



# 2018-2019 Undergraduate Catalog

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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.

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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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# DIRECTORY OF PROGRAMS

## MAJORS

### MAJOR . . . . . DEGREE(S) OFFERED

Accounting . . . . .	BS
Alcohol & Drug Studies . . . . .	BS
American Indigenous Studies . . . . .	BA, BS
Anthropology . . . . .	BA, BS
Applied Organizational Studies . . . . .	BS
Art . . . . .	BA
Art . . . . .	BFA
Ceramics Emphasis	
Drawing Emphasis	
Graphic Design Emphasis	
Installation Emphasis	
Painting Emphasis	
Photography Emphasis	
Printmaking Emphasis	
Sculpture Emphasis	
Art History . . . . .	BA
Art Teaching . . . . .	BS
Ceramics Emphasis	
Drawing Emphasis	
Fiber Design Emphasis	
Graphic Design Emphasis	
Painting Emphasis	
Photography Emphasis	
Printmaking Emphasis	
Sculpture Emphasis	
Automotive Engineering Technology . . . . .	BS
Aviation . . . . .	BS
Aeronautics Emphasis	
Aviation Management Emphasis	
Professional Flight Emphasis	
Biochemistry . . . . .	BA, BS
Biology . . . . .	BS
Biomedical Sciences Emphasis	
Cytotechnology Emphasis	
Ecology Emphasis	
Microbiology Emphasis	
Plant Science Emphasis	
Toxicology Emphasis	
Zoology Emphasis	
Biotechnology . . . . .	BS
Chemistry . . . . .	BA
Chemistry – ACS Approved . . . . .	BS
Chemistry Teaching . . . . .	BS
Civil Engineering . . . . .	BSCE
Cognitive Science . . . . .	BS
Biology Emphasis	
Computer Science Emphasis	
Philosophy Emphasis	
Psychology Emphasis	
Communication Arts and Literature Education . . . . .	BS
Communication Arts and Literature Education, Eng . . . . .	BS
Communication Sciences and Disorders . . . . .	BA, BS
Communication Studies . . . . .	BS
Community Health Education . . . . .	BS
Clinical Setting Emphasis	
Community Setting Emphasis	

Dance Generalist Emphasis	
Dance Therapy (Pre-Professional) Emphasis	
Private Studio Teaching Emphasis	
Dance Education (K-12) . . . . .	BS
Dental Hygiene . . . . .	BS
Earth Science . . . . .	BA, BS
Earth Science Teaching (5-12) . . . . .	BS
Economics . . . . .	BA, BS
Electrical Engineering . . . . .	BSEE
Electronic Engineering Technology . . . . .	BS
Elementary Education . . . . .	BS
English . . . . .	BA
English: Creative Writing . . . . .	BFA
English Literature . . . . .	BA
English Studies . . . . .	BA
Environmental Science . . . . .	BS
Ethnic Studies . . . . .	BS
Business/Corporate Emphasis	
International Community and Human Services Emphasis	
Local Community and Human Services Emphasis	
Public/Government Emphasis	
Exercise Science . . . . .	BS
General Exercise Science Emphasis	
Pre-Physical Therapy Emphasis	
Family Consumer Science . . . . .	BS
Child Development and Family Studies Emphasis	
Dietetics Emphasis	
Food and Nutrition Emphasis	
Family Consumer Science Education . . . . .	BS
Film and Media Studies . . . . .	BA
Finance . . . . .	BS
Corporate Finance Emphasis	
Financial Planning and Insurance Emphasis	
General Finance Emphasis	
Institutional Finance Emphasis	
Investment Analysis Emphasis	
Food Science Technology . . . . .	BS
French . . . . .	BA, BS
French Teaching . . . . .	BS
Gender and Women's Studies . . . . .	BA, BS
Geography . . . . .	BA, BS
Geography: Professional . . . . .	BA, BS
Geology . . . . .	BS
German . . . . .	BA, BS
German Teaching . . . . .	BS
Health and Physical Education . . . . .	BS
History . . . . .	BA, BS
Humanities . . . . .	BA
Integrated Engineering . . . . .	BSE

Interdisciplinary Studies . . . . . BS  
 International Business . . . . . BS  
 International Relations . . . . . BA  
 Law Enforcement . . . . . BS  
 Liberal Arts and Sciences . . . . . AA  
 Life Science Teaching (5-12) . . . . . BS  
 Management . . . . . BS  
     Business Management Emphasis  
     Human Resource Management Emphasis  
 Management Information Systems . . . . . BS  
 Manufacturing Engineering Technology . . . . . BS  
 Marketing . . . . . BS  
 Mass Media . . . . . BA, BS  
 Mathematics . . . . . BA, BS  
 Mathematics Teaching . . . . . BS  
 Mechanical Engineering . . . . . BSME  
 Medical Laboratory Science . . . . . BS  
 Music . . . . . BA  
     Performance Emphasis  
     Music Leadership Emphasis  
     Entrepreneurship Emphasis  
 Music Education . . . . . BS  
     Instrumental/General Music (K-12) Emphasis  
     Vocal/General Music (K-12) Emphasis  
 Music Industry . . . . . BS  
 Music Industry, Audio Production . . . . . BS  
 Nursing . . . . . BS  
 Performance (suspended) . . . . . BM  
 Philosophy . . . . . BA, BS  
 Philosophy, Politics, and Economics (PPE) . . . . . BA, BS  
     Economics Emphasis  
     Philosophy Emphasis  
     Political Science Emphasis  
 Physics . . . . . BS  
 Physics Teaching . . . . . BS  
 Political Science . . . . . BA, BS  
 Psychology . . . . . BS  
 Recreation, Parks & Leisure Services . . . . . BS  
     Leisure Planning and Management Emphasis  
     Therapeutic Recreation Emphasis  
     Resource Management Emphasis  
 RN Baccalaureate Completion . . . . . BS  
 Scandinavian Studies . . . . . BA  
 School Health Education . . . . . BS  
 Social Studies . . . . . BS  
     Anthropology Emphasis  
     Economics Emphasis  
     Ethnic Studies Emphasis  
     Gender and Women's Studies Emphasis  
     Geography Emphasis  
     History Emphasis  
     Political Science Emphasis  
     Psychology Emphasis  
     Sociology Emphasis

Social Studies Teaching . . . . . BS  
     Anthropology Emphasis  
     Economics Emphasis  
     Geography Emphasis  
     History Emphasis  
     Political Science Emphasis  
     Psychology Emphasis  
     Sociology Emphasis  
 Social Work . . . . . BSSW  
 Sociology . . . . . BA, BS  
     Applied Emphasis  
     General Emphasis  
 Sociology: Globalization Studies . . . . . BA, BS  
 Spanish . . . . . BA, BS  
 Spanish for the Professions . . . . . BS  
 Spanish Teaching . . . . . BS  
 Special Education: Academic and Behavioral Strategist . . . . . BS  
 Sport Management . . . . . BS  
 Statistics . . . . . BS  
     Actuarial Track Emphasis  
 Technical Communication . . . . . BS  
 Theatre Arts . . . . . BA, BS  
 Theatre Arts . . . . . BFA  
     Acting Emphasis  
     Design/Technology Emphasis  
     Musical Theatre Emphasis  
 Urban and Regional Studies . . . . . BS

## CERTIFICATES

American Indigenous Studies  
 Business Analytics  
 Critical Thinking  
 Database Technologies  
 Elementary Education STEM  
 Environmental Geology  
 Experimental Psychology  
 Geoarchaeology  
 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  
 Athletic Coaching  
 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).
- and
- Maintaining a cumulative satisfactory credit completion rate of at least 67%. (Transfer credits are included in calculating satisfactory credit completion rate).

To view the complete Academic Standing for Undergraduate Students policy, see <http://www.mnsu.edu/atoz/policies/>

### **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.

Questions concerning DARS should be directed to [DARS-Questions@mnsu.edu](mailto:DARS-Questions@mnsu.edu)

### **Ordering an Audit:**

There are three ways that students can obtain audits:

- order 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 co-requisite 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
HONR	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 507-389-2986 (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/>

### **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 Day 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/>

### **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/acessforstudentswithdisabilities2015.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.minnstate.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](http://www.mnsu.edu/safety). You may also request a paper copy from University Security at 507-389-2111 or by emailing [security@mnsu.edu](mailto: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.minnstate.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 (teaching) 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 chose 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/](http://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](http://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/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/512.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  
P0822 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 = ENG211WP)

### 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 of 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
5. Development of responsibility for lifelong learning.

### 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 or 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

- a rich understanding of how writing works
- guided opportunities to apply this understanding in specific writing situations
- experience analyzing, researching, and writing for academic writing situations
- 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 non-academic 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 II 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)**

Course	Minimum ACT English Score		Minimum SAT Writing Score		Minimum Accuplacer Reading Comprehension Score		Course Prerequisites
ENG 101	18	OR	440	OR	78	OR	Successful completion of ENG 100 or EAP 135 or EAP 136
ENG 103	N/A		N/A		N/A		N/A
ENG 104	N/A		N/A		N/A		Successful completion of ENG 103
ENG 100	N/A		N/A		N/A		N/A

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

Course	Minimum TOEFL Score		Minimum IELTS Score		Minimum Accuplacer ESL Reading Test		Minimum Accuplacer WritePlacer Score		Course Prerequisites
ENG 101	89 (internet-based) or 575 (paper-based)	OR	6.5	OR	N/A	OR	6	OR	Successful completion of EAP 136
ENG 101	89 (internet-based) or 575 (paper-based)	OR	6.5	OR	110	AND	5	OR	Successful completion of EAP 136
EAP 136	N/A		N/A		N/A		N/A		N/A

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.

**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:

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

Course(s) which satisfy this goal area include:

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

**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:

- gather and analyze information of various kinds, employing formal or informal tools to represent information in ways useful for solving problems;
- weigh evidence for and against hypotheses;
- recognize, construct, and evaluate arguments;
- 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:

Course	Credits	Title/Goal Area(s)
AST 115	(2)	Life in the Universe 2, 3
CHEM 111-L	(5)	Chemistry of Life Processes 2, 3
CHEM 191	(3)	Chemistry Applications 2, 3
CHEM 201-L	(5)	General Chemistry I 2, 3
CMST 101W	(4)	Interpersonal Communication 2
CSP 110	(3)	Decision Making for Career and Life 2
ECON 103WP	(3)	Economics of Women's Issues & Public Policy in the United States 2, 5
ECON 207	(4)	Business Statistics 2, 4
ENG 201W	(4)	Intermediate Writing 2
ENG 271W	(4)	Technical Communication 2, 13
ENG 272W	(4)	Business Communication 2, 13
ENG 301W	(4)	Advanced Writing 2
GEOG 313	(4)	Natural Disasters 2, 10
GERO 200G	(4)	Family Dynamics of Aging 2, 7
GERO 200WG	(4)	Family Dynamics of Aging 2, 7
GWS 230P	(4)	Gender, Race & Pop Culture 2, 6
HLTH 212	(3)	Consumer Health 2
KSP 150	(3)	Exploring Careers in Education 2
KSP 200G	(3)	Critical Issues in Public Ed Today 2, 9
MATH 290	(4)	Foundations of Mathematics 2
MUSC 301W	(3)	Music History 1 2
MUSC 302W	(3)	Music History 2 2
PHIL 110	(3)	Logic and Critical Thinking 2, 4
PHIL 112W	(3)	Scientific Reasoning 2, 4
PHIL 311	(3)	Symbolic Logic 2, 4
PHYS 211-L	(4)	Principles of Physics I 2, 3
PHYS 221-L	(5)	General Physics I 2, 3

POL	103W	(3)	Thinking About Politics 2
PSYC	103W	(3)	Psychology Today 2
SOC	214W	(3)	Animals and Society 2, 9
STAT	154	(4)	Elementary Statistics 2

**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:

- develop understanding of scientific theories;
- formulate and test hypotheses in either laboratory, simulation, or field experiences;
- communicate his/her experimental findings and interpretations both orally and in writing;
- apply the natural science perspective to society issues.

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

Course	Credits	Title/Goal Area(s)
ANTH 120	(3)	Forensic Science: An Anthropological Approach 3
ANTH 210-L	(4)	Introduction to Archaeology 3, 10
ANTH 220-L	(4)	Human Origins 3
AST 101	(3)	Introduction to Astronomy 3
AST 102	(3)	Introduction to the Planets 3
AST 104-L	(2)	Introduction to Experimental Astronomy 3
AST 115	(2)	Life in the Universe 2, 3
AST 125-L	(3)	Observational Astronomy 3
BIOL 100-L	(4)	Our Natural World 3, 8
BIOL 102	(3)	Biology of Women 3
BIOL 103W-L	(3)	Introduction to Biotechnology 3
BIOL 105-L	(4)	General Biology I 3
BIOL 105W-L	(4)	General Biology I 3
BIOL 270-L	(4)	Microbiology 3
CHEM 100-L	(4)	Chemistry in Society 3
CHEM 104	(3)	Introduction to Chemistry 3
CHEM 106	(3)	Chemistry of Life Processes I 3
CHEM 111-L	(5)	Chemistry of Life Processes II 2, 3
CHEM 131	(3)	Forensic Science 3, 9
CHEM 134	(3)	Mind Altering Substances 3
CHEM 135	(3)	Science of Sport 3
CHEM 191	(3)	Chemistry Applications 2, 3
CHEM 201-L	(5)	General Chemistry I 2, 3
EET 112-L	(3)	Elementary Electricity and Electronics 3
EET 118	(3)	Electricity - Generation, Usage & Green Alternatives 3, 8
FCS 140	(3)	Introduction to Nutrition 3
GEOG 101	(3)	Introductory Physical Geography 3, 10
GEOL 100-L	(3-4)	Our Geologic Environment 3, 10
GEOL 108	(3)	Oceans of the World 3, 10
GEOL 121-L	(4)	Physical Geology 3, 10
GEOL 122-L	(4)	Earth History 3
PHYS 100-L	(3)	Cultural Physics 3
PHYS 101-L	(3)	Introductory Physics 3
PHYS 102	(3)	Physics in the World Around Us 3
PHYS 105	(3)	Time, Atomic Clocks, and Relativity 3
PHYS 211-L	(4)	Principles of Physics I 2, 3
PHYS 221-L	(4)	General Physics I 2, 3

**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:

- illustrate historical and contemporary applications of mathematical/logical systems;
- clearly express mathematical/logical ideas in writing;
- explain what constitutes a valid mathematical/logical argument (proof);
- 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 I, MATH 130 Finite Mathematics and Introductory Calculus, MATH 201 Elements of Mathematics I, or STAT 154 Elementary Statistics must demonstrate readiness to succeed by satisfying the placement table below.

Course	Minimum ACT/SAT Math Subscore	Minimum Accuplacer Intermediate Algebra Score	Minimum Accuplacer College Level Math Score	Minimum Accuplacer Calculus Readiness Score	Course Prerequisites
Math 112	ACT 22, Old SAT 520, New SAT* 550, 2-digit SAT 27.5** MCA 1158	OR 60	N/A	N/A	OR Grade of P in MATH 098
Math 113	ACT 22, Old SAT 520, New SAT* 550, 2-digit SAT 27.5**	OR 60	AND 84	N/A	OR Math 112 with "C" or better
Math 115	ACT 23, Old SAT 530, New SAT* 560, 2-digit SAT 28**	OR 60	AND 96	N/A	OR Grade of P in MATH 098
Math 121	ACT 24, Old SAT 560, New SAT* 580, 2-digit SAT 29**	OR 60	AND 84	AND 21	OR MATH 115, or both MATH 112 and MATH 113 with a "C" (2.0) or better
Math 130	ACT 23, Old SAT 530, New SAT* 560, 2-digit SAT 28**	OR 60	AND 84	N/A	OR MATH 112 or MATH 115 with a "C" (2.0) or better
Math 181	ACT 23, Old SAT 530, New SAT* 560, 2-digit SAT 28**	OR 60	AND 84	N/A	OR MATH 112 or MATH 115 with a "C" (2.0) or better
Math 201	ACT 22, Old SAT 520, New SAT* 550, 2-digit SAT 27.5** MCA 1148	OR 60	N/A	N/A	OR Grade of P in Math 098 or "C" (2.0) or better in MATH 112, MATH 115, or MATH 12
Stat 154	ACT 19, Old SAT 460, New SAT* 500, 2-digit SAT 25** MCA 1148	OR 60	N/A	N/A	OR Grade of P in Math 098, or "C" (2.0) or better in Math 112, Math 115, or Math 121

\*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

All test scores (includes ACT, SAT, and MCA) are valid for 5 years.

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)	Intuitive Calculus 4
MATH 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

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

**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 examine the implications of this knowledge and its interconnection with action and

living an informed life. Students will be able to:

- employ the methods and data that historians and social and behavioral scientists use to investigate the human condition;
- examine social institutions and processes across a range of historical periods and cultures;
- use and critique alternative explanatory systems or theories;
- develop and communicate alternative explanations or solutions for contemporary social issues.

Course(s) which satisfy this goal area include:

Course	Credits	Title/Goal Area(s)
AIS 101P	(3)	Introduction to American Indigenous Studies 5, 7
AIS 210WP	(3)	Oral Traditions 5, 7
AIS 211P	(4)	The Story of American Indian Country to 1900 5, 7
AIS 212P	(4)	The Story of American Indian Country 1900-Present 5, 7
AIS 220WP	(3)	Introduction to Tribal Sovereignty 5, 7
AIS 230WP	(3)	American Indians of Minnesota 5, 7
AIS 240WP	(3)	American Indian Women 5, 7
AIS 330P	(3)	Indigenous Education 5, 9
ANTH 101P	(4)	Introduction to Anthropology 5, 8
ANTH 102	(4)	Ancient Peoples 5, 10
ANTH 240G	(4)	Language and Culture 5, 8
ANTH 250WP	(4)	Portraits of Culture 5
ANTH 260P	(3)	Vampires, Werewolves & Zombies: Folklore of Fear 5, 8
ANTH 261P	(3)	Taboos, Tattoos & T-shirts: Culture and Body Art 5, 8
ANTH 269P	(3)	Anthropology of Sex 5, 7
ANTH 340P	(4)	Language & Power 5, 7
CORR 106P	(3)	Introduction to Criminal Justice Systems 5, 9
CORR 255	(3)	Juvenile Delinquency 5, 9
ECON 100	(3)	An Introduction to the U.S. Economy 5
ECON 103WP	(3)	Economics of Women's Issues & Public Policy in the United States 2, 5
ECON 201	(3)	Principles of Macroeconomics 5
ECON 202	(3)	Principles of Microeconomics 5
ECON 314W	(3)	Current Economic Issues 5, 8
ETHN 100P	(3)	American Racial Minorities 5, 7
ETHN 101P	(3)	Introduction to Multicultural & Ethnic Studies 5, 7
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
ETHN 220WP	(3)	Civil Rights in the U.S. 5
ETHN 440	(3)	Asian American Studies 5
FCS 100	(3)	Personal & Family Living 5
GEOG 103P	(3)	Introductory Cultural Geography 5, 8
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 225WG	(4)	Introduction to Lesbian, Gay, Bisexual & Transgender Studies 5, 7
HIST 155P	(3)	History of the Family in America 5, 7
HIST 170	(4)	Ancient World Civilization to 1500 5, 8
HIST 170W	(4)	Ancient Civilization to 1500 5, 8
HIST 171P	(4)	World Civilization, 1500-Present 5, 8
HIST 171W	(4)	World Civilization 1500-Present 5, 8
HIST 180	(4)	European History to 1648 5, 10
HIST 180W	(4)	European History to 1648 5, 10
HIST 181	(4)	European History: 1648 to the Present 5, 9
HIST 181W	(4)	European History: 1648-Present 5, 9
HIST 190P	(4)	United States to 1877 5, 7
HIST 190WP	(4)	United States to 1877 5, 7
HIST 191P	(4)	United States Since 1877 5, 7
HIST 191WP	(4)	United States Since 1877 5, 7
HIST 260P	(4)	Introduction to Traditional East Asian Civilization 5, 10
HIST 260WP	(4)	Introduction to Traditional East Asian Civilization 5, 10
HLTH 225	(3)	Introduction to Alcohol and Drug Studies 5
HLTH 240	(3)	Drug Education 5
KSP 235	(3)	Human Development 5
LAWE 131	(3)	Introduction to Law Enforcement 5
LAWE 132	(3)	Crime and Punishment 5
MSL 252	(3)	The Evolution of American Warfare 5
MRKT 100	(3)	Foundations of Business Concepts 5
MUSE 200W	(3)	Introduction to Museum Studies 5, 8
POL 100	(3)	Introduction to Politics 5
POL 104	(3)	Understanding the U.S. Constitution 5
POL 111	(3)	United States Government 5, 9
PSYC 101	(4)	Introduction to Psychology Science 5



## UNDERGRADUATE GRADUATION REQUIREMENT: GENERAL EDUCATION CONTINUED

PSYC	206	(4)	Introduction to Cognitive Science 5
RPLS	260	(3)	Planes, Trains, and Automobiles: An Introduction to the Travel and Tourism Industry 5
SOC	101P	(3)	Introduction to Sociology 5, 8
SOC	150P	(3)	Social Problems 5, 7
SOC	208P	(3)	Families in Society 5, 7
SOC	209P	(3)	Sociology of Human Sexuality 5, 7
SOC	255	(3)	Juvenile Delinquency 5, 9
SOWK	215P	(4)	Introduction to Social Welfare Services 5, 9
SOWK	255P	(3)	Global Responses to Human Need 5, 8
URBS	100	(3)	Introduction to the City 5, 8
URBS	150	(3)	Sustainable Communities 5, 10

### 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:

- demonstrate awareness of the scope and variety of works in the arts and humanities;
- understand those works as expressions of individual and human values within an historical and social context;
- respond critically to works in the arts and humanities;
- engage in the creative process or interpretive performance;
- articulate an informed personal reaction to works in the arts and humanities.

Course(s) which satisfy this goal area include:

Course	Credits	Title/Goal Area(s)
ART	100	(3) Elements and Principles of Art 6
ART	160P	(3) Introduction to Visual Culture 6, 8
ART	225	(3) Developing Creativity: Approaches and Techniques 6, 7
ART	231	(3) Mixed Media 6
ART	260P	(3) Art History Survey I 6, 8
ART	261	(3) Art History Survey II 6, 8
ART	265W	(3) Art as Politics 6, 8
ART	275	(3) Photography 6
CMST	310	(4) Performance of Literature 6, 11
CS	201W	(4) Artificial Intelligence & Science Fiction 6, 9
DANC	120	(3) Introduction to Dance 6, 8
DANC	120W	(3) Introduction to Dance 6, 8
EET	125P	(3) Perspective on Technology 6, 8
ENG	110	(4) Introduction to Literature 6
ENG	112W	(4) Introduction to Poetry and Drama 6
ENG	113W	(4) Introduction to Prose Literature 6
ENG	118P	(4) Diverse Culture in Literature and Film 6, 7
ENG	125P	(4) International Children's Literature 6, 8
ENG	146	(4) Introduction to Shakespeare 6, 8
ENG	211WP	(4) Perspectives in Literature and Human Diversity 6, 7
ENG	212W	(4) Perspectives in World Literature 6, 8
ENG	213W	(4) Perspectives: Ethics and Civic Responsibility 6, 9
ENG	215	(2-4) Topics in Literature 6
FILM	110	(4) Film Appreciation 6
FILM	114	(4) Introduction to Film 6
FILM	210W	(4) Film Genres 6
FILM	214	(4) Topics in Film 6
FILM	216W	(4) Writing About Film 6
FILM	217	(4) Introduction to Film Production 6, 11
FILM	334WP	(4) International Cinema 6, 8
GER	150WP	(4) The German-Speaking Countries: An Interdisciplinary Introduction 6, 8
GWS	230P	(4) Gender, Race & Pop Culture 2, 6
GWS	251P	(4) Coming of Age: Gender & Culture 6, 7
GWS	251WP	(4) Coming of Age: Gender & Culture 6, 7
HUM	101W	(4) Introduction to the Humanities and the Search for Meanings 6, 8
HUM	150	(4) Western Humanities I: Beginnings through the Renaissance 6
HUM	151	(4) Western Humanities. II: Renaissance through Present 6
HUM	155	(4) Global Humanities I 6, 8
HUM	156P	(4) Global Humanities II 6, 8
HUM	250	(2-4) Perspectives in Humanities 6
HUM	250W	(4) Perspectives in Humanities 6
HUM	280	(2-4) Humanities Traditions 6
HUM	280W	(4) Humanities Traditions 6
HUM	281WP	(4) Human Diversity and Humanities Traditions 6, 7

HUM	282WP	(4)	Global Perspectives & Humanities Traditions 6, 8
IT	113P	(4)	Synergy between Health Humanities, Healthcare Informatics and Outcome Measures 6, 7
KSP	251	(3)	Coming of Age: Gender & Culture 6, 7
MASS	260P	(4)	Principles of Visual Mass Media 6, 7
MASS	280	(4)	Social Media and Society 6, 9
MUSC	101	(3)	Intro to Music 6
MUSC	102P	(3)	Pop Music USA: Jazz to Country to Blues 6, 7
MUSC	103P	(3)	Pop Music USA: R & B to MTV 6, 7
MUSC	120	(3)	Survey of American Popular Music 6
MUSC	209	(1-3)	Music Travel Tour 6
MUSC	307G	(3)	Music of the World 6, 8
MUSC	308	(3)	Women in Music 6
MUSC	309W	(3)	Music Travel Tour 6
PHIL	100W	(3)	Introduction to Philosophy 6
PHIL	101W	(3)	Philosophical Problem: The Mind-Body Problem 6
PHIL	115W	(3)	Phil of Race, Class & Gender 6, 7
PHIL	120W	(3)	Introduction to Ethics 6, 9
PHIL	122 WP	(3)	Introduction to Asian Philosophy 6, 8
PHIL	205W	(3)	Culture, Identity & Diversity 6, 8
PHIL	222W	(3)	Medical Ethics 6, 9
PHIL	224	(3)	Business Ethics 6, 9
PHIL	224W	(3)	Business Ethics 6, 9
PHIL	240W	(3)	Law, Justice & Society 6, 9
PHIL	321W	(3)	Social and Political Philosophy 6, 9
PHIL	322W	(3)	Ethical Theory 6, 9
PHIL	323W	(3)	Philosophy of Economics 6, 9
PHIL	334W	(3)	History of Philosophy: Classical Philosophy 6
PHIL	336W	(3)	History of Philosophy: Renaissance & Modern Philosophy 6
PHIL	337	(3)	19th Century Philosophy 6
PHIL	358WP	(3)	Topics in Asian Philosophy 6, 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
THEA	100	(3)	Introduction to Theatre 6
THEA	101	(3)	Acting for Everyone 6
THEA	115	(3)	Experiencing Theatre 6, 11
THEA	285WP	(3)	Theatre of Diversity 6, 7
URBS	110	(3)	The City: Design and Architecture 6

### 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:

- understand the development of and the changing meanings of group identities in the United States' history and cultures;
- demonstrate an awareness of the individual and institutional dynamics of unequal power relations between groups in contemporary society;
- analyze and evaluate their own attitudes, behaviors, concepts, and beliefs regarding diversity, racism, and bigotry;
- 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;
- demonstrate communication skills necessary for living and working effectively in a society with great population diversity.

Course(s) which satisfy this goal area include:

Course	Credits	Title/Goal Area(s)
AIS	101P	(3) Introduction to American Indigenous Studies 5, 7
AIS	112P	(4) Elementary Ojibwe I 7, 8
AIS	113P	(4) Elementary Ojibwe II 7, 8
AIS	210WP	(3) Oral Traditions 5, 7
AIS	211P	(4) The Story of American Indian Country to 1900 5, 7
AIS	212P	(4) The Story of American Indian Country 1900-Present 5, 7
AIS	220WP	(3) Introduction to Tribal Sovereignty 5, 7
AIS	230WP	(3) American Indians of Minnesota 5, 7
AIS	240WP	(3) American Indian Women 5, 7
ANTH	245P	(3) Social Life of Swearing 7, 9
ANTH	269P	(3) Anthropology of Sex 5, 7
ANTH	280G	(3) Engaged Anthropology 7, 11
ANTH	340P	(4) Language & Power 5, 7

ART 225	(3)	Developing Creativity: Approaches and Techniques 6, 7	ART 265W	(3)	Art as Politics 6, 8
CDIS 290P	(3)	Introduction to Communication Disorders 7	BIOL 100-L	(4)	Our Natural World 3, 8
CMST 203P	(3)	Intercultural Communication 7, 8	CDIS 206	(3)	Intermediate Sign Language 8
ED 101P	(3)	Introduction to Critical Race Theory in Education 7, 9	CDIS 207	(3)	Advanced Sign Language I 8
EEC 222WG	(3)	Human Relations in a Multicultural Society 7, 11	CMST 203P	(3)	Intercultural Communication 7, 8
ENG 118P	(4)	Diverse Culture in Literature and Film 6, 7	DAK 101	(4)	Elementary Dakota I 8
ENG 211WP	(4)	Perspectives in Literature and Human Diversity 6, 7	DAK 102	(4)	Elementary Dakota II 8
ETHN 100P	(3)	American Racial Minorities 5, 7	DAK 201	(4)	Intermediate Dakota I 8
ETHN 101P	(3)	Introduction to Multicultural & Ethnic Studies 5, 7	DAK 202	(4)	Intermediate Dakota II 8
ETHN 150G	(3)	Multicultural/Ethnic Experience 7	DANC 120	(3)	Introduction to Dance 6, 8
ETHN 200	(3)	Interracial/Interethnic Dating/Marriage 7	DANC 120W	(3)	Introduction to Dance 6, 8
ETHN 201WP	(3)	Perspectives on African Americans 5, 7	DANC 225P	(3)	Worlds of Dance 8, 11
ETHN 202W	(3)	Perspectives on American Indians in Ethnic Studies 5, 7	ECON 314W	(3)	Current Economic Issues 5, 8
ETHN 203WP	(3)	Perspectives on Asian Americans 5, 7	EET 118	(3)	Electricity - Generation, Usage & Green Alternatives 3, 8
ETHN 204WP	(3)	Perspectives on Latinos/Hispanics 5, 7	EET 125P	(3)	Perspective on Technology 6, 8
GERO 200G	(4)	Family Dynamics of Aging 2, 7	ENG 125P	(4)	International Children's Literature 6, 8
GERO 200WG	(4)	Family Dynamics of Aging 2, 7	ENG 146	(4)	Introduction to Shakespeare 6, 8
GWS 110P	(4)	Introduction to Gender 5, 7	ENG 212W	(4)	Perspectives in World Literature 6, 8
GWS 110WP	(4)	Introduction to Gender 5, 7	ENVR 101	(4)	Perspectives in Environmental Science 8, 10
GWS 225G	(4)	Introduction to Lesbian, Gay, Bisexual & Transgender Studies 5, 7	FILM 334WP	(4)	International Cinema 6, 8
GWS 225WG	(4)	Introduction to Lesbian, Gay, Bisexual & Transgender Studies 5, 7	FREN 101	(5)	Elementary French I 8
GWS 251P	(4)	Coming of Age: Gender & Culture 6, 7	FREN 102	(5)	Elementary French II 8
GWS 251WP	(4)	Coming of Age: Gender & Culture 6, 7	FREN 201	(4)	Intermediate French I 8
HIST 155P	(3)	History of the Family in America 5, 7	FREN 202	(4)	Intermediate French II 8
HIST 190P	(4)	United States to 1877 5, 7	GEOG 100P	(3)	Elements of Geography 8, 10
HIST 190WP	(4)	United States to 1877 5, 7	GEOG 103P	(3)	Introductory Cultural Geography 5, 8
HIST 191P	(4)	United States Since 1877 5, 7	GER 101	(4)	Elementary German I 8
HIST 191WP	(4)	United States Since 1877 5, 7	GER 102	(4)	Elementary German II 8
HIST 232G	(4)	Islamic Civilizations 7, 8	GER 150WP	(4)	The German-Speaking Countries: An Interdisciplinary Introduction 6, 8
HLTH 211G	(3)	Human Sexuality in a World of Diversity 7	GER 201	(4)	Intermediate German I 8
HUM 281WP	(4)	Human Diversity and Humanities Traditions 6, 7	GER 202	(4)	Intermediate German II 8
IT 113P	(4)	Synergy between Health Humanities, Healthcare Informatics and Outcome Measures 6, 7	GWS 220P	(4)	Sex and Gender Worldwide 8, 9
KSP 220WG	(3)	Human Relations in a Multicultural Society 7, 11	GWS 220WP	(4)	Sex and Gender Worldwide 8, 9
KSP 251	(3)	Coming of Age: Gender and Culture 6, 7	HIST 170	(4)	Ancient World Civilization to 1500 5, 8
KSP 260G	(3)	Creating Global Awareness through Studying Abroad 7, 8	HIST 170W	(4)	Ancient World Civilization to 1500 5, 8
MASS 260P	(4)	Principles of Visual Mass Media 6, 7	HIST 171P	(4)	World Civilization, 1500-Present 5, 8
MUSC 102P	(3)	Pop Music USA: Jazz to Country to Blues 6, 7	HIST 171W	(4)	World Civilization 1500-Present 5, 8
MUSC 103P	(3)	Pop Music USA: R & B to MTV 6, 7	HIST 232G	(4)	Islamic Civilizations 7, 8
PHIL 115W	(3)	Phil. of Race, Class & Gender 6, 7	HUM 101W	(4)	Introduction to the Humanities and the Search for Meanings 6, 8
REHB 110WG	(3)	Sensitivity to Disability 7	HUM 155	(4)	Global Humanities I 6, 8
SOC 150P	(3)	Social Problems 5, 7	HUM 156P	(4)	Global Humanities II 6, 8
SOC 208P	(3)	Families in Society 5, 7	HUM 282WP	(4)	Global Perspectives & Humanities Traditions 6, 8
SOC 209P	(3)	Sociology of Human Sexuality 5, 7	KSP 260G	(3)	Creating Global Awareness through Studying Abroad 7, 8
SPED 108P	(3)	Human Services and Disabilities 7, 9	MUSC 307G	(3)	Music of the World 6, 8
THEA 285WP	(3)	Theatre of Diversity 6, 7	MUSE 200W	(3)	Introduction to Museum Studies 5, 8

## 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:

- 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;
- demonstrate knowledge of cultural, social, religious and linguistic differences;
- analyze specific international problems illustrating cultural, economic, artistic, humanistic, social, and political differences which affect their solution;
- 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:

Course	Credits	Title/Goal Area(s)
AIS 112P	(4)	Elementary Ojibwe I 7, 8
AIS 113P	(4)	Elementary Ojibwe II 7, 8
AIS 201	(4)	Intermediate Dakota I 8
AIS 202	(4)	Intermediate Dakota II 8
ANTH 101P	(4)	Introduction to Anthropology 5, 8
ANTH 230G	(4)	People & Cultures of the World 8
ANTH 240G	(4)	Language and Culture 5, 8
ANTH 260P	(3)	Vampires, Werewolves & Zombies: Folklore of Fear 5, 8
ANTH 261P	(3)	Taboos, Tattoos & T-shirts: Culture and Body Art 5, 8
ART 160P	(3)	Introduction to Visual Culture 6, 8
ART 260P	(3)	Art History Survey I 6, 8
ART 261	(3)	Art History Survey II 6, 8

## 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, 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.

## UNDERGRADUATE GRADUATION REQUIREMENT: GENERAL EDUCATION CONTINUED

Students will be able to:

- examine, articulate, and apply their own ethical views;
- understand and apply core concepts (e.g. politics, rights and obligations, justice, liberty) to specific issues;
- analyze and reflect on the ethical dimensions of legal, social, and scientific issues;
- recognize the diversity of political motivations and interests of others;
- identify ways to exercise the rights and responsibilities of citizenship.

Course(s) which satisfy this goal area include:

Course	Credits	Title/Goal Area(s)
AIS 330P	(3)	Indigenous Education 5, 9
ANTH 245P	(3)	Social Life of Swearing 7, 9
BLAW 131	(3)	Consumer Law & Ethics 9
CHEM 131	(3)	Forensic Science 3, 9
CMST 330	(4)	Ethics and Free Speech 9
CORR 106P	(3)	Introduction to Criminal Justice Systems 5, 9
CORR 255	(3)	Juvenile Delinquency 5, 9
CS 201W	(4)	Artificial Intelligence & Science Fiction 6, 9
ED 101P	(3)	Introduction to Critical Race Theory in Education 7, 9
ENG 213W	(4)	Perspectives: Ethics and Civic Responsibility 6, 9
GWS 120P	(4)	Violence and Gender 9
GWS 120WP	(4)	Violence and Gender 9
GWS 220P	(4)	Sex and Gender Worldwide 8, 9
GWS 220WP	(4)	Sex and Gender Worldwide 8, 9
HIST 181	(4)	European History: 1648 to the Present 5, 9
HIST 181W	(4)	European History: 1648-Present 5, 9
HIST 250	(4)	Riot and Revolution in History 1B, 9
HIST 268	(4)	American Legal History 1B, 9
HIST 280G	(4)	History in Black and White 9, 11
IT 100	(4)	Introduction to Computing & Applications 9, 13
IT 202W	(4)	Computers in Society 9, 13
KSP 101	(3)	Exploring and Applying Values 9
KSP 200G	(3)	Critical Issues in Public Ed Today 2, 9
KSP 250	(3)	Social Justice in School and Community 9
MASS 110P	(4)	Introduction to Mass Media 9
MASS 280	(4)	Social Media and Society 6, 9
NPL 273	(3)	Introduction to the Nonprofit Sector 9
PHIL 120W	(3)	Introduction to Ethics 6, 9
PHIL 222W	(3)	Medical Ethics 6, 9
PHIL 224	(3)	Business Ethics 6, 9
PHIL 224W	(3)	Business Ethics 6, 9
PHIL 226W	(3)	Environmental Ethics 9, 10
PHIL 240W	(3)	Law, Justice & Society 6, 9
PHIL 321W	(3)	Social & Political Philosophy 6, 9
PHIL 322W	(3)	Ethical Theory 6, 9
PHIL 323W	(3)	Philosophy of Economics 6, 9
POL 101	(3)	Introduction to Public Life 9, 11
POL 111	(3)	United States Government 5, 9
RPLS 272	(3)	Introduction to Recreation, Parks & Leisure Services 9
RPLS 275	(3)	Natural Resources and Conservation in RPLS 9
SOC 214W	(3)	Animals and Society 2, 9
SOC 255	(3)	Juvenile Delinquency 5, 9
SOWK 215P	(4)	Introduction to Social Welfare Services 5, 9
SPED 108P	(3)	Human Services and Disabilities 7, 9
URBS 230	(3)	Community Leadership 9, 11
URBS 230W	(3)	Community Leadership 9, 11

### 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 bio-physical principles and psychosocial cultural systems is the foundation for integrative and critical thinking about environmental issues.

Students will be able to:

- explain the basic structure and function of various natural ecosystems and of human adaptive strategies within those systems;
- discern and analyze patterns and interrelationships of the bio-physical and psycho-social cultural systems;
- critically discern and analyze individual, social, and ecological dimensions of health;
- describe the basic institutional arrangements (social, legal, political, economic, health, ethical, religious) that are evolving to deal with environmental and natural resource challenges;
- evaluate critically environmental and natural resource issues in light of understandings about interrelationships, ecosystems, and institutions;
- propose and assess alternative solutions to environmental problems;
- articulate and defend the actions they would take on various environmental issues.

Course(s) which satisfy this goal area include:

Course	Credits	Title/Goal Area(s)
AIS 360P	(3)	Indigenous People & Environmental Struggles 10
ANTH 102	(4)	Ancient Peoples 5, 10
ANTH 210L	(4)	Introduction to Archaeology 3, 10
EEC 205	(3)	Service Learning: Society and the Environment 10
ENVR 101	(4)	Perspectives in Environmental Science 8, 10
GEOG 100P	(3)	Elements of Geography 8, 10
GEOG 101	(3)	Introductory Physical Geography 3, 10
GEOG 210W	(3)	Landscapes and Places 10
GEOG 313	(4)	Natural Disasters 2, 10
GEOL 100L	(3-4)	Our Geologic Environment 3, 10
GEOL 108	(3)	Oceans of the World 3, 10
GEOL 121L	(4)	Physical Geology 3, 10
HIST 180	(4)	European History to 1648 5, 10
HIST 180W	(4)	European History to 1648 5, 10
HIST 260P	(4)	Introduction to Traditional East Asian Civilization 5, 10
HIST 260WP	(4)	Introduction to Traditional East Asian Civilization 5, 10
HLTH 101	(3)	Health and the Environment 10
PHIL 226W	(3)	Environmental Ethics 9, 10
RPLS 282	(3)	Wildlife as a Recreational Resource 10
SOC 360P	(3)	Indigenous Peoples & Environmental Struggles 10
URBS 150	(3)	Sustainable Communities 5, 10

**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:

- participate effectively in a variety of artistic, education, political, recreational, health and public service, or social service settings;
- interact with others of another culture in its indigenous setting through a structured experience;
- participate cooperatively in group athletic activity or artistic performance.

Course(s) which satisfy this goal area include:

Course	Credits	Title/Goal Area(s)
ANTH 280G	(3)	Engaged Anthropology 7, 11
CDIS 205	(3)	Beginning Sign Language 11
CMST 220	(1-4)	Forensics 11
CMST 310	(4)	Performance of Literature 6, 11
DANC 123	(2)	Jazz Dance 11
DANC 125	(2)	Afro-Caribbean Dance Forms 11
DANC 126	(2)	Ballet I 11
DANC 127	(2)	Tap Dance I 11
DANC 128	(2)	Contemporary Dance I 11
DANC 223	(2)	Jazz Dance II 11
DANC 225P	(3)	Worlds of Dance 8, 11
DANC 226	(2)	Ballet II 11
DANC 227	(2)	Tap Dance II 11
DANC 228	(2)	Contemporary Dance II 11
DANC 229	(1)	Kinetic Learning in the Classroom 11
DANC 328	(2)	Contemporary Dance III 11
EEC 222WG	(3)	Human Relations in a Multicultural Society 7, 11
ENG 242W	(4)	Introduction to Creative Writing 11
EXED 202	(3)	Introduction to Experiential Education 11
FILM 217	(4)	Introduction to Film Production 6, 11
HIST 280G	(4)	History in Black and White 9, 11
HLTH 210	(3)	First Aid & CPR 11
HP 102	(1)	Individualized Exercise 11
HP 103	(1)	Fitness for Living 11
HP 104	(1)	Adult Fitness 11
HP 105	(1)	Beginner & Advanced Beginner Swimming 11
HP 114	(1)	Billiards and Bowling 11
HP 117	(1)	Aerobic Conditioning 11
HP 130	(1)	Self-Defense for Women 11
HP 139	(1)	Winter Survival 11
HP 143	(1)	Aqua Exercise 11
HP 145	(1)	Aquatic Conditioning and Water Polo 11
HP 146	(1)	Intercollegiate Bowling 11
HP 147	(1)	Intercollegiate Cross Country 11
HP 148	(1)	Intercollegiate Softball 11
HP 149	(1)	Intercollegiate Volleyball 11
HP 150	(1)	Intercollegiate Wrestling 11
HP 152	(1)	Intercollegiate Track and Field 11

HP	153	(1)	Intercollegiate Swimming 11
HP	154	(1)	Intercollegiate Football 11
HP	155	(1)	Intercollegiate Basketball 11
HP	156	(1)	Intercollegiate Baseball 11
HP	157	(1)	Intercollegiate Golf 11
HP	158	(1)	Intercollegiate Tennis 11
HP	159	(1)	Intercollegiate Hockey 11
HP	161	(1)	Intercollegiate Soccer 11
HP	166	(1)	Team Game Skills 11
HP	174	(1)	Individual Dual Activities 11
HP	175	(1)	Fitness Activities 11
HP	176	(1)	Lifetime Activities I 11
HP	177	(1)	Lifetime Activities II 11
HP	178	(1)	Social, Folk and Square Dance Techniques 11
HP	179	(1)	Winter Activities 11
HP	180	(1)	Introduction to Handball 11
HP	181	(1)	Advanced Handball 11
HP	182	(1)	Aquatic Skills 11
HP	190	(1)	Sport Activities 11
HP	241	(1)	Sailing 11
HP	242	(1)	Canoeing 11
HP	245	(1)	Intermediate Swimming 11
HP	248	(1)	Stroke Analysis 11
HP	250	(2)	Lifeguard Training 11
HP	252	(2)	Officiating Theory 11
HP	257	(2)	Water Safety Instructor (WSI) 11
HP	291	(2)	Concepts of Fitness 11
KSP	220WG	(3)	Human Relations in a Multicultural Society 7, 11
MSL	210	(1)	Army Physical Fitness 11
MUSP	101	(0-1)	Concert Choir 11
MUSP	103	(0-1)	Chamber Singers 11
MUSP	108	(0-1)	Contemporary Vocal Ensemble 11
MUSP	114	(1)	Vocal Ensemble 11
MUSP	121	(0-1)	Maverick Wind Ensemble 11
MUSP	122	(0-1)	Symphonic Band 11
MUSP	123	(0-1)	University Orchestra 11
MUSP	125	(0-1)	Jazz Mavericks 11
MUSP	126	(0-1)	Contemporary Instrumental Ensemble 11
MUSP	131	(0-1)	Maverick Machine Athletic Band 11
MUSP	133	(1)	Percussion Ensemble 11
MUSP	201	(0-1)	Concert Choir 11
MUSP	202	(0-1)	University Chorale 11
MUSP	203	(0-1)	Chamber Singers 11
MUSP	208	(0-1)	Contemporary Vocal Ensemble 11
MUSP	211	(1,3)	Music Productions for the Stage and Screen 11
MUSP	214	(0-1)	Vocal Ensemble 11
MUSP	221	(0-1)	Wind Ensemble 11
MUSP	222	(0-1)	Symphonic Band 11
MUSP	223	(0-1)	University Orchestra 11
MUSP	225	(0-1)	Jazz Mavericks 11
MUSP	226	(0-1)	Contemporary Instrumental Ensemble 11
MUSP	233	(0-1)	Percussion Ensemble 11
MUSP	235	(0-1)	Theatre Orchestra 11
MUSP	239	(0-1)	Instrumental Ensemble 11
MUSP	303	(0-1)	Chamber Singers 11
MUSP	308	(0-1)	Contemporary Vocal Ensemble 11
MUSP	314	(0,1)	Vocal Ensemble 11
MUSP	321	(0-1)	Wind Ensemble 11
MUSP	322	(0-1)	Symphonic Band 11
MUSP	323	(0-1)	University Orchestra 11
MUSP	325	(0-1)	Jazz Mavericks 11
MUSP	326	(0-1)	Contemporary Instrumental Ensemble 11
MUSP	331	(0-1)	Maverick Machine Athletic Band 11
MUSP	333	(0-1)	Percussion Ensemble 11
NURS	101W	(3)	Courage, Caring, and Team Building 11
POL	101	(3)	Introduction to Public Life 9, 11
RPLS	278	(3)	Leisure and Lifestyle 11
THEA	102	(1-2)	Theatre Activity: Acting 11
THEA	103	(1-2)	Theatre Activity: Management 11
THEA	105	(1-2)	Theatre Activity: Stagecraft 11
THEA	107	(1-2)	Theatre Activity: Costume 11
THEA	108	(1-2)	Theatre Activity: Lighting 11
THEA	109	(1-2)	Theatre Activity: Sound 11
THEA	115	(3)	Experiencing Theatre 6, 11
URBS	230	(3)	Community Leadership 9, 11
URBS	230W	(3)	Community Leadership 9, 11

## 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:

- experience higher personal expectations of his/her ability to meaningfully participate in academic life;
- define and give examples of critical thinking;
- interact with other students regarding academic matters;
- affirm that careful thinking is an important aspect of the educational process;
- make a comfortable transition to college life.

