALT-Spring

THEA 415 (2) Stage Dialects II
A continuation of Stage Dialects I.
Prerequisite: THEA 413
ALT-Fall

THEA 416 (3) Acting Scene Studies
Advanced scene studies with a focus on analysis and the varied approaches to developing motivations.
Prerequisite: THEA 210 or consent
ALT-Spring

THEA 417 (3) Acting Techniques
The development of individual performance craft and advanced acting methodologies.
Prerequisite: THEA 210 or consent
ALT-Fall

THEA 417W (3) Acting Techniques
The development of individual performance craft and advanced acting methodologies.
Prerequisite: THEA 210 or consent
ALT-Fall
WI

THEA 418 (3) Acting Styles
Advanced scene studies in classical and stylized dramatic literature.
Prerequisite: THEA 210 or consent
ALT-Spring

THEA 419 (3) Acting for Radio/TV
Development of performance craft for the media.
Prerequisite: THEA 210 and consent
ALT-Spring

THEA 424 (3) Theatre Pedagogy
Pedagogy of theatre in the K-12 setting. Emphasis will include: national and state standards, assessment practices, lesson planning and curriculum development.
Prerequisite: THEA 324
On Demand

THEA 425 (1 or 2) Styles of Motion
Specialized training in a variety of physical techniques. May be repeated.
Prerequisite: Consent
ALT-Spring

THEA 426 (2) Stage Combat
An exploration of basic skills involved in unarmed combat and a variety of historical weapons systems with primary emphasis on theatricality and safety.
Prerequisite: Consent

THEA 430 (3) Theatre Management
Exposes students to the functions of theatre managers through case studies, discussions, practical application and readings.
Prerequisite: THEA 235
ALT-Spring

THEA 431 (1) K-12 Theatre Management
Exposes future teachers to a practical methodology of producing theatre in the K-12 setting.
Co-requisite: THEA 424
On Demand

THEA 432 (1-2) Practicum: Choreography
Serve as Choreographer for a mainstage or approved production. May be repeated.
Prerequisite: Consent
Fall, Spring

THEA 433 (1-2) Practicum: Musical Directing
Serve as Musical Director for a mainstage or approved production. May be repeated.
Prerequisite: Consent
Fall, Spring

THEA 434 (1-2) Practicum: Dramaturgy
Serve as Dramaturg for a mainstage or approved production. May be repeated.
Prerequisite: Consent
Fall, Spring

THEA 435 (3) Advanced Directing Methods
Advanced studies in script analysis, actor psychology and staging techniques culminating in performance projects with critical analysis.
Prerequisite: THEA 235 and consent
Spring

THEA 440 (3) Scene Design I
Development of techniques and skills in the creation of scenery.
Prerequisite: THEA 240 or consent
Fall

THEA 441 (3) Scene Design II
Refinement of model building and drawing skills in theatrical design.
Prerequisite: THEA 440
Spring

THEA 444 (3) Styles and Ornamentation
A visual appreciation of assorted cultures through the study of their architecture, decoration, furniture, utensils, etc.
Prerequisite: Consent
ALT-Spring
THEA 445 (3) Scene Painting II
Provides information on materials and techniques of scenic painting with a large amount of lab time for experimentation with technique.
Prerequisite: THEA 252 or consent
ALT-Fall

THEA 448 (3) Drawing & Rendering for the Theatre
Exploring compositional organization of the two-dimensional surface by experimenting with a variety of media, materials, forms, approaches and subjects as a means for theatrical communication.
Prerequisite: THEA 240
ALT-Spring

THEA 451 (3) Drafting for the Theatre
Enhances the advanced theatre student's ability to show complex elements of a theatrical design in a clear manner using accepted theatrical drafting methods.
Prerequisite: Consent
ALT-Fall

THEA 455 (3) Technical Direction
Explores all facets of technical direction, construction techniques, and project management.
Prerequisite: THEA 255
ALT-Fall

THEA 456 (3) Advanced Technical Direction
Explores advanced facets of technical direction including entertainment engineering and technology currently in use in the field.
ALT-Fall

THEA 460 (3) Costume Design I
Theory and techniques in costume design and execution.
Prerequisite: THEA 240 or consent
Fall