Course(s) which satisfy this goal area include:

Course	Credits	Title/Goal Area(s)
CIVE	100	(1) Explorations in Engineering 12
EE	100	(1) Exploration in Engineering 12
FYEX	100	(1) First Year Seminar 12
ME	100	(1) Exploration in Engineering 12

## 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:

- use electronic information technology ethically and responsibly;
- access and retrieve information through electronic media, evaluating the accuracy and authenticity of that information;
- create, manage, organize and communicate information through electronic media;
- demonstrate a working knowledge of information technology terms and concepts;
- understand how computers function and the limits of computation and information technology;
- 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	(3) Understanding Computers 13
EET	116	(3) Communications-Past, Present & Future 13
ENG	271W	(4) Technical Communication 2, 13
ENG	272W	(4) Business Communication 2, 13
IT	100	(4) Introduction to Computing & Applications 9, 13
IT	202W	(4) Computers in Society 9, 13
MUSC	299	(0) Upper Level Admission Assessment 13

## 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

- Students pursuing a baccalaureate degree must take either:
  - 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
  - at least two (2) courses for a minimum of 6 credits from the list of courses designated as Purple (Content).
- 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 impact 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.
2. 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.
3. 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.
4. Courses must meet Purple learning outcome 1 and at least two of the other Purple learning outcomes.
5. Purple courses may have experiential and reflective components, but the primary focus is on content.

### DIVERSE CULTURES - PURPLE COURSES

AIS 101	AIS 110	AIS 111	AIS 112
AIS 113	AIS 210W	AIS 211	AIS 220W
AIS 230W	AIS 240W	AIS 330	AIS 340
AIS 360	AIS 380	ANTH 101	ANTH 230
ANTH 240	ANTH 245	ANTH 250W	ANTH 260
ANTH 261	ANTH 269	ANTH 332	ANTH 340
ANTH 361	ANTH 421W	ANTH 436W	ANTH 443W
ART 160	ART 260	ART 416	ART 467
ART 469	ART 477W	CDIS 290	CMST 203
CMST 403	CORR 106	CORR 444	CORR 468
CORR 472	DANC 225	ECON 103W	ECON 320W
ED 101	EET 125	ENG 118	ENG 125
ENG 211W	ENG 318	ENG 402W	ENG 412W
ENG 433W	ENG 436W	ENG 437W	ENG 438W
ENG 448	ETHN 100	ETHN 101	ETHN 201W
ETHN 203W	ETHN 204W	ETHN 220W	ETHN 403
ETHN 410	ETHN 460	ETHN 470	ETHN 486
FCS 120	FCS 400	FILM 334W	GEOG 100
GEOG 103	GEOG 341	GER 150W	GWS 110
GWS 110W	GWS 120	GWS 120W	GWS 220
GWS 220W	GWS 230	GWS 251	GWS 251W
GWS 411	HIST 250	HLTH 410	HLTH 466
HIST 155	HIST 171	HIST 190	HIST 190W
HIST 191	HIST 191W	HIST 260	HIST 260W

HIST 408	HIST 410	HIST 435	HIST 437
HIST 438	HIST 441	HIST 442	HIST 454
HIST 455	HIST 458	HIST 459	HIST 462
HIST 466	HIST 470	HIST 471	HIST 476
HIST 478	HUM 156	HUM 281W	HUM 282W
IT 113	LAWE 310	MASS 110	MASS 260
MUSC 102	MUSC 103	PHIL 122W	PHIL 358W
PSYC 460W	RPLS 274	SCAN 150W	SCAN 251W
SCAN 451	SOC 101	SOC 150	SOC 208
SOC 209	SOC 360	SOC 404	SOC 430
SOC 446	SOC 460	SOC 461	SOC 463
SOWK 215	SOWK 255	SPED 108	THEA 285W

### 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.

Students will 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.

#### 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

AIS 455	AIS 460	AIS 497	ANTH 280
CMST 417	DHYG 336	DHYG 447	EEC 222W
ENG 485	ETHN 150	ETHN 401	ETHN 402W
GERO 200	GERO 200W	GWS 225	GWS 225W
HIST 232	HIST 280	HLTH 211	KSP 150
KSP 200	KSP 220W	KSP 260	MRKT 494
MSL 498	MUSC 307	NURS382	PSYC 230
REHB 110W	SOC 420	SPAN 396	SPED 409

**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:

- Engage in effective writing processes, including the ability to generate ideas, draft, revise, format, and edit their work.
- Use writing to grapple with course content and reflect on their learning.
- Produce texts appropriate for an intended audience, purpose, and context.
- 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:

- Write in academic, professional, or public genres related to the discipline, displaying an understanding of the genres' communicative functions and contexts.
- Locate, evaluate, analyze, and use source material or data in their writing.

### Writing-Intensive Requirement:

- 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.
- 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.
- 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.

- 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.

- 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 488WV	AET 489W	AIS 210WP	AIS 220WP
AIS 230WP	AIS 240WP	AIS 300W	ANTH 250WP
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 485W	CORR 447W	CS 201W
CS 490W	CS 498W	DANC 120W	DANC 484W
DHYG 425W	DHYG 444W	ECON 103WP	ECON 314W
ECON 320W	ECON 485W	EE 467W	EE 477W
EEC 222WG	EEC 422WG	ENG 112W	ENG 113W
ENG 201W	ENG 211WP	ENG 212W	ENG 213W
ENG 242W	ENG 271W	ENG 272W	ENG 275W
ENG 301W	ENG 402WP	ENG 403W	ENG 412 WP
ENG 433WP	ENG 436WP	ENG 437WP	ENG 438WP
ENG 474W	ENG 477W	ENGR 311W	ENGR 312W
ENGR 411W	ENGR 412W	ETHN 201WP	ETHN 202W
ETHN 203WP	ETHN 204WP	ETHN 220WP	ETHN 300W
ETHN 402WG	FCS 414W	FILM 210W	FILM 216W
FILM 334WP	FREN 302W	GEOG 210W	GEOG 416W
GEOL 320W	GER 150WP	GERO 200WG	GWS 110WP
GWS 120WP	GWS 220WP	GWS 225WG	GWS 251WP
GWS 330W	HIST 170W	HIST 171W	HIST 180W
HIST 181W	HIST 190WP	HIST 191WP	HIST 260WP
HIST 481W	HIST 495W	HLTH 361W	HLTH 380W
HLTH 408W	HLTH 410W	HLTH 420W	HLTH 457W
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
MET 489W	MUSC 301W	MUSC 302W	MUSC 309W
MUSE 200W	NURS 101W	NURS 320W	NURS482W
PHIL 100W	PHIL 101W	PHIL 115W	PHIL 120W
PHIL 112W	PHIL 122WP	PHIL 205W	PHIL 222W
PHIL 224W	PHIL 226W	PHIL 240W	PHIL 321W
PHIL 322W	PHIL 323W	PHIL 334W	PHIL 336W
PHIL 358WP	PHYS 475W	POL 103W	PSYC 103W
PSYC 211W	PSYC 425W	PSYC 460WP	REHB 110WG
RPLS 447W	RPLS 471W	SCAN 150WP	SCAN 251WP
SOC 214W	SOC 285W	SOC 301W	SOC 495W
SPAN 210W	SPAN 311W	SPED 448W	THEA 285WP
THEA 381W	THEA 417W	THEA 485W	THEA 487W
URBS 230W			

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

## STUDENT'S NAME \_\_\_\_\_

Fall	Year 2018	Spring	Year 2019	Summer	Year 2019
Course/Course#	# of credits	Course/Course#	# of credits	Course/Course#	# of credits

Fall	Year 2019	Spring	Year 2020	Summer	Year 2020
Course/Course#	# of credits	Course/Course#	# of credits	Course/Course#	# of credits

Fall	Year 2020	Spring	Year 2021	Summer	Year 2021
Course/Course#	# of credits	Course/Course#	# of credits	Course/Course#	# of credits

Fall	Year 2021	Spring	Year 2022	Summer	Year 2022
Course/Course#	# of credits	Course/Course#	# of credits	Course/Course#	# of credits



## PRE-PROFESSIONAL PROGRAMS

The purpose of pre-professional 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 pre-professional 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 requirements. 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 primarily 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

BIOL 220	Human Anatomy (4 credits)
BIOL 330	Principles of Human Physiology (4 credits)
HP 265	Introduction to PT, OT, and AT (2 credits)
HP 348	Structural Kinesiology and Biomechanics (3 credits) <b>OR</b>
PHYS 211	General Physics I (or higher) may substitute for a biomechanics course
HP 414	Physiology of Exercise (3 credits)
STAT 154	Elementary Statistics (4) <b>OR</b>
HP 403	Research Methods and Statistics in Exercise Science (3 credits)
FCS 242	Nutrition for Healthcare Professionals (3 credits)
PSYCH 101	Introduction to Psychological Science, <b>OR</b>
	a higher psychology (4 credits)
HLTH 210	First Aid and CPR (3 credits) <b>OR</b>
	current CPR for the Professional Rescuer
CHEM 111	Chemistry of Life Processes Part II, <b>OR</b>
	a higher chemistry course (5 credits)
HLTH 101	Health and the Environment (3 credits) <b>OR</b>
	a higher public/community health course

### Preferred Prerequisite Courses

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

BIOL 105	General Biology I (4 credits)
Physics	Any 200 level or higher Physics course
HP 340	Prevention and Care of Athletic Injuries (2 credits)
HLTH 460	Introduction to Epidemiology (3 credits)
HP 403	Research Methods and Statistics in Exercise Science (3 credits)
	<b>OR</b> another Research Methods course

**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.

Students should check the Commission on Accreditation of Athletic Training Education (CAATE) web site ([www.caate.net](http://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)

CMST 102	Public Speaking (3)
ENG 101	Composition (4)
MATH 112	College Algebra (4)*
MATH 113	Trigonometry (3)*
PSYC 101	Introduction to Psychological Science (4)

An additional 15 elective credits from Humanities or Social Sciences

### Recommended Support Courses (3 credits)

HLTH 321	Medical Terminology (3)
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### Required for Major (Core, 34-35 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)
PHYS 211	Principles of Physics I (4)
PHYS 212	Principles of Physics II (4) <b>OR</b>
HP 348	Structural Kinesiology and Biomechanics (3)

### 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 regularly 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)

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

**Biology.** BIOL 105, BIOL 106 - students are encouraged to take additional electives from the following list to enhance their knowledge in basic biology: BIOL 211, BIOL 220, BIOL 270, BIOL 316, BIOL 320, BIOL 330, BIOL 435, BIOL 475

**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) <b>OR</b>
ECON	202	Principles of Microeconomics (3)
ENG	101	Composition (4)
MATH	121	Calculus I (4)
MATH	122	Calculus II (4)
PHYS	221	General Physics I (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)

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)

### 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. Goellner, Ph.D., Marilyn Hart, Ph.D., R. Cohen, Ph.D.; D. Sharlin, 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)  
BIOL 105 and BIOL 106

Students are encouraged to take additional electives from the following list to enhance their knowledge in basic biology: BIOL 211, BIOL 220, BIOL 270, BIOL 316, BIOL 320, BIOL 330, BIOL 435, BIOL 474

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

General chemistry: CHEM 201, 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 HLTH 475

**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 Behavior 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-medicine 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) <b>OR</b>
BIOL	105	General Biology I (4)
CHEM	100	Chemistry in Society (4) <b>OR</b>
CHEM	111	Chemistry of Life Process Part II (Organic & Biochemistry) (5) <b>OR</b>
CHEM	201	General Chemistry I (5)
STAT	154	Elementary Statistics (4) <b>OR</b>
PSYC	201	Statistics for Psychology (4)
SOC	101	Introduction to Sociology (3) <b>OR</b>
SOC	101W	Introduction to Sociology (3)
CMST	100	Fundamentals of Communication (3) <b>OR</b>
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 or 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](http://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, PhD  
mary.visser@mnsu.edu  
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

BIOL	220	Human Anatomy (4)
BIOL	330	Principles of Human Physiology (4)
STAT	154	Elementary Statistics (4)
CHEM	106	Chemistry of Life Process Part I (General) (3) <b>OR</b>
CHEM	111	Chemistry of Life Process Part II (Organic & Biochemistry) (5)
PSYC	101	Introduction to Psychological Science (4)
PSYC	433	Child Psychology (4) <b>AND</b>
PSYC	436	Adolescent Psychology (4) <b>AND</b>
PSYC	466	Psychology of Aging (4) <b>OR</b>
KSP	235	Human Development (3)
PSYC	455	Abnormal Psychology (4)
SOC	101	Introduction to Sociology (3)
HLTH	321	Medical Terminology (3)
HP	265	Orientation to Occupational and Physical Therapy (2)

TOTAL: 32-39 credits

AOTA Website for Accredited OT Programs: <http://www.aota.org/Educate/Schools/EntryLevelOT/38119.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.

#### 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.

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	322	Organic Chemistry I (4)
CHEM	323	Supplemental Organic Functional Group Chemistry (1)
CHEM	360	Principles of Biochemistry (4)
ENG	101	Composition (4)
ENG	271W	Technical Communication (4)
MATH	112	College Algebra (4) <b>AND</b>
MATH	113	Trigonometry (3) <b>OR</b>
MATH	115	Precalculus Mathematics (4)
MATH	121	Calculus I (4)
PHYS	211	Principles of Physics I (4)
PHYS	212	Principles of Physics II (4)
PSYC	101	Introduction to Psychological Science (4)
STAT	154	Elementary Statistics (4)

**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) <b>AND</b>
MATH	113	Trigonometry (3) <b>OR</b>
MATH	115	Pre-Calculus (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) <b>OR</b>
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.  
(for chemistry majors)

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) <b>OR</b>
BIOL	211	Genetics (4) <b>OR</b>
BIOL	320	Cell Biology (4) <b>OR</b>
BIOL	479	Molecular Biology (4)
CMST	102	Public Speaking (3) <b>OR</b>
CMST	101W	Interpersonal Communications (4)
ECON	202	Principles of Microeconomics (3)
ENG	201W	Intermediate Writing (4) <b>OR</b>
ENG	271W	Technical Communication (4) <b>OR</b>
ENG	301W	Advanced Writing (4)
MATH	121	Calculus I (4)
PHYS	221	General Physics I (4) <b>OR</b>

PHYS	211	Principles of Physics I (4) <b>AND</b>
PHYS	212	Principles of Physics II (4)
PSYC	101	Introduction to Psychological Science (4)
STAT	154	Elementary Statistics (4) <b>OR</b>
STAT	354	Concepts of Probability & Statistics (4) <b>OR</b>
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.

Email: mary.visser@mnsu.edu

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) <b>AND</b>
MATH	113	Trigonometry (3) <b>OR</b>
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 <b>AND</b>
PSYC	436	Adolescent Psychology <b>AND</b>
PSYC	466	Psychology of Aging (4) <b>OR</b>
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.



**PRE-PODIATRIC MEDICINE AND SURGERY***College of Science, Engineering & Technology***Advisor:** Rebecca Moen, Ph.D.

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) <b>AND</b>
MATH	113	Trigonometry (3) <b>OR</b>
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	324	Organic Chemistry II (3)
CHEM	325	Organic Chemistry II Lab (1)
CHEM	360	Principles of Biochemistry (4) <b>OR</b>
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.

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

**PRE-VETERINARY MEDICINE***College of Science, Engineering & Technology***Advisor:** P. Knoblich D.V.M., Ph.D.

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) <b>AND</b>
MATH	113	Trigonometry (3)* <b>OR</b>
MATH	115	Precalculus Mathematics (4) <b>OR</b>
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) <b>AND</b>
BIOL	330	Principles of Human Physiology (4) <b>OR</b>
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](http://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.

**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/](http://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)  
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 all Accounting Majors ("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)  
BLAW 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

#### Minor Common Core

ACCT 200 Financial Accounting (3)  
ACCT 210 Managerial Accounting (3)  
ACCT 300 Intermediate Financial Accounting I (3)

#### Minor Required 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)

ACCT	410	Business Income Tax (3)
ACCT	421	Assurance Services I (3)
ACCT	470	Advanced Topics (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 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

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, 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 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

### ACCT 200 (3) Financial Accounting

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

Fall, Spring

### ACCT 210 (3) Managerial Accounting

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

Fall, Spring

### ACCT 220 (1) Accounting Cycle Applications

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.

Fall, Spring

Prerequisite: ACCT 200

### ACCT 300 (3) Intermediate Financial Accounting I

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

Fall, Spring

### ACCT 301 (3) Intermediate Financial Accounting II

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.

Prerequisite: ACCT 300

Fall, Spring

### ACCT 310 (3) Management Accounting I

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

Fall, Spring

### ACCT 311 (3) Management Accounting II

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 con-

straints, transfer pricing, capital budgeting and international issues in cost management.

Prerequisite: ACCT 310

Variable

### ACCT 320 (3) Accounting Information Systems

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.

Fall, Spring

### ACCT 330 (3) Individual Income Tax

The course examines the principles and procedures relating to the determination and computation of federal income taxes for an individual. Federal estate tax, gift tax, and income taxation of estates and trusts are also examined.

Prerequisite: ACCT 200, ACCT 210

Fall, Spring

### ACCT 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

### ACCT 400 (3) Advanced Financial Accounting

A study of accounting principles and concepts for mergers, acquisitions, consolidated statements, foreign currency translation, partnerships, and governmental/not-for-profit.

Prerequisite: ACCT 301

Fall, Spring

### ACCT 410 (3) Business Income Tax

The course examines the principles and procedures relating to the determination and computation of federal income taxes for various business entities including sole proprietorships, corporations, partnerships and tax-exempt entities. The course also covers tax research procedures.

Prerequisite: ACCT 300, ACCT 330

Fall, Spring

### ACCT 421 (3) Assurance Services I

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 320

Fall, Spring

### ACCT 424 (3) Assurance Services II

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

Variable

### ACCT 470 (3) Advanced Topics in Accounting

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 421, ACCT 410 or ACCT 411

Fall, Spring

### ACCT 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.

Variable

### ACCT 493 (1-4) Honors Reading in Accounting

Variable

### ACCT 497 (1-6) Internship

Supervised experience in public, industrial or governmental accounting. Students must meet standards established by the employer and the Department of Accounting.

Variable

### ACCT 499 (1-4) Individual Study of Accounting

Variable

## 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/](http://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 Windschitl (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](http://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)  
SOWK 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 300 Introduction to MIS (3)  
MGMT 340 Human Resource Management (3)

##### Major Restricted Electives

###### Gerontology Electives

(choose 3-4 credits from one of 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 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 III (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)  
SOWK 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 6 - Human Resources: POL 463 / POL 563, Public Personnel Administration or MGMT 340, Human Resource Management or POL 662, Seminar: Human Resource Management
- Subpart 8 - Information Uses: MGMT 300, Introduction to MIS
- Practicum: GERO 498 / GERO 698, Practicum: Nursing Home Administration

### COURSE DESCRIPTIONS

#### GERO 200 (3) Family Dynamics of Aging

This course will answer the question "Why should I care about getting old when I am young?" through an exploration of the life course perspective, service learning opportunities, and written reflection and exploration.

Fall, Spring

GE-2, GE-7

Diverse Cultures - Gold

#### GERO 200W (3) Family Dynamics of Aging

This course will answer the question "Why should I care about getting old when I am young?" through an exploration of the life course perspective, service learning opportunities, and written reflection and exploration.

Fall, Spring

WI, GE-2, GE-7

Diverse Cultures - Gold

#### GERO 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

#### 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.

#### 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.

## ALCOHOL AND DRUG STUDIES BS AND MINOR

### Alcohol and Drug Studies

College of Allied Health & Nursing

Department of Health Science

213 Highland Center N • 507-389-1527

Website: [www.mnsu.edu/dept/health/](http://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 Visser

**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)**

### POLICIES/INFORMATION

#### 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 ones 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 and a full letter grade deduction from the final course grade (e.g., "A" to "B-"). An act of plagiarism will result in a 0 on the assessment or assessments

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 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.

#### Alcohol and Drug Studies (BS) and Minor

**Program Information.** Students must earn a "C" or better in all required general education, required, and elective courses in the Alcohol and Drug Studies major. Students must also 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.

**Admission Requirements.** ADS admission requirements include:

- completion of a minimum of 32 credit hours,
- a minimum cumulative G.P.A. 2.5,
- a "C" or better in HLTH 225: Introduction to Alcohol and Drug Studies
- a "C" or better in two of the following four required General Education courses:
  - CMST 102: Public Speaking,



- CMST 203: Intercultural Communications,
- PSYC 101: Introduction to Psychological Science, and/or
- SOC 101: Introduction to Sociology.
- Meeting with the Alcohol and Drug Studies Coordinator to complete the Alcohol and Drug Studies Program Permission Form and sign the Alcohol and Drug Studies Form of Understanding.

**Internship Prerequisites.** Prerequisites for the Alcohol and Drug Studies internship (HLTH 496: Internship: Alcohol and Drug Studies) include:

- a "C" or better in all Major Common Core courses;
- a minimum G.P.A. of 2.5;
- Deadlines for internship applications for both the Alcohol and Drug Studies majors: October 15 for Spring Semester, March 15 for Summer Semester, and May 15 for Fall Semester.
- successful completion of an internship interview with the Alcohol and Drug Studies Coordinator;
- successful completion of a Department of Human Services background check; and
- submission of the internship Site Approval Form signed by an official designee of the approved internship site.

**The Alcohol and Drug Studies Internship.** The internship requires the completion of 880 clock hours at an approved internship site per the Minnesota Board of Behavioral Health and Therapy licensure requirements.

**Chemical Use Problems.** Consistent with standards of practice in the field, students participating in the internship process must be free of chemical use problems for at least two years immediately preceding their internship. Examples of chemical use problems include, but are not limited to:

- receiving treatment for chemical use within this time period
- chemical use that has a negative impact on the student's academic performance;
- chemical use that affects the student's professional credibility of treatment services with clients, referral sources, or other members of the community; and
- symptoms of intoxication or withdrawal during academic roles.

**Background Check.** Students involved in any field experience need to undergo a criminal background check prior to registering for HLTH 497 Internship: Alcohol and Drug Studies. Students are responsible for the fees associated with the background check. 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.

**Licensure and Certification.** The Alcohol and Drug Studies Major provides students with the academic coursework necessary to pursue a number of credentialing options. Students are responsible for verifying their eligibility for credentialing with their respective credentialing boards.

#### **ALCOHOL AND DRUG STUDIES BS**

Degree completion = 120 credits

The Alcohol and Drug Studies major is an interdisciplinary program administered

by the Department of Health Science. The program prepares students to enter the addictions field or further their knowledge of addictions to strengthen their competency within other disciplines. The Alcohol and Drug Studies major provides students with the academic coursework necessary to pursue the Licensed Alcohol and Drug Counselor (LADC) credential through the Minnesota Board of Behavioral Health and Therapy and the Board Certified Counselor (BCC) credential through the Minnesota Certification Board. Students are responsible for verifying their eligibility for credentialing within their respective credentialing boards.

#### **Required General Education**

CMST	102	Public Speaking (3)
CMST	203	Intercultural Communication (4)
PSYC	101	Introduction to Psychological Science (4)
SOC	101	Introduction to Sociology (3)

#### **Major Common Core**

A total of 12 credit hours of HLTH 497 must be completed.

CSP	470	Group Procedures (3)
CSP	471	Interpersonal Helping Skills (3)
CSP	473	Counseling the Chemically Dependent Family (3)
HLTH	225	Introduction to Alcohol and Drug Studies (3)
HLTH	406	Ethics and Professionalism for Addictions Professionals (3)
HLTH	407	Pharmacology for Alcohol and Drug Professionals (3)
HLTH	408	Theories and Methods for Addictions Professionals (3)
HLTH	456	Assessment and Diagnosis of Substance Use Disorders (3)
HLTH	469	Co-Occurring Disorders (3)
HLTH	497	Internship: Alcohol and Drug Studies (1-12)
SOC	465	Law and Chemical Dependency (3)

#### **Major Restricted Electives**

9 credits of Health Science Electives

**Required Minor:** Yes. Any.

#### **ALCOHOL AND DRUG STUDIES MINOR**

##### **Minor Core**

CSP	471	Interpersonal Helping Skills (3)
CSP	473	Counseling the Chemically Dependent Family (3)
HLTH	225	Introduction to Alcohol and Drug Studies (3)
HLTH	406	Ethics and Professionalism for Addictions Professionals (3)
HLTH	407	Pharmacology for Alcohol and Drug Professionals (3)
HLTH	408	Theories and Methods for Addictions Professionals (3)
HLTH	469	Co-Occurring Disorders (3)

#### **COURSE DESCRIPTIONS**

##### **LOCATED UNDER HEALTH SCIENCE (HLTH) COURSE DESCRIPTIONS**

## **ALLIED HEALTH AND NURSING INTRO. COURSE**

### **Allied Health and Nursing Intro. Course**

124 Myers Field House • 507-389-6315

website: <http://ahn.mnsu.edu/>

Dean: Kristine Retherford

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

WVI

## AMERICAN INDIGENOUS STUDIES BA, BS, CERTIFICATE AND MINOR

### 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.

**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 American Indigenous Studies Program. The American Indigenous Studies Program adheres to the minimum University admission requirements: 1) a minimum of 32 earned semester credit hours and 2) a minimum cumulative GPA of 2.00 ("C").

#### AMERICAN INDIGENOUS STUDIES BA

Degree completion = 120 credits

##### Prerequisites to the Major

AIS 101 Introduction to American Indian Studies (3)

##### Major Common 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)

##### Major Restricted Electives

Language (choose 8 credits)

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

Program Electives (choose 12 credits)

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 Folklife (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

##### Prerequisites to the Major

AIS 101 Introduction to American Indian Studies (3)

##### Major Common 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)

##### Major Unrestricted Electives

Program Electives

(choose 12 credits - 4 courses for a minimum of 12 credits)

AIS 110 Elementary Dakota I (4)  
AIS 111 Elementary Dakota II (4)  
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 Folklife (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 436 Native American Literature (2-4)  
LAW 310 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 210W Oral Traditions (3)  
AIS 275 Selected Topics (3)  
AIS 300W American Indian Leaders (3)  
AIS 340 American Indians in Film (3)



AIS	360	Indigenous People and Environmental Struggles (3)
AIS	380	The Sacred Landscape (3)
AIS	410	American Indian Folklife (3)
AIS	455	Museum Science and Representation (3)
AIS	475	Selected Topics (3)
AIS	497	Internship (1-12)
AIS	499	Individual Study (1-6)

### 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)

AIS	101	Introduction to American Indigenous Studies (3)
AIS	210W	Oral Traditions (3)
AIS	220W	Introduction to Tribal Sovereignty (3)
AIS	230W	American Indians of Minnesota (3)
AIS	240W	American Indian Women (3)
AIS	275	Selected Topics (3)

#### Major Unrestricted Electives

##### Expanded courses (choose 9 credits)

AIS	340	American Indians in Film (3)
AIS	380	The Sacred Landscape (3)
AIS	410	American Indian Folklife (3)
AIS	455	Museum Science and Representation (3)
AIS	460	Behaving Like Relatives (3)
AIS	475	Selected Topics (3)
ANTH	410	Archaeology of Minnesota (3)
ANTH	411	Archaeology of Native North America (3)
ANTH	440	Native American Cultures of North America (3)
ENG	318	Multicultural Literature (2-4)
ENG	436	Native American Literature (2-4)
SOC	360	Indigenous Peoples and Environmental Struggles (3)

### 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.

GE-5, GE-7

Diverse Cultures - Purple

#### 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

Variable

Diverse Cultures - Purple

#### 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

Variable

Diverse Cultures - Purple

#### 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

Diverse Cultures - Purple

#### 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

Diverse Cultures - Purple

#### 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

WI, 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. The 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

WI, 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

WI, 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

WI, GE-5, GE-7

Diverse Cultures - Purple

#### 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

Examines 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 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, ideational, 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 475 (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](http://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 9 Credits

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 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 Core**

(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***Electives for Minor* (choose 6-10 credits)

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 archeology, 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)

GEOL 122 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)

GEOL 201 Elements of Mineralogy (4)

GEOL 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 Restricted 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-8

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.

Alt-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-gathers, 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 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

**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 archeologic, geomorphic, and climatic studies. Focus is on proxy records used for climate/environmental reconstruction, archeologic/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

VI

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

VI

**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 understanding 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 most basic principle of organization for all human societies. This course analyzes the main 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

VI

Diverse Cultures - Purple



## ANTH 437 (3) Applied Anthropology

Examines the practical applications of anthropological knowledge to problem-oriented 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

WI

## 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

WI

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

WI, GE-5, GE-8

## 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](http://www.mnsu.edu/programs/aos.html)

Program Director: Dr. Christine Mollenkopf-Pigsley

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.

**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)**

#### 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/](http://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](http://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 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)
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**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)
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**Area Eight: Sculpture** (choose 0 - 3 credits)

ART 280	Sculpture (3)
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**Area Nine: Installation** (choose 0 - 3 credits)

ART 285	Introduction to Installation (3)
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**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 477W	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)
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**Major Emphasis: Graphic Design**

ART 202	Introduction to Digital Media (3)
ART 220	Graphic Design I (3)
ART 320	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 110	Drawing Foundations (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 467	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)
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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)
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Sculpture

ART 280	Sculpture (3)
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**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)
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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 six credits)

ART 380	Sculpture (3)
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**Required Minor: None.**

**ART STUDIO MINOR****Core**

ART 110	Drawing Foundations (3)
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**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).

**Core**

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

**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 from 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 artists, 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 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 320, 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 261 or consent

Alt-Spring

**ART 463 (3) Mannerism to Romanticism**

Historical survey of art, architecture and urban planning in Europe and America from the late sixteenth to mid-nineteenth century: Mannerism, Baroque, Rococo, Neoclassicism and Romanticism.

Prerequisite: ART 261 or consent

Alt-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

Alt-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 Post-modern 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: 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 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 497 (1-6) Internship**

Field experience in professional settings relating to the specialization: graphic design, museum or arts administration, etc.

Prerequisite: Jr. standing with consent of advisor and department chair.  
Fall, Spring

**ART 499 (1-6) Individual Study**

Advanced level pursuit of special projects of research on an independent basis. Requires contractual agreement in art office for registration.

Prerequisite: Consent  
Fall, Spring

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## ART HISTORY BA AND MINOR

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### Art History

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

Chair: Brian Frink

Faculty: Bradley Coulter, Alisa Eimen, Curt Germundson, Mika Laidlaw, Liz Miller, David Rogers, Areca Rowe, Ellen Schofield, 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](http://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.

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#### 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)     |

Renaissance and Baroque (choose 3 credits)

- ART 462 Renaissance Art (3)  
 ART 463 Mannerism to Romanticism (3)

Non-Western (choose 3 credits)

- ART 416 Art of Africa, the Americas, and the South Pacific (3)  
 ART 467 Art of the Islamic World (3)  
 ART 469 Asian Art (3)

Design/Drawing Requirement (choose 3 credits) (ART 101 preferred)

- ART 101 Design Foundations (preferred) (3)  
 ART 100 Elements and Principles of Art (3)

**Major Restricted Electives** (choose 9 credits)

Choose 3 courses from the Major Common Core not previously taken and/or from the following:

- ART 413 Scandinavian Art (3)  
 ART 419 Gender in Art (3)  
 ART 468 Design: History and Theory (3)  
 ART 492 Art History Seminar (1-6)  
 ART 494 Topics (3)

**Major Unrestricted Electives**

Studio Electives (choose 6 credits)

(choose 2 courses from the following)

- ART 103 Three Dimensional Design (3)  
 ART 110 Drawing Foundations (3)  
 ART 202 Introduction to Digital Media (3)  
 ART 210 Drawing (3)  
 ART 212 Life Drawing (3)  
 ART 220 Graphic Design I (3)  
 ART 231 Mixed Media (3)  
 ART 240 Painting (3)  
 ART 245 Watercolor (3)  
 ART 250 Ceramics: Beginning Wheel (3)  
 ART 251 Ceramics: Beginning Handbuilding (3)  
 ART 270 Printmaking: Beginning Silkscreen and Lithography (3)  
 ART 271 Printmaking: Beginning Intaglio/Relief (3)

- ART 275 Photography (3)

- ART 280 Sculpture (3)

**Other Graduation Requirements**

**Required for Bachelor of Arts (BA) degree ONLY** - Language (8 credits)

**Required Minor: Yes, Any.**

**ART HISTORY MINOR**

NOTE: Students who declare a major in art may choose to minor in art history; however only 50% of the art history courses selected to count toward the major in art may also count toward the minor in art history.

**Required for Minor**

- ART 260 Art History Survey I (3)  
 ART 261 Art History Survey II (3)

**Required Minor Electives**

Choose 12 credits

- ART 265VV Art As Politics (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 464 Art Museum and Exhibition Studies (3)  
 ART 466 Realism to Postmodernism (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)

**COURSE DESCRIPTIONS SEE ART**

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**ART TEACHING BS**

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**Art Teaching**

*College of Arts & Humanities*

*Department of Art*

136 Nelson Hall • 507-389-6412

Website: [mnsu.edu/artdept/](http://mnsu.edu/artdept/)

Chair: Brian Frink

Faculty: Bradley Coulter, Alisa Eimen, Curt Germundson, James B. Johnson, Mika Laidlaw, Liz Miller, David Morano, David Rogers, Ellen Schofield, Todd Shanafelt, 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](http://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 TEACHING CONTINUED

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	103	Three-Dimensional Design (3)
ART	110	Drawing 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)

ART	495	Senior Exhibit (0-1)
<u>Design Foundations</u> (choose 3 credits)		
ART	100	Elements and Principles of Art (3)
ART	101	Design Foundations (3)
<u>Art Education</u> (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)
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**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

## ARTS AND HUMANITIES

### Arts and Humanities Intro. Course

226 Armstrong Hall • 507-389-1712

Website: [www.mnsu.edu/carts/](http://www.mnsu.edu/carts/)

Dean: Matt Cecil

#### COURSE DESCRIPTION

##### AH 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 MINOR

### 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/](http://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 towards a career in teaching or research in astronomy.

**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://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 required 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.

Prerequisite: 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.

Prerequisite: 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.

Prerequisite: 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 astrophotograph; learning to install and operate ancillary equipment for both telescopes.

Prerequisite: 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.

Prerequisite: AST 215

ALT-Fall

##### AST 354 (2) Photometry II

Observations of extended sources; photometric calibration of extended sources; use of secondary standard stars.

Prerequisite: AST 353

ALT-Spring

##### AST 355 (2) Astrometry

Reduction of digital images to determine positions, proper motions, and parallaxes of stars; analysis of errors.

Prerequisite: AST 201 and AST 215

ALT-Spring

##### AST 357 (2) Spectroscopy

Line identification; radial velocity determinations; spectral classification.

Prerequisite: AST 225

ALT-Fall

**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/](http://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](http://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 BS AND MINOR

### Automotive Engineering Technology

College of Science, Engineering & Technology  
Department of Automotive & Manufacturing  
Engineering Technology  
205 Trafton Science Center E  
Phone: 507-389-6383  
Fax: 507-389-5002  
Website: [www.cset.mnsu.edu/aet](http://www.cset.mnsu.edu/aet)

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 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](http://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 K-12 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 more complete reference to companies employing AET graduates may be obtained from the Department Chair.

The Society of Automotive Engineers ([sae.org](http://sae.org)) and National Institute of Automotive Service Excellence ([ase.com](http://ase.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 employment opportunities. To accomplish this goal, program outcomes and objectives are defined and assessed for continuous improvement.

**Program Outcomes.** Students at the time of graduation are prepared to:

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 Objectives.** AET graduates two to three years into their careers should have the foundation to:

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 technologies.
2. actively participate in on-going professional development, professional growth, and increasing professional responsibility.
3. effectively communicate ideas to technical and non-technical people.
4. perform in or manage 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 goals using world class management methodologies.

#### Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)

#### 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 488VV, and AET 489VV.

**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 bi-annually, 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)
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AET	160	Automotive Technology & Systems (4)
AET	261	Automotive Driveability and Diagnosis (4)
AET	262	Automotive Computers and Electronics (4)
EET	113	DC Circuits (3)
ENG	101	Composition (4)
MATH	121	Calculus I (4)
MET	142	Introduction to Parametric Modeling (3)
MET	275	Manufacturing Processes I (4)
PHYS	211	Principles of Physics I (4)
<u>Speech</u> (choose 3 credits)		
CMST	100	Fundamentals of Communication (3)
CMST	102	Public Speaking (3)

## Major Common Core

AET	334	Fluid Power (3)
AET	364	Chassis Design and Performance Testing (4)
AET	366	Automotive Thermodynamics and Engine Design (3)
AET	387	Junior Design Project (3)
AET	465	Automotive Laboratory Experience (2)
AET	468	Automotive Research Methods (4)
AET	488W	Senior Design Project I (3)
AET	489W	Senior Design Project II (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	375	Manufacturing Processes II (4)
MET	424	Industrial Safety (2)
MET	425	Project and Value Management (3)
PHYS	212	Principles of Physics II (4)

## Major Restricted Electives

<u>Programming</u> (choose 3 credits)		
CS	271	Introduction to Graphical Programming (3)
EET	315	Programmable Instrumentation (3)

Required Minor: None

## AUTOMOTIVE ENGINEERING TECHNOLOGY MINOR

### Required for Minor

AET	102	Introduction to Automotive Engineering Technology (1)
AET	160	Automotive Technology & Systems (4)
AET	261	Automotive Driveability and Diagnosis (4)
AET	262	Automotive Computers and Electronics (4)

Electives (choose 3 additional credits of AET/MET courses)

## 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 system using a systems approach to diagnose problems. Test equipment used in the course includes: fuel and fuel system; emission system; ignition oscilloscopes; valve refurbishing 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.

Fall, Spring

Prerequisite: MATH 121, PHYS 211

### 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: ENG 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 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: 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

### AET 488W (3) Senior Design Project I

The first of a two-course sequence where students carry out their capstone design project. Weekly meetings are scheduled where the design team carries out the tasks required for completion. Formal design presentations and research papers are presented at the end of the course.

Prerequisite: AET 364, AET 387, MET 324, MET 341

Co-requisite: AET 468

Fall

### AET 489W (3) Senior Design Project II

The second of a two course sequence where students build upon the first semester's work. The course culminates with the completion of the capstone project with a formal technical paper following SAE format that would be ready to be submitted for publication.

Prerequisite: AET 468, AET 488W

Spring

### AET 492 (1-4) Automotive Seminar

Selected automotive topics.

Prerequisite: Permission required

On Demand

### AET 497 (1-10) Internship: Automotive

Automotive work experience in an area pertinent to the student's career objectives. Consent of internship coordinator required prior to the beginning of employment and registration. Typically done between the junior and senior year.

Prerequisite: 40 earned credits in AET/MET

Fall, Spring, Summer

### AET 499 (1-4) Individual Study

Prerequisite: Permission required

## AVIATION BS, CERTIFICATE AND MINORS

### Aviation

College of Education

Department of Aviation

328 Armstrong Hall • 507-389-6116

Website: <http://ed.mnsu.edu/aviation>

Email: [aviation@mnsu.edu](mailto:aviation@mnsu.edu)

Program Coordinator: Vincent Winstead Ph.D.

Faculty: Nihad Daidžic, Joel Patrick McKinzie, Thomas Peterson

**Aviation Program Mission Statement.** 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](http://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](http://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](http://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 demonstration of 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 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 Flt Lab (1)
AVIA	362	Add-on CFI-A Single Engine Flt Lab (1)
AVIA	363	CFI-Instrument Airplane (CF-I) 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	Airport Management (3)
AVIA	344	Airport 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.

AVIA 101 - 499

**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 1 (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)
AVIA	340	Flight Operations (3)
AVIA	436	Flight Operations and Procedures (3)

### 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)

##### Domestic or International Students

Pick one option. The first is intended for domestic students, the second offers courses in English for Aviation for non-native English speakers. Advisor approval is necessary for your selection.

AVIA	101	World of Aviation (3)
ENG	207	Special Topics in ESL (1-4)

### COURSE DESCRIPTIONS

#### 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.

Fall, Spring

#### 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.

Fall

#### 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.

Fall, Spring

#### 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.

Fall, Spring

#### 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.

On Demand

#### 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.

Fall, Spring, Summer

#### 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.

Prerequisite: AVIA 151, or equivalent

Fall, Spring

#### 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.

Prerequisite: PHYS 101, MATH 112

Fall, Spring

#### AVIA 202 (3) Principles of Air Navigation

A study of fundamental air navigation principles and how it is applied to flight, pilotage and dead reckoning, great circle navigation, charts and conformal projects, and celestial navigation systems and their operations and use.

Prerequisite: AVIA 150

Spring

#### 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.

Prerequisite: AVIA 150, or equivalent

Fall, Spring

#### AVIA 241 (2) Instrument Pilot Flight Lab

Prepares advanced flight students with the in-flight requirements needed to obtain the FAA Instrument Pilot rating.

Fall, Spring

#### 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.

Prerequisite: AVIA 152

On Demand

#### 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.

Fall, Spring, Summer

#### 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.

Prerequisite: AVIA 151, AVIA 240

Fall, Spring

#### 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.

Fall, Spring

#### 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.

Prerequisite: AVIA 152, AVIA 242

On Demand



## 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

This course prepares students for the Airport Operations certification. It includes topics required for certification: Airport Layout, Safety, Part 139. Airport Surfaces, Marking, Signs, Lighting, Self-Inspections, Ground Vehicles, NAVAIDS, ATC, Part 77, Hazardous Materials, FOD, Wildlife, ARFF, Winter Operations, and Security.

On Demand

## 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 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



**AVIA 435 (3) Aviation Law - Transactions**

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

**AVIA 436 (3) Flight Operations & Procedures**

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

**AVIA 437 (3) Aviation Safety**

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

**AVIA 442 (3) Fundamentals of Air Traffic Control**

To provide the student with the basic knowledge of ATC as a career and the fundamentals necessary for FAA certification.

Prerequisite: AVIA 240

Fall

**AVIA 443 (3) Aircraft Dispatcher 1**

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

**AVIA 444 (3) Aircraft Dispatcher 2**

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

**AVIA 445 (3) Aviation Human Factors**

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

**AVIA 450 (3) Professional Pilot Theory**

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

**AVIA 451 (3) Professional Flight Course**

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

**AVIA 452 (3) Professional Aviator Course**

This is a stand-alone 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

**AVIA 455 (3) Aircraft Performance**

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

**AVIA 458 (3) Aeromedical Factors**

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

**AVIA 490 (1-10) Aviation Workshop**

Co-requisite: ANTH 491 or ANTH 492 or ANTH 493 or ANTH 494

Variable

**AVIA 497 (1-12) Aviation Internship**

Supervised experience in business, industry, state or federal institutions.

Fall, Spring

**AVIA 499 (1-6) Individual Study in Aviation**

Allows the student an individual course of study on an aviation topic to be arranged with the department.

Fall, Spring

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## BIOCHEMISTRY BA AND BS

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### 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. Krois, 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.

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#### Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://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.

**Admission to Major.** Admission to a program is necessary before a student can enroll in 300-and-400-level courses. To be eligible for admission to the biochemistry program a student must have declared biochemistry as a first major, completed 32 credits, including BIOL 105 and BIOL 106 as well as CHEM 201 and CHEM 202 and achieved a minimum grade point average of 2.0. Students should also have an assigned biochemistry advisor with whom they have discussed the program.

**GPA Policy.** Students obtaining a major in biochemistry must maintain an overall GPA of 2.2 in all courses required for their selected program with no more than 4 credits of "D" work in chemistry or biochemistry courses.

Students must meet a residency requirement. This means that all students who wish to receive either the Biochemistry BA or the Biochemistry BS from Minnesota State Mankato must complete the biochemistry sequence which consists of CHEM 460, CHEM 461, CHEM 465 and CHEM 466 at Minnesota State Mankato. It is important that this sequence be taken during the third (junior) year for all majors.

Students who complete the requirements for the Biochemistry BS must submit a comprehensive research report in conjunction with completion of CHEM 498. Students are encouraged to contact Professor Moen for details regarding the research report prior the enrolling in CHEM 498.

**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.

The department is recognized by the American Chemical Society and offers a BS (Chemistry) major that is approved by that organization. The BS Biochemistry program follows the ASBMB recommended curriculum for a biochemistry and molecular biology undergraduate major. Anyone considering a biochemistry major should choose a biochemist as an advisor and consult that advisor often throughout the course of study.

## BIOCHEMISTRY BA

Degree completion = 120 credits

### Required General Education

BIOL	105	General Biology I (4)
CHEM	201	General Chemistry I (5)

### Major Common Core

BIOL	106	General Biology II (4)
BIOL	211	Genetics (4)
BIOL	270	Microbiology (4)
BIOL	479	Molecular Biology (4)
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 Lab (1)
CHEM	340	Quantitative Skills for Chemistry and Biochemistry I (1)
CHEM	460	Biochemistry I (3)
CHEM	461	Biochemistry II (3)
CHEM	465	Biochemical Techniques I (2)
CHEM	466W	Biochemical Techniques II (2)
CHEM	474	Chromatography (2)

### Capstone

(choose 1 credit from either CHEM 494 or CHEM 495)		
CHEM	494	Biochemistry Capstone Experience (1)
CHEM	495	Senior Seminar (1)

### 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)

### MATH courses (choose 7-8 credits)

Choose 2 of the following courses. Note that GE-4 requires 1 course so the remaining credits may be considered restricted elective credits.

MATH	121	Calculus I (4)
MATH	122	Calculus II (4)
STAT	154	Elementary Statistics (4)

### Major Common Core

BIOL	106	General Biology II (4)
BIOL	211	Genetics (4)
BIOL	270	Microbiology (4)
BIOL	479	Molecular Biology (4)
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	440	Physical Chemistry I (3)
CHEM	450	Physical Chemistry Laboratory I (1)
CHEM	460	Biochemistry I (3)
CHEM	461	Biochemistry II (3)
CHEM	465	Biochemical Techniques I (2)
CHEM	466W	Biochemical Techniques II (2)
CHEM	474	Chromatography (2)
CHEM	494	Biochemistry Capstone Experience (1)
(2 credits of CHEM 498 are required for the major core)		
CHEM	498	Undergraduate Research (1-6)

### Major Restricted Electives

#### Upper Division Electives

Choose a minimum of 7 credits from upper division Biology and Chemistry courses with approval from a Biochemistry advisor. Courses used in the core cannot count as electives.

BIOL	300 -	BIOL	499
CHEM	300 -	BIOL	499

### PHYS

(choose 8 credits from either the Principles of Physics sequence or the General Physics courses noted below)

PHYS	211	Principles of Physics I (4)
PHYS	212	Principles of Physics II (4)
PHYS	221	General Physics I (4)
PHYS	223	General Physics III (3)
PHYS	233	General Physics III Laboratory (1)

**Required Minor:** None.

## BIOLOGY BS AND MINOR

### Biology

College of Science, Engineering & Technology  
Department of Biological Sciences  
242 Trafton Science Center S • 507-389-2786  
Website: [www.cset.mnsu.edu/biology/](http://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 Goellner PhD; Marilyn Hart PhD; Matthew Kaproth PhD; Penny Knoblich PhD; John Krenz PhD; Allison Land PhD; Bethann Lavoie PhD; Gregg Marg PhD; Steven Mercurio PhD; Bertha Proctor PhD; Christopher Ruhland 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.

#### Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://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

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

BIOL	105	General Biology I (4)
CHEM	201	General Chemistry I (5)
ENG	271W	Technical Communication (4)

#### Major Common Core

BIOL	106	General Biology II (4)
BIOL	211	Genetics (4)

#### 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)

MATH	113	Trigonometry (3)
MATH	115	Precalculus Mathematics (4)
MATH	121	Calculus I (4)

Physics Requirement Choose 3 - 4 Credit(s).

PHYS	101	Introductory Physics (3)
PHYS	211	Principles of Physics I (4)
PHYS	221	General Physics I (4)

Statistics Requirement Choose 3 - 4 Credit(s).

HLTH	475	Biostatistics (3)
STAT	154	Elementary Statistics (4)

#### Emphasis Common Core (choose 20 credits)

BIOL	215	General Ecology (4)
BIOL	301	Evolution (2)
BIOL	320	Cell Biology (4)
CHEM	202	General Chemistry II (5)
CHEM	322	Organic Chemistry I (4)

**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

BIOL	220	Human Anatomy (4)
BIOL	330	Principles of Human Physiology (4)

#### Plant

BIOL	217	Plant Science (4)
BIOL	441	Plant Physiology (4)

#### Microbiology

BIOL	270	Microbiology (4)
BIOL	476	Microbial Physiology and Genetics (5)

#### Animal

BIOL	316	Animal Diversity (3)
BIOL	431	Comparative Animal Physiology (3)

#### 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.

BIOL 300 - 499

#### Recommended Support Courses (choose 0-8 credits)

CHEM	360	Principles of Biochemistry (4)
CHEM	460	Biochemistry I (3)
CHEM	465	Biochemical Techniques I (1)

**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 (choose 4 credits)

PHYS 211 Principles of Physics I (4)

#### Math Requirement (choose 3 - 4 credits)

MATH 113 Trigonometry (3)

MATH 115 Precalculus Mathematics (4)

MATH 121 Calculus I (4)

#### Emphasis Common Core (choose 34 credits)

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

##### Additional Math/Stats Requirement

Choose 3-4 credits. Math 121 cannot be counted in this category if previously counted in the above Math Requirement.

HLTH 475 Biostatistics (3)

MATH 121 Calculus I (4)

STAT 354 Concepts of Probability & Statistics (3)

**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 (1-4)

**Biochemistry Requirement:** Choose one of the following options.

**One Semester Option** Choose 4 credits.

CHEM 360 Principles of Biochemistry (4)

**One Year Option** Choose 8 Credits

CHEM 460 Biochemistry I (3)

CHEM 461 Biochemistry II (3)

CHEM 465 Biochemical Techniques I (2)

**Analytical/Organic Chemistry Requirement:** Choose one of the following options.

*Analytical/Supplemental Organic option* (Choose 5 Credits).

CHEM 305 Analytical Chemistry (4)

CHEM 323 Supplemental Organic Functional Group Chemistry (1)

*Organic II with Lab option* (Choose 4 Credits)

CHEM 324 Organic Chemistry II (3)

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 Hansing, 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.

#### Emphasis Required General Education (choose 4 credits)

MATH 112 College Algebra (4)

MATH 115 Precalculus Mathematics (4)

MATH 121 Calculus I (4)

#### Emphasis Required Support Courses (choose 13 credits)

Choose from the following to total at least 13 additional credits in Chemistry.

CHEM 202 General Chemistry II (5)

CHEM 305 Analytical Chemistry (4)

CHEM 322 Organic Chemistry I (4)

CHEM 323 Supplemental Organic Functional Group Chemistry (1)

CHEM 324 Organic Chemistry II (3)

CHEM 325 Organic Chemistry II Lab (1)

CHEM 360 Principles of Biochemistry (4)

#### Emphasis Core Courses (choose 16 Credits)

BIOL 220 Human Anatomy (4)

BIOL 270 Microbiology (4)

BIOL 320 Cell Biology (4)

BIOL 330 Principles of Human Physiology (4)

#### Emphasis Restricted Electives (choose 3 - 4 credits)

BIOL 424 Developmental Biology (3)

BIOL 430 Hematology/Introduction to Immunology (4)

BIOL 435 Histology (4)

BIOL 479 Molecular Biology (4)

#### Professional Education (choose 32 credits)

BIOL 493 Cytotechnology/Cytogenetics Clinical Internship 1 (1-12)

BIOL 494 Cytotechnology/Cytogenetics Clinical Internship 2 (1-12)

BIOL 495 Cytotechnology/Cytogenetics Clinical Internship 3 (1-12)

BIOL 496 Cytotechnology/Cytogenetics Clinical Internship 4 (1-12)

#### Major Emphasis: Ecology

Ecology is the study of relationships between organisms and their environment. The option consists of fundamental courses in biology and related sciences, mid-level study in genetics, evolution, and statistics, and an array of upper-division electives that emphasize fieldwork, data analysis, and writing. Many students collaborate with faculty in their research or conduct independent research projects. Career titles available with this option include ecologist, naturalist, wildlife biologist, natural resource manager, fish biologist, marine biologist, conservation training or graduate school. For more information about the option and the ecology faculty, select "ecology" at the department page (see [www.mnsu.edu/dept/biology](http://www.mnsu.edu/dept/biology)). All emphases require BIOL 105, 106, 211, CHEM 201, and ENG 271W.

#### Emphasis Common Core (choose 17 credits)

BIOL 215 General Ecology (4)

BIOL 301 Evolution (2)

BIOL 408 Vertebrate Ecology (4)

BIOL 443 Plant Ecology (4)

HLTH 475 Biostatistics (3)

#### Chemistry Requirement (choose 5 credits)

CHEM 111 Chemistry of Life Processes (5)

CHEM 202 General Chemistry II (5)

**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.**

COMPLETE 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 492 Honors Research (1-3)

BIOL 497 Internship I (1-12)

BIOL 499 Individual Study (1-4)

**Required Minor: None.****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 (ex. Quality assurance, vaccine production) and government (ex. laboratory technicians). Currently, employment opportunities abound in applied areas of microbiology such as biological products/pharmaceuticals, food processing, 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 Common Core** (choose 18 credits)

BIOL 270 Microbiology (4)

CHEM 202 General Chemistry II (5)

CHEM 305 Analytical Chemistry (4)

CHEM 322 Organic Chemistry I (4)

CHEM 323 Supplemental Organic Functional Group Chemistry (1)

**Emphasis Restricted Electives** (choose 4 - 5 credits)

BIOL 476 Microbial Physiology and Genetics (5)

CHEM 360 Principles of Biochemistry (4)

CHEM 460 Biochemistry I (3)

CHEM 465 Biochemical Techniques I (1)

**Emphasis Unrestricted Electives** (choose 25 credits)

BIOL 476, CHEM 360, CHEM 460, and CHEM 465 can satisfy this category IF they are not used in the Emphasis Restricted Electives.

BIOL 420 Diagnostic Parasitology (3)

BIOL 452 Biological Instrumentation (3)

BIOL 472 Microbial Ecology and Bioremediation (4)

BIOL 473 Virology (3)

BIOL 474 Immunology (4)

BIOL 475 Medical Microbiology (4)

BIOL 476 Microbial Physiology and Genetics (5)

BIOL 478 Food Microbiology and Sanitation (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.****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.

Physics Requirement (choose 4 credits)

PHYS 211 Principles of Physics I (4)

Math Requirement (choose 3 - 4 credits)

MATH 113 Trigonometry (3)

MATH 115 Precalculus Mathematics (4)

**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. Then students can do 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 where 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 65 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	202	General Chemistry II (5)
CHEM	305	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	466V	Biochemical Techniques II (2)
HLTH	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 graduate 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 schools is required in many of these areas and acceptance 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	316	Animal Diversity (3)
BIOL	408	Vertebrate Ecology (4)
BIOL	431	Comparative Animal Physiology (3)
BIOL	434	Developmental Biology (3)
HLTH	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.

BIOL	320	Cell Biology (4)
BIOL	324	Neurobiology (3)
BIOL	403	Conservation Biology (3)
BIOL	409	Advanced Field Ecology (4)
BIOL	410	Global Change Biology (3)
BIOL	412	Soil Ecology (4)
BIOL	420	Diagnostic Parasitology (3)
BIOL	435	Histology (4)
BIOL	438	General Endocrinology (3)
BIOL	460	Introduction to Toxicology (3)
BIOL	472	Microbial Ecology and Bioremediation (4)
BIOL	479	Molecular Biology (4)
BIOL	492	Honors Research (1-3)
BIOL	497	Internship I (1-12)
BIOL	499	Individual Study (1-4)

**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)
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**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)

**COURSE 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 sub-titles.

Fall, Spring

**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



**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 micro-organisms. Lab included.

Prerequisite: One BIOL course and one semester of chemistry from among CHEM 104, CHEM 106, CHEM 111, or CHEM 201  
Fall, Spring, Summer  
GE-3

**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 310 (4) Basics 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 316 (3) Animal Diversity**

A comprehensive phylogenetic survey of both invertebrate and vertebrate animals. Emphasis on evolutionary relationships among phyla, the evolution of organ systems, animal organization and function, animal adaptations, and zoogeographical considerations. Research and inquiry of animal unity and diversity will include using the Internet. Lab included.

Prerequisite: BIOL 105 and BIOL 106  
Fall

**BIOL 320 (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 banking 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

**BIOL 408 (4) Vertebrate Ecology**

A field course in the ecology of birds, mammals, amphibians, reptiles, and fishes. Students are trained in sampling techniques such as mark-and-recapture, population size estimation and monitoring, and species identification of live and preserved specimens. Lectures encompass evolution and adaptation, origins, energetics, mating systems, morphology, geographical distributions, and population-level phenomena. Lecture and laboratory. Prerequisite: BIOL 105, BIOL 106, BIOL 215 or consent  
Fall

**BIOL 409 (4) Advanced Field Ecology**

A field course focused on the function and dynamics of various North American ecosystems. Emphases will be on natural history, critical thought, and experimental design. Students will be trained in a variety of soil, plant, and animal sampling techniques. Depending on enrollment, there may be additional costs (e.g., camping fees) for the course. Prerequisite: BIOL 105, BIOL 106, BIOL 215 or consent  
Summer (On Demand)

**BIOL 410 (3) Global Change Biology**

This class examines the effects of natural and human-induced changes in climate on terrestrial and marine ecosystems. The course focuses on the science behind global change issues that have biological, social, and economic implications. Prerequisite: BIOL 105, BIOL 106, BIOL 215 or consent  
Fall

**BIOL 412 (4) Soil Ecology**

Soil ecology will focus on the genesis and classification of soils, the physical properties of soil as they relate to habitat formation, niches, interactions that exist among soil organisms, human impact on soil systems relative to population pressures and management practices. Lab included. Prerequisite: BIOL 105, BIOL 106, BIOL 215, or consent  
Spring

**BIOL 417 (3) Biology of Aging and Chronic Diseases**

Emphasis is placed on the biomedical aspects of aging and chronic disease. The course is designed for students majoring in biology, gerontology programs, or other health related programs. Prerequisite: BIOL 100 or BIOL 105  
Fall, Spring

**BIOL 420 (3) Diagnostic Parasitology**

Clinically important parasites. Protozoans, Flukes, Tapeworms, Roundworms, Ticks, Mites and Insects. Designed for Medical Technology, Pre-Med, Pre-Vet and Biology majors. Identification, clinical disease, epidemiology and ecology are covered. Lab included. Prerequisite: BIOL 100 or BIOL 105, BIOL 106 recommended  
Spring

**BIOL 421 (3) Entomology**

Morphological, physiological, medical, and economic significance of insects. Prerequisite: BIOL 105 and BIOL 106 or consent  
ALT-Fall

**BIOL 424 (3) Developmental Biology**

Understanding the process of cell differentiation and development. These principles are then applied to the descriptive study of human embryology including the basis of congenital malformations. Prerequisite: BIOL 100 or BIOL 105  
Fall

**BIOL 425 (1) Development Biology Lab**

Biology 425 is an optional 1-credit laboratory in addition to Developmental Biology, Biology 424. In the laboratory component, students will be exposed to modern techniques used to examine developmental processes in several key model systems. Laboratory exercises consist of experiments designed to demonstrate fundamental concepts in development and to familiarize students with experimental approaches utilized in studying developmental biology and embryology. Fall  
Prerequisite: BIOL 211; Co-requisite: BIOL 424

**BIOL 430 (4) Hematology/Introduction to Immunology**

Collection, examination, evaluation, morphology, function and diseases of blood cells. Hemostasis/coagulation of blood. Immunology theory is presented. Lab included. Spring

**BIOL 431 (3) Comparative Animal Physiology**

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  
Spring

**BIOL 432 (4) Lake Ecology**

This course is an introduction to the physical, chemical, and biological characteristics and interactions of inland freshwater lakes. Labs will emphasize field work, including data collection from five local lakes, analysis, and discussion. ALT-Fall

**BIOL 433 (3) Cardiovascular Physiology**

This course is a functional study of the heart and circulatory system. Fall

**BIOL 435 (4) Histology**

Study of types, arrangements and special adaptations of human tissues. Lab included. Prerequisite: BIOL 220  
Spring

**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  
Spring

**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  
Spring

**BIOL 441 (4) Plant Physiology**

Plant functions such as water relations, mineral nutrition, translocation, metabolism, photosynthesis, photorespiration, 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.  
Spring

**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 215 or consent. BIOL 217 strongly recommended.  
Fall

**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 pharming, and tissue culture. Fall

**BIOL 452 (3) 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  
Spring

**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.  
Fall

**BIOL 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

**BIOL 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

**BIOL 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

**BIOL 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  
ALT-Fall

**BIOL 461 (4) Environmental Toxicology**

A lecture/laboratory course that focuses on anthropogenic and natural toxicants, 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  
ALT-Spring

**BIOL 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  
ALT-Fall

**BIOL 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  
ALT-Fall

**BIOL 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  
ALT-S

**BIOL 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  
ALT-Spring

**BIOL 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  
ALT-Fall

**BIOL 472 (4) Microbial Ecology and Bioremediation**

Role of microorganisms in soil, air, water, sewage processes as well as methods of measurement and detection. Special emphasis on the role of microorganisms in bioremediation. Lab included. Prerequisite: BIOL 105, BIOL 106, and BIOL 270  
Fall

**BIOL 473 (3) Virology**

Viruses infect all living things, such as bacteria, fungi, plants, and animals (including humans). There are many viruses that cause significant human mortality and morbidity, such as influenza and smallpox viruses. However, the vast majority of viruses that infect humans have little or no negative impact on our health and well-being. This course will teach Virology by stressing the rules of replication that every virus must follow. The use of viruses as molecular tools, virus-host interactions, and current viral outbreaks will also be discussed. Prerequisite: BIOL 105, BIOL 106, and BIOL 270  
Spring

**BIOL 474 (4) Immunology**

Fundamental principles of humoral and cell mediated immunity and the application of these principles. Current experimental work in the different areas of immunology will be discussed. Lab included. Prerequisite: BIOL 105, BIOL 106, and BIOL 270  
Fall

**BIOL 475 (4) Medical Microbiology**

This course will cover bacterial, fungal, and viral human pathogens: what diseases they cause, how they cause disease, and how humans defend against and prevent those diseases. In the laboratory the student will isolate and identify pathogenic microorganisms using microbiological, biochemical, and immunological techniques. Prerequisite: BIOL 270  
Fall

**BIOL 476 (5) Microbial Physiology and Genetics**

This course presents the physiology and genetics of microorganisms emphasizing those aspects unique to bacteria and archaea. Topics include: energy production; biosynthesis of small molecules and DNA, RNA, and proteins; the formation of cell walls and membranes; microbial differentiation and behavior; and the genetic and biochemical regulation of these processes. Lab included. Prerequisite: BIOL 105, BIOL 106, BIOL 270  
Spring

**BIOL 478 (4) Food Microbiology and Sanitation**

The role microbes play in production and spoilage of food products, as prepared for mass market. Topics include foodborne pathogens, epidemiology and control, essential principles in sanitation including Hazard Analysis/Critical Control Point and ISO 9000 requirements. Lab included. Prerequisite: BIOL 105, BIOL 106 and BIOL 270  
Spring

**BIOL 479 (4) Molecular Biology**

This course will cover both eukaryotic and prokaryotic molecular biology including: DNA and RNA structure, transcription, regulation of gene expression, RNA processing, protein synthesis, DNA replication, mutagenesis and repair, recombination, and insertion elements. A number of important techniques used in recombinant DNA technology will be discussed and practiced. Prerequisite: BIOL 105, BIOL 106, BIOL 211  
Spring

**BIOL 480 (3) Biological Laboratory Experiences for Elementary Teachers**

Provides experience with a wide variety of biological laboratory exercises to prepare prospective elementary teachers. Emphasis is on building knowledge, skills, and confidence. The course will cover major biological concepts and environmental education through classroom-ready examples selected to illustrate each concept. Fall, Spring

**BIOL 481 (1) Lab Supervision and Maintenance**

Experience in maintaining and supervising laboratories. For individuals desiring additional experience with students in laboratory situations. Fall, Spring

**BIOL 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: Recipient of a MAX scholarship or instructor consent.

Fall, Spring

**BIOL 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 BIOL

Fall

**BIOL 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: BIOL 485

ALT-Spring

**BIOL 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.

Fall, Spring

**BIOL 492 (1-3) Honors Research**

Fall, Spring

**BIOL 493 (1-12) Cytotechnology Clinical Internship I**

The clinical internship and training includes lectures, demonstrations, laboratory sessions, and clinical practicum in the area of cytotechnology. Instructor permission required.

Fall, Spring

**BIOL 494 (1-12) Cytotechnology Clinical Internship II**

Continuation of Cytotechnology Clinical Internship I. The clinical internship and training includes lectures, demonstrations, laboratory sessions, and clinical practicum in the area of cytotechnology. Instructor Permission required.

Fall, Spring

**BIOL 495 (1-12) Cytotechnology Clinical Internship III**

Continuation of Cytotechnology Clinical Internship II. The clinical internship and training includes lectures, demonstrations, laboratory sessions, and clinical practicum in the area of cytotechnology. Instructor Permission required.

Fall, Spring

**BIOL 496 (1-12) Cytotechnology Clinical Internship IV**

Continuation of Cytotechnology Clinical Internship III. The clinical internship and training includes lectures, demonstrations, laboratory sessions, and clinical practicum in the area of cytotechnology. Instructor Permission required.

Fall, Spring

**BIOL 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

**BIOL 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

**BIOL 499 (1-4) Individual Study**


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## BIOTECHNOLOGY BS

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### Biotechnology

College of Science, Engineering & Technology

Department of Biological Sciences

242 Trafton Science Center S • 507-389-5731

Website: [www.cset.mnsu.edu/biology/](http://www.cset.mnsu.edu/biology/)

Director Gregg A. Marg PhD

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.

**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. Admission requirements are 32 earned semester credit hours including BIOL 105 and BIOL 106, with a grade of a "C" or better in both BIOL 105 and BIOL 106; and a minimum cumulative GPA of 2.0.

**BIOTECHNOLOGY 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**

BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)
BIOL	211	Genetics (4)

**Major Common Core**

BIOL	270	Microbiology (4)
BIOL	320	Cell Biology (4)
BIOL	452	Biological Instrumentation (3)
BIOL	453	Biological Engineering Analysis I (4)
BIOL	454	Biological Engineering Analysis II (4)
BIOL	474	Immunology (4)
BIOL	476	Microbial Physiology and Genetics (5)
BIOL	479	Molecular Biology (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)
PHYS	212	Principles of Physics II (4)

**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)

HLTH	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](http://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 ADMINISTRATION MINOR****Core****Required Courses for Minor (12 credits)**

ACCT	200	Financial Accounting (3)
FINA	362	Business Finance (3)
MGMT	230	Principles of Management (3)
MRKT	210	Principles of Marketing (3)

**Unrestricted Electives**

Select 9-10 credits from the list below.

At least 6 credits must be 300 or 400 level courses.

ACCT	210	Managerial Accounting (3)
ACCT	300	Intermediate Financial Accounting I (3)
ACCT	310	Management Accounting I (3)
ACCT	330	Individual Income Tax (3)
BLAW	200	Legal Environment of Business (3)
BLAW	450	Contracts, Sales, and Professional Responsibility (3)
BLAW	452	Employment and Labor Law (3)
ECON	201	Principles of Macroeconomics (3)
ECON	202	Principles of Microeconomics (3)
ECON	207	Business Statistics (4)
FINA	375	Business Analytics (3)
FINA	467	Insurance and Risk Management (3)
IBUS	380	Principles of International Business (3)
IBUS	428	International Marketing (3)
IBUS	448	International Business Management (3)
IBUS	469	International Business Finance (3)
MGMT	300	Introduction to MIS (3)
MGMT	332	Creativity and Innovation (3)
MGMT	340	Human Resource Management (3)
MGMT	380	Human Behavior in Organizations (3)
MRKT	312	Professional Selling (3)
MRKT	316	Consumer Behavior (3)
MRKT	318	Integrated Marketing Communications (3)

**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.



## 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

BLAW	200	Legal Environment of Business (3)
BLAW	450	Contracts, Sales, and Professional Responsibility (3)
BLAW	452	Employment and Labor Law (3)
IT	101	Introduction to Information Systems (3)

##### Electives (Choose 6 Credits).

BLAW	371	Technology and Intellectual Property Law (3)
BLAW	453	International Legal Environment of Business (3)
BLAW	455	Legal Aspects of Banking and Finance (3)
BLAW	474	Environmental Regulation and Land Use (3)
BLAW	476	Construction and Design Law (3)
BLAW	477	Negotiation and Conflict Resolution (3)
BLAW	483	Special Topics (1-3)
BLAW	492	Study Tour (3)

#### 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

GE-9

##### 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 legal 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



**BLAW 455 (3) Legal Aspects of Banking and Finance**

Legal aspects of checks and promissory notes, forgery and the use of counterfeit currency. Discusses the Federal Reserve check collection process, electronic banking, the purchase and sale of commercial paper, debtor and creditor rights, securities regulation, fundamentals of collateral foreclosure, the federal bankruptcy code and insurance law.

Prerequisite: BLAW 200

Variable

**BLAW 474 (3) Environmental Regulation and Land Use**

Legal aspects of land use planning, drainage, surface water rights and boundaries, mining and land reclamation, clean air, clean water, waste disposal, noise control and environmental permit processes. Discussion of legal aspects of Historic Landmark Preservation, National Environmental Policy, CERCLA, the Superfund, liability for environmental contamination and emerging environmental issues.

Prerequisite: BLAW 200

Variable

**BLAW 476 (3) Construction and Design Law**

Legal responsibilities of architects, engineers and contractors in dealing with each other, the project's owner, sureties and subcontractors. Special emphasis on performance problems, forms of business association, legal relationships with independent contractors, the AIA contract documents, mechanics liens, AAA Construction Arbitration Rules, dispute avoidance, claims management and collection strategies.

Prerequisite: BLAW 200

Fall, Spring

**BLAW 477 (3) Negotiation and Conflict Resolution**

Negotiation theory and techniques, mediation theory and techniques, use of

neutrals, limits of confidentiality and ethical duties. Rule 114 and laws governing arbitration and management of the arbitration process. Extensive use of cases and role play.

Prerequisite: BLAW 200

Variable

**BLAW 483 (1-3) Special Topics**

Seminar topics may include women and the law, legal aspects of entrepreneurship, mergers and acquisitions, legal rights in computer software, investigating sexual harassment claims, copyright on the internet, immigration law, steps to become an IPO, privacy rights on computer networks, case studies in deregulation, legal aspects of leveraged buyouts, corporate takeover and ESOP's, complying with NAFTA.

Variable

**BLAW 492 (1-3) Study Tour**

Study tours are lead by Minnesota State University, Mankato faculty members and provide students the opportunities to visit epicenters of international law to experience the development and implementation of international law and its effect on businesses.

On-Demand: Spring

**BLAW 497 (1-8) Internship**

Variable

**BLAW 498 (1-3) Internship**

Variable

**BLAW 499 (1-4) Individual Study**

Variable

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## CHEMISTRY BA, BS AND MINOR

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## Chemistry

*College of Science, Engineering and Technology*

*Department of Chemistry & Geology*

241 Ford Hall • 507-389-1963

<https://cset.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 Thoenke, 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](http://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 Trafton 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

MATH 121 Calculus I (4)

Physics (choose 4 credits - choose 1 from 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	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 BS

Degree completion = 120 credits

#### 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 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.

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  
Alt-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  
Alt-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, alkyl halides, alkenes, alkynes, and alcohols will be covered. Laboratory illustrates 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  
Co-requisite: CHEM 322  
Fall

**CHEM 324 (3) Organic Chemistry II**

This course is a continuation 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 carbonyl compounds and synthetic transformations is covered.

Pre 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 carbonyl chemistry will be performed.

Prerequisite: CHEM 324  
Co-requisite: CHEM 324  
Spring

**CHEM 340 (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 341.

Prerequisite: CHEM 202, MATH 121 ("C" (2.0) or higher in CHEM 202, MATH 121)  
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, safe 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  
VI

**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

Alt-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 Co-requisite: CHEM 441

Spring

**CHEM 460 (3) Biochemistry I**

Detailed analysis of the structures, properties, and functions of proteins, carbohydrates, and lipids; 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 or 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

WI

**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, spectrophotometric 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 poster format at 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

**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

Spring

**CHEM 496 (1-6) Senior Thesis****CHEM 497 (1-16) Internship****CHEM 498 (1-6) Undergraduate Research****CHEM 499 (1-6) Individual Study**


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## CHINESE (MANDARIN) COURSES

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### Chinese (Mandarin)

*College of Arts & Humanities*  
*Department of World Languages & Cultures*  
 227 Armstrong Hall • 507-389-2116  
 Website: [www.mnsu.edu/languages](http://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)

**COURSE DESCRIPTIONS****CHIN 101 (5) Elementary Mandarin I**

Beginning Mandarin I is a practical introductory language course with simple, graded activities on essential daily topics. Students will begin to work orally & with the Chinese writing systems while developing early listening and reading skills.  
 Fall

**CHIN 102 (5) Elementary Mandarin II**

Beginning Mandarin II is a practical introductory language course with simple, graded activities on essential daily topics. Students will continue to work orally & with the Chinese writing systems while developing early listening and reading skills.  
 Spring

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## CIVIL ENGINEERING BSCE

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### 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](http://ce.mnsu.edu)

Chair: Patrick Tebbe P.E.

Program Coordinator: Stephen J. Druschel, P.E.

Faculty: Shaobiao Cai, P.E., Stephen J. Druschel, P.E., Charles W. Johnson, P.E., Sung-won Kim, Saeed Moaveni, P.E., Vojin Nikolic, Deborah K. Nykanen, P.E., Jin Park, Farhad Reza, P.E., Patrick A. Tebbe, P.E., W. James Wilde, P.E., Nazli Yilmaz-Wodzinski

Adjunct Faculty: Dan Flatgard; David Hanson

**Accreditation.** The Civil Engineering program is accredited by the Engineering Accreditation Commission of ABET, [www.ABET.org](http://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](http://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 upper-division 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 upper-division 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 upper-division 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 or 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)
(choose 3 credits)		
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)
(choose 2 - 3 credits)		
ME	241	Thermodynamics (3)
ME	299	Thermal Analysis (2)
(choose 3 credits)		
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)**

BIOL	270	Microbiology (4)
BLAW	450	Contracts, Sales, and Professional Responsibility (3)
BLAW	453	International Legal Environment of Business (3)
BLAW	474	Environmental Regulation and Land Use (3)
BLAW	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)



CM	330	Planning and Scheduling (3)
CM	340	Construction Project Management (3)
EE	300 - 489	
EE	230	Circuit Analysis I (3)
ENVR	440	Environmental Regulations (3)
ENVR	450	Environmental Pollution & Control (3)
ENVR	460	Analysis of Pollutants (4)
GEOG	315	Geomorphology (3)
GEOG	373	Introduction to Geographic Information Systems (4)
GEOG	439	Transportation Modeling & GIS (4)
GEOL	330	Structural Geology (4)
GEOL	350	Environmental Geology (4)
GEOL	351	Engineering Geology (2)
GEOL	450	Hydrogeology (3)
ME	300 - 489	

Required Minor: None.

## 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

Mechanical behavior and properties of civil engineering materials. Microstructure, response to stress, creep, fatigue, fracture and failure. Composition, application and construction of steel, concrete, asphalt, aggregates, steel, timber, composites and other materials. Includes laboratory component.

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 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

### 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 223 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

WI

### 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

**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 ACI 318 Building Code requirements. Includes significant design component.

Prerequisite: CIVE 340

Alt-Spring

**CIVE 447 (3) Prestressed Concrete Design**

Design of prestressed concrete structures. Basic materials and prestress loss mechanisms. Flexure, shear, and deflections of prestressed concrete beams. Load-moment interaction curves for columns. Prestressed concrete bridge girders. The use of software is expected. Includes significant design component.

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

Alt-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

Co-requisite: 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, inter-sections, 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

**CIVE 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

**CIVE 497 (1-6) Internship**

Variable

**CIVE 499 (1-6) Individual Study**


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## COGNITIVE SCIENCE BS

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### 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 Arsznov  
Cognitive Science Program Core Faculty: Dawn Albertson (Psychology), Bradley Arsznov (Psychology), Rebecca Bates (Computer Science), Michael Bentley (Biology), Geoffrey Goellner (Biology), Moses Langley (Psychology), Karla Lassonde (Psychology), Richard Liebendorfer (Philosophy), Guaronex Salivia (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/#All](http://www.mnsu.edu/programs/#All)**

#### 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. Each core will typically require 12 credits of course work, a total of 36 credits. A student need not do the core for her or his area of concentration since the core is already included in the concentration.

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 policies. Grades of "D" are not accepted by the program for Prerequisites to the major, major common core and major restricted elective courses.

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#### 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 II (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

HLTH 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)

PHIL	477	Animal Minds (3)
PHIL	480	Philosophy of Science (3)
PHIL	481	Philosophy of Biology (3)

**Major Emphasis: Biology**

BIOL	106	General Biology II (4)
BIOL	211	Genetics (4)

**Choose 3 - 4 Credits**

BIOL	320	Cell Biology (4)
BIOL	424	Developmental Biology (3)
BIOL	435	Histology (4)
BIOL	436	Animal Behavior (4)
BIOL	438	General Endocrinology (3)
BIOL	460	Introduction to Toxicology (3)
BIOL	466	Principles of Pharmacology (3)
BIOL	479	Molecular Biology (4)

**Major Emphasis: Computer Science**

CS	305	Algorithmic Structures (4)
CS	498W	Senior Thesis (4)

**Choose 3 - 4 Credits**

CS	315	Introduction to Cryptographic Methods (4)
CS	330	Introduction to Neural Computation (4)
CS	430	Artificial Intelligence (3)
IT	482	Human Computer Interaction (4)

**Major Emphasis: Philosophy**

PHIL	497	Philosophy-Cognitive Science Thesis (3)
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**Choose 3 Credits**

Choose a course not used to satisfy Core Area 3		
PHIL	410	Philosophy of Language (3)

PHIL	474	Philosophy of the Mind (3)
PHIL	476	Philosophy of Perception (3)
PHIL	477	Animal Minds (3)
PHIL	480	Philosophy of Science (3)
PHIL	481	Philosophy of Biology (3)

**Choose 6 Credits**

Choose a course not already chosen above or used to satisfy Core Area 3

PHIL	311	Symbolic Logic (3)
PHIL	410	Philosophy of Language (3)
PHIL	420	Epistemology (3)
PHIL	430	Metaphysics (3)
PHIL	437	Contemporary Philosophy (3)
PHIL	455	Existentialism & Phenomenology (3)
PHIL	474	Philosophy of the Mind (3)
PHIL	476	Philosophy of Perception (3)
PHIL	477	Animal Minds (3)
PHIL	480	Philosophy of Science (3)
PHIL	481	Philosophy of Biology (3)

**Major Emphasis: Psychology**

PSYC	421	Behavior Neuroscience (4)
PSYC	423	Cognitive Neuroscience (4)

**Choose 4 Credits**

PSYC	413	Sensation & Perception (4)
PSYC	414	Learning (4)
PSYC	415	Human Memory (4)
PSYC	420	Psychopharmacology (4)
PSYC	430	Advanced Topics in Biological Psychology (4)
PSYC	450	Advanced Cognitive Psychology (4)

**Required Minor: None.**

## COMMUNICATION SCIENCES AND DISORDERS BA, BS AND MINOR

### 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 Poburka, Ph.D.; Renee Shellum, Au.D.

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.

**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)**

**POLICIES/INFORMATION**

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.

### COMMUNICATION SCIENCES AND DISORDERS BA

Degree completion = 120 credits

**General Education Courses**

Students must take a total of 12 credits with at least one course in each of the following areas: Statistics, Biology, Physical Sciences (physics or chemistry), and Social/Behavioral Sciences.

**Required for Major**

CDIS	201	Observation of Human Communication (3)
CDIS	220	Basic Audiology (3)
CDIS	290	Introduction to Communication Disorders (3)
CDIS	312	Speech and Language Development (3)
CDIS	322	Speech and Hearing Science (3)
CDIS	392	Phonetics (3)
CDIS	394	Applied Anatomy and Physiology (3)
CDIS	402	Child Language Disorders (2)
CDIS	403	Child Language Disorders Lab (1)
CDIS	410	Neurological Bases of Speech (2)
CDIS	416	Voice and Resonance Disorders (3)
CDIS	421	Aural Rehabilitation (3)
CDIS	431	Orientation Lab (1)
CDIS	434	Orientation to Clinical Practicum (2)
CDIS	438	Speech Sound Disorders (3)
CDIS	444	Appraisal and Diagnosis (3)
CDIS	445	Grand Rounds - Foundation (1)
CDIS	446	Grand Rounds - Presentation (2)
CDIS	495	Clinical Practicum: Speech/Language Disorders (2)

**Other Graduation Requirement**

**Required for Bachelor of Arts (BA) degree ONLY:** Language (8 credits)

**Required Minor:** None

**COMMUNICATION SCIENCES AND DISORDERS BS**

Degree completion = 120 credits

**General Education Courses**

Students must take a total of 12 credits with at least one course in each of the following areas: Statistics, Biology, Physical Sciences (physics or chemistry), and Social/Behavioral Sciences.

**Required for Major**

CDIS	201	Observation of Human Communication (3)
CDIS	220	Basic Audiology (3)
CDIS	290	Introduction to Communication Disorders (3)
CDIS	312	Speech and Language Development (3)
CDIS	322	Speech and Hearing Science (3)
CDIS	392	Phonetics (3)
CDIS	394	Applied Anatomy and Physiology (3)
CDIS	402	Child Language Disorders (2)
CDIS	403	Child Language Disorders Lab (1)
CDIS	410	Neurological Bases of Speech (2)
CDIS	416	Voice and Resonance Disorders (3)
CDIS	421	Aural Rehabilitation (3)
CDIS	431	Orientation Lab (1)
CDIS	434	Orientation to Clinical Practicum (2)
CDIS	438	Speech Sound Disorders (3)
CDIS	444	Appraisal and Diagnosis (3)
CDIS	445	Grand Rounds - Foundation (1)
CDIS	446	Grand Rounds - Presentation (2)
CDIS	495	Clinical Practicum: Speech/Language Disorders (2)

**COMMUNICATION SCIENCES AND DISORDERS MINOR**

Students must complete both Minor Core and Minor Capstone courses and a minimum of 12 credits from Minor Specialization Courses.

**Required for Minor**

CDIS	290	Introduction to Communication Disorders (3)
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**Minor Specialization Courses** (Select 12 credits minimum)

CDIS	201	Observation of Human Communication (3)
CDIS	220	Basic Audiology (Note: prerequisite is CDIS 322) (3)
CDIS	312	Speech and Language Development (3)
CDIS	322	Speech and Hearing Science (3)
CDIS	392	Phonetics (3)
CDIS	394	Applied Anatomy and Physiology (3)
CDIS	402	Child Language Disorders (2)
CDIS	403	Child Language Disorders Lab (1)
CDIS	416	Voice and Resonance Disorders (3)
CDIS	421	Aural Rehabilitation (3)
CDIS	444	Appraisal and Diagnosis (3)

**Required for Minor Capstone Course**

CDIS	445	Grand Rounds – Foundation (1)
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**COURSE DESCRIPTIONS**

**CDIS 201 (3) Observation of Human Communication**

Procedures for observing, describing, analyzing behaviors associated with human communication. Open to non-majors.

Fall, Spring

GE-1B

**CDIS 205 (3) Beginning Sign Language**

The first in a sequence of courses which aim at the development of skills in the use of American Sign Language as a form of communication with persons who are hearing impaired or deaf.

Variable

GE-11

**CDIS 206 (3) Intermediate Sign Language**

The second in a sequence of courses which aim at the development of skills in the use of American Sign Language as a form of communication with persons who are hearing impaired or deaf.

Prerequisite: CDIS 205

Variable

GE-8

**CDIS 207 (3) Advanced Sign Language I**

The third in a sequence of courses which aim at the development of skills in the use of American Sign Language as a form of communication with persons who are hearing impaired or deaf.

Prerequisite: CDIS 206

Variable

GE-8

**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

Spring

**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 291 (1-3) Individual Study**

Fall, Spring

**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 neuroanatomy 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**

Habilitative audiology 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 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

**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](http://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

Faculty: Christopher Brown Ph.D.; Katie Brunner, MFA; Daniel Cronn-Mills Ph.D.; Kristen Cvarcara Ph.D.; James Dimock MFA; David Engen Ph.D.; Laura Jacobi Ph.D.; Anne Kerber Ph.D.; Deepa Oommen Ph.D.; Justin Rudnick Ph.D.; Emily Sauter Ph.D.; Sachi Sekimoto Ph.D.; Kristen Treinen Ph.D.; Leah White Ph.D.

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](http://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 100 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 Management (4)
- CMST 490 Workshop (1-4)
- CMST 498 Internship (1-12)

#### Communication Analysis Foundation Choose 8 Credits

- CMST 301 Communication Studies: Approaches & Perspectives (4)
- CMST 302 Argumentation (4)

#### Communication Analysis Electives Choose 4 Credits

CMST 440 requires approval of program advisor.

- CMST 330 Ethics & Free Speech (4)
- 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.

**Minor Core**

CMST 312 Professional Communication and Interviewing (4)  
 MASS 221W Basic Writing for Mass Media (4)

**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 225 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 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)  
 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 360 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.

**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. GE-11

**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 retaken 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 will the role of intercultural communication in the workplace. Individual speeches, group presentations, and interviews are the major presentations. GE-1B

**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 specific 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**

First-hand experience in the classroom assisting a faculty member.

**CMST 498 (1-12) Internship**

Provides first-hand 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.

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## COMMUNITY HEALTH EDUCATION BS

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### Community Health Education

College of Allied Health & Nursing

Department of Health Science  
213 Highland Center N • 507-389-1527  
Website: [www.mnsu.edu/dept/health/](http://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 Visser

**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)**

**POLICIES/INFORMATION****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 ones 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 and a full letter

grade deduction from the final course grade (e.g., "A" to "B-"). An act of plagiarism will result in a 0 on the assessment or assessments 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 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.

**Community Health Education BS**

**Program Information:** Students must earn a "C" or better in all required general education courses (except Chemistry), required major courses (except Human Anatomy), and elective courses in the Community Health Education major. Students must also maintain a G.P.A. of 2.5 or better in the major (required general education, required, and elective courses). A G.P.A. of 2.5 in the major is also required for graduation in Community Health Education.

**Admission Requirements.** CHE 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 HLTH 101: Health and the Environment,
- a "C" or better in HLTH 260: Introduction to Health Education.

**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 I (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	360	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

#### COURSE DESCRIPTIONS

#### LOCATED UNDER HEALTH SCIENCE (HLTH) COURSE DESCRIPTIONS

## COMPUTER 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](http://cset.mnsu.edu/cis)

Chair: Mahbubur Syed

Faculty: Cyrus Azarbod, Rajeev Bukralia, Jonathan Hardwick, Sarah Kruse, Guarionex Salvia, Christophe Veltsos, 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](http://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 upper-division (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 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.

#### 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](http://www.cset.mnsu.edu/ecet)  
Email: [ecet@mnsu.edu](mailto:ecet@mnsu.edu)

Chair: Qun Zhang  
Program Coordinator: Qun Zhang

Faculty: Gale Allen, Nannan He, Han-Way Huang, Muhammad Khaliq, Julio Mandojana, Puteri MegatHamari, Ryan Shirk, Vincent Winstead, Xuanhui Wu, Jianwu Zeng, Qun Zhang

**Accreditation.** The Computer Engineering program is accredited by the Engineering Accreditation Commission of ABET, [www.abet.org](http://www.abet.org).