THEA 461 (3) Costume Design II
Advanced costume design theory and techniques.
Prerequisite: THEA 460
ALT-Spring

THEA 464 (3) Costume History
Survey of costume history from ancient Egypt to 1900.
Prerequisite: Consent
ALT-Spring

THEA 465 (3) Advanced Makeup
Practical application of advanced makeup techniques.
Prerequisite: THEA 265
ALT-Spring

THEA 470 (3) Lighting Design I
The study of lighting equipment, usage, techniques and stage lighting design.
Prerequisite: THEA 270
Spring

THEA 471 (3) Lighting Design II
Solving particular lighting design challenges.
Prerequisite: THEA 470
ALT-Fall

THEA 472 (3) Virtual Lighting
Computer realization for virtual lighting design to enhance practical production quality.
Prerequisite: THEA 470. Permission of Instructor
ALT-Fall

THEA 474 (3) Advanced Sound Technology: Digital Audio Systems
A study of the concepts behind digital audio and an exploration of their practical uses.
ALT-Fall
Prerequisite: THEA 275

THEA 475 (3) Sound Design I
Production and sound effects, electronic sound reinforcement of live performance, choice and operation of sound equipment, as well as basic music styles and terminology.
Prerequisite: consent
Fall

THEA 476 (3) Sound Design II
Integrated sound design to support and enhance theatrical production.
Prerequisite: THEA 475
ALT-Fall

THEA 481 (3) Theatre History I
Survey of theatrical history from its origins to 1700.
Prerequisite: THEA 100
ALT-Fall

THEA 482 (3) Theatre History II
Survey of theatrical history from 1700 to the present.
Prerequisite: THEA 100
ALT-Spring

THEA 483 (3) Musical Theatre History
Survey of the history of the American Musical Theatre from its origins to the present.
Prerequisite: THEA 100 and consent
ALT-Spring

THEA 485W (3) Theatre Dramaturgy
This class teaches how to access historical information and present it to directors, actors or designers in a way that will help them make informed and practical artistic choices.
Prerequisite: THEA 100 and consent
Fall
VI

THEA 487W (3) Playwriting
Writing the short and long play.
Prerequisite: THEA 100. Permission of instructor.
ALT-Spring
VI

THEA 490 (1-3) Topics in Theatre
Special topics not covered in other classes. May be repeated.
Prerequisite: THEA 100. Permission of Instructor
Variable

THEA 492 (1-3) Theatre Field Studies
Prerequisite: Consent

THEA 497 (1-8) Internship
Prerequisite: Consent

THEA 499 (1-3) Individual Study
Prerequisite: Consent
## Urban and Regional Studies

### Department of Integrated Engineering

**College of Science, Engineering & Technology**
141 Tracton Science Center N • 507-389-2744
Website: cset.mnsu.edu/ie

**Chair:** Dean Kelley
**Faculty:** Rebecca Bates, Robert Sleezer, Jacob Swanson

Location: Normandale Community College, Partnership Center, 9700 France Avenue South, Bloomington, MN

### URBAN & REGIONAL STUDIES BS AND MINOR

### Required for Major (Electives, 12 credits)
Select 12 credits from URBS upper division courses, or see advisor for approval. The department strongly recommends an internship (URBS 497).

### Required Minor: Yes. Any.

### URBAN AND REGIONAL STUDIES MINOR

<table>
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<tr>
<th>Minor Core</th>
<th>URBS 150 Sustainable Communities (3)</th>
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<td>URBS 230 Community Leadership (3)</td>
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<tr>
<td>URBS 431 Urban Design Principles (3)</td>
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</table>

### Minor Electives
Select 9 credits from URBS upper division courses, or see advisor for approval.

### COURSE DESCRIPTIONS

#### URBS 100 (3) Introduction to the City
A fresh look at the city, with emphasis on the reasons why cities have grown and how people can make cities livable.
- Fall, Spring
- GE-5, GE-6

#### URBS 110 (3) The City: Design and Architecture
Appreciation of the city as the highest cultural achievement in design and architecture.
- Fall, Spring
- GE-5, GE-10

#### URBS 150 (3) Sustainable Communities
This course will identify and analyze global social, economic, political and environmental problems impacting community viability and explore the full range of solutions to these problems. The course will view communities as complex, sustainable organisms and bring together the works of the great minds working on sustainability.
- Fall, Spring
- GE-5, GE-9, GE-11