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 engineering 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 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.

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, including discrete math; 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 (IoT), Application Specific Integrated Circuits (ASICs), in the junior/senior level electives.
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 (pre-engineering), two programming language courses, a discrete mathematics course (specifically designed for computer engineers), as well as supporting work in English, humanities, and social sciences. Second-year computer 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 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 form 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

ENG	101	Composition (4)
ENG	271W	Technical Communication (4)
MATH	121	Calculus I (4)
PHYS	221	General Physics I (4)
<u>Economics</u> (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	232	General Physics II Laboratory (1)

#### Major Common Core

CS	460	Operating Systems: Design and Implementation (3)
EE	281	Digital System Design with Testability (3)
EE	282	Digital System Design with Testability Lab (1)
EE	332	Electronics I (3)
EE	334	Microprocessor Engineering 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	344	Microprocessor II Laboratory (1)
EE	358	Control Systems (3)
EE	368	Control Systems Laboratory (1)
EE	395	Computer Hardware and Organization (3)
EE	450	Engineering Economics (3)
EE	467W	Principles of Engineering Design III (1)
EE	477W	Principles of Engineering Design IV (1)
IT	214	Fundamentals of Software Development (4)
IT	310	Data Structures & Algorithms (4)
MATH	180	Mathematics for Computer Science (4)
MATH	223	Calculus III (4)
ME	299	Thermal Analysis (2)
PHYS	223	General Physics III (3)
PHYS	233	General Physics III Laboratory (1)

#### Major Restricted Electives

Choose 14 credits: choose EE 333 (3) and then EE 333 (3) and then choose additional 11 credits e.g. CS 350, EE 481, EE 484, EE 485; or choose EE 390 (4) and then choose additional 10 credits e.g. CS 350, EE 470, and EE 489.

CS	350	Network Architectures (3)
EE	333	Electronics II (3)
EE	390	Smart Sensor Systems (4)
EE	453	Advanced Communications Systems Engineering (3)
EE	470	Wireless Networking (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	484	VLSI Design (3)
EE	485	ASIC Design (4)
EE	487	RF Systems Engineering (3)
EE	489	Real-time Embedded Systems (4)

#### Other Graduation Requirements

Choose a minimum of twelve (12) credits of Humanities (6 credits) and Social Sciences (6 credits). For example, ECON 201 is a Social Sciences course. For a complete listing of approved Humanities and Social Science courses please consult the department website. In general, graduation credits 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)
ME	291	Engineering Analysis (3)

Required Minor: None.

## COURSE DESCRIPTIONS

### 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: (EE 107 or IT 210) 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  
Variable

### Computer Science Courses

#### 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 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 210 and CS 320

Spring

### 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. Student 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 interface design.

Prerequisite: EE 106, EE 107

Corequisite: EE 234

**EE 240 (1) Evaluation of Circuits**

Laboratory support for EE 230. Use of laboratory instrumentation to measure currents and voltages associated with DC and AC circuits. Statistical analysis of measurement data. Measurements of series, parallel and series-parallel DC and AC circuits. Measurement of properties for circuits using operational amplifiers. Measurement of transient responses for R-L and R-C circuits. Simulation of DC and AC circuits using PSpice. Concepts covered in EE 230 will be verified in the laboratory. Prerequisite: Must be taken concurrently with EE 230.

Fall

**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, PLA's, FPGA's and Memories. Analysis, synthesis and design of sequential machines; synchronous, pulse mode, 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.

Coresquisite: 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 phenomenon 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 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, BJT's, JFET's, and MOSFET's 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, bi-stability, 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**

Vector fields. Electrostatic charges, potential and fields; displacement. Steady current/current density; magnetostatic fields, flux density. Materials properties. Faraday's Law and Maxwell's equations. Skin effect. Wave propagation, plane waves, guided waves. Radiation and antennas. Transmission line theory.

Prerequisite: EE 231, MATH 223, MATH 321 and PHYS 222

Spring

**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**

Measurement techniques using the oscilloscope, spectrum analyzer and network analyzer. Signals and spectra. Frequency response. Noise and noise figure measurements. Intermodulation products. Amplitude and frequency modulation/demodulation. Sampling, aliasing, and intersymbol interference. Bit error measurement.

Prerequisite: Concurrent with EE 353

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, 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 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 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

VI

**EE 479 (3) Superconductive Devices**

Magnetic and superconducting properties of materials, microscopic theory of superconductivity and tunneling phenomenon. Josephson and SQUID devices, survey of computer memories, memory cell and shift register, A/D converters and microwave amplifiers. Integrated circuit technology and high temperature superconductors.

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 484 (3) VLSI Design**

The basics of digital VLSI technology. Bipolar and MOS modeling for digital circuits. Physical transistor layout structure and IC process flow and design rules. Custom CMOS/BICMOS static and dynamic logic styles, design and analysis. Clock generation, acquisition, and synchronization procedures. Special purpose digital structures including memory, Schmitt triggers, and oscillators. Individual design projects assigned.

Prerequisite: EE 333

Fall

**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**

Overview of wireless communication and control systems. Characterization and measurements of two-port RF/IF networks. Transmission lines. Smith chart. Scattering parameters. Antenna-preselector-preamplifier interface. Radio wave propagation. Fading. RF transistor amplifiers, oscillators, and mixer/modulator circuits. Multiple

access techniques. Transmitter/receiver design considerations. SAW matched filters.

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

### Computer Engineering Technology

*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](http://www.cset.mnsu.edu/ecet)

Email: [ecet@mnsu.edu](mailto:ecet@mnsu.edu)

Chair: Qun Zhang

Program Coordinator: Qun Zhang

Faculty: Gale Allen, Nannan He, Han-Way Huang, Muhammad Khaliq, Julio Mandojana, Puteri MegaHamari, Ryan Shirk, Vincent Winstead, Xuanhui Wu, Jianwu Zeng, Qun Zhang

**Accreditation.** The Computer Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, [www.abet.org](http://www.abet.org).

Computer Engineering Technology is a technological field requiring the application of scientific and engineering knowledge and methods, combined with technical skills, in support of computer activities. A computer engineering technologist is a person who is knowledgeable in computer hardware and software theory and design and who can apply them to a variety of industrial and consumer problems. Computers, controls/automation, robotics, instrumentation, and communications are just a few fields open to computer engineering technologists.

The program strives to prepare students for successful entry into the technical workforce. This means that the curriculum prepares students to:

1. Apply knowledge of mathematics, science, and computer engineering to problems.
2. Design and construct experiments and analyze and interpret the resulting data.
3. Design systems, components, or processes to meet specified needs.
4. Function effectively in teams.
5. Identify, formulate, and solve problems in computer engineering technology.
6. Understand their professional and ethical responsibilities.
7. Communicate effectively.

The Educational Objectives for our Bachelors Degree in Computer Engineering Technology program are:

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](http://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 341 Electronics Shop Practices (2)  
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)  
STAT 354 Concepts of Probability and 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. Thevenin'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**

A study of AC circuits, power, phasors, series and parallel AC networks, and network analysis theorems. Ohm's Laws and Kirchhoff's Laws for AC circuits. Use of dependent sources in 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 through out the world. Finally, the course will exam the 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.

Fall

GE-6, GE-8

Diverse Cultures - Purple

**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.

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 micro-processor 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, BJT 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 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, PLCs, 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, 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 microprocessors resources will be stressed. PC programming in assembly and a high level language.

Prerequisite: EET 143

Fall

**EET 486 (3) Digital Communications**

An overview of a communication system. Phase Shift Keying, Amplitude Shift Keying and Frequency Shift Keying. Coherent and non-coherent detection. Maximum likelihood receiver and Matched filter. Noise power, Noise figure, and Noise

Temperature. Error performance in presence of noise. Linear block codes, cyclic codes and convolution codes. Spread Spectrum Techniques.

Prerequisite: EET 142, EET 222

Variable

**EET 487 (3) RF Systems Technology**

Overview of wireless communication and control systems. Characterization and measurement of RF networks. Transmission lines. Antennas. Radio wave propagation. Fading. Smith Chart. RF transistor amplifiers, oscillators and mixer/modulator circuits. Klystrons, magnetrons and TWTs. Spread spectrum techniques. SAW matched filters.

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

**EET 499 (1-4) Individual Study**

Fall, Spring

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## COMPUTER INFORMATION TECHNOLOGY BS, CERTIFICATES AND MINORS

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### Computer Information Technology

*College of Science, Engineering & Technology*

*Department of Computer Information Science*

273 Wissink Hall • 507-389-1412

Website: [cset.mnsu.edu/cis](http://cset.mnsu.edu/cis)

Chair: Mahbubur Syed

Faculty: Cyrus Azarbod, Rajeev Bukralia, Jonathan Hardwick, Sarah Kruse, Guarionex Salvia, Christophe Veltsos, Michael Wells

Computer Information Technology (CIT) in its broadest sense encompasses all aspects of computing technology. CIT, as an academic discipline, focuses on meeting the needs of users within an organizational and societal context through the selection, creation, application, integration and administration of computing technologies. The aim is to provide CIT major graduates with the skills and knowledge to take on appropriate professional positions upon graduation and to grow into leadership positions or pursue research or graduate studies in the field. The CIT program also has six minors.

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](http://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 (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**

ENG	101	Composition (4)
IT	202W	Computers in Society (4)
STAT	154	Elementary Statistics (4)
MATH	121	Calculus I (4)
(choose one of the following CMST Courses) (3 credits)		
CMST	100	Fundamentals of Communication (3)
CMST	102	Public Speaking (3)
CMST	312	Professional Communication & Interviewing (4)

#### **Major Common Core**

Three credits of IT 497 are required for the major. Additional credits may only be used to satisfy degree requirements.

ENG	271	Technical Communication (4)
IT	210	Fundamentals of Programming (4)
IT	214	Fundamentals of Software Development (4)
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)
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**

IT	210	Fundamentals of Programming (4)
IT	214	Fundamentals of Software Development (4)
(choose three of the following courses)		
IT	483	Web Applications and User Interface Design (4)
IT	320	Machine Structures and Operating Systems (4)
IT	340	Introduction to Database Systems (4)
IT	360	Introduction to Networking (4)
IT	380	Introduction to Software Engineering (4)

### COMPUTER TECHNOLOGY MINOR

#### **Required for Minor**

IT	100	Introduction to Computing and Applications (4)
IT	202W	Computers in Society (4)
IT	210	Fundamentals of Programming (4)
(choose 8 credits) (choose two of the following)		
IT	214	Fundamentals of Software Development (4)
IT	340	Introduction to Database Systems (4)
IT	350	Information Security (4)
IT	360	Introduction to Networking (4)
IT	380	Systems Analysis and Design (4)

### DATABASE TECHNOLOGIES MINOR

#### **Required for Minor**

IT	210	Fundamentals of Programming (4)
IT	214	Fundamentals of Software Development (4)
IT	340	Introduction to Database Systems (4)
(choose two of the following courses)		
IT	440	Database Management Systems (4)
IT	442	Database Security, Auditing, and Disaster Recovery (4)
IT	444	Data Analytics (4)

### 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 350 Information Security (4)
- IT 360 Introduction to Networking (4)

(choose one of the following courses)

- 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 380 Systems Analysis and Design (4)

(choose one for the following courses)

- 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).

(choose three of the following courses) (12 credits)

- IT 350 Information Security (4)
- IT 442 Database Security, Auditing, and Disaster Recovery (4)
- IT 450 Information Warfare (4)
- IT 460 Network and Security Protocols (4)

**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 Applications 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



**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: (EE 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, Summer

**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

Variable

**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; Web-markup languages; Client-side, Server-side 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 N • 507-389-2744  
Email: [integrated.engineering@mnsu.edu](mailto:integrated.engineering@mnsu.edu)  
Websites: [cset.mnsu.edu/ie](http://cset.mnsu.edu/ie) and [cset.mnsu.edu/cs](http://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](http://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 offered 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 493, 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

This option is recommended for students majoring in electrical or computer engineering.

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 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 &amp; 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 113, 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 230

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 systems 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

Alt-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

**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

Alt-Fall

**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

Alt-Fall

**CS 433 (3) Data Mining and Machine Learning**

A blend of computer science, information science, and statistics for storing, accessing, modeling, and understanding large data sets. 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

Alt-Spring

**CS 452 (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 454 (3) Mobile and Wireless Networks**

Emerging mobile and wireless data networks technologies covered include standard wireless protocols (e.g., Bluetooth, IEEE 802.11, RFID, and WAP), and development of mobile and wireless applications (e.g., J2ME, WML, Brew). Includes research, design, and implementation of a wireless, mobile application.

Prerequisite: CS 320 and CS 350

Variable

**CS 455 (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

Spring

**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 compile-time and run-time 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 481 (3) Software Engineering**

Building upon the introduction provided in CS 300, provides a formal presentation of software engineering concepts. Additional topics include alternative design methods, software metrics, software project management, reuse and re-engineering.

Prerequisite: CS 300, CS 380 and MATH 121

Variable

**CS 482 (3) Software Verification**

Provides an introduction to software quality assurance with focus on software testing processes, methods, techniques and tools. Topics include formal verification and validation techniques; black box and white box testing; integration, regression, performance, stress, and acceptance testing of software.

Prerequisite: CS 300, CS 380 and MATH 354

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.

Spring

VI

**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, Spring



**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

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## CONSTRUCTION MANAGEMENT BS

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### Construction Management

*College of Science, Engineering & Technology*

*Department of Construction Management*

302 Wiecking Center • 507-389-6385

Website: [cset.mnsu.edu/cm](http://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](http://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.

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### CONSTRUCTION MANAGEMENT BS

Degree completion = 120 credits

**Required General Education**

ECON 201 Principles of Macroeconomics (3)

ECON 202 Principles of Microeconomics (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)

BLAW 200 Legal, Political, and Regulatory Environment of Business (3)

BLAW 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.**

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## 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.  
Prerequisite: CM 111, CM 120, CM 130, IT 101  
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: ENG 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) Estimating II

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 BS AND MINOR

### 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. Posas

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](http://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 minoring 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

Degree completion = 120 credits

#### Required General Education

CORR	106	Introduction to Criminal Justice Systems (3)
SOC	101	Introduction to Sociology (3)

#### Major Common Core

CORR	200	Foundations and Orientation to Corrections (3)
CORR	255	Juvenile Delinquency (3)
CORR	310	Corrections Research Methods (3)

CORR	442	Criminology (3)
CORR	443	History of Prisons and Punishment (3)
CORR	447W	Community Corrections W (3)
CORR	448	Correctional Law (3)
CORR	449	Correctional Counseling (3)
CORR	468	Cultural Competency (3)
CORR	496	Field Practicum: Corrections (10)
CORR	497	Capstone Seminar (2)

#### Major Restricted Electives

(choose 9 credits)

CORR	355	JOLT: Joint Opportunity to Learn and Thrive, Part II (3)
CORR	441	Social Deviance (3)
CORR	444	Women in the Criminal Justice System (3)
CORR	450	Evidence-Based Practices in Corrections (3)
CORR	452	Victimology (3)
CORR	459	Issues in Corrections (3)
CORR	472	Drugs and Society (3)
SOC	403	Sociology of Mental Health (3)
SOC	409	Family Violence (3)
SOC	420	Identity Work in Women's Reentry Experiences (3)

Required Minor: Yes. Any.

#### CORRECTIONS MINOR

#### Required for Minor

CORR	106	Introduction to Criminal Justice Systems (3)
(choose at least two courses from the following)		
CORR	255	Juvenile Delinquency (3)
CORR	441	Social Deviance (3)
CORR	442	Criminology (3)

#### Required Electives for Minor (12 credits)

CORR	300-400 Level
CORR	300-400 Level
CORR	300-400 Level
CORR	300-400 Level

#### 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

VI

**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

**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

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## COUNSELING AND STUDENT PERSONNEL COURSES

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### 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](http://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](http://www.mnsu.edu/programs/#All)**

#### COURSE DESCRIPTIONS

**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  
GE-2

**CSP 115 (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 effecting families, and professionals will be presented.

**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 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 491 (1-4) In-service****CSP 499 (1-4) Individual Study**


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## CRITICAL THINKING CERTIFICATE AND MINOR

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### 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 Preiss, Bekka Williams, Julie Wulfemeyer, Sun Kyeong Yu

**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://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)



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	480	Philosophy of Science (3)
PHIL	481	Philosophy of Biology (3)

**AREA 2:** For those interested in the critical, analytical and philosophical dimensions of the humanities. (choose 6 credits)

PHIL	115W	Philosophy of Race, Class and Gender (3)
PHIL	120W	Introduction to Ethics (3)
PHIL	205W	Culture, Identity, and Diversity (3)
PHIL	358W	Eastern Philosophy (3)
PHIL	361	Philosophy of Religion (3)
PHIL	445	Feminist Philosophy (3)
PHIL	455	Existentialism & Phenomenology (3)
PHIL	460	Philosophy of the Arts (3)
PHIL	465	Philosophy of Film (3)
PHIL	476	Philosophy of Perception (3)
PHIL	482	Philosophy of Social Science (3)

**AREA 3:** For those interested in the critical, analytical and philosophical dimensions of social science. (choose 6 credits)

PHIL	115W	Philosophy of Race, Class and Gender (3)
PHIL	205W	Culture, Identity, and Diversity (3)
PHIL	240W	Law, Justice & Society (3)
PHIL	321W	Social & Political Philosophy (3)
PHIL	322W	Ethical Theory (3)
PHIL	323W	Philosophy of Economics (3)
PHIL	420	Epistemology (3)
PHIL	440	Philosophy of Law (3)
PHIL	445	Feminist Philosophy (3)
PHIL	455	Existentialism & Phenomenology (3)
PHIL	476	Philosophy of Perception (3)
PHIL	482	Philosophy of Social Science (3)

**AREA 4:** For those interested in the critical, analytical and philosophical dimensions of history. (choose 6 credits)

PHIL	323W	Philosophy of Economics (3)
PHIL	334W	History of Philosophy: Classical Philosophy (3)
PHIL	336W	History of Philosophy: Renaissance & Modern Philosophy (3)
PHIL	337	19th Century Philosophy (3)
PHIL	338	American Philosophy (3)
PHIL	358W	Eastern Philosophy (3)
PHIL	437	Contemporary Philosophy (3)
PHIL	440	Philosophy of Law (3)
PHIL	455	Existentialism & Phenomenology (3)
PHIL	482	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	226W	Environmental Ethics (3)
PHIL	321W	Social & Political Philosophy (3)
PHIL	322W	Ethical Theory (3)
PHIL	323W	Philosophy of Economics (3)
PHIL	440	Philosophy of Law (3)

## Major Unrestricted Electives

Students must take one course (3 credits) from any courses that the Philosophy Department offers.

## 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	101W	Philosophical Problem: The Mind-Body Problem (3)
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 the humanities

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)
MASS	110	Introduction to Mass Media (4)
MASS	260	Principles of Visual Mass Media (4)
MASS	412	Mass Media History (4)
PHIL	112W	Introduction to Asian Philosophy (3)
PHIL	115W	Philosophy of Race, Class and Gender (3)
PHIL	120W	Introduction to Ethics (3)
PHIL	205W	Culture, Identity, and Diversity (3)
PHIL	358W	Topics in Asian Philosophy (3)
PHIL	361	Philosophy of Religion (3)
PHIL	445	Feminist Philosophy (3)
PHIL	455	Existentialism & Phenomenology (3)
PHIL	460	Philosophy of the Arts (3)
PHIL	465	Philosophy of Film (3)
PHIL	476	Philosophy of Perception (3)
PHIL	482	Philosophy of Social Science (3)

**AREA 3:** For those interested in the critical, analytical and philosophical dimensions of social science

Choose 15 credits from the following list. At least 9 credits must be upper division (300-400 level).

PHIL	115W	Philosophy of Race, Class and Gender (3)
PHIL	205W	Culture, Identity, and Diversity (3)
PHIL	240W	Law, Justice & Society (3)
PHIL	321W	Social & Political Philosophy (3)
PHIL	322W	Ethical Theory (3)
PHIL	420	Epistemology (3)
PHIL	440	Philosophy of Law (3)
PHIL	445	Feminist Philosophy (3)
PHIL	455	Existentialism & Phenomenology (3)
PHIL	476	Philosophy of Perception (3)
PHIL	482	Philosophy of Social Science (3)
PSYC	103W	Psychology Today (3)
URBS	100	Introduction to the City (3)
URBS	150	Sustainable Communities (3)

**AREA 4:** For those interested in the critical, analytical and philosophical dimensions of history

Choose 15 credits from the following.

HIST	401	Classical World of Greece & Rome (4)
HIST	406	Social History of Renaissance and Reformation Europe (4)
HIST	407	The Age of Absolutism and Enlightenment (4)
HIST	435	East Asian History: 1945 - The Present (4)
HIST	458	U.S. History 1820-1861 (4)
HIST	463	U.S. History, 1945-Present (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	478	America in Vietnam (4)
MASS	412	Mass Media History (4)
PHIL	122W	Introduction to Asian Philosophy (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	358W	Topics in Asian Philosophy (3)
PHIL	437	Contemporary Philosophy (3)
PHIL	440	Philosophy of Law (3)
PHIL	455	Existentialism & Phenomenology (3)
PHIL	482	Philosophy of Social Science (3)

**AREA 5:** For those interested in the critical, analytical and philosophical dimensions of business

Choose 15 credits from the following list. At least 9 credits must be upper division (300-400 level).

PHIL	120W	Introduction to Ethics (3)
PHIL	222W	Medical Ethics (3)
PHIL	224W	Business Ethics (3)
PHIL	226W	Environmental Ethics (3)
PHIL	321W	Social & Political Philosophy (3)
PHIL	322W	Ethical Theory (3)
PHIL	323W	Philosophy of Economics (3)
PHIL	440	Philosophy of Law (3)
URBS	100	Introduction to the City (3)
URBS	150	Sustainable Communities (3)

## DAKOTA COURSES

### Dakota

College of Arts & Humanities  
Department of World Languages & Cultures  
227 Armstrong Hall • 507-389-2116  
Website: [www.mnsu.edu/languages](http://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.

DAK	101	Elementary Dakota I (4)
DAK	102	Elementary Dakota I (4)
DAK	201	Intermediate Dakota I (4)
DAK	202	Intermediate Dakota II (4)

### COURSE DESCRIPTIONS

#### DAK 101 (4) Elementary Dakota I

An introduction, within cultural context, to the basic skills of listening, speaking, reading and writing in the Dakota language.

Fall  
GE-8

#### DAK 102 (4) Elementary Dakota I

An introduction, within a cultural context, to the basic skills of listening, speaking, reading and writing in the Dakota language.

Spring  
GE-8

#### DAK 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

#### DAK 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

## 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.msudance.com](http://www.msudance.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.

**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://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.

#### DANCE BFA

Degree completion = 120 credits

#### Required General Education

DANC	120W	Introduction to Dance (3)
THEA	101	Acting for Everyone (3)

**Major Common Core**

DANC	225	Worlds of Dance (3)
DANC	321	Dance Composition I (2)
DANC	322	Dance Improvisation (2)
DANC	329	Dance Practicum (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)
<u>Repertory</u>		
(Choose 5 Credits). (Course may be repeated for credit)		
DANC	428	Dance Repertory (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	128	Contemporary Dance I (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 Credit(s))

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)

**DANCE BA**

Degree completion = 120 credits

**Major Common Core**

DANC	128	Contemporary Dance I (2)
DANC	225	Worlds of Dance (3)
DANC	226	Ballet 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	421	Dance Composition II (2)
DANC	427	Topics in Dance (3)
DANC	429	Senior Dance Project (1)
DANC	484	Dance History (3)
THEA	262	Dance Production: Costumes (1)
THEA	272	Dance Production: Lighting (1)
THEA	276	Dance Production: Sound (1)
(choose 3 Credits) (take 3 times)		
DANC	428	Dance Repertory (1)

**Major Restricted Electives** (choose 3 Credits) (choose 2 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 14 credits of Dance not from Common Core.

**Other Graduation Requirements**

Language (8 credits)

**DANCE BS**

Degree completion = 120 credits

**Required General Education**

DANC	120W	Introduction to Dance (3)
THEA	101	Acting for Everyone (3)

**Major Common Core**

DANC	128	Contemporary Dance I (2)
DANC	225	Worlds of Dance (3)
DANC	226	Ballet 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	421	Dance Composition II (2)
DANC	427	Topics in Dance (3)
DANC	429	Senior Dance Project (1)
DANC	484W	Dance History (3)
THEA	262	Dance Production: Costumes (1)
THEA	272	Dance Production: Lighting (1)
THEA	276	Dance Production: Sound (1)
(choose 3 credits) Take 3 times		
DANC	428	Dance Repertory (1)

**Major Restricted Electives**

(choose 3 credits from 2 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 11 credits of Dance not in Common Core)

**Major Emphasis: Dance Therapy** (Pre-Professional)

Must complete a Psychology Minor (18 credits).

**Major Emphasis: Private Studio Teaching**

Must complete a Marketing Minor for Non-COB (21 credits).

Must also take DANC 324 (3 credits) as part of 11 credits of Unrestricted Electives.

**DANCE MINOR****Minor Core**

DANC	120	Introduction to Dance (3)
DANC	125	Afro-Caribbean Dance Forms (2)

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

Fundamentals of African-based dance forms explored through West African and Caribbean roots. May be repeated.

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 mainstage 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 through 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 K-12 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

### **DANC 326 (2) Ballet III**

Increasing difficulty of ballet technique with more complex combinations, multiple turns, point work, and greater emphasis on performance skills. May be repeated.  
Prerequisite: DANC 226 or consent  
ALT-Spring

### **DANC 327 (2) 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  
ALT-Spring

### **DANC 328 (2) 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  
GE-11

### **DANC 329 (1) Dance Practicum**

Individualized teaching, performance, or choreographic experiences occurring on, or off-campus. May be repeated.  
Prerequisite: Consent.  
Fall, Spring

### **DANC 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)

### **DANC 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)

### **DANC 421 (2) Dance Composition II**

Continuation of the principles and techniques of choreography with an emphasis on group forms.  
Prerequisite: DANC 321  
ALT-Fall

### **DANC 424 (3) 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

### **DANC 427 (3) Topics in Dance**

Rotation of a variety of topics in dance. May be repeated.  
Prerequisite: DANC 226, DANC 228  
Fall, Spring

### **DANC 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

### **DANC 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

### **DANC 430 (1) Choreographic Project I**

Course will advance individual student's compositional skills through her/his solo and group projects in a self-paced manner.  
Prerequisite: DANC 421  
Variable

### **DANC 431 (1) Choreographic Project II**

Course will further advance individual student's compositional skills through her/his solo and group projects in a self-paced manner.  
Prerequisite: DANC 430, consent  
Variable

### **DANC 484 (3) 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

### **DANC 484W (3) 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

### **DANC 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

### **DANC 499 (1-3) Individual Study**

This course is designed to provide student with specialized study in dance.  
Prerequisite: consent  
Fall, Spring

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## DANCE K-12 EDUCATION BS

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### 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.msudance.com](http://www.msudance.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.

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**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://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.



**K-12 DANCE EDUCATION BS**

Degree completion = 120 credits

**Required General Education**

DANC	120W	Introduction to Dance (3)
HLTH	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	262	Dance Production: Costumes (1)
THEA	272	Dance Production: Lighting (1)
THEA	276	Dance Production: Sound (1)
(choose 2 credits) (Take twice)		
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: msdentalclinic@mnsu.edu  
 Dept. Website: <http://ahn.mnsu.edu/dental>

Chair: Brigitte Cooper MS

Faculty: Terri Brown MS; Brigitte Cooper MS; Julie Dittich MS; Lynnette Engeswick PhD.; Lisa Fleck MS; Trisha Krenik-Matejcek 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](http://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/](http://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 326 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 (@~\$300). 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

## DENTAL HYGIENE CONTINUED

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 off-site 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.

### DENTAL HYGIENE BS

Degree completion = 120 credits

#### Required General Education

BIOL	270	Microbiology (4)^
ENG	101	Composition (4)~
HLTH	101	Health and the Environment (3)*
PSYC	101	Introduction to Psychological Science (4)~

(choose 3 credits)

SOC	101	Introduction to Sociology (3)~
SOC	150	Social Problems (3)~

(choose 3 credits)

CMST	100	Fundamentals of Communication (3)~
CMST	102	Public Speaking (3)~

(choose 3-4 credits)

SOC	202	Introductory Social Statistics (3)~
STAT	154	Elementary Statistics (4)~

(choose 3 credits)

PHIL	120W	Introduction to Ethics (3)*
PHIL	222W	Medical Ethics (3)*

### Chemistry

(choose one course 3-5 credits)

CHEM	106	Chemistry of Life Process Part I (General) (3)^
CHEM	111	Chemistry of Life Processes Part II (5)^

#### Prerequisites to the Major (choose 16 credits)

BIOL	220	Human Anatomy (4)
DHYG	100	Perspectives in Dental Hygiene (1)
DHYG	219	Head and Neck Anatomy and Histology (2)
DHYG	223	Pharmacology (3)
DHYG	225	Oral Anatomy (2)
FCS	242	Nutrition for Healthcare Professionals (3)

(choose 4 credit(s).

BIOL	310	Basics of Human Physiology (4)
BIOL	330	Principles of Human Physiology (4)

#### Major Common Core

DHYG	311	Preclinical Orientation (3)
DHYG	313	Clinical Skills Development (3)
DHYG	321	Radiography I (3)
DHYG	322	Biomaterials I (2)
DHYG	326	Biomaterials II (2)
DHYG	327	Periodontology I (2)
DHYG	328	Radiography Interpretation (2)
DHYG	329	Oral Embryology and Pathology (3)
DHYG	331	Clinical Dental Hygiene I (2)
DHYG	332	Clinical Seminar I (2)
DHYG	333	Clinical Dental Hygiene IS (2)
DHYG	334	Dental Computer Software Management (1)
DHYG	420	Local Anesthesia (1)
DHYG	421	Clinical Dental Hygiene II (3)
DHYG	422	Clinical Seminar II (1)
DHYG	424	Nitrous Oxide Sedation (1)

DHYG	425W	Community Dental Health (3)
DHYG	426	Dental Hygiene Jurisprudence and Ethics (1)
DHYG	427	Periodontology II (2)
DHYG	428	Technology in Dentistry (1)
DHYG	431	Clinical Dental Hygiene III (3)
DHYG	432	Clinical Seminar III (2)
DHYG	435	Community Practicum (2)
DHYG	437	Dental Management of the Medically Compromised Patient (2)
DHYG	438	Advanced Community Practice I (1)
DHYG	439	Advanced Community Practice II (1)
DHYG	440	Restorative Functions (4)

**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.*

DHYG	441	Advanced Dental Hygiene Practice (3)
DHYG	442	Current Issues in Dental Hygiene (3)
DHYG	443	Technology in Oral Health (3)
DHYG	444W	Principles of Oral Health Promotion (3)
DHYG	445	Educational Methods in Dental Hygiene (3)
DHYG	451	Dental Hygiene Care Planning (3)
DHYG	452	Decision Making in Periodontology (3)
DHYG	453	Research Methods in Dental Hygiene (3)
DHYG	454	Oral Health Promotion Practice (3)
DHYG	455	Educational Practice in Dental Hygiene (3)
DHYG	456	Oral Medicine and Treatment Planning (2)

#### Study Abroad

Choose 0 - 6 Credit(s).

*These courses are optional and may not be offered each year/semester.*

DHYG	336	Cultural Awareness through the Lens of Health (3)
DHYG	447	Dental Health Study Abroad in Belize (3)

**Required Minor: None**

### 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](mailto:julie.dittrich@mnsu.edu) for more information.

#### Required for Major

DHYG	441	Advanced Dental Hygiene Practice (3)
DHYG	442	Current Issues in Dental Hygiene (3)
DHYG	443	Technology in Oral Health (3)
DHYG	444W	Principles of Oral Health Promotion (3)
DHYG	445	Educational Methods in Dental Hygiene (3)
DHYG	451	Dental Hygiene Care Planning (3)
DHYG	452	Decision Making in Periodontology (3)
DHYG	453	Research Methods in Dental Hygiene (3)
DHYG	454	Oral Health Promotion Practice (3)
DHYG	455	Educational Practice in Dental Hygiene (3)
DHYG	456	Oral Medicine and Treatment Planning (2)

**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 223 (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 the permanent, mixed and primary dentitions including 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 x-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 is designed to reinforce topics covered in DHYG 311 through the use of advanced case studies. Emphasis will be placed on evidence-based decision making. Also designed to collaborate with clinic needs as identified in DHYG 331.

Spring

**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.

Summer

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 the 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. This 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.

Fall

## DHYG 427 (2) Periodontology II

Didactic and clinical study of etiology, diagnosis, preventive and therapeutic procedures involved with periodontal disease.

Spring

## 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.

Fall

## 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.

Fall

Variable

## 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.

Spring

## 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.

Fall

## 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.

Fall

## 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.

Spring

## 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.

Spring

## 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.

Spring, Summer (On Demand)

## 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.

Fall, Summer (On Demand)

## 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.

Fall (On Demand), Spring

## DHYG 444W (3) 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.

Fall, Spring (On Demand)

## 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.

Fall, Spring (On Demand)

## 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.

Spring

Diverse Cultures - Gold

## 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.

Fall, Spring (On Demand)

## 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.

Fall, Spring (On Demand)

## 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.

Fall (On Demand), Spring

## 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

Fall (On Demand), Spring

**DHYG 455 (3) Educational Practice in Dental Hygiene**

Applies content from Principles of Educational Methods to support the role of dental hygiene educator in didactic and clinical instruction. Active participation in course design, delivery and evaluation in classroom, online or clinical format with emphasis on competency based instruction.

Prerequisite: DHYG 445

Fall (On Demand), Spring

**DHYG 456 (2) Oral Medicine and Treatment Planning**

This course is designed to facilitate critical thinking skills related to drugs used in dentistry and medicine with emphasis placed on the impact of the dental hygiene diagnosis.

Spring, Summer (On Demand)

**DHYG 499 (1-6) Individual Study**


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## DEVELOPMENTAL ADAPTED PHYSICAL EDUCATION, TEACHING MINOR (DAPE)

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### 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/](http://ahn.mnsu.edu/hp/)

Chair: Lynnette M. Engeswick  
Program Coordinator: Sue Tarr  
Faculty: Sue Tarr

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#### Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)

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Most school districts in Minnesota now require physical education teachers to have licensure in Developmental Adapted Physical Education (DAPE) to obtain or retain their teaching positions. In addition to DAPE licensure to teach students with disabilities, a DAPE minor makes prospective teachers better equipped to teach students of all abilities in general physical education classes. Applicant for DAPE licensure must be a Health & Physical Education Teacher Education Major as DAPE licensure is an add-on license to the K-12 Health and Physical education teaching license. Students in related disciplines who foresee teaching students and individuals with disabilities may pursue the DAPE minor; however, pursuant to Minnesota teacher licensure requirements, only physical education majors can be granted the DAPE teaching licensure. Prospective teachers will be eligible for DAPE licensure in the State of Minnesota when all competencies have been met. See this link for more information <http://ahn.mnsu.edu/hp/undergraduate/dape.html>.

All courses in the minor must be taken for grade with the exception of HP 493 (Internship in DAPE) which must be taken as P/NC. HP 493 may be taken concur-

rently with student teaching with prior approval. Cooperating teacher for HP 493 must be a licensed DAPE teacher.

Candidates must pass the Minnesota Teacher Licensure Exam (MTLE) in Special Education: Core Skills to receive DAPE license.

**Admission to Minor** is granted by the department concurrent with or following admission to physical education major. Minimum department admissions requirements are:

- a minimum of 32 earned semester credit hours
- a minimum cumulative GPA of 2.5 or above

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#### DEVELOPMENTAL ADAPTED PHYSICAL EDUCATION, TEACHING MINOR (DAPE)

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##### 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)
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#### COURSE DESCRIPTIONS LOCATED UNDER HUMAN PERFORMANCE (HP) COURSE DESCRIPTIONS

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## EARTH SCIENCE BA, BS CERTIFICATE AND MINOR

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### Earth Science

*College of Social & Behavioral Sciences*  
Department of Geography  
206 Morris Hall • 507-389-2617  
Website: <http://sbs.mnsu.edu/earthscience/>

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.

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#### Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)

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##### 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.

Refer to 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.



**EARTH SCIENCE BA and BS**

Degree completion = 120 credits

**Major Common Core**

AST	101	Introduction to Astronomy (3)
AST	102	Introduction to the Planets (3)
BIOL	100	Our Natural World (4)
CHEM	201	General Chemistry I (5)
GEOG	101	Introductory Physical Geography (3)
GEOG	217	Weather (4)
GEOG	315	Geomorphology (3)
GEOG	410	Climatic Environments (3)
GEOL	121	Physical Geology (4)
GEOL	122	Earth History (4)
GEOL	201	Elements of Mineralogy (4)
PHYS	211	Principles of Physics I (4)

**Major Restricted Electives** (choose 6 credits)

AST	125L	Observational Astronomy (3)
BIOL	432	Lake Ecology (4)
GEOG	313	Natural Disasters (4)
GEOG	370	Cartographic Techniques (4)
GEOG	373	Introduction to Geographic Information Systems (4)
GEOG	411	Soils Geomorphology (3)
GEOG	412	Advanced Weather (4)
GEOG	414	Biogeography (3)
GEOG	415	Earth Surface Processes (4)
GEOG	416W	Fluvial Geomorphology and Hydrology (4)
GEOG	420	Conservation of Natural Resources (3)
GEOG	440	Field Studies (1-4)
GEOG	471	Digital Field Mapping with GPS (4)
GEOG	474	Introduction to Remote Sensing (4)
GEOG	480	Seminar (1-4)
GEOL	302	Petrology (4)
GEOL	320W	Sedimentology and Stratigraphy (4)
GEOL	330	Structural Geology (4)
GEOL	370	Geotectonics (2)
GEOL	410	Glacial Geology (3)
GEOL	450	Hydrogeology (3)
GEOL	497	Internship (1-10)

**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.

**Other Graduation Requirements**

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

**EARTH SCIENCE MINOR****Required General Education for Minor**

AST	101	Introduction to Astronomy (3)
BIOL	100	Our Natural World (4)
CHEM	100	Chemistry in Society (4)
GEOG	101	Introductory Physical Geography (3)
PHYS	100	Cultural Physics (3)
Required for Minor		
GEOL	121	Physical Geology (4)
GEOL	122	Earth History (4)
GEOG	217	Weather (4)
GEOG	315	Geomorphology (3)

**Required Electives for Minor**

(choose one from the following)

AST	102	Introduction to the Planets (3)
GEOG	410	Climatic Environments (3)
GEOG	420	Conservation of Natural Resources (3)

**GEOMORPHOLOGY AND EARTH SURFACE PROCESSES CERTIFICATE**

Geomorphology is the study of the form and character of the Earth's surface. Earth Surface Processes shape and transform our planet's landscape. Students will develop a broad theoretical understanding and learn to apply specific analytical skill to the field of Geomorphology through a multi-disciplinary curriculum in Geography, Geology and Anthropology.

**Major Common Core**

Take either GEOG 315 or GEOG 415 and GEOG 410

GEOG	315	Geomorphology (3)
GEOG	415	Earth Surface Processes (4)
GEOG	410	Climatic Environments (3)

**Major Restricted Electives** (choose one from the following)

GEOG	411	Soils Geomorphology (3)
GEOG	416W	Fluvial Geomorphology and Hydrology (4)

**Major Unrestricted Electives**

At least six credits must be taken. Choose courses from two of the three listed departments. GEOG 411 and GEOG 416 can be taken as an unrestricted elective if they were not taken as a restricted elective.

ANTH	331	Environmental Anthropology (3)
GEOG	411	Soils Geomorphology (3)
GEOG	416W	Fluvial Geomorphology and Hydrology (4)
GEOG	440	Field Studies (1-4)
GEOL	201	Elements of Mineralogy (4)
GEOL	320W	Sedimentology and Stratigraphy (4)

**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, Atrayee 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.

**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

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 305	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 380	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)
MRKT 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 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 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 a 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 380	Human Behavior in Organizations (3)
<u>Economics of Public Sector Emphasis</u>	
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)
<u>Financial Economics Emphasis</u>	
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)
<u>Graduate School Preparation</u>	
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 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)

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  
VI, GE-2, 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  
GE-2, 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  
VI, 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)  
VI  
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

WI

**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

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## EDUCATIONAL LEADERSHIP COURSES

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### 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](http://www.mnsu.edu/programs/#All)**

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### 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 BSEE

## Electrical Engineering

College of Science, Engineering and Technology  
 Department of Electrical & Computer Engineering and Technology  
 242 Trafton Science Center N • 507-389-5747  
 Website: [www.cset.mnsu.edu/ecet](http://www.cset.mnsu.edu/ecet)  
 Email: [ecet@mnsu.edu](mailto:ecet@mnsu.edu)

Chair: Qun Zhang  
 Program Coordinator: Qun Zhang

Faculty: Gale Allen, Nannan He, Han-Way Huang, Muhammad Khaliq, Julio Mandojana, Puteri Megat-Hamari, Ryan Shirk, Vincent Winstead, Xuanhui Wu, Jianwu Zeng, Qun Zhang

**Accreditation.** The Electrical Engineering program is accredited by the Engineering Accreditation Commission of ABET, [www.abet.org](http://www.abet.org).

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 humanistic implications of technology and motivate them to make worth-while 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.

### 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 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; and
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 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.



**ELECTRICAL ENGINEERING BSEE**

Degree completion = 128 credits

**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 232	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	Control Systems Laboratory (1)
EE 450	Engineering Economics (3)
EE 467W	Principles of Engineering Design III (1)
EE 477W	Principles of Engineering Design IV (1)
EE 482	Electromechanics (3)
MATH 223	Calculus III (4)
PHYS 223	General Physics III (3)
PHYS 233	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 (4)
EE 487	RF Systems Engineering (3)
EE 489	Real-time Embedded Systems (4)

**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)
ME 291	Engineering Analysis (3)

**Business/Finance** Choose 3 Credits.

BLAW 200	Legal Environment of Business (3)
FINA 362	Business Finance (3)
MGMT 230	Principles of Management (3)
MGMT 340	Human Resource Management (3)
MRKT 210	Principles of Marketing (3)

**Required Minor: None.**

No minor or other major accepted toward degree

**COURSE DESCRIPTIONS****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. Student 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  
Co-requisite: EE 106  
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  
Co-requisite: 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 interface design.

Prerequisite: EE 106, EE 107  
Co-requisite: EE 234

**EE 240 (1) Evaluation of Circuits**

Laboratory support for EE 230. Use of laboratory instrumentation to measure currents and voltages associated with DC and AC circuits. Statistical analysis of measurement data. Measurements of series, parallel and series-parallel DC and AC circuits. Measurement of properties for circuits using operational amplifiers. Measurement of transient responses for R-L and R-C circuits. Simulation of DC and AC circuits using PSpice. Concepts covered in EE 230 will be verified in the laboratory.

Prerequisite: Must be taken concurrently with EE 230.

Fall

**EE 241 (1) Electric Circuits Lab**

This course accompany EE231 with labs relating to first order RLC circuit, and second order RLC circuits, source free and sinusoidal RLC 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, PLA's, FPGA's and Memories. Analysis, synthesis and design of sequential machines; synchronous, pulse mode, 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.

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 phenomenon 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 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, BJT's, JFET's, and MOSFET's 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, bi-stability, 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 343 (1) Electronics II Laboratory**

This course will accompany EE 333 course dealing with laboratory experience of designing, evaluating and simulation of source and emitter coupled logic circuits, output stages and power amplifiers, negative feedback amplifiers, oscillator circuits, Multivibrators, Schmidt Trigger, 555 timer application to Multivibrators, Memory circuits, CMOS logic circuits, signal generating and waveform shaping circuits.

Prerequisite: EE 332 and concurrent with EE333

Spring

**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**

Vector fields. Electrostatic charges, potential and fields; displacement. Steady Current/current density; magnetostatic fields, flux density. Materials properties. Faraday's Law and Maxwell's equations. Skin effect. Wave propagation, plane waves, guided waves. Radiation and antennas. Transmission line theory.

Prerequisite: EE 231, MATH 223, MATH 321 and PHYS 222

Spring

**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**

Measurement techniques using the oscilloscope, spectrum analyzer and network analyzer. Signals and spectra. Frequency response. Noise and noise figure measurements. Intermodulation products. Amplitude and frequency modulation/demodulation. Sampling, aliasing, and intersymbol interference. Bit error measurement.

Prerequisite: Concurrent with EE 353

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, 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: 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

WVI

**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

VI

**EE 479 (3) Superconductive Devices**

Magnetic and superconducting properties of materials, microscopic theory of superconductivity and tunneling phenomenon. Josephson and SQUID devices, survey of computer memories, memory cell and shift register, A/D converters and microwave amplifiers. Integrated circuit technology and high temperature superconductors.

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**

The basics of digital VLSI technology. Bipolar and MOS modeling for digital circuits. Physical transistor layout structure and IC process flow and design rules. Custom CMOS/BICMOS static and dynamic logic styles, design and analysis. Clock generation, acquisition, and synchronization procedures. Special purpose digital structures including memory, Schmitt triggers, and oscillators. Individual design projects assigned.

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**

Overview of wireless communication and control systems. Characterization and measurements of two-port RF/IF networks. Transmission lines. Smith chart. Scattering parameters. Antenna-preselector-preamplifier interface. Radio wave propagation. Fading. RF transistor amplifiers, oscillators, and mixer/modulator circuits. Multiple access techniques. Transmitter/receiver design considerations. SAW matched filters.

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 BS, CERTIFICATE AND MINOR

### Electronic Engineering Technology

College of Science, Engineering & Technology  
Department of Electrical & Computer Engineering and Technology  
242 Trafton Science Center N • 507-389-5747  
Website: [www.cset.mnsu.edu/ecet](http://www.cset.mnsu.edu/ecet)  
Email: [ecet@mnsu.edu](mailto:ecet@mnsu.edu)

Chair: Qun Zhang  
Program Coordinator: Qun Zhang

Faculty: Gale Allen, Nannan He, Han-Way Huang, Muhammad Khaliq, Julio Mandojana, Puteri Megat-Hamari, Ryan Shirr, Vincent Winstead, Xuanhui Wu, Jianwu Zeng, Qun Zhang

**Accreditation.** The Electronic Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, [www.abet.org](http://www.abet.org).

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 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](http://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.

**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.

**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. The student may also attempt to test out of EET 114, EET 222, and 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.
4. Grades must be "C-" (1.67) 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.

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 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.)

**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)
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**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. Thevenin'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**

A study of AC circuits, power, phasors, series and parallel AC networks, and network analysis theorems. Ohm's Laws and Kirchhoff's Laws for AC circuits. Use of dependent sources in AC circuits.

Prerequisite: EET 113  
Fall, Spring

**EET 115 (3) Understanding Computers**

A self-paced, interactive, multi-media course, for nonengineering 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 through out the world. Finally, the course will exam the 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

Co-requisite: 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 concept, 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 conversion, 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

**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 Multism 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**

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 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, PLCs, 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, 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 microprocessors resources will be stressed. PC programming in assembly and a high level language.

Prerequisite: EET 143

Fall

**EET 486 (3) Digital Communications**

An overview of a communication system. Phase Shift Keying, Amplitude Shift Keying and Frequency Shift Keying. Coherent and non-coherent detection. Maximum likelihood receiver and Matched filter. Noise power, Noise figure, and Noise Temperature. Error performance in presence of noise. Linear block codes, cyclic codes and convolution codes. Spread Spectrum Techniques.

Prerequisite: EET 142, EET 222

Variable

**EET 487 (3) RF Systems Technology**

Overview of wireless communication and control systems. Characterization and measurement of RF networks. Transmission lines. Antennas. Radio wave propagation. Fading. Smith Chart. RF transistor amplifiers, oscillators and mixer/modulator circuits. Klystrons, magnetrons and TWTs. Spread spectrum techniques. SAW matched filters.

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

**EET 499 (1-4) Individual Study**

Fall, Spring

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## ELEMENTARY EDUCATION BS, CERTIFICATE AND MINORS

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### 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.

Faculty: Kristi Bergeson Ph.D.; Ronald Browne Ph.D.; David Kimori Ph.D.; Karl Matz Ed.D.; Lori Powlowski Ph.D.; Steven Reuter Ph.D.; Elizabeth Sandell Ph.D.; Lisa Vasquez 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.

### 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-

**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)**

variations of teaching activities by public school and university faculty, the use of videotaped lessons and activities for self-assessment, use of logs, participation in learning communities, and participation in activities reflective of the professional responsibilities of teachers (e.g., parent conferences). The Director of the Office of Field and International Experience requests placements for all teacher candidates in partner districts, especially our Professional Development Schools. Teacher candidates should not contact schools regarding their placement.

Admission to the student teaching experience is contingent upon completion of:

1. Completion of all coursework in major and General Education requirements.
2. A cumulative GPA of 3.00 or higher; grades of "C" or higher in all program requirements.
3. Admittance to Professional Education.
4. Completion of all professional education course work.
5. Completion and validation of formal application materials one year prior to student teaching semester.
6. Attendance at all preliminary student teaching meeting(s).
7. Recommendation of advisor.
8. 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.**

## ELEMENTARY EDUCATION BS, TEACHING

Degree completion = 120 credits

### Required General Education

ART	225	Developing Creativity: Approaches & Techniques (3)
CHEM	100	Chemistry in Society (4)
EEC	222W	Human Relations in a Multicultural Society (3)
GEOG	100	Elements of Geography (3)
GEOG	100	Our Geologic Environment (3-4)
HIST	190	United States to 1877 (4)
HLTH	240	Drug Education (3)
MATH	112	College Algebra (4)
MATH	201	Elements of Mathematics I (3)
THEA	101	Acting for Everyone (3)

### Communication Studies (choose 3 credits)

CMST	100	Fundamentals of Communication (3)
CMST	102	Public Speaking (3)

### English Composition General Education (choose 4 credits)

ENG	101	Composition (4)
ENG	104	Stretch Composition II (4)

### Major Common Core

Core Support (choose 16 credits)

BIOL	480	Biological Laboratory Experiences for Elementary Teachers (3)
EEC	215	Introduction to Educational Psychology and Instruction in the Elem Cl (4)
ENG	325	Children's Literature (3)
MATH	202	Elements of Mathematics II (3)
PHYS	280	Lab Experiences in Physical Science (3)

### Block I (choose 17 credits)

EEC	411	Elementary Math Methods Primary (2)
EEC	412	Kindergarten Methods and Materials (3)
EEC	422W	Literacy Fundamentals (4-5)
EEC	423	Field Experience for the Diverse Classroom I (1)
EEC	427	Instructional Planning and Assessment (2)
EEC	444	Elementary Science I (4)

### Block II (choose 16 credits)

EEC	431	Elementary Math Methods Intermediate (3)
EEC	432	Social Studies in Elementary School (3)
EEC	437	Field Experience for the Diverse Classroom II (1)
EEC	438	Creating Environments for Learning (1)
EEC	445	Literacy Methods for the Intermediate Classroom (4)
EEC	454	Elementary Science II (4)

### Student Teaching I (choose 15 credits)

EEC	401	Music for Elementary Teachers (1)
EEC	405	Art for Elementary Teachers (1)
EEC	415	Physical Education for Elementary Teachers (1)
EEC	421	Multi-Tiered Systems of Support: Assessment & Interventions (4)
EEC	424	Special Education and Behavioral Needs in Elementary Education (3)
EEC	463	Elementary Student Teaching I (1)
ENG	491	Teaching English Language Learners in the Mainstream Classroom (4)

### Student Teaching 2 (choose 12 credits)

EEC	473	Student Teaching Elementary (12)
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**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.

## Middle School Communication Arts & Literature Minor

### Minor Core

EEC 494 (4) OR \*EEC 451 (1-2)

\*EEC 451 is for students who hold a K-6 initial license

- EEC 410 Philosophy & Practices in the Middle School (3)
- EEC 428 Teaching Reading and Writing in the Content Areas (3)
- EEC 494 Student Teaching Middle School (4)
- ENG 242W Introduction To Creative Writing (4)
- ENG 285 Practical Grammar (2)
- ENG 425 Topics in Children's Literature (2-4)
- ENG 464 Teaching Literature in the Middle School (3)

## ELEMENTARY EDUCATION STEM CERTIFICATE

The Elementary Education STEM Certificate will provide teacher candidates with preparation needed to become effective STEM teachers.

### Major Emphasis: Elementary Education STEM Certificate

- EEC 436 Engineering for Elementary Teachers (3)
- EEC 446 Educational Technology-STEM (3)
- EEC 456 Special Topics: STEM for Elementary Teachers (1)
- EEC 467 Integrating Science, Technology, Engineering, and Math for Elem Teachers (3)
- EEC 470 Field Experience in Reading and STEM (1)

### Mathematics Courses (Choose 3 - 4 Credits)

- MATH 112 College Algebra (4)
- MATH 203 Elements of Math III (3)
- STAT 154 Elementary Statistics (4)

Choose 6 credits from two different areas in Biology, Geology, and/or Physics

## 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 tenants 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  
WI, GE-7, GE-9  
Diverse Cultures - Purple

## ELEMENTARY EDUCATION

### 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  
WI, GE-7, GE-11  
Diverse Cultures - Gold

### 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

Co-requisite: EEC 323, EEC 324, EEC 407, EEC 421, EEC 444

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

## 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

Co-requisite: EEC 320, EEC 321, EEC 334, EEC 355

Fall, Spring

## EEC 428 (3) Teaching Reading and Writing in the Content Areas

Presents 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

Co-requisite: 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/math experience in elementary classrooms.

Co-requisite: 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. Students will plan and implement developmentally appropriate activities/lessons related to math, science, and social studies.

Co-requisite: EEC 440, EEC 441, EEC 442

Fall

## EEC 444 (4) Elementary Science 1

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

Co-requisite: EEC 421, EEC 424, EEC 491

**EEC 471 (6) Kindergarten Student Teaching and Seminar**

Full responsibility of classroom with university supervision.

Prerequisite: EEC 370 and EEC 473, and admission to student teaching  
Fall, Spring

**EEC 472 (11) Student Teaching: Moderately/Severely Mentally Handicapped**

Student teaching in special education. (TMH)

Prerequisite: Special Ed. Methods  
Fall, Spring

**EEC 473 (12) Student Teaching Elementary II**

Student teaching in the elementary school. Includes weekly seminar.

Prerequisite: Methods Courses; admission to student teaching.

Co-requisite: EEC 466, EEC 494

Fall, Spring

**EEC 478 (5) Supplementary Student Teaching Elementary**

Student teaching in the elementary school including weekly seminar for K-12 majors.

Prerequisite: Admission to student teaching.

Co-requisite: EEC 476 and KSP 475

Fall, Spring

**EEC 479 (11) Student Teaching Mildly/Moderately Mentally Handicapped**

Student teaching in special education. (EMH)

Prerequisite: Admission to student teaching

Fall, Spring

**EEC 483 (2) Supervision of Student Teachers**

Assist K-12 classroom teachers in developing their skills for supervising pre-service and student teachers.

Variable

**EEC 490 (1-3) Workshop**

The workshop format provides teachers and others opportunity to study a specific topic in a shortened, hands-on course.

Variable

**EEC 491 (1-4) In-Service**

Variable

**EEC 493 (5) Student Teaching Middle School**

Student teaching in a content area for a full-day, half-semester, in a middle school setting. For elementary students student teaching in middle school.

**EEC 494 (4) Student Teaching Middle School**

Student teaching in a second content area for a full-day, half-semester, in a middle school setting. For elementary students student teaching in middle school.

Prerequisite: EEC 473

Fall, Spring

**EEC 495 (2-4) Internship: Early Childhood Family Education**

Principles and practices in Early Childhood/Family Education and programs. On-site experiences are required.

Prerequisite: FCS 483, FCS 488

Variable

**EEC 496 (3-6) Internship**

Provides clinical experiences for pre-service teachers; extends laboratory experiences for those who have completed pre-student teaching experiences.

Prerequisite: Required methods

Variable

**EEC 497 (3-6) Reading Internship**

Student directed learning; project determined jointly between student and advisor.

Prerequisite: EEC 332 or EEC 334, EEC 420, EEC 422 or EEC 428

Variable

**EEC 499 (1-4) Individual Study**

By contract between student and faculty member.

Variable

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## ENGLISH BFA, BA, BS, CERTIFICATE AND MINORS

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### English

College of Arts & Humanities

Department of English

230 Armstrong Hall • 507-389-2117

Fax: 389-5887

Website: [www.english.mnsu.edu](http://www.english.mnsu.edu)

Chair: Matthew Sewell

Faculty: Dawn Armfield, Jacqueline Arnold, Edward Avila, Abigail Bakke, Robin Becker, Candace Black, Heather Camp, Kirsti Cole, Matthew Connolly, Nancy Drescher, Danielle Haque, Sarah Henderson Lee, Geoff Herbach, Paolo Infante, Diana Joseph, Karen Lybeck, Christopher McCormick, Roland Nord, Sara Parks, Glen Poupore, Melissa Purdue, Richard Robbins, Steven Rybin, Matthew Sewell, Kristie Smith, Lee Tesdell, Jennifer Veltsos, Gwen Westerman, Elizabeth Williamsen

The Department of English prepares students to study, understand, and use the English language in order to

- communicate through written composition
- comprehend and create written texts
- gain a critical and analytical understanding of texts
- prepare for careers in teaching, writing, editing, publishing, and other professions that value such knowledge and skills.

The department's goals are:

1. offering quality undergraduate education in creative writing, English education, film, linguistics, literature, and technical communication;
2. offering general education and service courses that foster effective reading, writing, speaking, and critical thinking, that promote an understanding of literature and film, and that promote an appreciation for the variety of cultures within our country and throughout the world;
3. contributing to students' education in writing and teaching by means of instruction in the effective use of communication technologies.

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](http://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, minor, 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)
HLTH 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 361	Teaching English: Literature, Grades 5-12 (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 BA in creative writing requires 8 credits of a single modern language.

### CREATIVE WRITING BFA

#### 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 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 320 British Literature to 1785 (4)  
 ENG 321 British Literature: 1785-Present (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 433W Selected Studies in World Literature (4)  
 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 321 British Literature: 1785-Present (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 433W 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 (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)



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 Restricted Electives**

Electives (choose 12 - 16 credits)

Sufficient electives to reach 40 credits

- ENG 316 Topics in Literature (1-4)  
 ENG 318 Multicultural Literature (2-4)  
 ENG 319 Animals and Literature (4)  
 ENG 320 British Literature to 1785 (4)  
 ENG 321 British Literature: 1785-Present (4)  
 ENG 325 Children's Literature (3)  
 ENG 327 American Literature to 1865 (4)  
 ENG 328 American Literature: 1865 to the Present (4)  
 ENG 381 Introduction to English Linguistics (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 412W Arab American Literature (4)  
 ENG 425 Topics in Children's Literature (2-4)  
 ENG 426 Selected Periods (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 441 Literary Theory and Criticism (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)

**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)

**ENGLISH STUDIES BA****Major Common Core**

48 total credits required for this degree. If you select 4 credits in the Foundation Category, you must select 40 credits in the Content Areas Category.

- ENG 275W Introduction to Literary Studies (4)

**Major Restricted Electives**

**FOUNDATION** (choose 4-8 credits total in the Foundation Category)

Creative Writing and Linguistics (choose 0-8 credits)

- ENG 242W Introduction to Creative Writing (4)  
 ENG 381 Introduction to English Linguistics (4)

Technical Communication (choose 0-4 credits)

- ENG 271W Technical Communication (4)  
 ENG 272W Business Communication (4)

**CONTENT AREAS**

Choose 36-40 credits total in the Content Areas Category (Literature Surveys, Content-Area Electives, and General Electives).

Students must take a minimum of 8 credits (two courses) from 2 of the 3 categories (British, American, and World).

Literature Surveys (choose 8-12 credits)

- ENG 320 British Literature to 1785 (4)  
 ENG 321 British Literature: 1785-Present (4)  
 ENG 327 American Literature to 1865 (4)  
 ENG 328 American Literature: 1865 to the Present (4)  
 ENG 433W Selected Studies in World Literature (4)  
 ENG 435 The World Novel (2-4)

Content-Area Electives (choose 8-12 credits)

- 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 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 482 Teaching English Pronunciation and Discourse (4)  
 ENG 484 Pedagogical Grammar and Academic English (4)  
 ENG 485 Language and Culture in TESL (4)  
 ENG 486 Theories of Teaching ESL (4)

**Major Unrestricted Electives**

General Electives (choose 12-24 credits)

Courses may not be double-counted from other categories

- ENG 300 - ENG 499 Selected in consultation with an advisor.  
 FILM 300 - FILM 499 Selected in consultation with an advisor.

**Other Graduation Requirements**

**Required for Bachelor of Arts (BA) degree:** Language (8 credits)

48 total credits required for this degree.

**Required Minor: None.**

**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 (Required for a state of Minnesota teaching license, an additional 30 credits of professional education courses.).** See the SECONDARY 5-12 AND K-12 PROFESSIONAL EDUCATION section for admission requirements to Professional Education and a list of required professional education courses. This 30 credit requirement includes 11 credits of student teaching. Students must

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 Common 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 475W	Editing Technical Publications (4)
ENG 498W	Internship (3-4)
<u>Documentation</u> (choose 4 credits)	
ENG 476	Online Documentation (4)
ENG 477W	Technical Documentation, Policies, and Procedures (4)

#### **Major Restricted Electives (18-19 credits)**

Major Common Core and Electives must total 37 credits.

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)

ENG 479	Rhetorical Theory Applied to Technical Documents (4)
ENG 480	Proposals (4)
ENG 494	English Workshop (selected sections, 1-6)

**Other Graduation Requirements.** English Department policy does not permit double-counting of courses for any English major or minor.

**Minor.** Choose a technical minor from the list below: Automotive Engineering Technology, Civil Engineering, Electronic Engineering Technology, Manufacturing Engineering Technology, Biology, Chemistry, Community Health, Computer Information Science, Computer Technology, Environmental Science, Geography, Geology, Math, Physics, Psychology, or others with approval. Contact your advisor or the program director.

### **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 text and graphics for print and online publication. Special topics courses focus on industry practice in standards and documentation, document design, web development, usability testing, international communication, and other topics of importance to technical communicators.

#### **Major Common Core**

ENG 471	Visual Technical Communication (4)
ENG 475	Editing Technical Publications (4)
<u>Documentation</u> (choose 4 credits)	
ENG 476	Online Documentation (4)
ENG 477W	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 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 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)

**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 335 Communication & Community (4)  
 CMST 333 Advanced Public Communication (4)  
 CMST 445 Conflict Management (4)  
 ECON 201 Principles of Macroeconomics (3)  
 ECON 202 Principles of Microeconomics (3)  
 ENG 301W Advanced Writing (4)  
 ENG 454 Persuasive Writing on Public Issues (4)  
 ENG 455 Advanced Writing Workshop (4)  
 ENG 471 Visual Technical Communication (4)  
 ENG 473 Desktop Publishing (4)  
 ENG 474 Research and Writing Technical Reports (4)  
 ENG 475 Editing Technical Publications (4)  
 IT 100 Introduction to Computing and Applications (4)  
 RPLS 377 Public Relations (3)  
 RPLS 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 writing about readings and the use of sources. Does not fulfill general education requirement 1A.

**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. Spring  
 GE-1A

**ENG 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. Works will be chosen from the following forms: short stories, essays, novellas, novels, memoirs, autobiographies, and other long forms. 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, WWII 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 re-taken 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 explore 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.

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 300-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 300-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 425 (2-4) Topics in Children's Literature**

Topics have included genres such as fantasy or historical fiction and thematic topics such as survival or journeys. May be repeated for credit when the topic changes.  
Fall

**ENG 426 (2-4) Selected Periods**

Selected periods of literary study.

**ENG 430 (1-4) Independent Reading**

Extensive reading in an area for which the student has had basic preparation.  
Prerequisite: Consent

**ENG 432 (2-4) Selected Studies in the Novel**

Content changes. May be repeated.

**ENG 433W (4) Selected Studies in World Literature**

Topics on themes, issues, and developments in genres of the literatures of the world.  
Content changes. May be repeated.  
Fall  
Diverse Cultures - Purple

**ENG 435 (2-4) The World Novel**

A study of selected novels from a variety of time periods and cultures, including Eastern and Western Europe, Asia, Africa, and Latin America.  
Spring

**ENG 436W (4) Native American Literature**

This writing-intensive course surveys the earliest Native American literary works,

from oral tradition and songs to contemporary works and authors, with a particular emphasis on tribal and cultural contexts that identify these works as Native American.  
Diverse Cultures - Purple

**ENG 437W (2-4) Latina/o Literature**

This course surveys the origins and development of Chicana/o and Latina/o literature, from oral narratives, early poetry, and narrative fiction and memoirs, through the Chicano Movement and the emergence of Chicana/o literature and drama. The course also examines contemporary Chicana/o and Latina/o narrative fiction, including issues related to immigration, the urban experience, Chicana/o and Latina/o subjectivity, and the reappropriation and reinterpretation of myths, legends, and cultural figures in transnational context.  
On Demand: Fall, Spring, Summer  
Diverse Cultures - Purple

**ENG 438W (4) African American Literature**

This writing-intensive course surveys the earliest African American literary works, including slave narratives, poetry, folklore, and oration, through 20th century movements such as the Jazz Age, Harlem Renaissance, and Black Arts Movement of the 1960s, to contemporary works and authors.  
Diverse Cultures - Purple

**ENG 441 (4) Literary Theory and Criticism**

Theories of literature and its production and use.  
Prerequisite: 6 semester credits in literature  
Variable

**ENG 442 (4) Advanced Creative Nonfiction Workshop**

Advanced workshop in writing personal essays and literary journalism. May be repeated.  
Prerequisite: ENG 340 or ENG 342  
ALT-Fall

**ENG 443 (4) Advanced Fiction Workshop**

An advanced course in writing short stories and novels. May be repeated.  
Prerequisite: ENG 340 or ENG 343  
ALT-Spring

**ENG 444 (4) Advanced Poetry Workshop**

An advanced course in writing poems. May be repeated.  
Prerequisite: ENG 341 or ENG 344  
ALT-Spring

**ENG 445 (4) Advanced Critical Writing Workshop**

An advanced course in writing critical essays. May be repeated.  
Prerequisite: Writing course or consent  
Variable

**ENG 446 (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 447 (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 448 (4) Contemporary 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 449 (2-4) 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

WI

**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

WI

**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.

ALT-Fall

**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

**vENG 492 (2-4) Selected Topics**

Various topic-oriented courses in literature.

**ENG 494 (1-6) English Workshop**

Specialized workshops in topics such as computer assisted writing, teaching the writing of poetry in the secondary school, or discipline-specific writing. May be repeated with change in topic. 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.

**ENG 495 (1-4) Special Studies**

Specialized, in-depth study of topics such as Holocaust literature, environmental literature, or regional literature. May be repeated with change in topic. 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.

**ENG 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.

**ENG 499 (1-4) Individual Study**

Extensive reading and writing in an area for which the student has had basic preparation. May be repeated with change in topic.

Prerequisite: Consent

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**ENGLISH FOR MULTILINGUAL LEARNERS: INTENSIVE ENGLISH PROGRAM AND ENGLISH FOR ACADEMIC PURPOSES**


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## English for Multilingual Learners: Intensive English Program and English for Academic Purposes

College of Arts & Humanities  
Department of English  
230 Armstrong Hall • 507-389-2117

Chair: Matthew Sewell

Faculty: Nancy Drescher, Sarah Henderson Lee, Paolo Infante, Karen Lybeck, Glen Poupore

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 the Department of English or the Kearney International Center.

**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)**

**POLICIES/INFORMATION**

**GPA Policy.** A grade of "C" (2.0) or better must be earned in these courses.

**COURSE DESCRIPTIONS*****Intensive English Program*****IEP 020 (1-6) Low-Intermediate Reading and Vocabulary**

In this course, multilingual students in the Intensive English Program develop their reading comprehension and vocabulary at the low-intermediate level by reading a selective range of academic texts from a variety of genres and by applying a variety of reading and vocabulary-building strategies.

On Demand: Fall, Spring, Summer

**IEP 021 (1-6) Low-Intermediate Writing**

In this course, multilingual students in the Intensive English Program develop their writing skills at the low-intermediate level by writing paragraphs in a range of genres and by applying a variety of writing strategies.

On Demand: Fall, Spring, Summer

**IEP 022 (1-6) Low-Intermediate Listening and Speaking**

In this course, multilingual students in the Intensive English Program develop their listening and speaking skills at the low-intermediate level by listening to a selective range of academic lectures and other types of audio-visual texts, by participating in academic and social conversations, and by performing short oral presentations.

On Demand: Fall, Spring, Summer

**IEP 023 (1-6) Low-Intermediate Grammar**

In this course, multilingual students in the Intensive English Program develop their grammar skills at the low-intermediate level by understanding how written and spoken grammar is used in context and how to apply them in written and spoken contexts.

On Demand: Fall, Spring, Summer

**IEP 030 (1-6) High-Intermediate Reading and Vocabulary**

In this course, multilingual students in the Intensive English Program develop their reading comprehension and vocabulary at the high-intermediate level by reading an extensive range of academic texts from a variety of genres and by applying a variety of reading and vocabulary-building strategies.

On Demand: Fall, Spring, Summer

### IEP 031 (1-6) High-Intermediate Writing

In this course, multilingual students in the Intensive English Program develop their writing skills at the high-intermediate level by writing paragraphs and short essays in a range of genres and by applying a variety of writing strategies.

On Demand: Fall, Spring, Summer

### IEP 032 (1-6) High-Intermediate Listening and Speaking

In this course, multilingual students in the Intensive English Program develop their listening and speaking skills at the high-intermediate level by listening to an extensive range of academic lectures and other types of audio-visual texts, by participating in academic and social conversations, and by performing oral presentations.

On Demand: Fall, Spring, Summer

### IEP 033 (1-6) High-Intermediate Grammar

In this course, multilingual students in the Intensive English Program develop their grammar skills at the high-intermediate level by understanding how written and spoken grammar is used in context and how to apply them in written and spoken contexts.

On Demand: Fall, Spring, Summer

### IEP 099 (1-6) Integrated Language Skills

In this course, multilingual students in the Intensive English Program develop in all four skills of listening, speaking, reading, and writing in an integrated manner through a focus on selected interdisciplinary themes and topics. Designed for lower-level learners, the course will help students to develop their overall language proficiency.

On Demand: Fall, Spring, Summer

### IEP 102 (4) Advanced Listening and Speaking Skills 1

In this English language class, multilingual students in the intensive English program develop their listening and speaking skills at an advanced level. These skills include listening to academic lectures and other forms of multimedia and audio-visual texts, taking notes, participating in small group discussions, interviewing, and practice giving oral presentations. The course will help prepare students for regular entrance to the university.

Fall, Spring

### IEP 103 (4) Advanced Listening and Speaking Skills 2

In this English language class, multilingual students in the intensive English program develop their listening and speaking skills at a more advanced level. These skills include listening to academic lectures and other forms of multimedia and audio-visual texts, taking notes, participating in small group discussions, interviewing, and practice giving oral presentations. The course will help prepare students for regular entrance to the university.

Fall, Spring

### IEP 112 (4) Advanced Reading and Writing Skills 1

In this English language class, multilingual students in the intensive English program develop their reading and writing skills at an advanced level. These skills include reading academic texts from a variety of genres; using a variety of reading, writing, and vocabulary-building strategies; writing short essays; writing personal responses to literary texts; and building grammatical competence. The course will help prepare students for regular entrance to the university.

Fall, Spring

### IEP 113 (4) Advanced Reading and Writing Skills 2

In this English language class, multilingual students in the intensive English program continue to develop their reading and writing skills at a more advanced level. These skills include reading academic texts from a variety of genres; using a variety of reading, writing, and vocabulary-building strategies; writing essay compositions including research essays; writing personal responses to literary texts; and building grammatical competence. The course will help prepare students for regular entrance to the university.

Fall, Spring

### IEP 199 (1-6) Integrated Language Skills

In this course, multilingual students in the Intensive English Program develop in all four skills of listening, speaking, reading, and writing in an integrated manner through a focus on selected interdisciplinary themes and topics. Designed for higher-level learners, the course will help prepare students for regular entrance to the university.

On Demand: Fall, Spring, Summer

### English for Academic Purposes

#### EAP 125 (4) Introduction to Oral Communication for Multilingual Speakers

In this oral communication course, regularly admitted multilingual students develop their academic listening and speaking skills. These skills include listening to authentic academic lectures and taking notes, participating in small group discussions, study skills, and practice giving oral presentations.

Fall, Spring

#### EAP 136 (4) Introduction to Composition for Multilingual Writers

In this composition course, regularly admitted multilingual students develop their academic writing skills. These skills relate to essay structure and organization, genre and audience awareness, and language usage and grammar.

Fall, Spring

## 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](http://www.mnsu.edu/programs/#All)**

#### POLICIES/INFORMATION

Minors in the College of Business include Business Administration, Business Law, Accounting, Financial Planning, International Business, Human Resource Management, Marketing, and Entrepreneurship and Innovation.

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 BS AND MINOR

## Environmental Sciences

College of Science, Engineering & Technology

Department of Biological Sciences

242 Trafton Science Center S • 507-389-2786

Website: <http://cset.mnsu.edu/biology/programs/ugrad/envrsciences.html>

Chair: Penny Knoblich

Program Coordinator: Beth Proctor, Ph.D.

507-389-5697

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.

**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. 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.

Refer to the college regarding required advising for students on academic probation.

**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 coursework, 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.

## ENVIRONMENTAL SCIENCES BS

Degree completion = 120 credits

## Required General Education

BIOL 105 General Biology I (4)

Select one of the following math classes (choose 4 credits)

MATH 112 College Algebra (4)

MATH 115 Precalculus Mathematics (4)

MATH 121 Calculus I (4)

Select one of the following chemistry classes (choose 3-5 credits)

CHEM 106 Chemistry of Life Process Part I (General) (3)

CHEM 201 General Chemistry I (5)

## Major Common Core

BIOL 106 General Biology II (4)

BIOL 215 General Ecology (4)

BIOL 410 Global Change Biology (3)

ENVR 440 Environmental Regulations (3)

ENVR 450 Environmental Pollution & Control (3)

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 GPS (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)

URBS	417	Urban Law (3)
URBS	433	Urban Development (3)
URBS	455	Regional & County Development (3)

**Political Science**

POL	451	Administrative Law (3)
POL	452	Jurisprudence (3)
POL	453	Constitutional Law (3)
POL	461	Environmental Politics (3)
POL	472	Urban Government (3)
POL	473	Legislative Process (3)
POL	474	Executive Process (3)
POL	475	Judicial Process (3)

**Recreation, Parks and Leisure Services**

RPLS	378	Commercial Recreation and Tourism (3)
RPLS	379	Management of Parks and Recreation Facilities (3)
RPLS	475	Public Land Use Policies (3)
RPLS	481	Park Planning (3)
RPLS	483	Legal Processes in Recreation, Parks and Leisure Services (3)

**Business Law**

BLAW	453	International Legal Environment of Business (3)
BLAW	474	Environmental Regulation and Land Use (3)
BLAW	476	Construction and Design Law (3)

**Biology**

BIOL	316	Animal Diversity (3)
BIOL	320	Cell Biology (4)
BIOL	324	Neurobiology (3)
BIOL	402	Stream Ecology (4)
BIOL	403	Conservation Biology (3)
BIOL	404	Wetlands (4)
BIOL	405	Fisheries Biology (3)
BIOL	408	Vertebrate Ecology (4)
BIOL	409	Advanced Field Ecology (4)
BIOL	412	Soil Ecology (4)
BIOL	417	Biology of Aging and Chronic Diseases (3)
BIOL	420	Diagnostic Parasitology (3)
BIOL	421	Entomology (3)
BIOL	424	Developmental Biology (3)
BIOL	431	Comparative Animal Physiology (3)
BIOL	432	Lake Ecology (4)
BIOL	435	Histology (4)
BIOL	436	Animal Behavior (4)
BIOL	438	General Endocrinology (3)
BIOL	441	Plant Physiology (4)
BIOL	442	Flora of Minnesota (4)
BIOL	443	Plant Ecology (4)
BIOL	451	Agroecology (4)
BIOL	460	Introduction to Toxicology (3)
BIOL	461	Environmental Toxicology (4)
BIOL	464	Methods of Applied Toxicology (3)
BIOL	472	Microbial Ecology and Bioremediation (4)
BIOL	474	Immunology (4)
BIOL	476	Microbial Physiology and Genetics (5)
BIOL	478	Food Microbiology and Sanitation (4)
BIOL	479	Molecular Biology (4)

**General Electives**

It is the student's responsibility to ensure that he/she has completed 40 credits at the 300-400 level. This is a University requirement for graduation.

**Minor**

Select One Minor from the following: Anthropology, Automotive Engineering Technology, Business Law, Chemistry, Geography, Geology, Law Enforcement, Political Science, Recreation, Parks and Leisure Services, or Urban and Regional Studies

**ENVIRONMENTAL STUDIES MINOR****Minor Core**

ENVR	440	Environmental Regulations (3)
ENVR	450	Pollution and Control (3)*
ENVR	460	Analysis of Pollutants (4)
ENVR	470	Environmental Assessment (3)

\*Requires 2 semesters of chemistry

**Minor Electives**

Select one of the following: CHEM 106 and CHEM 111 OR CHEM 201 and CHEM 202

**COURSE DESCRIPTIONS****ENVR 101 (4) Perspectives in Environmental Science**

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

**ENVR 440 (3) Environmental Regulations**

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

**ENVR 450 (3) Environmental Pollution & Control**

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

**ENVR 460 (4) Analysis of Pollutants**

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

**ENVR 470 (3) Environmental Assessment**

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

Spring

**ENVR 480 (1-6) Senior Research**

Participate in an independent research project with advisory support and with a focus on the student's career objectives.

Fall, Spring

**ENVR 498 (1-6) Internship**

Only three credits can be counted toward major. Experience in applied Environmental Sciences according to a prearranged training program.

Fall, Spring

**ENVR 499 (1-6) Individual Study**

Individual Research Project.

Fall, Spring



## 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](http://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)

PHIL	226W	Environmental Ethics (3)
PHIL	240W	Law, Justice & Society (3)

##### Group 2 Choose 6 Credits

PHIL	321W	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)

##### Choose 3 Credits

This course does not also count toward the Group 1 or Group 2 requirements

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)
PHIL	226W	Environmental Ethics (3)
PHIL	240W	Law, Justice & Society (3)
PHIL	321W	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 • 507-389-2798  
Fax 507-389-6377  
Website: [www.mnsu.edu/dept/ethnic](http://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 strong 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](http://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 3 credit courses)

ETHN	401	Applied Cultural Research (3)
ETHN	402W	Ethnic Research Methods/Skills (3)

Critical Thinking/ Theoretical Course

(choose one of the following 3 credit courses)

ETHN	400	Cultural Pluralism (3)
ETHN	410	Foundations of Oppression (3)

**Major Restricted Electives**

(choose at least 15 credit(s): Two must be writing intensive "WI" courses and two must be 400 level courses)

ETHN	150	Multi-Cultural/Ethnic Experience (3)
ETHN	201W	Perspectives on African Americans (3)
ETHN	202W	Perspectives on American Indians (3)
ETHN	203W	Perspectives on Asian Americans (3)
ETHN	204W	Perspectives on Latinos/Hispanics (3)
ETHN	220W	Civil Rights in the United States (3)
ETHN	295	Selected Topics (1-4)
ETHN	300W	American Indian Leaders (3)
ETHN	330	Immigration and Ethnicity (3)
ETHN	405	Perspectives on New Immigrants (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 & Gender (3)
ETHN	482	Civil Rights in the United States (3)
ETHN	486	Racial and Ethnic Politics (3)
ETHN	495	Selected Topics: Black History (3)
ETHN	496	Workshop (1-3)
ETHN	497	Internship (1-10)
ETHN	498	College Teaching Internship (1-6)

**Major Unrestricted Electives**Multicultural Courses: (choose at least 15 credits)

ANTH	240	Language and Culture (4)
GEOG	103	Introductory Cultural Geography (3)
HIST	434	East Asian History: 1800-1945 (4)
HIST	437	African History to 1800 (4)
HIST	442	History of Latin America (4)
HIST	477	Advanced African-American History (3)
MUSC	102	Pop Music USA: Jazz to Country to Blues (3)
MUSC	103	Pop Music USA: R & B to MTV (3)
PHIL	115W	Philosophy of Race, Class and Gender (3)
PHIL	205W	Culture, Identity, and Diversity (3)
SOC	101	Introduction to Sociology (3)
THEA	285W	Theatre of Diversity (3)

**MAJOR EMPHASIS: BUSINESS/CORPORATE**

(Students are encouraged to minor in Marketing, Human Resource Management or International Business) (choose at least 15 credits)

IBUS	380	Principles of International Business (3)
MGMT	230	Principles of Management (3)
MGMT	340	Human Resource Management (3)
MGMT	445	Training & Development (3)
MRKT	100	Global Business Concepts (3)
MRKT	210	Principles of Marketing (3)
PSYC	463	Survey of Industrial/Organizational Psychology (4)

**MAJOR EMPHASIS: INTERNATIONAL COMMUNITY AND HUMAN SERVICES**

(Students are encouraged to minor in International Relations or any foreign language.) (choose at least 15 credits)

CMST	203	Intercultural Communication (4)
ECON	450	Economic Development (3)
ENG	101	Composition (4)
ETHN	497	Internship (1-10)
GEOG	341	World Regional Geography (3)
GEOG	373	Introduction to Geographic Information Systems (4)
GWS	220	Sex and Gender Worldwide (4)
HIST	191	United States Since 1877 (4)
IBUS	380	Principles of International Business (3)
POL	106	Politics in the World Community (3)
POL	431	International Relations (3)
PSYC	358	Cultural Psychology (4)
SOWK	255	Global Responses to Human Need (3)
URBS	150	Sustainable Communities (3)

**MAJOR EMPHASIS: LOCAL COMMUNITY AND HUMAN SERVICES**

(Students are encouraged to minor in Psychology, Social Work, and Counseling/ Education.) (choose at least 15 credits)

CSP	471	Interpersonal Helping Skills (3)
ETHN	497	Internship (1-10)
HLTH	260	Introduction to Health Education (3)
KSP	235	Human Development (3)
PSYC	101	Introduction to Psychological Science (4)
PSYC	358	Cultural Psychology (4)
URBS	230W	Community Leadership (3)

**MAJOR EMPHASIS: PUBLIC/GOVERNMENT**

(Students are encouraged to minor in Political Science, Law Enforcement or Urban Studies.) (choose at least 15 credits)

CORR	485	Selected Topics (2-6)
ECON	100	An Introduction to the U.S. Economy (3)
ETHN	482	Civil Rights in the U.S. (3)
ETHN	497	Internship (1-10)
LAWE	234	Policing in a Diverse Society (3)
POL	101	Introduction to Public Life (3)
POL	111	United States Government (3)
POL	260	Introduction to Public Administration (3)
SOC	417	Program Administration (3)
URBS	100	Introduction to the City (3)
URBS	415	Urban Housing Policy (3)

**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)

ETHN	100	American Racial Minorities (3)
ETHN	101	Introduction to Multicultural & Ethnic Studies (3)

**Minor Core**Writing Intensive

(choose at least three credits from the following)

ETHN	201W	Perspectives on African Americans (3)
ETHN	202W	Perspectives on American Indians in Ethnic Studies (3)
ETHN	203W	Perspectives on Asian Americans (3)
ETHN	204W	Perspectives on Latinos/Hispanics (3)
ETHN	220W	Civil Rights in the U.S. (3)

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 the students, to understand their perspectives and to 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**

The 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 confronted 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 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

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

Variable

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 BS

## Exercise Science

*College of Allied Health & Nursing*

Department of Human Performance  
1400 Highland Center • 507-389-6313  
Website: [ahn.mnsu.edu/hp/](http://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](http://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**

Degree completion = 120 credits

**Required General Education**

ENG 101 Composition (4)  
IT 100 Introduction to Computing and Applications (4)

**Major Common Core**

Students may take HP 466V instead of HP 466.

BIO 220 Human Anatomy (4)  
BIO 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 148 Intercollegiate Softball (1)  
HP 149 Intercollegiate Volleyball (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 I (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.

BIO 320 Cell Biology (4)  
BIO 324 Neurobiology (3)  
BIO 380 Blood Banking/Urinalysis (3)  
BIO 417 Biology of Aging and Chronic Diseases (3)  
BIO 433 Cardiovascular Physiology (3)  
BIO 466 Principles of Pharmacology (3)  
BIO 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 341 Athletic Training Techniques (3)  
HP 413 Lifespan Motor Development (2)  
HP 415 Advanced Sports Medicine (2)  
HP 418 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 467 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 496 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

CHEM	111	Chemistry of Life Process Part II (Organic & Biochemistry) (5)
FCS	140	Introduction to Nutrition (3)
HLTH	210	First Aid & CPR (3)
MATH	112	College Algebra (4)

#### General Exercise Science Core

HP	160	Introduction to Human Performance Studies (2)
HP	290	Psycho-Social Aspects of Sport (3)
HP	291	Concepts of Fitness (2)
HP	392	Group Exercise Instruction (3)
HP	403W	Research Methods & Statistics in Exercise Science (3)
HP	477	Behavior Change Strategies and Foundations (3)
HP	486	Small Group Personal Training (3)
HP	487	Applied Exercise Science (3)

#### 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.

HP	496	Internship (1-10)
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#### Major Emphasis: Pre-Physical Therapy

The Pre-Physical Therapy emphases 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.

#### Required General Education

BIOL	105	General Biology I (4)
CHEM	201	General Chemistry I (5)
MATH	115	Precalculus Mathematics (4)
PHYS	211	Principles of Physics I (4)
PSYC	101	Introduction to Psychological Science (4)
STAT	154	Elementary Statistics (4)

#### Pre-PT Core (choose 34 credits)

BIOL	106	General Biology II (4)
CHEM	202	General Chemistry II (5)
HLTH	321	Medical Terminology (3)
HP	265	Orientation to Occupational and Physical Therapy (2)
PHYS	212	Principles of Physics II (4)
PSYC	433	Child Psychology (4)
PSYC	436	Adolescent Psychology (4) AND
PSYC	455	Abnormal Psychology (4) AND
PSYC	466	Psychology of Aging (4)

#### Pre-PT Capstone (choose 3-10 credits)

The Pre-Physical Therapy emphases 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.

HP	496	Internship (1-10)
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### COURSE DESCRIPTIONS

#### LOCATED UNDER HUMAN PERFORMANCE (HP) COURSE DESCRIPTIONS

## 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/>

Chair: Heather Von Bank

Faculty: David Bissonnette, Joye 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.

#### Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://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 minimum 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.

**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

FCS	100	Personal & Family Living (3)
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#### Major Common Core

FCS	101	Introduction to Family Consumer Science (3)
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#### Major Restricted Electives

##### Family Consumer Science Electives

(choose 6 credits from the following FCS courses)

FCS	120	Clothing and People (2)
FCS	140	Introduction to Nutrition (3)
FCS	150	Food, Culture and You (3)
FCS	280	Orientation to Family Consumer Science Education (2)
FCS	331	Clothing Construction and Textiles (4)
FCS	473	Consumer Protection (3)

##### Child Development and Family Studies Electives

(choose 18 credits from the following)

FCS	260	Child Health, Safety, and Nutrition (3)
FCS	270	Family Housing (3)
FCS	360	Romantic Relationships (3)
FCS	402	Play and Child Development (3)
FCS	403	Parents and Peers and Adolescent Development (3)
FCS	446	Lifespan Nutrition (3)
FCS	474	Community Resources and Family Support (3)
FCS	478	Family Finance (3)
FCS	483	Adult and Technical Education in Family Consumer Science (3)

FCS	494	Family Life Education Practicum (1-3)
FCS	495	Intern: Early Child Family (3-4)
FCS	496	Selected Topics: CDFS (2-3)
FCS	497	Internship (1-6)
FCS	498	Undergraduate Internship (1-6)
FCS	499	Individual Study (1-6)
PSYC	230	Child Care Psychology (3)

#### 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

#### Becoming a Certified Family Life Educator (CFLE)

The Child Development and Family Studies program has been approved by the National Council on Family Relations. Minnesota State Mankato graduates with an CDFS major or minor who have taken the approved courses are eligible to become Certified Family Life Educators. Being a CFLE recognizes a broad understanding of family life issues. Certification is available to professionals from all disciplines who have met the requirements.

#### DIETETICS OPTION

The Dietetics Option\* promotes growth among students wanting to become competent dietetics professionals by providing the 'highest practicable quality' advisory, 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 or as members of food management teams.

\* The Dietetics Option, a Didactic Program in Dietetics (DPD) is accredited by the Accreditation Council for Education in Nutrition and Dietetics, the accrediting agency for the 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](http://www.eatright.org/ACEND).