#### URBS 230 (3) Community Leadership
Introduction to community leadership—elected, professional, or voluntary—and the skills and values which support it.
- GE-9, GE-11

#### URBS 230W (3) Community Leadership
Introduction to community leadership—elected, professional, or voluntary—and the skills and values which support it.
- Fall, Spring
- WI, GE-9, GE-11

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<td>Foundations in Urban Management &amp; Planning</td>
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<td>URBS 402</td>
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<td>URBS 489</td>
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<td>Fall, Spring</td>
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### Academic Map/Degree Plan at www.mnsu.edu/programs/#All

### Policies/Information

- **P/N Grading Policy:** The internship must be taken on a P/N basis. All other courses must be taken for grade.

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**URBAN AND REGIONAL STUDIES BS

Degree completion = 120 credits**

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<tr>
<th>Course Number</th>
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<td>URBS 489</td>
<td>Capstone</td>
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</table>
URBS 260 (3) Community Development
Introduction to knowledge, values and skills required to strengthen and maintain the capacity of a local group (neighborhood, city or region) to provide for the resident’s needs.

URBS 401 (3) Foundations in Urban Management & Planning
This course is a survey of the local community—the forces which shape it, the significance of a democratic public, and the professional practice of local government service. Fall, Spring

URBS 402 (3) Urban Analysis
Introduction to skills and techniques used to form questions about urban affairs, to organize and analyze information to answer it, and to present the results of one’s analysis in a professional format. Spring

URBS 411 (3) Urban Policy & Strategic Analysis
Prepares students to analyze problems, identify alternative solutions and utilize techniques of analysis.

URBS 412 (3) Public Information and Involvement
This course, designed for students preparing for a professional career in local government or public service, focuses on media relations and building citizen involvement through public awareness projects. Fall

URBS 413 (3) Urban Program Evaluation
Reviews processes and techniques related to evaluation of public programs.

URBS 415 (3) Urban Housing Policy
Public policy and programs that address issues of housing supply, quality, costs, and neighborhood revitalization.

URBS 417 (3) Urban Administrative Law
An overview of local government law and local governing powers. In addition, public issues in the legal context will be examined from a management and operational perspective.

URBS 431 (3) Urban Design Principles
A basic working knowledge and vocabulary of urban design concepts and techniques in an applied problem solving context.

URBS 433 (3) Urban Development
Theory and applications of principles of landscape architecture or urban design.

URBS 435 (3) Downtown Revitalization
Examines the problem of central business district deterioration and explores the changing patterns of economic and social mobility with primary focus upon the trends of downtown revitalization currently being employed by the public and private sectors.

URBS 437 (3) Urban Heritage Preservation
Preservation techniques, principles of structural evaluation, adaptive use potentials and options, economic consideration in preservation and the role of legislation.

URBS 438 (3) Historic Preservation: Policy and Field Methods
Historic Preservation: Policy and Field Methods introduces students to the rules and laws of structural historic preservation. The course will investigate the major policy documents, laws, agencies, survey methods, and examine how they are applied in local government preservation. Spring

URBS 450 (3) The Urban Context
Advanced course to explore the interactions of space and social institutions in an urban context.

URBS 451 (3) Nonprofit Sector
Nature of the Third Sector, from a variety of perspectives, and implications for managing both internal and external relations of nonprofit organizations.

URBS 453 (3) Grants Administration
Raising resources for public and nonprofit organizations—from needs assessment through obtaining funding to managing the grant after it is awarded.

URBS 455 (3) Regional & County Development
Regional and community planning content and procedures, including basic research, land use planning, and implementation of regulations.

URBS 457 (3) Economic Development
A survey course covering the concepts, processes, tools and strategies of economic development in local communities. Emphasis is on the “why” and “how” of economic development.

URBS 461 (3) Environmental Planning
Examines and applies the fundamental concepts, techniques and mechanisms for environmental planning at the city, county, and sub-state regional levels. Fall

URBS 471 (3) Urban Transportation
Examines transportation problems of, and solutions for large and medium sized cities. Special emphasis on reducing traffic congestion, improving management of transit systems, and linking transportation and land use planning.