#### Required General Education

BIOL	270	Microbiology (4)
CHEM	106	Chemistry of Life Process Part I (General) (3)
ENG	101	Composition (4)
IT	100	Introduction to Computing and Applications (4)
MATH	112	College Algebra (4)
SOC	101	Introduction to Sociology (3)
(choose 3 credits)		
CMST	100	Fundamentals of Communication (3)
CMST	102	Public Speaking (3)
(choose 3 credits)		
ETHN	101	Introduction to Multicultural & Ethnic Studies (3)
ETHN	150	Multi-Cultural/Ethnic Experience (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	321	Medical Terminology (3)
HLTH	475	Biostatistics (3)
HLTH	477	Behavior Change Foundations and Strategies (3)
PSYC	101	Introduction to Psychological Science (4)

#### Major Common Core

FCS	101	Introduction to Family Consumer Science (3)
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#### 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)
FCS	492	Dietetics Seminar (2)
FCS	497	Internship (1-6)

#### FOOD AND NUTRITION 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)
FCS	140	Introduction to Nutrition (3)

#### Prerequisites to the Major

BIOL	220	Human Anatomy (4)
BIOL	330	Principles of Human Physiology (4)
HLTH	475	Biostatistics (3)

#### Major Common Core

FCS	101	Introduction to Family Consumer Science (3)
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#### Major Unrestricted Electives

(choose 8 credits; at least 3 credits must be from 3-400 level courses)

BIOL	270	Microbiology (4)
BIOL	478	Food Microbiology and Sanitation (4)
FCS	100	Personal & Family Living (3)
FCS	275	Consumers in the Economy (3)
FCS	400	Culturally Diverse Family Systems (3)
FCS	417	Principles of Wellness Coaching (3)
FCS	439	Nutrition for Physical Activity and Sport (3)
FCS	473	Consumer Protection (3)
HLTH	210	First Aid & CPR (3)
HLTH	212	Consumer Health (3)
HLTH	260	Introduction to Health Education (3)
HLTH	315	Holistic Health and Wellness (3)
HLTH	321	Medical Terminology (3)
HLTH	361W	Health Communication and Advocacy (4)
HLTH	380W	Health Education Planning, Implementing, and Evaluating 1 (3)
HLTH	400	Women's Health (3)
HLTH	410	Current Health Issues (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	460	Introduction to Epidemiology (3)
HLTH	465	Health Care Delivery in the United States (3)
HLTH	467	Public Health Law (3)
HLTH	480	Health Education Planning, Implementing and Evaluating 2 (3)

HLTH	481	Community Organizing for Health (3)
HLTH	488	Worksite Health Promotion (3)
HP	348	Structural Kinesiology and Biomechanics (3)
HP	414	Physiology of Exercise (3)
HP	465	Legal Aspects of Physical Education and Sport (3)
HP	466	Graded Exercise Testing and Exercise Prescription (3)

**Major Emphasis: Foods and Nutrition**

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	444	Experimental Food Science (3)
FCS	446	Lifespan Nutrition (3)
FCS	447	Food Policy (3)
FCS	483	Adult & Technical Education in Family Consumer Science (3)
FCS	497	Internship (1-6)

**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	140	Introduction to Nutrition (3)
FCS	150	Food, Culture and You (3)
FCS	242	Nutrition for Healthcare Professionals (3)
FCS	420	Nutrition Assessment (3)
FCS	440	Nutrition II (3)
FCS	446	Lifespan Nutrition (3)

**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	Personal & Family Living (3)
FCS	101	Introduction to Family Consumer Science (3)
FCS	270	Family Housing (3)
FCS	275	Consumers in the Economy (3)
FCS	301	Lifespan Development (3)
FCS	303	Working With Families (3)
FCS	360	Romantic Relationships (3)
FCS	400	Culturally Diverse Family Systems (3)
FCS	401	Family Life Development (3)

FCS	402	Play and Child Development (3)
FCS	403	Parents and Peers and Adolescent Development (3)
FCS	414W	Family Policy and Ethics (3)
FCS	446	Lifespan Nutrition (3)
FCS	474	Community Resources and Family Support (3)
FCS	478	Family Finance (3)
FCS	482	Teaching Family Life/Parenting Education (3)
FCS	483	Adult and Technical Education in Family Consumer Science (3)
FCS	488	Parenting Education (3)
FCS	494	Family Life Education Practicum (1-3)
FCS	496	Selected Topics: FLCD (2-3)
FCS	497	Internship (1-6)
HLTH	311	Family Life & Sex Education (3)
PSYC	230	Child Care Psychology (3)

**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	Introduction to Family Consumer Science (3)
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**Consumer-Related Courses (Required)**

FCS	275	Consumers in the Economy (3)
FCS	414W	Family Policy and Ethics (3)
FCS	473	Consumer Protection (3)
FCS	474	Community Resources and Family Support (3)
FCS	478	Family Finance (3)

**Consumer Elective Course****Choose 2 - 3 Credits****Select One Course**

FCS	120	Clothing and People (2)
FCS	140	Introduction to Nutrition (3)
FCS	270	Family Housing (3)
FCS	303	Working With Families (3)
FCS	483	Adult and Technical Education in Family Consumer Science (3)
FCS	496	Selected Topics: FLCD (2-3)
FCS	498	Undergraduate Internship (1-6)

**Strongly Recommended Electives**

MRKT	210	Principles of Marketing (3)
MRKT	316	Consumer Behavior (3)

**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 (2) 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.

Alt-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

WII

**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, well-being 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

Spring

**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 physiologic 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 socioeconomic 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 BS

### Family Consumer Science Education

College of Allied Health & Nursing  
Department of Family Consumer Science  
102 Wiecking Center • 507-389-2421  
Website: <http://ahn.mnsu.edu/fcs/>

Chair: Heather Von Bank

Faculty: David Bissonnette, Joye Bond, Jill Conlon, Jae Min Lee, Daniel Moen

**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.

**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://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 minimum 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.

**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 EDUCATION BS TEACHING

This option prepares men and women to teach family consumer science in grades 5-12 and for other education-related professions.

#### 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	414V	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](http://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.

**Internships.** In addition to the two-credit Internship Option for the Capstone Project, students may take additional internship credits up to a total of six internship credits. Opportunities for film and media studies internships exist on and off campus for majors who want to work in a professional setting.

**Additional Requirement.** Students may not use any course in this major to meet the requirements of any other degree in the Mass Media or English departments.

**Student Advising.** Students are encouraged to consult the Program Directors on a regular basis for advice about course selection and career planning. Please see the Program Director in the area that matches your career interests: Film or Media Studies.

#### FILM AND MEDIA STUDIES BA

##### 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)

ENG	446	Screenwriting Workshop (4)
FILM	216W	Writing About Film (4)
FILM	217	Introduction to Film Production (4)
FILM	317	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	Public Relations 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 Core

FILM	114	Introduction to Film (4)
FILM	329	Film History (4)
FILM	416	Film Theory and Criticism (4)

##### 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 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, pornography, 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 advertising, 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/finc/](http://cob.mnsu.edu/finc/)

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](http://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 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/](http://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 Credit(s).

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

ACCT	300	Intermediate Financial Accounting I (3)
ACCT	310	Management Accounting I (3)
FINA	461	Advanced Corporate Finance (3)

Electives (choose 6-12 credits)

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	301	Intermediate Financial Accounting II (3)
ACCT	311	Management Accounting II (3)
ACCT	320	Accounting Information Systems (3)
ACCT	330	Individual Income Tax (3)
ACCT	410	Business Income Tax (3)
ECON	463	Applied Econometrics of Financial Markets (3)
FINA	463	Security Analysis (3)
FINA	469	International Business Finance (3)
FINA	480	Options and Futures (3)
FINA	493	Maverick Fund (1-6)
FINA	498	Internship (3)

**Major Emphasis - FINANCIAL PLANNING AND INSURANCE**

ACCT	330	Individual Income Tax (3)
FINA	459	Personal Financial Planning (3)
FINA	470	Personal Insurance (3)

**Electives** (choose 6 credits)

Choose two of the following, 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	410	Business Income Tax (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)
ECON	463	Applied Econometrics of Financial Markets (3)
FINA	458	Estate Planning (3)
FINA	459	Personal Financial 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)

**Major Emphasis: INVESTMENT ANALYSIS**

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)
FINA	463	Security Analysis (3)
FINA	480	Options and Futures (3)
FINA	493	Maverick Fund (1-6)

**Electives** (choose 3-12 credits)

Choose at least one of the following.

ACCT	301	Intermediate Financial Accounting II (3)
ACCT	330	Individual Income Tax (3)
ECON	463	Applied Econometrics of Financial Markets (3)
FINA	459	Personal Financial Planning (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	498	Internship (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)
BUS	397	IBE Practicum (3)
ECON	463	Applied Econometrics of Financial Markets (3)
FINA	375	Business Analytics (3)
FINA	458	Estate Planning (3)
FINA	459	Personal Financial 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)
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MGMT 385 Introduction to Management Science (3)  
MRKT 324 Marketing Research & Analysis (3)

Students can apply for admission to the certificate program in the College of Business advising office.

## 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 start-up 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 230, 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**

Fundamental concepts of commercial bank management: banking trends and performance evaluations. Managing the balance sheet and evaluating loan requests.

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

**FYEX 100 (1) First Year Seminar**

This course supports the development of student success skills, such as reading, writing and speaking; helps students gain intellectual confidence; builds in the expectation of academic success; and provides assistance in making the transition to the University.

GE-12

## 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/](http://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](http://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.

**FOOD SCIENCE TECHNOLOGY BS**

Degree completion = 120 credits

**Required General Education**

BIOL	105	General Biology I (4)
STAT	154	Elementary Statistics (4)

**MATH**

(choose 4 credits) Math 121 Calculus is strongly suggested if graduate study is intended.

MATH	112	College Algebra (4)
MATH	115	Precalculus Mathematics (4)
MATH	121	Calculus I (4)

**Prerequisites to the Major**

BIOL	220	Human Anatomy (4)
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**Major Common Core**

BIOL	106	General Biology II (4)
BIOL	270	Microbiology (4)
BIOL	330	Principles of Human Physiology (4)

BIOL	453	Biological Engineering Analysis I (4)
BIOL	478	Food Microbiology and Sanitation (4)
CHEM	201	General Chemistry I (5)
CHEM	202	General Chemistry II (5)
CHEM	305	Analytical Chemistry (4)
CHEM	322	Organic Chemistry I (4)
CHEM	323	Supplemental Organic Functional Group Chemistry (1)
CHEM	360	Principles of Biochemistry (4)
ENG	271W	Technical Communication (4)
FCS	150	Food, Culture and You (3)
FCS	242	Nutrition for Healthcare Professionals (3)

FCS	340	Food Science (4)
FCS	444	Experimental Food Science (3)
<u>Practicum</u> (choose 2-4 credits) (choose 2 credits from the following)		
BIOL	497	Internship I (1-12)
BIOL	499	Individual Study (1-4)

**Major Restricted Electives** (choose 1 course)  
 BIOL 452 Biological Instrumentation (3)  
 BIOL 467 Industrial Hygiene (3)

**Required Minor:** None.

## 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](http://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 life-long learners by using the language for personal enjoyment and enrichment.

**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 2.00 ("C").

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 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 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 11-21 credits)

FREN	302VV	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 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 1-12 credits)

FREN	201	Intermediate French I (4)
FREN	202	Intermediate French II (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 France (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 France (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	323	French Phonetics & Applied Linguistics (2-4)
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 France (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 French Study (1-6)
FREN	497	Internship (1-6)
FREN	499	Individual Study (1-4)

**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	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 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 France (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 France (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	323	French Phonetics & Applied Linguistics (2-4)
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 France (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 French 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	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)
(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-8

**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  
GE-8

**FREN 214 (1-3) Paris et L'Île 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'Île 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 366 (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'Île 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



### 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](http://www.mnsu.edu/languages)

Chair: Adriana Gordillo

Faculty: Evan Bibbee

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- 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](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 2.00 ("C").

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 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 11-21 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 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)
<u>Methods</u> (choose 8 credits)		
WLC	460	Methods of Teaching Modern Language (3)
WLC	461	Applied Modern Language Teaching Methods (1)
WLC	462	Foreign Language Elementary School (FLES) Methods (3)
WLC	463	Applied (FLES) Methods (1)

**Major Restricted Electives** (choose 1 credit)

FREN	201	Intermediate French I (4)
FREN	202	Intermediate French II (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 France (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 France (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	323	French Phonetics & Applied Linguistics (2-4)

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 France (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 French Study (1-6)
FREN	497	Internship (1-6)
FREN	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 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.

**COURSE DESCRIPTIONS SEE FRENCH**

## GENDER AND WOMEN'S STUDIES BA, BS AND MINORS

### 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 to continue in the program. Interested students should contact the Department for more information.

**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. 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 Gender and Women's Studies major GPA of 2.0 is required, AND a grade of "C-" or better must be earned in all Gender and Women's Studies courses.

**P/N Grading Policy.** With the exception of workshops and internships, only two classes may be taken on a P/NC basis.

**GENDER AND WOMEN'S STUDIES BA**

Degree completion = 120 credits

**Major Common Core**

GWS	110	Introduction to Gender (4)
GWS	220	Sex and Gender Worldwide (4)
GWS	310	Feminist Thought (4)
GWS	330	Feminist Research and Action (4)
GWS	340	Undergraduate Seminar (4)

**Major Restricted Electives**

(choose a minimum of 13 credits from the following)

AIS	240	American Indian Women (3)
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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)
LAWWE	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)

#### Other Graduation Requirements

Required for Bachelor of Arts (BA) degree ONLY - Language (8 credits)

Required Minor: Yes. Any.

#### GENDER AND WOMEN'S STUDIES BS

Degree completion = 120 credits

#### Major Common Core

GWS	110	Introduction to Gender (4)
GWS	220	Sex and Gender Worldwide (4)
GWS	310	Feminist Thought (4)
GWS	330	Feminist Research and Action (4)
GWS	340	Undergraduate Seminar (4)

Internship (choose 4 credits from the following)

GWS	497	Internship: Teaching (1-6)
GWS	498	Internship: Community (1-6)

#### Major Restricted Electives

(choose a minimum of 9 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)
LAWWE	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 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	Intro. to Lesbian, Gay, Bisexual, and Transgender Studies (4)
GWS	225W	Intro. 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)
LAWWE	235	Women in Law Enforcement (3)
PHIL	445	Feminist Philosophy (3)
POL	424	Women & Politics (3)

PSYC	460	Psychology of Women (3)
SOC	209	Sociology of Human Sexualities (3)
SOC	307	Sex & Gender in Contemporary Society (3)
SOC	409	Family Violence (3)
SOC	420	Identity Work in Women's Reentry Experiences (3)
SOWK	420	Women's Issues in Social Work (3)
SOWK	427	Social Work and Domestic Violence (3)

### SEXUALITY STUDIES MINOR

The Sexuality Studies minor is an interdisciplinary course of study designed to complement any major. The objective of the curriculum is to develop a critical framework for understanding social justice by examining how sexual practices, expressions, identities, and representations are shaped by social, anthropological, historical, psychological, legal, sociological, and political contexts. Under the coordination of the Department of Gender and Women's Studies, the minor focuses on issues of social ethics and sexuality, including the impact of cultural inequality on sexual well-being and sexual health.

#### **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)

### **COURSE DESCRIPTIONS**

#### **GWS 110 (4) Introduction to Gender**

This course familiarizes students with the field of Gender and Women's Studies. It focuses on major questions and approaches to understanding gender alongside race, class, and sexuality, among other identity categories.

Fall, Spring, Summer  
GE-5, GE-7  
Diverse Culture - Purple

#### **GWS 110W (4) Introduction to Gender**

This course familiarizes students with the field of Gender and Women's Studies. It focuses on major questions and approaches to understanding gender alongside race, class, and sexuality, among other identity categories.

Fall, Spring, Summer  
WI, GE-5, GE-7  
Diverse Culture - Purple

#### **GWS 120 (4) Violence and Gender**

We will examine the gendered systemic, and institutional nature of violence. We will seek to understand and prevent gender-based violence: sexual assault and harassment, intimate partner abuse, and hate crimes. We will think critically about gender, oppression, and privilege.

Fall, Spring, Summer  
GE-9  
Diverse Cultures - Purple

#### **GWS 120W (4) Violence and Gender**

We will examine the gendered systemic, and institutional nature of violence. We will seek to understand and prevent gender-based violence: sexual assault and harassment, intimate partner abuse, and hate crimes. We will think critically about gender, oppression, and privilege.

Fall, Spring, Summer  
WI, GE-9  
Diverse Cultures - Purple

#### **GWS 220 (4) Sex and Gender Worldwide**

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  
GE-8, GE-9  
Diverse Cultures - Purple

#### **GWS 220W (4) Sex and Gender Worldwide**

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  
WI, GE-8, GE-9  
Diverse Cultures - Purple

#### **GWS 225 (4) Intro. to Lesbian, Gay, Bisexual and Transgender Studies**

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  
GE-5, GE-7  
Diverse Cultures - Gold

#### **GWS 225W (4) Intro. to Lesbian, Gay, Bisexual and Transgender Studies**

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  
WI, GE-5, GE-7  
Diverse Cultures - Gold

#### **GWS 230 (4) Gender, Race, and Popular Culture**

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  
GE-2, GE-6  
Diverse Cultures - Purple

#### **GWS 251 (4) Coming of Age: Gender and Culture**

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  
GE-6, GE-7  
Diverse Cultures - Purple

#### **GWS 251W (4) Coming of Age: Gender and Culture**

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  
WI, GE-6, GE-7  
Diverse Cultures - Purple

#### **GWS 260 (1-4) Selected Topics**

Offered according to student demand and instructor availability/expertise, topics courses provide curriculum enrichment on an ongoing basis.  
Variable

#### **GWS 277 (1-6) Individual Study**

Concentrated study and research in areas of student's special interests/expertise under supervision of a faculty member.

Prerequisite: Women's Studies major/minor  
Fall, Spring

#### **GWS 290 (1-4) Workshop**

Topics to be announced. May be retaken for credit.  
Variable

#### **GWS 310 (4) Feminist Thought**

This course will introduce you to major theories of feminism as well as key issues in contemporary feminist thought. Students will have an opportunity to advance their own feminist thinking through engagement with a diversity of theoretical perspectives on gender.

Fall

**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  
VI

**GWS 340 (4) Undergraduate Seminar**

Advanced topics in women's and gender studies.  
Prerequisite: GWS 110 or GWS 220 or consent  
Spring

**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](mailto: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.

## 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 Mahapatra, 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](http://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)
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 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

**Other Graduation Requirements**

**Required for Bachelor of Arts (BA) degree ONLY:** Language (8 credits)

**Required Minor:** None.

**GEOGRAPHY 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 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- GEOG 499

**GEOGRAPHIC INFORMATION SCIENCE (GIS) 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 world-wide 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, tornadoes, 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.

Spring

**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 (Odd Years)

**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, landforms, water resources, energy, housing, population geography, or some other topic for the class.

Fall, Spring

**GEOG 410 (3) Climatic Environments**

The characteristics of particular climates and understanding the factors that control their spatial distribution.

Pre: GEOG 101, or consent  
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.

Prerequisite: GEOG 217  
ALT-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 (i.e., runoff generation and 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 archeologic, geomorphic, and climatic studies. Focus is on proxy records used for climate/environmental reconstruction, archeologic/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**

Concepts and theories concerning global and national social problems and the significance of geographic analytic methods for social research. Study of factors related to variations in regional standards of living.

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.

ALT-Fall

**GEOG 450 (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 providing students with a general overview of the application of remote sensing to practical problems, and hands-on experience for image processing and analysis.

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 474

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 scribing, 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.

**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

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## GEOLOGY BS, MINOR AND CERTIFICATE

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### Geology

*College of Science, Engineering and Technology*

*Department Chemistry & Geology*

241 Ford Hall • 507-389-1963

Website: [cset.mnsu.edu/chemgeol/programs/geol/](http://cset.mnsu.edu/chemgeol/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](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 2.00 ("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 of 30 earned semester credit hours.
  - 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, ENVR) 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.

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### GEOLOGY BS

**Major Common Core**

GEOG	121	Physical Geology (4)
GEOG	122	Earth History (4)
GEOG	201	Elements of Mineralogy (4)
GEOG	302	Petrology (4)
GEOG	320W	Sedimentology and Stratigraphy (4)
GEOG	330	Structural Geology (4)
<i>Required General Education</i> (13 credits)		
CHEM	201	General Chemistry I (5)
MATH	121	Calculus I (4)
PHYS	211	Principles of Physics I (4)

**Major Restricted Electives**

*Geology Electives* (choose 7 - 8 credits)

GEOG	401	Field Studies (1-3)
GEOG	410	Glacial Geology (3)
GEOG	430	Petroleum and Ore Deposit Geology (3)
GEOG	449	Applied Soil Science and Surface Hydrology (4)
GEOG	450	Hydrogeology (3)

Geomorphology Elective (choose 3 - 4 credits)

- GEOG 315 Geomorphology (3)  
 GEOG 411 Soils Geomorphology (3)  
 GEOG 415 Earth Surface Processes (4)  
Geography Elective (choose 3 - 4 credits)  
 GEOG 373 Introduction to Geography Information Systems (4)  
 GEOG 416 Fluvial Geomorphology and Hydrology (4)  
 GEOG 471 Digital Field Mapping with GPS (4)  
 GEOG 474 Introduction to Remote Sensing (4)

Capstone Experience (choose 4 - 10 credits)

- GEO 440 Geology Field Camp (4-8)  
 GEOL 497 Internship (1-10)  
 GEOL 499 Individual Study (1-5)

**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.

**GEOLOGY MINOR****Required for Minor**

- GEOL 121 Physical Geology (4)  
 GEOL 122 Earth History (4)  
 GEOL 201 Elements of Mineralogy (4)

**Required Electives for Minor**

- 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)  
 GEOL 499 Individual Study (1-5)

**ENVIRONMENTAL GEOLOGY CERTIFICATE**

The Environmental Geology Certificate is designed to develop a core component of skills in geology that are relevant to solving environmental problems. This certificate will complement students of any major who are interested in pursuing employment in environmental science or resource management job sectors. Courses within the certificate place an emphasis on understanding and solving problems associated with our regional geologic environment.

**Major Common Core**

- GEOL 121 Physical Geology (4)  
 GEOL 201 Elements of Mineralogy (4)  
 GEOL 320W Sedimentology and Stratigraphy (4)  
Required Environmental Geology (choose 3 - 4 credits)  
 GEOL 449 Applied Soil Science and Surface Hydrology (4)  
 GEOL 450 Hydrogeology (3)  
Required Environmental Sciences (choose 3 - 4 credits)  
 ENVR 440 Environmental Regulations (3)

**Major Restricted Electives**

Choose one course not used to satisfy requirements above.

- ENVR 450 Environmental Pollution & Control (3)  
 ENVR 460 Analysis of Pollutants (4)  
 ENVR 470 Environmental Assessment (3)  
 GEOL 449 Applied Soil Science and Surface Hydrology (4)  
 GEOL 450 Hydrogeology (3)

**COURSE DESCRIPTIONS****GEOL 100 (3-4) Our Geologic Environment**

Earthquakes, volcanic eruptions, and flooding are three examples of naturally recurring events on the Earth that ultimately influence all of our lives. This course introduces the physical features and processes of the Earth that control these events. The course has a laboratory component.

Fall, Spring  
 GE-3, GE-10

**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  
 GE-3, GE-10

**GEOL 121 (4) Physical Geology**

Physical geology is the study of how the earth works. From mountain building to soil erosion, this course provides an introduction to all the main areas of geologic study. Lecture discussions and laboratory exercises are designed for students seeking a major or minor in one of the natural sciences.

Fall  
 GE-3, GE-10

**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  
 GE-3

**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  
 VI

**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



**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

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### German

College of Arts & Humanities

Department of World Languages & Cultures

227 Armstrong Hall • 507-389-2116

Website: [www.mnsu.edu/languages](http://www.mnsu.edu/languages)

Chair: Adriana Gordillo

Faculty: Nadja Krämer

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](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 2.00 ("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.

**esidency 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:

**- 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 German Education:**

Emphasis on communication (four skills plus culture and language analysis).

**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 150W 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 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)  
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)

**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 441 Conversation and Composition (4)  
GER 442 German Literature (1-4)

**Major Restricted Electives (12 credits)**

- GER 150W 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 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)  
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 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. Variable

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

**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.

**GER 460 (4) Topics in German Cinema**

The course explores 20th and 21st century German film in historical, social, cultural contexts and events. Topics may be a survey, or concentration on Weimar Cinema, New German Cinema, East German cinema, transnational cinema. Topics vary. Course may be repeated.  
Variable

**GER 490 (1-4) Senior Capstone Project**

An individual project by German majors or minors that demonstrates the ability to focus on a specific topic or question in-depth in the field of German culture and literature studies. Approval required by a designated advisor in the German program.  
Prerequisite: GER 340, GER 341, GER 342, GER 343, GER 441. Student has to be admitted as a German major or minor and of senior standing.  
On Demand

**GER 493 (1-6) Supervised Foreign Study**

Study for credit must be arranged by contract prior to departure.  
Prerequisite: Experience appropriate for level of credit

**GER 497 (1-6) Internship**

Prerequisite: Experience appropriate to project

**GER 499 (1-4) Individual Study**

Prerequisite: As appropriate for level of project

## 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](http://www.mnsu.edu/languages)

Chair: Adriana Gordillo

Faculty: Nadja Krämer

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- Standard 5.1: Students use the language both within and beyond the school setting.
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**- BS German Education:**

Emphasis on communication (four skills plus culture and language analysis).

**GERMAN BS, TEACHING**

Degree completion = 120 credits

**Prerequisites to the Major**

GER	201	Intermediate German I (4)
GER	202	Intermediate German II (4)

**Major Common Core**

Language (choose 1-4 credits)

GER	340	Topics in Language (1-4)
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Literature (choose 1-8 credits)

GER	342	Selected Readings (1-4)
GER	442	German Literature (1-4)

Civilization

GER	343	German Civilization (1-4)
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Methods (choose 8 credits)

WLC	460	Methods of Teaching Modern Language (3)
WLC	461	Applied Modern Language Teaching Methods (1)
WLC	462	Foreign Language Elementary School (FLES) Methods (3)
WLC	463	Applied (FLES) Methods (1)

Composition & Conversation

GER	341	Composition and Conversation (4)
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**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.**

**COURSE DESCRIPTIONS SEE GERMAN****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](http://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/coop, 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)

**Program-specific Core**

Take one of the following courses twice, once before and a second time after the required international experience (2 credits required).

CIVE	494	Global Experience in Engineering and Technology (1)
EE	494	Global Experience in Engineering and Technology (1)
EET	494	Global Experience in Engineering and Technology (1)
ENGR	494	Global Experience in Engineering and Technology (1)
ME	494	Global Experience in Engineering and Technology (1)

**Elective****Minor Electives - Tier 2 Courses**

(Minimum 10 credits from the following three groups).

**Tier 2 Course Options - Trade and Technology Electives**

Select from the following courses (0-6 credits).

IBUS	419	International Business Seminar (3)
IBUS	428	International Marketing (3)
IBUS	448	International Business Management (3)
IBUS	469	International Business Finance (3)
MRKT	494	Fair Trade Study Abroad in Belize (3)
RPLS	475	Public Land Use Policies (3)

**Tier 2 Course Options - Language Electives**

Select from the following courses (4-8 credits).

FREN	101	Elementary French I (5)
FREN	102	Elementary French II (5)
FREN	201	Intermediate French I (4)
FREN	202	Intermediate French II (4)
GER	101	Elementary German I (4)
GER	102	Elementary German II (4)
GER	201	Intermediate German I (4)
GER	202	Intermediate German II (4)
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)
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)
SPAN	201	Intermediate Spanish I (4)
SPAN	202	Intermediate Spanish II (4)
SPAN	293	Individual Study Abroad: Intermediate Spanish I (1-6)
SPAN	294	Individual Study Abroad: Intermediate Spanish II (1-6)
SPAN	355	Spanish Civilization (1-4)
SPAN	356	Latin American Civilization (1-4)
SPAN	396	Experiencing Diverse Cultures (1-3)

**Tier 2 Course Options - Culture and Communication Electives**

Select from the following courses (0-6 credits).

ANTH	230	Peoples and Cultures of the World (4)
ANTH	240	Language and Culture (4)
ANTH	250W	Portraits of Culture (4)

ANTH	412	Archaeology of Latin America (3)
ANTH	430	Peoples and Cultures of Latin America (3)
ANTH	443W	People and Cultures of East Asia (3)
ART	265W	Art As Politics (3)
ART	467	Art of the Islamic World (3)
ART	469	Asian Art (3)
CMST	212	Professional Communication and Interviewing (4)
CMST	225	Communicating With/Through Technology (4)
CMST	305	Communication and Community (4)
CMST	445	Conflict Management (4)
ENG	118	Diverse Cultures in Literature and Film (4)
ENG	212W	Perspectives in World Literature (4)
ENG	213W	Perspectives: Ethics and Civic Responsibility in Literature (4)
ENG	272W	Business Communication (4)
ENG	435	The World Novel (2-4)
ENG	469	Project Management in Technical Communication (4)
GEOG	341	World Regional Geography (3)
GEOG	425	Economic Geography (3)
GEOG	438	Social Geography (3)
GEOG	445	Latin America (3)
GEOG	446	Canada (3)
GEOG	450	Europe (3)
GEOG	456	Africa (3)
GEOG	458	Geography of East Asia (3)
GER	150W	The German-Speaking Countries: An Interdisciplinary Introduction (4)
GERO	450	Innovations in Aging Policy (3)
GWS	220	Global Perspectives on Women and Change (4)
GWS	220W	Global Perspectives on Women and Change (4)
HIST	402	Foundations of Judaism, Christianity, & Islam (4)
HIST	415	England since 1603 (4)
HIST	419	France since the Revolution in 1789 (4)
HIST	424	Scandinavian History (4)
HIST	431	European History: Selected Topics (1-4)
HIST	432	World History: Selected Topics (1-4)
HIST	435	East Asian History: 1945 - The Present (4)
HIST	436	History of East Asian Relations with the United States (4)
HIST	438	Modern Africa (4)
HIST	442	History of Latin America (4)
HIST	466	History of U.S. Foreign Relations in the Twentieth Century (4)
IBUS	448	International Business Management (3)
SCAN	150W	The Nordic Countries: Interdisciplinary Introduction (4)
SOC	325	Sociology of Popular Culture (3)
SOC	461	Urban Sociology (3)
SOC	463	Social Stratification (3)
SOC	482	Social Change (3)
SOWK	255	Global Responses to Human Need (3)
URBS	100	Introduction to the City (3)
URBS	150	Sustainable Communities (3)
URBS	431	Urban Design Principles (3)
URBS	461	Environmental Planning (3)
URBS	471	Urban Transportation (3)

**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/](http://www.mnsu.edu/dept/health/)

Chair: Marlene K. Tappe

Faculty: Autumn Hamilton, Amy Hedman, Dawn Larsen, Jennifer Londgren, 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/](http://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](http://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.



**HEALTH AND PHYSICAL EDUCATION BS**

Degree completion = 120 credits

The Health (5-12) and Physical Education (K-12) teaching program meets national and state standards for the preparation of school health educators and physical 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 skill to engage in healthy behaviors including life-long physical activity. 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.

**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 ones 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 and a full letter grade deduction from the final course grade (e.g., "A-" to "B-"). An act of plagiarism will result in a 0 on the assessment or assessments 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

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.

**Required General Education**

22 credit hours

CHEM	106	Introduction to Chemistry (for Allied Health) (3)
FCS	140	Introduction to Nutrition (3)
HLTH	101	Health and the Environment (3)
HLTH	240	Drug Education (3)
HP	182	Aquatic Skills (1)
HP	291	Concepts of Fitness (2)
KSP	220W	Human Relations in a Multicultural Society (3)
PSYC	101	Introduction to Psychological Science (4)

**Prerequisites to the Major**

8 credit hours

BIOL	220	Human Anatomy (4)
BIOL	310	Basics of Human Physiology (4)

**Major Common Core**

45 credit hours

HLTH	210	First Aid & CPR (3)
HLTH	311	Family Life & Sex Education (3)
HLTH	320	School Health Education (3)
HLTH	410W	Current Health Issues (3)
HLTH	420W	School Health Methods (3)
HLTH	451	Emotional Health and Stress (3)
HLTH	454	Chronic and Infectious Diseases (3)
HP	202	Introduction to Teaching PE and Health (1)
HP	203	Fundamentals of Indoor and Outdoor Team Sports (2)
HP	204	Fundamentals of Individual and Dual Sports (2)
HP	205	Fundamentals of Rhythm and Dance (2)
HP	348	Structural Kinesiology and Biomechanics (3)
HP	356	Methods of Elementary Physical Education (3)
HP	387	Methods of Secondary Physical Education (3)
HP	411	Developmental/Adapted Physical Education (3)
HP	413	Lifespan Motor Development (2)
HP	414	Physiology of Exercise (3)

**Other Graduation Requirements**

K-12 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.

Students in the Health and Physical Education Teaching program are strongly encouraged to consider completing the Developmental Adapted Physical Education Minor as well as the Athletic Coaching Minor offered by the Department of Human Performance.

**COURSE DESCRIPTIONS  
LOCATED UNDER HEALTH SCIENCE (HLTH) AND  
HUMAN PERFORMANCE (HP) COURSE DESCRIPTIONS**

## HEALTH INFORMATICS

### Health Informatics

*College of Science, Engineering and Technology*

Department of Computer Information Science  
273 Wissink Hall • 507-389-1412  
Website: [cset.mnsu.edu/cis](http://cset.mnsu.edu/cis)

Chair Mahbubur Syed  
Program Coordinator Sarah Kruse

Faculty: Cyrus Azarbad , Rajeev Bukralia , Jonathan Hardwick , Sarah Kruse ,  
Guadionex Salivia , Christophe Veltsos , Michael Wells

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.

- Design structure for data capture and establish retrieval methods to create targeted results that can be applied to health-related questions.
- Interpret data related to health concerns, population health, and business metrics to retrieve results for targeted purposes that lead to cutting edge, real time information.
- Understand business needs, analyze opportunities for improvement, manage the selection and implementation of a project, review and assess the results.

- Evaluate impact on issues related to healthcare systems including satisfaction, engagement, quality of care, economics, access to care, business process improvement, predictability, process mapping, flow diagramming, and gap analysis.

**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)**

## 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/](http://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 Visser

**Accreditation:** NCATE: Health and Physical Education, BS; School Health Education, BS, MS SABPAC: Community 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 (online-plus) as well as advanced degree programs in Community Health Education (M.S.) (online-plus) and School Health Education (M.S.) (online-plus).

**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://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

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**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 ones responsibility

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 and a full letter grade deduction from the final course grade (e.g., "A-" to "B-"). An act of plagiarism will result in a 0 on the assessment or assessments 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 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)

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)

##### Electives

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	Worksite Health Promotion (3)
HLTH	491	Directed Research in Health Science (1-6)

#### COURSE DESCRIPTIONS

#### LOCATED UNDER HEALTH SCIENCE (HLTH) COURSE DESCRIPTIONS

## HEALTH SCIENCE (HLTH) COURSE DESCRIPTIONS

### Health Science

*College of Allied Health & Nursing*

Department of Health Science  
213 Highland Center N • 507-389-1527  
Website: [www.mnsu.edu/dept/health/](http://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 Visser

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#### POLICIES/INFORMATION

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#### Academic Requirements

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conduct 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 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 is course 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.

##### 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  
VI

**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 Addictions 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 characteristic 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  
VI

**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 well-being.  
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) Workshop**

Intensive educational experience on selected topics related to skill development, content update, or material development. Typically offered in a concentrated format.

Variable

**HLTH 491 (1-6) 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 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/](http://www.mnsu.edu/history/)

Chair: Matthew Loayza

Faculty: Justin Biel, Angela Jill Cooley, Christopher R. Corley, Kathleen L. Gorman, Jameel Haque, Lori Ann Lahlum, 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](http://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 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

**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 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)

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 232 (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-1B, 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  
Diverse Cultures - Gold

## 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.

## 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 pre-history 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

## 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 483 (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.

Variable

## 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 non-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](http://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 Kerr-Berry (Theatre and Dance); Rosemary Krawczyk (Psychology); Teresa Krui-enga (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](http://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.

## HUMAN-ANIMAL STUDIES MINOR

### Human-Animal Studies

College of Arts & Humanities  
Human-Animal Studies  
227 Armstrong Hall • 507-389-2012

Minor Coordinator: Julie Wulfemeyer  
Faculty: Carol Glasser, Melissa Purdue, Julie Wulfemeyer

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](http://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)

PHIL 477 Animal Minds (3)  
SOC 214W Animals & Society (3)

#### Restricted Electives

Take 3 classes (9-12 credits) from at least two departments; at least 1 class must be at the 300-400 level. Electives in the first group will automatically count toward the minor. Electives in the second group are variable content and may count depending on the topic; these courses require approval from the minor coordinator.

#### Electives that do not require prior approval:

Choose 0 - 12 Credits

PHIL 120W Introduction to Ethics (3)  
PHIL 226W Environmental Ethics (3)  
PHIL 481 Philosophy of Biology (3)  
RPLS 282 Wildlife as a Recreational Resource (3)  
SOC 460 Environmental Sociology (3)

#### Electives that require prior approval by minor coordinator:

Choose 0 - 12 Credits

ART 494 Topics (3)  
ENG 213W Perspectives: Ethics and Civic Responsibility in Literature (4)  
ENG 425 Topics in Children's Literature (2-4)  
ENG 499 Individual Study (1-4)  
PHIL 499 Individual Study (1-6)  
SOC 497 Internship: Sociology (1-12)  
SOC 499 Individual Study (1-6)

## HUMANITIES BA AND MINOR

### Humanities

College of Arts & Humanities  
Humanities Program  
230 Armstrong Hall • 507-389-5508 or 389-2117

Director: Gwen Westerman

The Humanities Program offers an interdisciplinary approach to examine the common issues, ideas, and themes that run throughout different cultures and throughout human history. The program uncovers the creative side of the human spirit and crosses the boundaries of the shared human experience—the places where dreams meet reality, art meets science, and technology meets nature.

By studying literature, arts, history, science, architecture, and philosophical and religious traditions from ancient to contemporary times, students are able to understand their connections to each other and to the world.

A Humanities degree provides the essential tools that employers are looking for today: communication, creativity, collaboration, critical thinking, and global awareness. The major and minor offered by the Humanities Programs help students to become deep thinkers, connection makers, and problem solvers. Students will improve their writing skills and expand their critical thinking skills, as well as sharpen their understanding of different human perspectives.

**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 2.00 ("C").

Contact the program for application procedures.

**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 261 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)

HUM	155	Global Humanities I (4)
HUM	156	Global Humanities II (4)
HUM	250W	Perspectives in Humanities (4)
HUM	280W	Humanities Traditions (4)
HUM	281W	Human Diversity and Humanities Traditions (4)
HUM	498	Internship (1-4)
HUM	499	Individual Study (1-4)
MUSC	301W	Music History 1 (3)
MUSC	302W	Music History 2 (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	361	Philosophy of Religion (3)
PHIL	460	Philosophy of the Arts (3)

#### Other Graduation Requirements:

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)

Required Minor. Any.

#### HUMANITIES MINOR

#### Required for Minor (20 credits)

(choose 1 course in each of the following categories for a total of 4 credits)

##### Western

HUM	150	Western Humanities I: Beginning through the Renaissance (4)
HUM	151	Western Humanities II: Renaissance through the Present (4)

##### Global

HUM	155	Global Humanities I (4)
HUM	156	Global Humanities II (4)

##### Perspectives and Traditions

HUM	250W	Perspectives in Humanities (4)
HUM	280W	Humanities Traditions (4)
HUM	281W	Human Diversity and Humanities Traditions (4)
HUM	282W	Global Perspectives and Humanities Traditions (4)

##### Comparative Studies

HUM	350	Reading in Humanities(1-4)
HUM	380	Topics in Humanities (4)

##### Capstone

HUM	450W	Humanities Seminar (4)
HUM	490	Senior Capstone Project (4)
HUM	498	Humanities Internship (1-4)

#### COURSE DESCRIPTIONS

##### **HUM 101W (4) Introduction to Humanities and the Search for Meaning**

An introduction to Humanities and its themes of study, including an exploration of the diversity of world cultures and multiple forms of creativity and expression, and aspects of interactions among peoples across the world. Students will think critically about and increase their understanding of diverse human perspectives and global relationships.

Variable  
WI, GE-6, GE-8

##### **HUM 150 (4) Western Humanities I: Beginnings through the Renaissance**

An introduction to the interdisciplinary study of the Western Humanities, from ancient times through the Renaissance. Artistic, philosophical and religious forms of cultural expression are considered within their social and historical contexts.

ALT-Fall  
GE-6

##### **HUM 151 (4) Western Humanities II: Renaissance through the Present**

An introduction to the interdisciplinary study of the Western Humanities, from the Renaissance to the present. Artistic, philosophical and religious forms of cultural expression are considered within their social and historical contexts.

ALT-Spring  
GE-6

##### **HUM 155 (4) Global Humanities I**

An introduction to the interdisciplinary study of the humanities, as expressed through the cultures and traditions of the Middle East, North Africa, South Asia, and East Asia. Artistic, philosophical and religious forms of cultural expression are considered within their social and historical contexts.

ALT-Fall  
GE-6, GE-8

##### **HUM 156 (4) Global Humanities II**

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  
WI, 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  
WI, 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  
WI, GE-6, GE-7  
Diverse Cultures - Purple

##### **HUM 282W (4) Global Perspectives and Humanities Traditions**

Historical or cultural periods, beliefs, or movements of one or more groups outside 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  
WI, GE-6, GE-8  
Diverse Cultures - Purple

##### **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.

##### **HUM 380 (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.

##### **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

#### 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 282VV, advanced standing in Humanities and consent of instructor.  
On-Demand

#### HUM 499 (1-4) Individual Study

Interdisciplinary study in an area for which the student has basic preparation.

Prerequisite: Approval of faculty.

## 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/](http://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 Tarr, 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

Candidates 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. Candidates 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 graduation. 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 non-competitive 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 life-long healthy exercise habits that impact physical fitness in one or more of the following areas: cardiovascular and muscular endurance, 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 student with an introduction to winter survival techniques applicable to severe and varying weather conditions. Classroom lecture and outdoor hands-on training is utilized to accomplish 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

Introduction 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

**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 174 (1) Individual Dual Activities**

Participation and increase skill knowledge through activity in track and field or gymnastics.

Fall, Spring

GE-11

**HP 175 (1) Fitness Activities**

Participation and increase skill knowledge through activity in body building, physical conditioning, and aerobics.

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 190 (1) Sport Activities**

Variable content based on demand.

Prerequisite: Varies depending on activity

Fall, Spring

GE-11

**HP 201 (3) Introduction to Teaching Physical Education**

Introduction to physical education for teaching majors. An overview of history, physical education teaching profession, and opportunities and challenges in teaching.

Fall



**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**

Advanced strokes: butterfly, overarm sidestroke, trudgen, inverted breaststroke. Competitive strokes and turns. Springboard diving. Aquatic Art. Mask and snorkel skills. Safety/rescue skills. Water exercise. Water polo.

Prerequisite: Front crawl, back crawl, elementary backstroke, sidestroke, breaststroke. Spring

GE-11

**HP 248 (1) Stroke Analysis**

Stroke technique and theory in front crawl, back crawl, elementary backstroke, breaststroke, sidestroke, butterfly. Individual stroke analysis/video taping. Development of cardiovascular fitness, strength, flexibility, and endurance.

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 based 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 social-psychological 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

**HP 309 (1) Basketball Coaching Theory**

Methods and procedures used in coaching.  
Fall, Spring

**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  
Fall

**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.  
Spring

**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 coaching licensure 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.  
Summer

**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  
Co-requisite: 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 instruction certification, develop/instruct a wide variety of group exercise formats and monitor and modify the exercise of participants in group exercise.  
Fall

**HP 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: HP 140 or HP 141 or HP 160 or HP 201. At least 60 credits earned; in good standing; instructor permission; co-op contract; Prerequisites may vary by program: HP 140 (AT), HP 141 (SM), HP 160 (ES), HP 201 (PE/HLTH).  
Fall, Spring, Summer

**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  
WI  
Spring

**HP 405 (3) Adapted Physical Activity**

Course is designed for pre-professionals 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.  
Fall

**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, HLTH 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 sponsorships, 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 456 (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 it applies to the sport business industry.  
Prerequisite: ACCT 200 or consent of instructor  
Fall, Spring

**HP 462 (3) Sports Administration**

This course provides student 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. Collegiate 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, psycho-social antecedents of 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, HP372, 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: HLTH 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. This must be done prior to registration.

Fall, Spring

## INTEGRATED ENGINEERING BSE, MINOR AND CERTIFICATES

### Integrated Engineering

Department of Integrated Engineering  
College of Science, Engineering & Technology  
131 Trafton Science Center N • 507-389-2744  
Websites: [cset.mnsu.edu/ie](http://cset.mnsu.edu/ie) and [www.ire.minnstate.edu](http://www.ire.minnstate.edu)  
Email: [integrated.engineering@mnsu.edu](mailto:integrated.engineering@mnsu.edu)

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 Lilleslev

**Accreditation.** Iron Range 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 to Minnesota State Mankato. **Iron Range Engineering** is offered in the Iron Range region of northeast Minnesota (Virginia, MN) and **Twin Cities Engineering** is offered in the Twin Cities metro area (Bloomington, MN). 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 Iron Range Engineering (IRE) 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 IRE 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](http://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 also 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 to the program 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)
<u>Economics Course</u> (Choose 3 Credits)		
ECON	201	Principles of Macroeconomics (3)
ECON	202	Principles of Microeconomics (3)
<u>Communications</u> (Choose 3 - 4 Credits)		
CMST	102	Public Speaking (3)
ENG	271W	Technical Communication (4)
<u>Chemistry</u> (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 (1)
ENGR	110	Introduction to Project-based Engineering (3)
MATH	122	Calculus II (4)
MATH	223	Calculus III (4)
MATH	321	Ordinary Differential Equations (4)
ME	212	Statics (3)
ME	214	Dynamics (3)
PHYS	222	General Physics II (3)
PHYS	232	General Physics II Laboratory (1)

#### CHOOSE 1 CLUSTER:

<u>Physics</u>		
PHYS	223	General Physics III (3)
PHYS	233	General Physics III Laboratory (1)
<u>Chemistry</u>		
CHEM	202	General Chemistry II (5)



Biology (choose 4 credits)

BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)

**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)

**Thesis or 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 in 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. The engineering field of these elective credits is unrestricted.

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

Mechanical Focus (Choose 16 Credits)

Students choosing a mechanical focus must complete ENGR 431 and ENGR 432, 0-2 credits of ENGR 350-355 and 12-14 credits of 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	Mechanical Advanced Competency: Heat Transfer (1)
ENGR	432	Mechanical Advanced Competency: Structural Analysis (1)
ENGR	441 - 442	Electrical Advanced Competencies
ENGR	450 - 463	Advanced Technical Electives
ENGR	475 - 479	Advanced Technical Electives

Electrical Focus (Choose 16 Credits)

Students choosing an electrical focus must complete ENGR 441 and ENGR 442, 0-2 credits of ENGR 350-355 and 12-14 credits of ENGR 431, ENGR 432, 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 electrical engineering. At least two of the four

engineering projects must include design of electrical 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**

16 Credits

**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/ie/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 certificate requirements.

**Standards.** Students must complete the application process for the minor, indicating relevant course 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.

Choose 4 Credits

ENGR	350 - 355	Elective Technical Competencies
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**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/ie/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

15 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/ie/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)
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### 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
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Choose 0 - 6 Credits

ENGR	331 - 336	Mechanical Core Competencies
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Choose 0 - 6 Credits

ENGR	341 - 346	Electrical Core Competencies
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Choose 0 - 2 Credits

ENGR	421 - 422	Advanced Engineering Core
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Choose 0 - 4 Credits

ENGR	431 - 432	Mechanical Advanced Competencies
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ENGR	441 - 442	Electrical Advanced Competencies
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### 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 scoping, 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: scoping, modeling, experimentation, analysis, modern tools, design reviews, multi-disciplinary systems view, creativity, safety, business plans, 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: scoping, modeling, experimentation, analysis, modern tools, design reviews, multi-disciplinary systems view, creativity, safety, business plans, global/societal/environmental impacts.  
Prerequisite: ENGR 301

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

WI

### 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

WI

### 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 RL, RC, and RLC 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, with reflection on education growth.

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.

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 Material 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

Admission to major, minor or certificate programs and faculty approval for study that extends a core topic area.

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 498 (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

## 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.

**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)**

### 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. The Interdisciplinary Studies major must:

- 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 BS**

Degree completion = 120 credits

**Major Common Core**

IDST 496 Capstone Experience (4)

**Major Restricted Electives**

Discipline One - (choose 15 credits)  
Any Discipline 300-499

Discipline Two - (choose 15 credits)  
Any Discipline 300-499

Discipline Three - (choose 15 credits)

Any Discipline 300-499

\*Lower-division courses (100-200 level) may be included with approval of the program director.

**Required Minor: None**

**COURSE DESCRIPTIONS**

**IDST 496 (4) Capstone Experience**

Project synthesizing student's three academic areas of concentration, to be arranged in consultation with program director and academic advisor(s) after minimum nine credits earned in each academic area. Project will culminate in presentation to director and advisor(s).

**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/](http://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](http://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 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.

**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/](http://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)

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 of all International Business Majors** (choose 15 credits)

IBUS	428	International Marketing (3)
IBUS	448	International Business Management (3)
IBUS	469	International Business Finance (3)
IBUS	485	Export Administration (3)
IBUS	490	International Business Policy (3)

**Major Restricted Electives**

Choose two courses from one of the following business functional areas (Marketing, Finance, or Management)

**OPTION A: Marketing** (choose 6 credits)

MRKT	312	Professional Selling (3)
MRKT	316	Consumer Behavior (3)
MRKT	318	Integrated Marketing Communications (3)
MRKT	324	Marketing Research & Analysis (3)
MRKT	339	Distribution Strategy (3)
MRKT	420	Sales Management (3)

**OPTION B: Finance** (choose 6 credits)

ACCT	310	Management Accounting I (3)
FINA	460	Investments (3)
FINA	462	Strategic Financial Management (3)
FINA	463	Security Analysis (3)
FINA	464	Financial Institutions and Markets (3)
FINA	467	Insurance and Risk Management (3)

**OPTION C: Management** (choose 6 credits)

MGMT	340	Human Resource Management (3)
MGMT	380	Human Behavior in Organizations (3)
MGMT	385	Introduction to Management Science (3)
MGMT	441	Staffing (3)
MGMT	444	Organization Design (3)
MGMT	459	Management Information Systems (3)

**Major Unrestricted Electives** (choose 6 credits)

ECON	420	International Economics (3)
FREN	202	Intermediate French II (4)
GEOG	103	Introductory Cultural Geography (3)
GEOG	341	World Regional Geography (3)
GER	202	Intermediate German II (4)
IBUS	419	International Business Seminar (3)
IBUS	491	In-Service (1-4)
IBUS	492	Study Tour (1-3)
IBUS	498	Internship (1-3)
IBUS	499	Individual Study (1-3)
POL	231	World Politics (3)
SCAN	293	Intermediate Norwegian II (1-4)
SCAN	295	Intermediate Swedish II (1-4)
SPAN	202	Intermediate Spanish II (4)

**Required Minor: None****INTERNATIONAL BUSINESS MINOR****Minor Core**

IBUS	380	Principles of International Business (3)
MRKT	210	Principles of Marketing (3)
(choose four courses (12 credits) from the following)		
IBUS	419	International Business Seminar (3)
IBUS	428	International Marketing (3)
IBUS	448	International Business Management (3)
IBUS	469	International Business Finance (3)
IBUS	485	Export Administration (3)
IBUS	490	International Business Policy (3)
IBUS	491	In-Service (1-4)
IBUS	492	Study Tours (1-3)

**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.

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 start-up 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 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

**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

Fall, Spring

**IBUS 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

**IBUS 419 (3) International Business Seminar**

Topics on current developments in international business, technology, and legislation.

Prerequisite: IBUS 380

Fall

**IBUS 428 (3) International Marketing**

Managerial approach to marketing decision making in multicultural market situations.

Prerequisite: MRKT 210, IBUS 380

Fall

**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

Fall

**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

Spring

**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

Spring

### IBUS 490 (3) International Business Policy

A capstone course for students majoring in international business designed to analyze and integrate the various international business management decisions. Prerequisite: IBUS 428, IBUS 448, IBUS 469 (select 2 out of the 3 courses) Spring

### IBUS 491 (1-4) In-Service

Topics will vary across various hands-on practical experiences. Prerequisite: Consent Variable

### IBUS 492 (1-3) Study Tours

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

### IBUS 497 (1-9) Internship

Supervised experience in business, industry, state or federal institutions. P/N only. Prerequisite: Consent Fall, Spring

### IBUS 498 (1-3) Internship

Supervised experience in business, industry, state or federal institutions. Taken for grade only. Prerequisite: Consent Fall, Spring

### IBUS 499 (1-3) Individual Study

Individual study of special topics. Prerequisite: Consent Fall, Spring

## INTERNATIONAL RELATIONS BA AND MINOR

### International Relations

College of Social & Behavioral Sciences  
Department of Government  
109 Morris Hall • 507-389-2721  
<http://sbs.mnsu.edu/psle/relations/>

Program Director: Abdalla Battah, 507-389-1019  
Email: [abdalla.battah@mnsu.edu](mailto:abdalla.battah@mnsu.edu)

Advisors: Abdalla Battah, Tom Inglot, Eiji Kawabata, Jackie Viecele

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 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.

**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 BA in International Relations.

**Minimum Credit Requirement.** All students (including transfer students) minoring in International Relations must take a minimum of 9 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	332	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)

ART	467	Art of the Islamic World (3)
ART	469	Asian Art (3)
ART	492	Art History Seminar (1-6)
BLAW	453	International Legal Environment of Business (3)
CMST	203	Intercultural Communication (3)
ECON	201	Principles of Macroeconomics (3)
ECON	420	International Economics (3)
ECON	450	Economic Development (3)
ENG	433W	Selected Studies in World Literature (4)
ENG	435	The World Novel (2-4)
FREN	305	France Today (1-4)
FREN	350	Introduction to French Literature (3)
FREN	405	Business French I (2-4)
FREN	406	Business French II (2-4)
FREN	442	French Literature II (1-4)
GEOG	341	World Regional Geography (3)
GEOG	409	Selected Topics (1-4)
GEOG	425	Economic Geography (3)
GEOG	437	Political Geography (3)
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)
GER	442	German Literature (1-4)
GER	455	German Cinema (3)
GER	460	Topics in German Cinema (4)
HIST	302	World History: An Overview (4)
HIST	402	Foundations of Judaism, Christianity, & Islam (4)
HIST	412	Modern Germany since 1500 (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)
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	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)
IBUS	380	Principles of International Business (3)
IBUS	419	International Business Seminar (3)
IBUS	428	International Marketing (3)
IBUS	448	International Business Management (3)
IBUS	469	International Business Finance (3)
IBUS	490	International Business Policy (3)
MRKT	428	International Marketing (3)
PHIL	321	Social & Political Philosophy (3)
PHIL	336W	History of Philosophy: Renaissance and Modern Philosophy (3)
PHIL	337	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	425	Terrorism & Political Violence (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)
SCAN	251W	Scandinavian Culture: The Sami (4)
SCAN	451	Scandinavian Crime Fiction (4)
SCAN	455	Topics in Scandinavian Film (4)
SOC	407	Population Dynamics (3)
SPAN	355	Spanish Civilization (1-4)
SPAN	356	Latin American Civilization (1-4)
SPAN	403	Topics in Spanish American Literature (1-4)

**Major Emphasis: Security & Peace (S&P)** (choose 15 credits)

Must take at least 2 of the following: POL 432, POL 433, POL 437.

CMST	203	Intercultural Communication (4)
GEOG	437	Political Geography (3)
HIST	436	History of East Asian Relations with the United States (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	478	America in Vietnam (4)
PHIL	358W	Topics in Asian Philosophy (3)
POL	201	Issues in Politics (1-3)
POL	234	Model United Nations (3)
POL	425	Terrorism & Political Violence (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	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)
SCAN	451	Scandinavian Crime Fiction (4)
SOC	407	Population Dynamics (3)

**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.

CMST	203	Intercultural Communication (4)
ECON	201	Principles of Macroeconomics (3)
ECON	420	International Economics (3)
ECON	450	Economic Development (3)
GEOG	425	Economic Geography (3)
GEOG	437	Political Geography (3)
IBUS	380	Principles of International Business (3)
IBUS	419	International Business Seminar (3)
IBUS	428	International Marketing (3)
IBUS	448	International Business Management (3)
IBUS	469	International Business Finance (3)
IBUS	490	International Business Policy (3)
MRKT	428	International Marketing (3)
PHIL	358W	Topics in Asian Philosophy (3)
POL	201	Issues in Politics (1-3)
POL	234	Model United Nations (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	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	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)
SCAN	451	Scandinavian Crime Fiction (4)
SOC	407	Population Dynamics (3)



### Major Emphasis: International Norms & Institutions (INI)

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, & Islam (4)
PHIL	321W	Social & Political Philosophy (3)
PHIL	336W	History of Philosophy: Renaissance and Modern Philosophy (3)
PHIL	337	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)

### Major Emphasis: Regional Studies (RS)

Choose 15 credits at least 6 credits must be from 300-400-level Political Science Courses.

ANTH	285	Special Topics (1-3)
ANTH	332	Anthropology of Religion (3)
ANTH	430	Peoples and Cultures of Latin America (3)
ANTH	432	Kinship, Marriage and Family (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	462	Renaissance Art (3)
ART	463	Mannerism to Romanticism (3)
ART	466	Realism to Postmodernism (3)
ART	467	Art of the Islamic World (3)
ART	469	Asian Art (3)
ART	492	Art History Seminar (1-6)
CMST	203	Intercultural Communication (4)
ENG	321	British Literature: 1785-Present (4)
ENG	435	The World Novel (2-4)
FREN	217	Modern France (1-3)
FREN	305	France Today (1-4)
FREN	350	Introduction to French Literature (3)
FREN	402	French Civilization (3-4)
FREN	417	Modern France (1-3)
FREN	432	French Literature I (1-4)
FREN	442	French Literature II (1-4)
GEOG	341	World Regional Geography (3)
GEOG	425	Economic Geography (3)
GEOG	437	Political Geography (3)
GEOG	440	Field Studies (1-4)
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)
HIST	412	Modern Germany since 1500 (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)
HIST	434	East Asian History: 1800-1945 (4)

HIST	435	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)
POL	416	Nonwestern Political Philosophy (3)
POL	435	Capitalism, Nationalism, and Democracy (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)
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

- Minor. Any.** Students are advised to consult with their advisor on the choice of a minor.
- Foreign Language.** The student may 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](http://cset.mnsu.edu/ie) and [www.ire.mnsu.edu](http://www.ire.mnsu.edu)

Chair: Dean Kelley

Faculty: Rebecca Bates, Mohammad Fanaei, 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](http://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](http://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 Torner

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)
POL 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 BS AND MINOR

### Law Enforcement

College of Social & Behavioral Sciences  
Department of Government  
109 Morris Hall • 507-389-2721  
Website: [sbs.mnsu.edu/government/lenforcement/](http://sbs.mnsu.edu/government/lenforcement/)

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 criminal justice and law enforcement. It is open to in-service students who wish to improve their basic education or complete their degree, and to pre-service 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.

**Accreditation:** Minnesota Peace Officers Standard and Training Board

**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 requirements 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 2.6 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)**

##### Required General Education Courses (6 credits)

POL 111	United States Government (3)
LAWE 131	Intro to Law Enforcement (3)

##### Major Common Core Courses (43 credits)

LAWE 133	Police and Community (3)
LAWE 231	Criminal Law & Procedures (4)
LAWE 233	Criminal Investigations (3)
LAWE 236	Minnesota Statutes (3)
LAWE 242	Police and Human Behavior (3)
LAWE 243	Police Juvenile Justice Procedure (3)

**\*Admission to program is required for 300-400 level courses.**

LAWE 310	Policing in a Diverse Society (3)
LAWE 311	Victims and Survivors (3)
LAWE 331	Police Stress (3)
LAWE 343	Law Enforcement Mindset (3)
LAWE 426	Ethics and Leadership (3)
LAWE 431	Police Patrol Theory (3)
LAWE 433	Senior Seminar (3)
POL 371	State & Local Government (3)

##### Required Elective Courses (9 credits)

Choose 9 LAWE credits, 6 credits at the 300-400 level.

##### Required Physical Fitness Electives (Choose at least 1 credit)

HP103; HP146-161; MSL210

#### LAW ENFORCEMENT MINOR

##### Required Core (10 credits)

POL 111	United States Government (3)
LAWE 131	Introduction to Law Enforcement (3)
LAWE 231	Criminal Law and Procedures (4)

##### Electives (12 credits)

Choose 12 credits from the following list with nine (9) of the credits being 300-400 level:

LAWE 132	Crime and Punishment (3)
LAWE 133	Police and Community (3)
LAWE 233	Criminal Investigations (3)
LAWE 235	Women in Law Enforcement (3)
LAWE 242	Police and Human Behavior (3)
LAWE 243	Police Juvenile Justice Procedure (3)
LAWE 243W	Police Juvenile Justice Procedure (3)
LAWE 310	Policing in a Diverse Society (3)
LAWE 311	Victims and Survivors (3)
LAWE 331	Police Stress (3)
LAWE 333	Criminal Forensics (3)
LAWE 336	Advanced Criminal Investigations (3)
LAWE 343	Law Enforcement Mindset (3)
LAWE 345	Narcotics Strategies (3)
LAWE 393	Issues in Law Enforcement (1-4)
LAWE 426	Law Enforcement Ethics and Leadership (3)
LAWE 434	Comparative Criminal Justice System (3)
LAWE 436	Civil Liberties (3)
LAWE 437	Judicial Process (3)
LAWE 438	Terrorism & Political Violence (3)
LAWE 439	Police Administration & Planning (3)
LAWE 441	Federal Law Enforcement and Homeland Security (3)
LAWE 442	Study Tour: Comparative Studies In Terrorism and Political Violence (3)

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; On Demand: Summer

### 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: LAW 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  
VI

### 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: LAW 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: LAW 236  
Fall, Spring; On Demand: Summer  
VI

### 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  
VI

### 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 LAW E Option 1 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 counter-terrorism 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

Prerequisite: Must be registered and approved for a faculty-led study abroad program.

**LAWE 453 (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

Prerequisite: LAW E 231

**LAWE 491 (1-5) 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 492 (1-8) 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 493 (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

This Associate of Arts (AA) degree is intended for those students who wish to pursue a two-year balanced program of liberal education.

**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://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 BS AND MINOR

### Management

College of Business  
Department of Management  
150 Morris Hall • 507-389-2966  
Website: [cob.mnsu.edu/academics/management/](http://cob.mnsu.edu/academics/management/)

Chair: Kathleen Dale Ph.D.

Faculty: Angela Titi Amayah, Queen Booker, Shane Bowyer, Chris Brown Mahoney, Yvonne Cariveau, Marilyn Fox, John Kaliski, Rakesh Kawatra, Sung Kim, Claudia Pragman, Kathy Richie, Buddhadev Roychoudhury, 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](http://www.mnsu.edu/programs/#All)

**Accreditation.** The Management 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 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, 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.

**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/](http://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)  
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)  
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)

#### 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)  
BLAW 477 Negotiation and Conflict Resolution (3)  
BUS 397 IBE Practicum (3)



MGMT	360	AgriBusiness in the Modern Economy (3)
MGMT	385	Introduction to Management Science (3)
MGMT	443	Entrepreneurship (3)
MGMT	447	Management: Special Topics (3)
MGMT	449	Quality Management (3)
MGMT	473	Enterprise Resource Planning (ERP) (3)
MGMT	482	Business, Society, & Ethics (3)
MGMT	484	Leadership (3)
MGMT	497	Internship (3)

#### Major Emphasis: HUMAN RESOURCE MANAGEMENT

Required of all Human Resource Management Emphasis Majors

BLAW	452	Employment and Labor Law (3)
MGMT	340	Human Resource Management (3)
MGMT	380	Human Behavior in Organizations (3)
MGMT	441	Staffing (3)
MGMT	442	Compensation Management (3)
MGMT	445	Training & Development (3)
MGMT	486	Strategic Human Resource Management (3)
<b>Electives</b> (choose 6 credits)		
ACCT	310	Management Accounting I (3)
BUS	397	IBE Practicum (3)
ECON	403	Labor Economics (3)
FINA	466	Retirement Planning (3)
HLTH	488	Worksite Health Promotion (3)
MET	423	Ergonomics & Work Measurement (3)
MGMT	484	Leadership (3)
MGMT	498	Internship (3)

Required Minor: None.

#### HUMAN RESOURCE MANAGEMENT MINOR

Requirement 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 2.7 or higher when starting the Human Resources Management minor (GPA 2.5)

#### Required for Minor

MGMT	230	Principles of Management (3)
MGMT	340	Human Resource Management (3)
MGMT	380	Human Behavior in Organizations (3)
MGMT	441	Staffing (3)
MGMT	442	Compensation Management (3)
MGMT	445	Training and Development (3)

### 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 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

#### **MGMT 230 (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 topics such 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.

Variable

#### **MGMT 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: MGMT 201. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

Fall, Spring, Summer

**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: MRKT 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 BS

### Management Information Systems

College of Science, Engineering & Technology  
Department of Computer Information Science  
273 Wissink Hall • 507-389-1412  
Website: [cset.mnsu.edu/cis](http://cset.mnsu.edu/cis)

Chair: Mahbubur Syed

Faculty: Cyrus Azarbod, Rajeev Bukralia, Jonathan Hardwick, Sarah Kruse, Guaronex Salivia, Christophe Veltsos, 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](http://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 2.5 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 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	202W	Computers in Society (4)
MATH	121	Calculus I (4)
PHIL	224W	Business Ethics (3)
<u>Communication Studies</u> (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)

MGMT 230 Principles of Management (3)  
MRKT 210 Principles of Marketing (3)

**Cluster 1 Electives** (choose 3 credits)

ACCT 210 Managerial Accounting (3)  
BLAW 371 Computer and Technology Law (3)  
MGMT 346 Production & Operations Management (3)  
MGMT 473 Enterprise Resource Planning (ERP) (3)

**Cluster 2: General Business** (15 credits)

*Business Core* (Choose 9 Credits)

FINA 362 Business Finance (3)  
MGMT 230 Principles of Management (3)  
MRKT 210 Principles of Marketing (3)

**Cluster 2 Electives** (Choose 6 Credits)

ACCT 210 Managerial Accounting (3)

BLAW 371 Computer and Technology Law (3)  
MGMT 346 Production & Operations Management (3)  
MGMT 473 Enterprise Resource Planning (ERP) (3)

**Major Unrestricted Electives** (Choose 12 Credits)

ENG 469 Project Management in Technical Communication (4)

Or any upper-division course(s) between IT 300-IT 496 not already used in the Major Common Core or in the selected cluster. At least 8 credits must be at the 400 level.

**Required Minor:** None.

**For IT course descriptions,  
please see Computer Information Technology.**

## MANUFACTURING ENGINEERING TECHNOLOGY BS AND MINOR

### Manufacturing Engineering Technology

College of Science, Engineering & Technology  
Department of Automotive & Manufacturing Engineering Technology  
205 Trafton Science Center E  
Phone: 507-389-6383  
Fax: 507-389-5002  
Website: [www.cset.mnsu.edu/met](http://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](http://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](http://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 Technologist (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 assessment, design, application, and continuous improvement of manufacturing systems, including automated manufacturing, processes, process controls, manufacturing operations, management, and systems integration.
2. specify and implement hard and soft technologies to solve manufacturing system problems using creativity in design.
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 life-long learning.
6. communicate effectively across all design and management interface levels of an organization.
7. function effectively in a team and or leadership environment.
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:



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 on-going 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](http://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 Engineering and Technology Student Advising Center regarding required advising for students on academic probation.

Refer to the College 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 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 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 (1)
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 (choose 3 credits)		
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)

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)

Minor Required: None.

## MANUFACTURING ENGINEERING TECHNOLOGY MINOR

### Required for Minor

MET	104	Introduction to Manufacturing Engineering Technology (1)
MET	142	Introduction to Parametric Modeling (3)
MET	275	Manufacturing Processes I (4)

### Electives

(choose 8 additional credits of MET courses)

## COURSE DESCRIPTIONS

### MET 104 (1) Introduction to Manufacturing Engineering Technology

An overview of careers, technology and requirements for individuals interested in Manufacturing Engineering Technology. Hands-on experience is gained in a variety of new technologies. Careers in engineering and technology are examined along with professional organizations and ethics. The course is intended as a first step toward a career in manufacturing.  
Fall

### MET 142 (3) Introduction to Parametric Modeling

The course covers a process of developing and analyzing solid parametric models for mechanical applications. Course includes solving technical design problems based on real-world applications as well as creating technical documentation: working and assembly drawings.  
Fall, Spring

### MET 275 (4) Manufacturing Processes I

Fundamentals of machine technology and metallurgy. Students learn to perform machining on a lathe, mill, and drill press, and also assemble the products. Basics of heat treatment, welding and machining are discussed. Extra lab time is required.  
Prerequisite: CHEM 104 and MET 142  
Fall, Spring

### MET 323 (3) Statics

This course covers principles of statics, force equilibrium, analysis of structures, friction, centroid, centers of gravity, and moment of inertia.  
Prerequisite: PHYS 211 and MATH 121  
Fall, Spring

### MET 324 (4) Strength of Materials and Dynamics

This course covers stress and strain, torsion, bending of beams, shearing stresses in beams, compound stresses, principal stresses, deflections of beams, columns, connections, and pressure vessels. Topics also include kinematics and kinetics of rigid bodies, work, energy and power.  
Prerequisite: MET 323  
Fall, Spring

### MET 341 (3) Advanced Parametric Modeling

The course emphasizes the use of parametric modeling in design, analysis and manufacturing. Topics include component design, assembly, mechanism, animation, EFX and rapid prototyping using computer technology.  
Prerequisite: MET 142  
Fall, Spring



**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, Summer

**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 worker-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, 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 credits

**MET 489W (2) Senior Design Project II**

Completion of the capstone design project; a continuation of MET 488W.

Spring

Prerequisite: MET 488W, Permission Required

**MET 492 (1-4) Seminar: Manufacturing**

Selected manufacturing topics.

**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/](http://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 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 Marketing 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 Marketing 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 Marketing 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.

**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/](http://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 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)
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)

MRKT	420	Sales Management (3)
MRKT	428	International Marketing (3)
MRKT	480	Seminar (3)
MRKT	492	Study Tour (3)
MRKT	494	Fair Trade Study Abroad in Belize (3)
MRKT	498	Internship (3)

Required Minor: None.

### MARKETING MINOR

#### Requirements for the Marketing 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 Marketing minor.

Required Courses for **COB Majors**: (choose 6 credits)

MRKT	210	Principles of Marketing (3)
MRKT	316	Consumer Behavior (3)

Elective Courses for **COB Majors**: (choose 12 credits)

(Take four of the following courses)

MRKT	312	Professional Selling (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	413	Business-to-Business Marketing (3)
MRKT	415	Retailing Management (3)
MRKT	416	Digital Marketing (3)
MRKT	420	Sales Management (3)
MRKT	428	International Marketing (3)
MRKT	480	Seminar (3)
MRKT	492	Study Tour (3)
MRKT	494	Fair Trade Study Abroad in Belize (3)
MRKT	498	Internship (3)

Required Courses for **Non-COB Majors**: (choose 9 credits)

MRKT	100	Foundations of Business Concepts (3)
MRKT	210	Principles of Marketing (3)
MRKT	316	Consumer Behavior (3)

Elective Courses for **Non-COB Majors**: (choose 9 credits)

(Take three of the following courses)

MRKT	312	Professional Selling (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	413	Business-to-Business Marketing (3)
MRKT	415	Retailing Management (3)
MRKT	416	Digital Marketing (3)
MRKT	420	Sales Management (3)
MRKT	428	International Marketing (3)
MRKT	480	Seminar (3)
MRKT	492	Study Tour (3)
MRKT	494	Fair Trade Study Abroad in Belize (3)
MRKT	498	Internship (3)

## 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.

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 start-up 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 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

### **MRKT 100 (3) Foundations of Business Concepts**

Focuses on the basic business functions of Accounting, Finance, Management, and Marketing in global context.

Fall, Spring

GE-5

### **MRKT 210 (3) Principles of Marketing**

This course provides a basic understanding of marketing concepts with emphasis on the pricing, promotion, and distribution of need satisfying products and services in domestic and international markets. The format of the course consists of lectures, case discussions, application exercises, projects, exams, and in-class group assignments.

Fall, Spring

### **MRKT 312 (3) Professional Selling**

The course is designed to provide basic human motivation theories, and develop persuasive communications strategies and applications necessary in the field of professional selling. The course takes a hands-on approach to professional selling techniques with the use of sales presentations, sales manuals, and exams.

Prerequisite: MRKT 210

Fall, Spring

### **MRKT 316 (3) Consumer Behavior**

Students will learn about consumer decision styles, perceptions, group influences, family decision-making, lifestyles, shopping behaviors and domestic and international trends related to marketing strategies. The framework consists of individual or group projects, usually requiring some personal interviewing, exams, and reports.

Fall, Spring

### **MRKT 317 (3) Product and Pricing Strategy**

The intention of the course is to explore in depth the concepts involved in new product development, the management of products through the product life cycle, and the development of pricing policies and strategies. The course involves a lecture/discussion format with occasional group activities, projects and exams.

Prerequisite: MRKT 210

Fall, Spring

### **MRKT 318 (3) Integrated Marketing Communications**

Integrated Marketing Communications provide an understanding of the elements of the marketing communications mix – advertising, public relations, personal selling, sales promotion and corporate sponsorship – through traditional and digital media.

Prerequisite: MRKT 210

Fall, Spring

### **MRKT 324 (3) Marketing Research & Analysis**

In this course, students will examine the role of research in decision making and the basics of scientific research, including the preparation of research proposals, design of data collection instruments, data analysis, interpretation, and reporting.

Prerequisite: MRKT 210, ECON 207

Fall, Spring

### **MRKT 339 (3) Distribution Strategy**

Defines the role of marketing channels within the marketing system. Topics in this course examine important issues in marketing distribution systems.

Prerequisite: MRKT 210

Fall, Spring

### **MRKT 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

**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 marketing 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](http://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](http://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.

### MASS MEDIA BA

Degree completion = 120 credits

#### Prerequisites to the Major

ENG	101	Composition (4)
MASS	110	Introduction to Mass Media (4)

#### Major Common Core

MASS	221W	Basic Writing for Mass Media (4)
MASS	312	Mass Media Law (4)
MASS	411	Mass Media Ethics and Criticism (4)
MASS	498	Mass Media Internship (4)

Mass Media majors must complete 4 credits of MASS 498

#### Major Restricted Electives

##### Group 1 (Choose 4 Credits)

Majors may take MASS 233 and MASS 312 concurrently with, but not before, MASS 221

MASS	233	Public Relations Principles (4)
MASS	260	Principles of Visual Mass Media (4)
MASS	325W	Media Reporting and Editing (4)
MASS	330W	Writing for Digital Multimedia (4)
MASS	340	Mass Media Research (4)

##### Group 2 (Choose 4 Credits)

##### Focused-Writing Course

MASS	325W	Media Reporting and Editing (4)
MASS	330W	Writing for Digital Multimedia (4)
MASS	334	Writing & Speaking for Broadcast (4)
MASS	431W	Freelancing for Mass Media (4)
MASS	434W	Public Relations Writing (4)
MASS	436W	Specialized Writing (4)

#### Major Unrestricted Elective

Choose 12 Credit(s).  
MASS 112 - 499

#### 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

ENG	101	Composition (4)
MASS	110	Introduction to Mass Media (4)

#### Major Common Core

MASS	221W	Basic Writing for Mass Media (4)
MASS	312	Mass Media Law (4)
MASS	411	Mass Media Ethics and Criticism (4)
MASS	498	Mass Media Internship (4)

Mass Media majors must complete 4 credits of MASS 498

#### Major Restricted Electives

##### Group 1 (choose 4 credits)

Majors may take MASS 233 and MASS 312 concurrently with, but not before, MASS 221

MASS	233	Public Relations Principles (4)
MASS	260	Principles of Visual Mass Media (4)
MASS	325W	Media Reporting and Editing (4)
MASS	330W	Writing for Digital Multimedia (4)
MASS	340	Mass Media Research (4)

##### Group 2 (choose 4 credits)

##### Focused-Writing Course

MASS	325W	Media Reporting and Editing (4)
MASS	330W	Writing for Digital Multimedia (4)
MASS	334	Writing & Speaking for Broadcast (4)
MASS	431W	Freelancing for Mass Media (4)
MASS	434W	Public Relations Writing (4)
MASS	436W	Specialized Writing (4)

#### Major Unrestricted Electives

Choose 12 Credit(s).  
MASS 112 - 499

**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

ENG	101	Composition (4)
MASS	110	Introduction to Mass Media (4)
MASS	221W	Basic Writing for Mass Media (4)
MASS	312	Mass Media Law (4)
MASS	411	Mass Media Ethics and Criticism (4)

#### Unrestricted Electives

Choose 8 Credits)

A limited set of courses are offered at the Normandale Partnership Center. Consult with an advisor on course offerings.

MASS 233 - 499

### 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

#### 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 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 toward creating messages and determining campaign effectiveness.

On-Demand: Fall, Spring, Summer

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

## MATHEMATICS BA, BS AND MINORS

### Mathematics

College of Science, Engineering & Technology

Department of Mathematics and Statistics

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Website: [www.cset.mnsu.edu/dept/mathstat/](http://www.cset.mnsu.edu/dept/mathstat/)

Chair: Ruijun Zhao, PhD

Faculty: Jonathan Harper, PhD; In-Jae Kim, PhD; Namyoung Lee, PhD; Hyekyung Min, PhD; Galkande Premarathna, PhD; Mezbahur Rahman, PhD; Brandon Rowekamp, PhD; Deepak Sanjel, PhD; Soo Yeon Shin, PhD; Dan Singer, PhD; Yea-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 cases, 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.

**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)**

#### 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

**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 1, MATH 130 Finite Mathematics and Introductory Calculus, MATH 201 Elements of Mathematics I, or STAT 154 Elementary Statistics must demonstrate readiness to succeed by satisfying the placement table below.

Course	Minimum ACT/SAT Math Subscore		Minimum Accuplacer Intermediate Algebra Score		Minimum Accuplacer College Level Math Score		Minimum Accuplacer Calculus Readiness Score		Course Prerequisites
Math 112	ACT 22, Old SAT 520, New SAT* 550, 2-digit SAT 27.5** MCA 1158	OR	60		N/A		N/A	OR	Grade of P in MATH 098
Math 113	ACT 22, Old SAT 520, New SAT* 550, 2-digit SAT 27.5**	OR	60	AND	84		N/A	OR	Math 112 with "C" or better
Math 115	ACT 23, Old SAT 530, New SAT* 560, 2-digit SAT 28**	OR	60	AND	96		N/A	OR	Grade of P in MATH 098
Math 121	ACT 24, Old SAT 560, New SAT* 580, 2-digit SAT 29**	OR	60	AND	84	AND	21	OR	MATH 115, or both MATH 112 and MATH 113 with a "C" (2.0) or better
Math 130	ACT 23, Old SAT 530, New SAT* 560, 2-digit SAT 28**	OR	60	AND	84		N/A	OR	MATH 112 or MATH 115 with a "C" (2.0) or better
Math 181	ACT 23, Old SAT 530, New SAT* 560, 2-digit SAT 28**	OR	60	AND	84		N/A	OR	MATH 112 or MATH 115 with a "C" (2.0) or better
Math 201	ACT 22, Old SAT 520, New SAT* 550, 2-digit SAT 27.5** MCA 1148	OR	60		N/A		N/A	OR	Grade of P in Math 098 or "C" (2.0) or better in MATH 112, MATH 115, or MATH 12
Stat 154	ACT 19, Old SAT 460, New SAT* 500, 2-digit SAT 25** MCA 1148	OR	60		N/A		N/A	OR	Grade of P in Math 098, or "C" (2.0) or better in Math 112, Math 115, or Math 121

\*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.

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.

#### 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)  
MATH 492W Mathematics Capstone Experience (3)  
MATH 492 may substitute for MATH 492W

**Major Restricted Electives**

Choose a minimum of eleven (11) credits. At least seven (7) credits must be at the 400-level. Credits must be chosen from at least two categories.

Applied Mathematics (choose 0 - 12 credits)

MATH 422 Partial Differential Equations (4)  
MATH 425 Mathematical Modeling (4)  
MATH 428 Linear Optimization Methods (4)  
MATH 470 Numerical Analysis I (4)  
MATH 471 Numerical Analysis II (4)  
MATH 475 Advanced Mathematical Software Programming (4)

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.  
MATH 354 Concepts of Probability & Statistics (4)  
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)

**Major Unrestricted Electives**

Choose 0-10 Credits

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 480 History of Mathematics (3)  
STAT 354, STAT 455 and STAT 456 may substitute for MATH 354, MATH 455 and MATH 456, respectively.

**Minor**

Required Minor. Yes. Any.

**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.

**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 Macroeconomics (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  
Fall, Spring, 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 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, 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'Hopital'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'Hopital'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 to model 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 mathematical 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 transformations, 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 332 (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 345 (4) Abstract Algebra I**

An introduction to the theory of groups and rings; including polynomial rings, homomorphisms, 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 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, STATS 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 included are 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, assessments and planning, teaching and 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 490 (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 BS

### Mathematics Teaching

College of Science, Engineering & Technology  
Department of Mathematics and Statistics  
273 Wissink • 507-389-1453  
Website: [www.cset.mnsu.edu/dept/mathstat/](http://www.cset.mnsu.edu/dept/mathstat/)

Chair: Ruijun Zhao, PhD

Faculty: Jonathan Harper, PhD; In-Jae Kim, PhD; Namyoung Lee, PhD; Hyekyung Min, PhD; Galkande Premarathna, PhD; Mezbahur Rahman, PhD; Brandon Rowekamp, PhD; Deepak Sanjel, PhD; Soo Yeon Shin, PhD; Dan Singer, PhD; Yea-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 cases, 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.

#### Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)

#### 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.

**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 201 Elements of Mathematics I, or STAT 154 Elementary Statistics must demonstrate readiness to succeed by satisfying the placement table below.

Course	Minimum ACT/SAT Math Subscore	Minimum Accuplacer Intermediate Algebra Score	Minimum Accuplacer College Level Math Score	Minimum Accuplacer Calculus Readiness Score	Course Prerequisites
<b>Math 112</b>	ACT 22, Old SAT 520, New SAT* 550, 2-digit SAT 27.5** MCA 1158	OR 60	N/A	N/A	OR Grade of P in MATH 098
<b>Math 113</b>	ACT 22, Old SAT 520, New SAT* 550, 2-digit SAT 27.5**	OR 60	AND 84	N/A	OR Math 112 with "C" or better
<b>Math 115</b>	ACT 23, Old SAT 530, New SAT* 560, 2-digit SAT 28**	OR 60	AND 96	N/A	OR Grade of P in MATH 098
<b>Math 121</b>	ACT 24, Old SAT 560, New SAT* 580, 2-digit SAT 29**	OR 60	AND 84	AND 21	OR MATH 115, or both MATH 112 and MATH 113 with a "C" (2.0) or better
<b>Math 130</b>	ACT 23, Old SAT 530, New SAT* 560, 2-digit SAT 28**	OR 60	AND 84	N/A	OR MATH 112 or MATH 115 with a "C" (2.0) or better
<b>Math 181</b>	ACT 23, Old SAT 530, New SAT* 560, 2-digit SAT 28**	OR 60	AND 84	N/A	OR MATH 112 or MATH 115 with a "C" (2.0) or better
<b>Math 201</b>	ACT 22, Old SAT 520, New SAT* 550, 2-digit SAT 27.5** MCA 1148	OR 60	N/A	N/A	OR Grade of P in Math 098 or "C" (2.0) or better in MATH 112, MATH 115, or MATH 12
<b>Stat 154</b>	ACT 19, Old SAT 460, New SAT* 500, 2-digit SAT 25** MCA 1148	OR 60	N/A	N/A	OR Grade of P in Math 098, or "C" (2.0) or better in Math 112, Math 115, or Math 121

\*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.

#### MATH BS TEACHING

Degree completion = 120 credits

#### Required for General Education

HLTH	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) <b>OR</b>
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

## MECHANICAL ENGINEERING BSME

### Mechanical Engineering

College of Science, Engineering & Technology  
Department of Mechanical and Civil Engineering  
205 Trafton Science Center E • 507-389-6383  
Fax: 507-389-5002  
Website: me.mnsu.edu

Chair: Patrick A. Tebbe P.E.

Faculty: Shaobiao Cai, P.E., Stephen J. Druschel, P.E., Charles W. Johnson, P.E., Sungwon Kim, Vojin Nikolic, Deborah K. Nykanen, P.E., Jin Park, Farhad Reza, P.E., Patrick A. Tebbe, P.E., James Wilde, P.E.

**Accreditation.** The Mechanical Engineering program is accredited by the Engineering Accreditation Commission of ABET, [www.ABET.org](http://www.ABET.org)

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 material 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 post-graduate 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 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.

**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)**

#### POLICIES/INFORMATION

**Program Admission.** Admission to the Mechanical Engineering Program is granted by the department, and is necessary before enrolling in 300- and 400-level courses. Near the end of the sophomore year, students must submit an application for admission to the mechanical engineering program. Applications to the program

may be obtained from the Department of Mechanical and Civil Engineering or downloaded from the department homepage.

Before being admitted to upper division mechanical engineering courses, a student must complete a minimum of 25 credits, for grade, including the following courses applicable to the degree: General Physics (calculus based) 4 credits; Calculus and Differential Equations 12 credits; Engineering Mechanics (Statics, Dynamics, and Mechanics) 9 credits.

To be admitted to the mechanical engineering program, a student must earn a grade of "C" (2.00) or better and a cumulative GPA of 2.50 in the courses listed above. All transfer courses will be counted in this GPA calculation at the equivalent credit value awarded by Minnesota State University Mankato. Students who meet the above requirements but have transferred any of the Engineering Mechanics courses (Statics, Dynamics, or Mechanics) from another institution will be granted Provisional Admission.

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 mechanical engineering courses.

**Satisfactory Progress.** Once admitted to the mechanical engineering program, a student must demonstrate satisfactory progress by maintaining a cumulative GPA of at least 2.30 in all upper-division mechanical engineering courses as calculated by the Registrar.

**P/N Grading Policy.** P/N credit is not allowed for any course used to meet mechanical engineering degree requirements.

**Probation Policy.** An admitted student who does not maintain satisfactory progress as defined above 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 upper division engineering courses for grade from the prescribed Mechanical 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 (consecutive or non-consecutive) will not be allowed to continue in the program.

**Readmission to Program.** A student who has failed to meet their Provisional or Probation requirements and who has been removed from the program may reapply to the program. A maximum of two admissions are allowed.

**Appeals.** A student may appeal any departmental decision in writing. The department will consider such appeals individually.

### **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 not 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 web site. 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)

#### **(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)  
ENVR 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



## 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  
Co-requisite: 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 (3) Engineering Analysis

Probability and statistics. Uncertainty, distributions. Numerical solution of algebraic, transcendental and differential equations. Numerical integration and differentiation. Structured programming language required. Prerequisite: CIVE 201 or ME 201 or EE107 with "C" (2.0) or better, ME 212  
Co-requisite: MATH 321  
Fall, Spring

## ME 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 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, similitude, viscous flow in pipes, flow over immersed bodies, and pumps. Includes significant design component. Prerequisite: MATH 223, ME 214  
Co-requisite: ME 241

## ME 324 (3) Heat Transfer

Steady and unsteady conduction. Free and forced convection. Heat transfer by radiation. Combined modes of heat transfer. Elements of heat exchangers design. Includes significant design component. Prerequisite: ME 241, ME 321  
Spring

## 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. Psychometrics. 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: ME306, 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 420 (3) Computer Aided Engineering**

This course provides the students with sound understanding of both solid modeling techniques and finite element analysis. It covers the major features as well as feature manipulation techniques. It also provides a background in deriving, understanding and applying the stiffness matrices and finite element equations for various types of finite elements and systems. Static stress analyses, sensitivity studies and optimization studies are covered. Includes significant design component.

Prerequisite: ME 203, ME 324, ME 417

Fall

**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/microcomposites. 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 selections, 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

WI

**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

WI

**ME 439 (3) Heating Ventilating and Air Conditioning Design**

Refrigeration cycles and equipment, refrigerant properties, heating and cooling loads, psychometric 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 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 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 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

VI

**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

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## MEDICAL LABORATORY SCIENCE BS

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### 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/clsmst.html](http://cset.mnsu.edu/biology/programs/ugrad/clsmst.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](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 2.00 ("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.

Questions and concerns pertaining to advising and the assignment of advisors can be answered by Ken Adams, SRC, 125 Trafton Science Center, telephone 507-389-1521 [Call: 507-389-1521]

**GPA Policy.** A GPA of 2.0 is required in both sciences courses and cumulative coursework.

**Probation.** Refer to the College regarding required advising for students on academic probation.

**P/N Grading Policy.** No P/N grades are accepted toward the major except BIOL 175.

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.

Agencies and clinical site adjunct faculty participating in the Medical Laboratory Science program include, but not limited to: Hennepin Healthcare, Minneapolis, MN, James Fink, M.D., Lynn Poth, MS, MT(ASCP) Mercy College of Health Sciences MLS Program, Des Moines, IA, Kyla Dippold, MS, MLS (ASCP)CM St. Luke's Hospital, Cedar Rapids, IA, Lindsey Mullenbach, MLS (ASCP), Lileah Harris, M.D. University of Minnesota, Minneapolis, MN, Janice Conway-Klaassen, Ph.D., MT(ASCP)SM New York Methodist Hospital, Brooklyn, NY, Lori Burkard, MS, MT (ASCP), Lynn Jones, MT(ASCP), Rabia Mir, M.D. Mercy Medical Center, Sioux City, IA, Mary Smith, MS, MLS (ASCP), Askar Qalbani, M.D. Sanford USD Medical Center, Sioux Falls, SD, Michael Geis, M.D., Renee Rydell, MBA, MS, MT(ASCP) St. Luke's College, Sioux City, IA, James Quesenberry, MD, Pamela Briese, MS, MT (ASCP)SC. Students accepted into the clinical internship will be responsible for: Proof of Medical/Hospitalization/Health Insurance Health Physical Exam Tuberculosis (TB) testing Proof of Immunization which may include the following: Hepatitis B, Measles, Mumps, Rubella, Tetanus, Chickenpox (Varicella), and Influenza.