URBS 471 (3) Selected Topics:
Varying topics dealing with emerging trends and contemporary needs facing urban America.

URBS 473 (1-6) Workshop
Varying topics using applied techniques to address community issues.

URBS 475 (1-6) Community-Based Problem Solving
Problem solving in communities and direct involvement into specific areas of study of student interest. Prerequisite: Consent Fall, Spring

URBS 483 (3) Capstone Seminar
Assemble and evaluate information and opinions into a coherent position on what makes cities work, and prepare for entry into professional world of work in cities. Spring

URBS 497 (1-12) Internship
Scheduled work assignments, varying in length and content, under the supervision of selected professional sponsors. Prerequisite: Consent Fall, Spring

URBS 499 (1-4) Individual Study
Independent study under supervision of an instructor with a research paper or report to be presented. Prerequisite: Consent Fall, Spring
WORLD LANGUAGES & CULTURES COURSES

World Languages & Cultures
College of Arts and Humanities
Department of World Languages & Cultures
227 Armstrong Hall • 507-389-2116
Website: www.mnsu.edu/languages
Chair: Adriana Gordillo

Although English has become the leading commercial and diplomatic language of the twenty-first century, World Languages and Cultures study will be of increasing importance in the years ahead. As technology continues to conquer the obstacles of time and space, the outlook is for even greater travel, commerce, and cultural exchange between the Upper Midwest and the rest of the world.

Minnesota State Mankato does not offer a degree in World Languages & Cultures per se. Students may, however, pursue BA or BS degrees in French, German, Spanish, Spanish for the Professions or Scandinavian Studies or BS degrees in French, German, or Spanish Education. Chinese, Portuguese, Russian, Latin, and Japanese courses are offered but are not part of any specific academic program. Please see individual sections of this catalog for program details and course offerings in specific languages or contact the Office of the Registrar for information.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

COURSE DESCRIPTIONS

WLC 310 (4) Portuguese for Spanish Speakers
The course is designed to help advanced Spanish students identify similarities and differences between Spanish and Portuguese and begin development of Portuguese productive language skills and cultural competency through comparative practice.
Prerequisite: SPAN 201W. Completion of one 300 level Spanish course or equivalent intermediate-mid-proficiency level of Spanish for admission to the course. See department for language proficiency evaluation information or instructor permission.
Variable

WLC 398 (0) Co-Operative Training WLC
Curricular practical training for World Languages and Cultures is a full-time practical experience in a professional setting in which more than one language is used. The experience is designed to allow students to improve overall communicative proficiency in languages and address business practices associated with the student's academic field of expertise. The Co-Op experience covers a minimum of two consecutive academic terms and requires that students register for a minimum of two consecutive academic terms following the experience.
On Demand

WLC 460 (3) Methods of Teaching Modern Languages
Introduction to theory and practice of modern language teaching, including lessons in listening, speaking, reading, writing, vocabulary, and culture. Includes testing, program design, lesson planning, and use of technology.
Prerequisite: Students must demonstrate sufficient language competence in the target language so as to be able to teach courses exclusively in the target language. See content faculty for evaluation.
Fall

WLC 461 (1) Applied Modern Language Teaching Methods
A field experience including placement in the secondary level school setting for students earning licensure in modern language teaching. Practicum students work with middle or high school students of French, German, or Spanish.
Take concurrently with or following WLC 460.

WLC 462 (3) Foreign Languages in the Elementary School (FLES) Methods
Introduction to theory and practice of modern language teaching for children grades K-6, including oral language development, second language literacy development, content-based language instruction, and techniques for language immersion programs.
Prerequisite: Students must demonstrate sufficient language competence in the target language so as to be able to teach courses exclusively in the target language. See content faculty for evaluation.
Spring

WLC 463 (1) Applied FLES Methods
A field experience including placement in the elementary level school setting for students earning licensure in modern language teaching. Practicum students work with elementary school students in French, German, or Spanish.
Take concurrently with or following WLC 462.

WLC 465 (1-3) Workshop in Modern Language Education
Topics in modern language education. May be repeated for credit.
Variable

WLC 499 (1-4) Individual Study
Special topics in language education. May be repeated for credit.
Fall, Spring
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