**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	105VV	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)
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University of Minnesota, Minneapolis, MN and Rochester, MN

CHEM	324	Organic Chemistry II (3)
CHEM	325	Organic Chemistry II Lab (1)
MATH	121	Calculus I (4)

**Required Minor: None.****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.

## MILITARY SCIENCE AND LEADERSHIP MINOR /ARMY ROTC PROGRAM

### Military Science and Leadership/Army ROTC

College of Education  
Department of Military Science and Leadership/  
Reserve Officers' Training Corps (Army ROTC)  
316 Wiecking Center • 507-389-6226/6229  
Website: <http://ed.mnsu.edu/armyrotc>

Chair: MAJ Robert M Rogers

Faculty: CPT John R. Dart; SFC James Delong; MSG Michael Moore; CPT Joe Sullivan

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.

**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)**

#### POLICIES/INFORMATION

**GPA Policy.** Students must earn a minimum GPA of 2.0 ("C") in the courses taken from the Military Science and Leadership department in order to meet graduation and/or commissioning requirements. Must be a U.S. citizen.

**P/N Grading Policy.** No classes offered by the Military Science and Leadership Department consist of P/N grades.

**Leadership Laboratories.** All contracted Cadets are required to attend (1) two hour Leadership Laboratory each week. Specifics are outlined in each course syllabus. A weekend field training exercise is also conducted each semester.

**Basic Camp.** Contracted students need to attend Basic Camp if they have never attended Basic Training. Basic Camp is a four-week fully funded course at Fort Knox, Kentucky that students will attend after either their freshman year (4-year and 3-year Advanced Designee Scholarship recipients) or after their sophomore year (3 year and 2 year Advanced Designee Scholarship recipients). This course will cover many of the basic Soldier skills covered at Basic Training. Students who successfully complete the course are awarded the Basic Camp completion ribbon.

**Advanced Camp.** During the summer between the junior and senior years, Cadets attend a five week leadership course at Fort Knox, KY. Cadets receive a stipend for this training; travel, room, board, uniforms, and medical care are also included. Students experience leadership positions, lead other ROTC Cadets through a number of challenging situations, build both stamina and self-confidence, and train in a number of areas to include land navigation, tactics, physical training, and drill and ceremony.

#### MILITARY SCIENCE MINOR

Required for Minor

CMST	102	Public Speaking (3)
HIST	478	American in Vietnam (4) <b>OR</b>
MSL	252	The Evolution of American Warfare (3)
MSL	210	Army Physical Fitness (1)
MSL	301	Training Management & the Warfighting Function (3)
MSL	302	Applied Leadership in Small Unit Operations (3)
MSL	366	Advanced Camp (3)
MSL	401	The Army Officer (3)
MSL	402	Company Grade Leadership(3)
MSL	403	Application of Physical Conditioning (1)
POL	111	United States Government (3)

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 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, explore 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.  
Co-requisite: MSL 101, MSL 102, MSL 201, MSL 202, MSL 299, MSL 301, MSL 302, MSL 401, MSL 402, MSL 499  
Fall, Spring



**MSL 210 (1) Army Physical Fitness**

This class is open to all students. Please note, this is a physically demanding class. It is a comprehensive fitness program based on the latest military fitness techniques and principles. Students participate in and learn the components of an effective physical fitness program, with emphasis on the development of an individual fitness program and the role of exercise and fitness in one's life. In addition, students will achieve the highest standards of physical fitness in preparation for the Army Physical Fitness Test.

This class is a prerequisite for MSL 403.

Fall, Spring  
GE-11

**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 first-hand 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 Army-sanctioned course is very rigorous. Once selected, Cadets hone their leadership and individual skills during two to four weeks of training and education. Possible courses include Airborne school, Air Assault school, Basic Camp, and Cadet Troop Leader Training.

Prerequisite: Limited to Cadets enrolled in Army ROTC

**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, Personal 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 officers. 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 completes 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/](http://www.mnsu.edu/music/)

Email: [music@mnsu.edu](mailto: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

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.

#### Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)

#### POLICIES/INFORMATION

**Admission to the Major** is granted by the department in a two-step process.

**Step One: Be admitted to music studies.** Every new and transfer student will:

- perform a successful audition in their primary instrument or voice;
- pass diagnostic tests in music fundamentals/theory and aural skills.

**Step Two: To be admitted to any major in music, the student must have:**

- Passing grades (C or higher) in all required courses in student's music degree program
- Overall GPA 2.5 or higher
- Minimum of 30 credit hours earned
- Acceptable progress in applied music studies (lessons)
- Demonstrated active participation in ensembles
- Presented a portfolio for review by music faculty (including an autobiography, detailing background and career goals)
- Present a formal application for 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 being 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 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.

**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 student 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 entrepreneurial skills with an awareness of the audience. May be repeated. (auditions required – see Department of Music for information)

**100-level:** Study includes practice 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 in-service 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, 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 basic 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 BA

Degree completion = 120 credits

#### Required General Education

##### Goal Area 8

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	115	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	Musicianship 4 (1)
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)
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Studio Class

Every semester that a student is enrolled in lessons, Studio Class is a required corequisite.

MUSP	150	Studio Class (0)
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In-Service Choose 2 Credits

2 Semesters (1 credit per semester)

MUSP	482	In-Service 1
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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	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	426	Contemporary Instrumental Ensemble (1)
MUSP	433	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)

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 (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	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)
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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	486	Private Percussion 4 (1, 3)
MUSP	491	Private Instrument 4 (1, 3)

Pedagogy and LiteraturePercussion, Wind, and String Instruments

MUSC	471	Instrumental Pedagogy & Literature (2)
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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:

PSYC	101	Intro to Psychological Science (4) Goal Area 5
SOC	202	Introductory Social Statistics (3) Goal Area 4

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)
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**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)
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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



**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  
GE-6

**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 211 (2) Music Theory 3**

Part III 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 MUS 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 245 (1) Brass Pedagogy and Techniques**

Instrumental music education majors only. Emphasis on pedagogical methods and techniques of individual instruments.

Even years: Fall

**MUSC 246 (1) String Pedagogy and Techniques**

Instrumental music education majors only. Emphasis on pedagogical methods and techniques of individual instruments.

Odd years: Fall

**MUSC 247 (1) Guitar Pedagogy and Techniques**

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) Percussion Pedagogy and Techniques**

Instrumental music education majors only. Emphasis on pedagogical methods and techniques of individual instruments.

Even years: Spring

**MUSC 261 (2) Introduction to Conducting**

This course is a prerequisite for Choral Musicianship (MUS 401 / MUS 402) and Instrumental Musicianship (MUS 411 / MUS 412). The course will develop basic conducting technique, acquaint the student with appropriate terminology, develop interpretive skills and gesture vocabulary.

Even Years: 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

WI, GE-2

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

WI, GE-2

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-assessment, 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 leadsheet 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: MUSC 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 I.  
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 I.

## 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

## MUSC 499 (1-4) Independent Study

Fall, Spring, Summer

## Music Performance

### MUSP 101 (0-1) Concert Choir

Audition required.  
GE-11

### MUSP 102 (0-1) University Chorale

No audition required.

### MUSP 103 (0-1) Chamber Singers

Audition required.  
GE-11

### MUSP 108 (0-1) Contemporary Vocal Ensemble

Audition required.  
Fall, Spring  
GE-11

### MUSP 111 (0-1) Music Productions for the Stage and Screen

Audition Required

### MUSP 114 (1) Vocal Ensemble

Audition required.  
Fall, Spring  
GE-11

### MUSP 121 (0-1) Wind Ensemble

Audition Required  
GE-11

### MUSP 122 (0-1) Symphonic Band

No audition required.  
GE-11

### MUSP 123 (0-1) University Orchestra

Audition Required  
GE-11

### MUSP 125 (0-1) Jazz Mavericks

Audition required.  
GE-11

### MUSP 126 (0-1) Contemporary Instrumental Ensemble

Audition required.  
Fall, Spring  
GE-11

### MUSP 139 (0-1) Instrumental Ensemble

Audition required.

### MUSP 131 (0-1) Maverick Machine Athletic Band

Audition Required  
GE-11

### MUSP 133 (1) Percussion Ensemble

Audition required.  
GE-11

### MUSP 135 (0-1) Theatre Orchestra

Audition Required

### MUSP 150 (0) Studio Class

Master class where students perform for each other, and are critiqued by other students and faculty. Presentations may also be made on performance issues. Required each semester that a student is taking lessons.  
Fall, Spring

### MUSP 151 (1, 3) Private Voice 1

Audition required.  
Permission of Instructor  
Fall, Spring

### MUSP 152 (1-3) Introduction to Vocal Studies

Introducing fundamental healthy vocal technique, practice techniques, performance practices, collaborative musicianship, stage deportment, basic solfege, and elements of critical listening. Learning skills that are applied to private study for all music majors and minors. May be repeated.  
Fall, Spring

**MUSP 155 (1, 3) Private Piano 1**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 156 (1, 3) Private Harpsichord 1**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 157 (1, 3) Private Organ 1**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 161 (1, 3) Private Trumpet 1**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 162 (1, 3) Private Horn 1**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 163 (1, 3) Private Trombone 1**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 164 (1, 3) Private Euphonium 1**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 165 (1, 3) Private Tuba 1**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 171 (1, 3) Private Violin 1**

Audition required.  
Permission of Instructor  
Fall, Spring

**MUSP 172 (1, 3) Private Viola 1**

Audition required.  
Permission of Instructor  
Fall, Spring

**MUSP 173 (1, 3) Private Cello 1**

Audition required.  
Permission of Instructor  
Fall, Spring

**MUSP 174 (1, 3) Private Double Bass 1**

Audition required.  
Permission of Instructor  
Fall, Spring

**MUSP 176 (1, 3) Private Classical Guitar 1**

Audition required.  
Permission of Instructor  
Fall, Spring

**MUSP 177 (1) Group Instruction in Guitar**

Learn to play acoustic guitar. Instruments may be available.  
On Demand: Fall, Spring

**MUSP 178 (1, 3) Private Electric Guitar 1**

Audition required.  
Permission of Instructor  
Fall, Spring

**MUSP 179 (1, 3) Private Electric Bass 1**

Audition required.  
Permission of Instructor  
Fall, Spring

**MUSP 181 (1, 3) Private Flute 1**

Audition required. May be repeated.  
Permission of instructor  
Fall, Spring

**MUSP 182 (1, 3) Private Oboe 1**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 183 (1, 3) Private Clarinet 1**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 184 (1, 3) Private Saxophone 1**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 185 (1, 3) Private Bassoon 1**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 186 (1, 3) Private Percussion 1**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 191 (0,1) Private Instrument 1**

Audition required.  
Permission of Instructor  
Fall, Spring

**MUSP 201 (0-1) Concert Choir**

Audition required.  
Fall, Spring  
GE-11

**MUSP 202 (0,1) University Chorale**

No audition required.  
Fall, Spring  
GE-11

**MUSP 203 (0,1) Chamber Singers**

Audition required.  
Fall, Spring  
GE-11

**MUSP 208 (0,1) Contemporary Vocal Ensemble**

Audition Required  
Fall, Spring  
GE-11

**MUSP 211 (1, 3) Music Productions for Stage and Screen**

Audition required.  
Fall, Spring  
GE-11

**MUSP 214 (0,1) Vocal Ensemble**

Audition required.  
Fall, Spring  
GE-11

**MUSP 215 (1) Collaborative Piano**

Experience in accompanying. Advanced pianists may participate in chamber ensembles. May be repeated.  
Fall, Spring

**MUSP 221 (0,1) Wind Ensemble**

Audition Required  
Fall, Spring  
GE-11

**MUSP 222 (0,1) Symphonic Band**

No Audition Required  
Fall, Spring  
GE-11

## **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

**MUSP 471 (1, 3) Private Violin 4**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 472 (1, 3) Private Viola 4**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 473 (1, 3) Private Cello 4**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 474 (1, 3) Private Double Bass 4**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 476 (1, 3) Private Classical Guitar 4**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 478 (1, 3) Private Electric Guitar 4**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 479 (1, 3) Private Electric Bass 4**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 481 (1, 3) Private Flute 4**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 482 (1, 3) Private Oboe 4**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 483 (1, 3) Private Clarinet 4**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 484 (1, 3) Private Saxophone 4**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 485 (1, 3) Private Bassoon 4**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 486 (1, 3) Private Percussion 4**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 491 (1, 3) Private Instrument 4**

Audition required.  
Permission of instructor  
Fall, Spring

**MUSP 493 (3) Advanced Choral Conducting**

Continuing development of choral conducting and analysis skills.  
Permission of Instructor  
On Demand: Fall, Spring

**MUSP 497 (3) Advanced Instrumental Conducting**

Conducting skills for the advanced instrumental conductor.  
Permission of instructor  
On Demand: Fall, Spring

**MUSP 498 (0-1) Senior Capstone Project or Recital**

Demonstrate mastery of musicianship skills through performance, conducting, arranging, collaboration and/or other creative activities, considering multiple musical genres. Demonstration of an awareness of social/historical context of music through a written/an or oral presentation. Demonstrate entrepreneurial skills.  
Fall, Spring, Summer

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## MUSIC EDUCATION BS

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### Music Education

College of Arts & Humanities  
Department of Music  
202 Earley Center for Performing Arts • 507-389-2118  
Website: [www.mnsu.edu/music/](http://www.mnsu.edu/music/)  
Email: [music@mnsu.edu](mailto: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](http://www.mnsu.edu/programs/#All)**

#### POLICIES/INFORMATION

**Admission to the Major** is granted by the department in a two-step process.

**Step One: Be admitted to music studies.** Every new and transfer student will:

- (a) perform a successful audition in their primary instrument or voice;
- (b) pass diagnostic tests in music fundamentals/theory and aural skills.

**Step Two: To be admitted to any major in music, the student must have:**

- Passing grades (C or higher) in all music courses
- Overall GPA 2.5 or higher
- Minimum of 30 credit hours earned
- Acceptable progress in applied music studies (lessons)
- Demonstrated active participation in ensembles
- Presented a portfolio for review by music faculty (including an autobiography, detailing background and career goals)
- Present a formal application for 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 being 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 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.

**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 student 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 entrepreneurial skills with an awareness of the audience. May be repeated. (auditions required – see Department of Music for information)

**100-level:** Study includes practice 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 in-service 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, 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 basic 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 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 11--Ensembles (choose 3 credits)

1st Year: Students under the Vocal/General K-12 emphasis should register for MUSP 101 or 102; Students pursuing the Instrumental/General K-12 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 K-12 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 220 Piano Proficiency (0)  
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 217 Jazz Pedagogy and Improvisation (1)  
MUSC 219 Class Piano 2 (1)  
MUSC 240 Music Technology (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)  
MUSP 152 Introduction to Vocal Studies (1)

### Major Restricted Electives (choose 2 - 4 credit)

Please work with your advisor when choosing additional ensembles. Students pursuing the Instrumental/General K-12 emphasis should register for 2 credits; students pursuing the Vocal/General K-12 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 303 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 Studio Class. 7 semesters are required.

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 475 Instrumental Musicianship 1 (3)

MUSC 476 Instrumental Musicianship 2 (3)

**Maverick Machine Athletic Band** (choose 1 credit)

MUSP 131 Maverick Machine Athletic Band (1)

MUSP 331 Maverick Machine Athletic Band (1)

**Percussion Ensemble** (choose 1 credit)

MUSP 133 Percussion Ensemble (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 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 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)

**2nd Year Lessons – Primary Instrument** (choose 3 credits)

All lessons should be on the same instrument.

MUSP 255 Private Piano 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 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)

**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 371 Private Violin 3 (1)

MUSP 372 Private Viola 3 (1)

MUSP 373 Private Cello 3 (1)

MUSP 374 Private Double Bass 3 (1)

MUSP 376 Private Classical Guitar 3 (1)

MUSP 378 Private Electric Guitar 3 (1)

MUSP 381 Private Flute 3 (1)

MUSP 382 Private Oboe 3 (1)

MUSP 383 Private Clarinet 3 (1)



MUSP 384 Private Saxophone 3 (1)  
 MUSP 385 Private Bassoon 3 (1)  
 MUSP 386 Private Percussion 3 (1, 3)

4th Year Lessons – Primary Instrument (choose 1 credit)

All lessons should be on the same instrument.

MUSP 455 Private Piano 4 (1)  
 MUSP 461 Private Trumpet 4 (1)  
 MUSP 462 Private Horn 4 (1)  
 MUSP 463 Private Trombone 4 (1)  
 MUSP 464 Private Euphonium 4 (1)  
 MUSP 465 Private Tuba 4 (1)  
 MUSP 471 Private Violin 4 (1)  
 MUSP 472 Private Viola 4 (1)  
 MUSP 473 Private Cello 4 (1)  
 MUSP 474 Private Double Bass 4 (1)  
 MUSP 476 Private Guitar 4 (1)  
 MUSP 478 Private Electric Guitar 4 (1)  
 MUSP 481 Private Flute 4 (1)  
 MUSP 482 Private Oboe 4 (1)  
 MUSP 483 Private Clarinet 4 (1)  
 MUSP 484 Private Saxophone 4 (1)  
 MUSP 485 Private Bassoon 4 (1)  
 MUSP 486 Private Percussion 4 (1, 3)  
 MUSP 491 Private Instrument 4 (1, 3)

Primary Ensemble

2nd Year (choose 3 credits)

MUSP 221 Maverick Wind Ensemble (1)  
 MUSP 222 Maverick Symphonic Band (1)  
 MUSP 223 University Orchestra (1)  
 MUSP 225 Jazz Mavericks (1)

3rd Year (choose 3 credits)

MUSP 321 Maverick Wind Ensemble (1)  
 MUSP 322 Maverick Symphonic Band (1)  
 MUSP 323 University Orchestra (1)  
 MUSP 325 Jazz Mavericks (1)

4th Year (choose 1 - 2 credits)

MUSP 421 Maverick Wind Ensemble (1)  
 MUSP 422 Maverick Symphonic Band (1)  
 MUSP 423 University Orchestra (1)  
 MUSP 425 Jazz Mavericks (1)

**Major Emphasis: Choral/General Music (K-12)**

MUSC 353 Diction for Singers (1)  
 MUSC 451 Vocal Literature (1)  
 MUSC 452 Vocal Pedagogy (3)  
 MUSC 465 Choral Musicianship 1 (3)

MUSC 466 Choral Musicianship (2) (3)  
 MUSP 317 Small Vocal Ensemble and Solo Accompanying (1)

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 1 semester of MUS 155; Singers should register for 1 semester of MUS 151.

MUSP 151 Private Voice 1 (1)  
 MUSP 155 Private Piano 1 (1)  
 MUSP 176 Private Classical Guitar 1 (1)  
 MUSP 178 Private Electric Guitar 1 (1)  
 MUSP 186 Private Percussion 1 (1, 3)  
 MUSP 191 Private Instrument 1 (1, 3)

2nd Year Lessons – Primary Performance Area (choose 3 credits)

MUSP 251 Private Voice 1 (1)  
 MUSP 255 Private Piano 2 (1)  
 MUSP 276 Private Classical Guitar 2 (1)  
 MUSP 278 Private Electric Guitar 2 (1)  
 MUSP 286 Private Percussion 2 (1, 3)  
 MUSP 291 Private Instrument 2 (1, 3)

3rd Year Lessons-Primary Performance Area (choose 3 credits)

MUSP 351 Private Voice 3 (1)  
 MUSP 355 Private Piano 3 (1)  
 MUSP 376 Private Classical Guitar 3 (1)  
 MUSP 378 Private Electric Guitar 3 (1)

4th Year Lessons – Primary Performance Area (choose 0 - 1 credits)

Additional lessons (as electives) in piano or voice are strongly recommended.

MUSP 451 Private Voice 4 (1)  
 MUSP 455 Private Piano 4 (1)  
 MUSP 476 Private Classical Guitar 4 (1)  
 MUSP 478 Private Electric Guitar 4 (1)

Primary Ensemble

2nd Year (choose 3 credits)

MUSP 201 Concert Choir (1)  
 MUSP 202 University Chorale (1)

3rd Year (choose 3 credits)

MUSP 301 Concert Choir (1)  
 MUSP 302 University Chorale (1)

4th Year (choose 1 - 2 credits)

MUSP 401 Concert Choir (1)  
 MUSP 402 University Chorale (1)

**COURSE DESCRIPTIONS SEE MUSIC**

## MUSIC INDUSTRY BS

### Music Industry

College of Arts & Humanities

Department of Music

202 Earley Center for Performing Arts • 507-389-2118

Website: [www.mnsu.edu/music/](http://www.mnsu.edu/music/)

Email: [music@mnsu.edu](mailto:music@mnsu.edu)

Chair: Doug Snapp

Faculty: Gerard Alosio, David Dickau, Dale Haefner, David Gadberry, John Lindberg, Michael Olson, Joe Rodgers, Amy Roisum Foley, Stephanie Thorpe, Mike Thursby, David Viscoli

**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. Faculty, students, and ensembles are warm and welcoming to majors and non-majors alike.

**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](http://www.mnsu.edu/programs/#All)**

**POLICIES/INFORMATION**

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- (a) perform a successful audition in their primary instrument or voice;
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**Step Two: To be admitted to any major in music, the student must have:**

- Passing grades (C or higher) in all music courses

- Overall GPA 2.5 or higher
- Minimum of 30 credit hours earned
- Acceptable progress in applied music studies (lessons)
- Demonstrated active participation in ensembles
- Presented a portfolio for review by music faculty (including an autobiography, detailing background and career goals)
- Present a formal application for 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 being 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 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.

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**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 student 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 entrepreneurial skills with an awareness of the audience. May be repeated. (auditions required – see Department of Music for information)

**100-level:** Study includes practice 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.

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**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; and participate cooperatively in group artistic performances; Demonstrate growth in artistry, technical skills, collaborative competence and knowledge of repertoire through regular ensemble experiences.

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artistry, technical skills, collaborative competence and knowledge of repertoire through regular ensemble experiences

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#### 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	Musicianship 1 (2)
MUSC 116	Musicianship 2 (2)
MUSC 119	Class Piano 1 (1)
MUSC 190	Seminar in Music Careers (1)
MUSC 220	Piano Proficiency (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	Musicpreneurship (2)
MUSC 325	Music Management and Concert Production (3)
MUSC 421	Project Development in Music Industry (3)
MUSC 424	Music Promotions (3)
MUSC 425	Music in the Marketplace (3)
MUSC 426	Legal Aspects of the Music Industry (3)
MUSC 428	Music Licensing for Film, TV and Games (3)

#### Concert Attendance (Choose 0 credits) 7 semesters required.

MUSC 100	Concert Attendance (0)
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#### 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)
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#### Activity in Music Industry (Choose 2 credits) 2 semesters at 1 credit

MUSC 221	Activity in Music Industry (1)
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## Practicum in Music Industry (Choose 2 credits) 2 semesters at 1 credit

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 102 Pop Music USA: Jazz to Country to Blues (3)

MUSC 103 Pop Music USA: R & B to MTV (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, 3)

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 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 1 (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 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 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 Chorale (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 331 Maverick Machine Athletic Band (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 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)

## **MI 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 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 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)  
 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)

##### 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)

##### MI Composition Seminar

*(Choose 3 Credits – 3 semesters at 1 credit per semester)*

MUSC 430 \* Music Industry Composition Seminar (1)

#### COURSE DESCRIPTIONS SEE MUSIC

## NONPROFIT LEADERSHIP CERTIFICATE AND MINOR

### Nonprofit Leadership

College of Social and Behavioral Science  
113 Armstrong Hall • 507-389-1561

Chair: Luis A. Posas  
Director: Kristi Rendahl

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/#All](http://www.mnsu.edu/programs/#All)**

#### NONPROFIT LEADERSHIP CERTIFICATE

##### Major Common Core

NPL	273	Introduction to the Nonprofit Sector (3)
NPL	473	Advanced Workshop in Nonprofit Leadership (3)

##### Major Restricted Electives

Program Planning and Evaluation (choose 3 credits)

GWS	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	Recreation Management II-Fiscal Resources (3)
URBS	453	Grants Administration (3)

Program Administration (choose 3 credits)

NPL	460	Administering Cultural Organizations (3)
RPLS	483	Legal Processes in Recreation, Parks and Leisure Services (3)
SOC	417	Program Administration (3)
URBS	230	Community Leadership (3)
URBS	230W	Community Leadership (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.

GWS	498	Internship: Community (1-6)
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RPLS	497	Internship (1-8)
SOC	497	Internship: Sociology (1-12)
SOWK	497	Internship: Social Work (1-10)
URBS	497	Internship (1-12)

#### NONPROFIT LEADERSHIP MINOR

##### Minor Common Core

NPL	273	Introduction to 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)

GWS	330	Feminist Research and Action (4)
RPLS	376	Program Planning in Rec., Parks, and Leisure Services (3)
SOC	466	Program Planning (3)
SOWK	435	Applied Social Work Research (3)
URBS	413	Urban Program Evaluation (3)

Program Administration (choose 3-6 credits)

May not take both URBS 230 and 230W

NPL	460	Administering Cultural Organizations (3)
RPLS	483	Legal Processes in Recreation, Parks and Leisure Services (3)
SOC	417	Program Administration (3)
URBS	230	Community Leadership (3)
URBS	230W	Community Leadership (3)

Financial Management and Development (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

ART	497	Internship (1-6)
GWS	498	Internship: Community (1-8)
RPLS	497	Internship (3)
SOC	497	Internship: Sociology (1-12)
SOWK	497	Internship (1-10)
URBS	497	Internship (1-12)

#### COURSE DESCRIPTIONS

##### NPL 273 (3) 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 (3) 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 (3) 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 (3) 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](http://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 (1-4)
SCAN	293	Intermediate Norwegian II (1-4)

## NURSING BS

### 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](mailto:school-of-nursing@mnsu.edu)

Chair: Patricia Young, PhD, RN

Faculty: Kristen Abbott-Anderson PhD, RN; CNP; Patricia Beierwaltes DNP, C-PNP; 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 Frederick DBA, MBA, BSN, RN; Amy Haycraft DNP, APRN, CNP, RN-BC, PMHNP(s); Norma Krumwiede EdD, RN; Kelly Krumwiede PhD, RN; Tammy Neiman PhD, RN; Laurel Ostrow DNP, RN, APRN; Noreen Reding PhD, RN; Colleen Royle EdD, MSN, RN; Nicole Schmitz DNP, APRN, PNPAC; Laura Schwarz DNP, RN, CNE; Tai Sims DNP, MSN, RN, PHN; Marilyn Swan PhD, RN; Stacey Van Gelderen DNP, RN; Diane Witt PdD, CNP

**Accreditation.** The Pre-Licensure Program and Family Nurse Practitioner program are approved by the Minnesota Board of Nursing. The nursing baccalaureate and master's degrees are accredited by the Commission on Collegiate Nursing Education (CCNE). Inquiries can be made by contacting, CCNE, One Dupont Circle NW, Suite 530, Washington, DC 20036.

The nursing curricula are designed to provide opportunities for the student to develop a sound theoretical and clinical foundation for the practice of professional nursing. The graduate is prepared for a variety of roles in the community, including the responsibility for health promotion; prevention of disease; and caring for the individuals, families and society in the community, the hospital and the home. An understanding of people and how they adapt to the environment is essential to the provision of these health-care services.

Graduates of the Pre-Licensure Program are prepared to take the National Council Licensure Examination—Registered Nurse. Successfully passing this exam permits the graduate to practice as a registered nurse (R.N.). Graduates with Bachelor of Science with a major in Nursing will have met the requirements for public health nurse registration and licensure as school nurses in Minnesota.

**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://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 course
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 5-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

transferred to Minnesota State Mankato. Pre-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

BIOL	270	Microbiology (4)
CHEM	111	Chemistry of Life Processes Part II (5)
ENG	101	Composition (4)
GEOG	103	Introductory Cultural Geography (3)
NURS	101W	Courage, Caring, and Team Building (3)
PSYC	101	Introduction to Psychological Science (4)
STAT	154	Elementary Statistics (4)

#### Choose 3 - 4 Credits

KSP	235	Human Development (3)
PSYC	343	Introduction to Developmental Psychology (4)

#### Prerequisites to the Major

BIOL	220	Human Anatomy (4)
BIOL	330	Principles of Human Physiology (4)
FCS	242	Nutrition for Healthcare Professionals (3)
NURS	282	Pathophysiology for Healthcare Professionals (3)
NURS	284	Pharmacology for Healthcare Professionals (3)
NURS	286	Relationship-Based Care in Nursing Practice (3)

#### Major Common Core

NURS	333	Professional Nursing (3)
NURS	334	Physiologic Integrity I (4)
NURS	335	Family and Societal Nursing Inquiry (3)
NURS	336	Assessment and Nursing Procedures (5)
NURS	363	Critical Inquiry in Nursing (2)
NURS	364	Physiologic Integrity II (5)
NURS	365	Nursing Care of Families in Transition I (7)
NURS	366	Quality, Safety, and Informatics in Nursing Practice (2)
NURS	433	Community Oriented Nursing Inquiry (4)
NURS	434	Physiologic Integrity III (4)
NURS	435	Nursing Care of Families in Transition II (3)
NURS	436	Psychosocial Integrity (4)
NURS	463	Nursing Leadership and Management (3)
NURS	464	Physiologic Integrity IV (4)
NURS	465	Nursing Care of Families in Crisis (2)
NURS	466	Professional Role Integration (4)

## 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

NURS	320W	Critical Inquiry and Evidence-based Practice for RNs (4)
NURS	362	Family and Societal Nursing for RNs (4)
NURS	382	Holistic Nursing Assessment and Practice (4)
NURS	402	Psychosocial/Inter-professional Communication for RNs (4)
NURS	420	Quality, Safety, Value and Informatics in Nursing Practice for RNs (4)
NURS	482W	Population Focused Care for RNs (6)
NURS	492	Nursing Capstone and Leadership for Baccalaureate Practice (4)

#### 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.

Prerequisite: 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.

Prerequisite: 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 pathophysiological 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  
Diverse Cultures - Gold

**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 420 (4) Quality, Safety, Value and Informatics in Nursing Practice for RNs**

This course will evaluate and enhance the role of the nurse in the promotion and the use of national standards, guidelines, technology, and informatics to create a culture of quality and safety, prevent and reduce medical errors, and support health care value.  
Prerequisite: 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

**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 health care 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 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**

In 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](http://mnsu.edu/philosophy)

Chair: Brandon Cooke

Faculty: Brandon Cooke, John Humphrey, Richard Liebendorfer, Craig Matarrese, Joshua Preiss, Bekka Williams, Julie Wulfemeyer, Sun Kyeong 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](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 2.00 ("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.



**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	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 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)
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PHIL	450	Special Topics (1-3)
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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 Minor: One of Astronomy, Biology, Chemistry, Earth Science, Environmental Science, Geology, Mathematics, Physics, Psychology, Sociology, or Statistics

**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	100W	Introduction to Philosophy (3)
PHIL	101W	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	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)
PHIL	311	Symbolic Logic (3)
PHIL	321W	Social & 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	Eastern 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 & 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 taken, 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 (3.3 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

#### PHIL 100W (3) Introduction to Philosophy

Introduction to the nature of philosophy and specific, basic problems.

Fall, Spring

WI, GE-6

#### PHIL 101W (3) Philosophical Problem: the Mind-Body Problem

This course considers historical and contemporary analyses of the mind in relation to the body and the connection of the mind-body problem to other issues concerning both religion and science.

Fall, Spring

WI, GE-6

#### PHIL 110 (3) Logic and Critical Thinking

Traditional syllogistic logic and an introduction to the elements of modern symbolic logic.

Fall, Spring

GE-2, GE-4

#### PHIL 112W (3) Scientific Reasoning

This course explores what makes reasoning scientific as distinguished from non-scientific. Issues are inductive reasoning, causal reasoning, fallacies, hypothetico-deductive reasoning, falsifiability, and scientific knowledge.

Variable

GE-2, GE-4

#### PHIL 115W (3) Philosophy of Race, Class and Gender

To what extent do the differences among races and between genders represent biological differences, and to what extent are they constructed by society? Is racism best conceptualized as an additional burden to sexism or as one different in kind?

Variable

WI, GE-6, GE-7

#### PHIL 120W (3) Introduction to Ethics

Discussion of theories of value and obligation.

Variable

WI, GE-6, GE-9

#### PHIL 122W (3) Introduction to Asian Philosophy

Survey of Asian philosophical traditions of Hinduism, Jainism, Buddhism, Confucianism, and Daoism.

GE-6, GE-8

Diverse Cultures - Purple

#### PHIL 205W (3) Culture, Identity, and Diversity

Discussion of the ways that a culture both creates human community and shapes self-identity. Exploration of similarities and differences between and interdependence among cultural traditions, and of vocabularies for assessing traditions.

Variable

WI, GE-6, GE-8

#### PHIL 222W (3) Medical Ethics

Ethical perspectives relevant to issues such as euthanasia, genetic engineering, organ transplant, patients' rights, abortion, etc.

Variable

WI, GE-6, GE-9

#### PHIL 224 (3) Business Ethics

Introduction to ethical theories and concepts and their application to specific cases in the world of business. Non-writing intensive version.

Fall; On-Demand: Summer

GE-6, GE-9

#### PHIL 224W (3) Business Ethics

Introduction to ethical theories and concepts and their application to specific cases in the world of business.

Variable

WI, GE-6, GE-9

#### PHIL 226W (3) Environmental Ethics

Questions about human responsibilities to other animals and the environment gain urgency as environmental crises become more prevalent, and animal species continue to be eliminated. Learn about, critique, and apply the principles underlying evaluations of human environmental conduct.

Variable

WI, GE-9, GE-10

#### PHIL 240W (3) Law, Justice & Society

Consideration of the basic philosophical approaches to the idea of justice and how this idea relates to other fundamental ideas in political philosophy, ethics, and law.

Variable

WI, GE-6, GE-9

#### PHIL 311 (3) Symbolic Logic

Study of the elements of first order symbolic logic, i.e., the propositional calculus and the predicate calculus, and its applications to ordinary language and mathematics.

Spring

GE-2, GE-4

#### PHIL 321W (3) Social & Political Philosophy

Human rights and responsibilities in relation to the organization of society and government.

Variable

WI, GE-6, GE-9

#### PHIL 322W (3) Ethical Theory

Topics in normative, meta-ethical and applied ethical theory.

WI, GE-6, GE-9

#### PHIL 323W (3) Philosophy of Economics

This course will introduce students to important texts in moral and social philosophy that provide the foundation for modern economics. In addition, we will discuss philosophical accounts of rationality, well being, and freedom and their relevance to economic analysis.

Variable

WI, GE-6, GE-9

#### PHIL 334W (3) History of Philosophy: Classical Philosophy

Philosophers of Ancient Greece, Rome and the early middle ages: The presocratics, Plato, Aristotle, Hellenistic and Roman philosophers, St. Augustine.

WI, GE-6

#### PHIL 336W (3) History of Philosophy: Renaissance and Modern Philosophy

Late Medieval Philosophy and its influence on the Renaissance, Descartes, Spinoza, Leibnitz and Continental Rationalism, Locke, Berkeley, Hume and British Empiricism, and Kant.

WI, GE-6

#### PHIL 337 (3) 19th Century Philosophy

Philosophers and philosophies of the 19th century.

Variable

GE-6

#### PHIL 338 (3) American Philosophy

Colonial times to the present.

Variable

**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- or 400-level courses in philosophy for P/N credit only with the consent of the department.

#### PHILOSOPHY, POLITICS & ECONOMICS BA

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 358W 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 358W 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)	
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 358W	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 358W	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 358W	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)	
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	358W	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)
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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)

## PHYSICS BS AND MINOR

### Physics

College of Science, Engineering & Technology  
Department of Physics & Astronomy  
141 Trafton Science Center N • 507-389-5743  
Website: [cset.mnsu.edu/pa/](http://cset.mnsu.edu/pa/)

Chair: Thomas R. Brown

Faculty: Paul Eskridge, Analía Dall'Asen, Steven Kipp, Igor Kogoutiuk, Jorge Mendez, Russell L 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](http://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.

#### PHYSICS BS

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 221	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 (1)
PHYS	222	General Physics II (3)
PHYS	223	General Physics III (3)
PHYS	232	General Physics II Laboratory (1)
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 (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 (2)
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)

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)

Required Minor: None.

#### PHYSICS MINOR

##### Required General Education

MATH	121	Calculus I (4)
PHYS	221	General Physics I (4)

##### Required Support Course

MATH	122	Calculus II (4)
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##### 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

##### 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 (3 credits)

Recommended General Education (22-23 credits) Including MATH 121

##### Required General Science Core (31-33 credits)

##### Required for Major

MATH	122	Calculus II (4)
PHYS	335	Modern Physics I (3)
PHYS	336	Modern Physics II (3)
PHYS	381	Tutoring Physics (2)
PHYS	465	Computer Applications in Physics (3)
PHYS	482	Teaching Methods & Materials in Physical Science (4)
PHYS	493	Undergraduate Research (1-6) (2 credits required)

##### Electives (Minimum of 8 Credits)\*

Students may use PHYS 221, PHYS 222, PHYS 223, PHYS 232 and PHYS 233 to fulfill their Physics Electives requirement **only if** PHYS 211 and PHYS 212 are completed successfully.

Alternatively, students with a strong interest in applying advanced mathematical skills to problems in physics are encouraged to choose a minimum of 8 credits\* of higher level Physics or Mathematics as approved by the student's advisor to fulfill the Physics Elective requirement.

\*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 fulfillment of the General Science Core requirements.

Students intending to teach physics in states other than Minnesota are advised to select the BS Physics major and use elective credits to satisfy the professional education course requirements. For additional information confer with the science teaching advisor.

#### COURSE DESCRIPTIONS

##### PHYS 100 (3) Cultural Physics

Self-paced format, open laboratory component. Includes the history, philosophy and growth of science from myth to the present. Included are readings on Galileo, Newton, the Industrial Revolution, and the modern scientific revolution. The relationship of science to art, archaeology, politics, weapons, medicine, technology, research and development, and the universe are discussed. Lab included.

Fall, Spring  
GE-3

##### PHYS 101 (3) Introductory 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

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 232.)  
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 233.)  
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. Schrodinger 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, noninertial 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  
Alt-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  
WI

**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 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](http://sbs.mnsu.edu/government/pscience)

Program Coordinator: Fred Slocum Ph.D.

Faculty: Abdalla Battah Ph.D.; Josh Berkenpas Ph.D.; Susan Burum J.D.; Scott Granberg-Rademacker Ph.D.; Tomasz Inglot Ph.D.; Avra Johnson Ph.D.; Eiji Kawabata Ph.D.; Kevin Parsneau Ph.D.; Fred Slocum Ph.D.; Jackie Veceli 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](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 2.00 ("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 Unrestricted Elective credit) toward completing the Political Science major.

No more than six (6) credit hours taken toward completing the Political Science minor can be counted toward completing the International Relations major.

No more than six (6) credit hours taken toward completing the International Relations major can be counted toward completing the Political Science major.

No more than six (6) credit hours taken toward completing the International Relations minor can be counted toward completing the Political Science major.

**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.

#### POLITICAL SCIENCE BA

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 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 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

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)
POL 450	Topics in Public Law (1-4)
POL 451	Administrative Law (3)
POL 453	Constitutional Law (3)
POL 454	Civil Liberties (3)
POL 455	American Legal Philosophy (3)

**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 (1-6)
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 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	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 453	Constitutional Law (3)
POL 454	Civil Liberties (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)

**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)
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POL 361	Public Budgeting (3)
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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)
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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**

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)
POL 450	Topics in Public Law (1-4)
POL 451	Administrative Law (3)
POL 453	Constitutional Law (3)
POL 454	Civil Liberties (3)
POL 455	American Legal Philosophy (3)

**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 (1-6)
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 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)
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POL 424	Women & Politics (3)
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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)
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POL 454	Civil Liberties (3)
POL 455	American Legal Philosophy (3)
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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)

**Required Minor: Yes. Any.**

**POLITICAL SCIENCE MINOR**

**Required for Minor (18 credits)**

Choose at least 18 credits, 12 credits at the 300-400 level.

POL Any Level	POL Any Level	POL 300-400
POL 300-400	POL 300-400	POL 300-400

**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 (6 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, GE-2

**POL 104 (3) Understanding the U.S. Constitution**

Rejoin 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 post-modernist writers. An examination of 19th and 20th Century political philosophers emphasizing German transcendentalism, utilitarianism, economic determinism, state socialism, neoliberalism, communitarianism and post-modernism. 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. Co-requisite: 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 410 (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 field. Specific topics will change depending on the term and instructor. May be retaken with a change of topic.

**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**

Political parties at United States, state, local levels. Cross-national comparisons. Decline and revival of parties. What parties do. Is the two party system the best? Are third parties the answer? Party organization. Voting behavior. Legislative, executive parties. Minnesota focus.

**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

**POL 425 (3) Terrorism & Political Violence**

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 LAWE 438  
Variable

**POL 426 (3) Racial and Ethnic Politics**

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 politics. 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

**POL 439 (3) Comparative Social Policy: The Welfare State in Europe and the Americas**

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

**POL 441 (3) Russia & Neighboring States Politics**

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

**POL 445 (3) Asia Pacific Rim: Politics & Policy**

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

**POL 446 (3) African Politics**

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

**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.

Fall

**POL 453 (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 454 (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 455 (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.

**POL 460 (1-4) Topics in Public 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 policymaking. Policy areas include: air/water pollution, climate change, hazardous/nuclear waste, sustainable development, and commons 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.

**POL 473 (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 474 (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 475 (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 476 (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.

**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

**POL 492 (1-5) 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

## 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](http://www.mnsu.edu/languages)

Chair: Adriana Gordillo

Please see to World Languages and Cultures to view course descriptions.

WLC 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/](http://www.mnsu.edu/psych/)

Chair: Andi Lassiter

Faculty: Angelica Aguirre, Bradley Arsznov, Jeffrey Brown, Jeffrey Buchanan, Kristie Campana, Elizabeth Fillion, Kevin Filter, 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/#All](http://www.mnsu.edu/programs/#All)**

#### 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 BS (teaching) program as described in the Social Studies section of this catalog.

#### PSYCHOLOGY BS

Degree completion = 120 credits

#### Prerequisites to the Major

PSYC 101 Introduction to Psychological Science (4)

Choose one course: (choose 4 credits)

MATH 112 College Algebra (4)  
STAT 154 Elementary Statistics (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 argumentations, intensive writings, research and presentations.

On Demand: Fall, Spring  
WI, GE-2

**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 care givers 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 Psy 101 OR Psy 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 work place. 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

**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, neurophysiology, 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

Spring

**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 Psyc 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.

Prerequisite: PSYC 340, 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

VI

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-aversive options.

Prerequisite: PSYC 211W

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 496 (2) Laboratory Research in Psychology

Individualized research experience with a faculty mentor in the psychology department. You will gain specific research experience as designed by a faculty mentor. To register for this course, you must first apply and be accepted to join a psychology faculty members' research team.

Prerequisite: PSYC 211W

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 499 (1-4) Individual Study

Individualized learning under faculty supervision.

Fall, Spring

## RECREATION, PARKS & LEISURE SERVICES BS AND MINOR

### 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](mailto: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](http://www.mnsu.edu/programs/#All)**

### POLICIES/INFORMATION

**Admission to Major** is granted by the department. Department admissions re-

quirements 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 minimum 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 447W 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 473 Recreation Management II-Fiscal 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.  
 Summer  
 On Demand: Fall & Spring  
 G-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

### 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

### 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 progressional 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

VI

**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

VI

**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 disposal. 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 management 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

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## REHABILITATION COUNSELING COURSES

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### 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.

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### 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 persons 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

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## RUSSIAN COURSES

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### Russian

*College of Arts & Humanities  
Department of World Languages & Cultures  
227 Armstrong Hall • 507-389-2116  
Website: [www.mnsu.edu/languages](http://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](http://www.mnsu.edu/languages)  
Fax: 507-389-5887

Chair: Adriana Gordillo

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](http://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)

#### 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 (1-6)
ART	494	Topics (3)
ART	499	Individual Study (1-6)
ENG	499	Individual Study (1-4)
GERO	200	Aging: Interdisciplinary Perspectives (3)
GERO	485	Topics in Gerontology (1-3)
GERO	499	Individual Study in Gerontology (1-4)
LAWE	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	299	Individual Study (1-4)
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)
SOWK	255	Global Responses to Human Need (3)

**Required Minor: Yes. Any.**

#### SCANDINAVIAN STUDIES 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.

#### Required for Minor

**Capstone Project** (1 credit)

SCAN 492 Minor Project in Scandinavian Studies (1)

#### NORWEGIAN

SCAN 101 Elementary Norwegian I (4)

SCAN 102 Elementary Norwegian II (4)

#### OR

#### SWEDISH

SCAN 111 Elementary Swedish I (4)

SCAN 112 Elementary Swedish II (4)

#### Required for Minor (11 credits)

Some elective courses concentrate exclusively on study of Scandinavia, while others have a strong component relating to the Nordic countries. Students taking these related courses for Scandinavian Studies credit should inform the instructor, and the students will be required to write a paper or complete a project on a Nordic topic. The department offers at least one topics course per semester. Individual study courses can also be arranged in several departments with faculty who have special interests in Scandinavia. Some elective courses may be taken at Gustavus Adolphus College with approval of the Minnesota State Mankato Director of Scandinavian Studies.

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.

#### Elective courses at Minnesota State Mankato

ANTH	436W	Anthropology of Aging (3)
ART	413	Scandinavian Art (3)
ART	492	Art History Seminar (1-6)
ART	494	Topics (3)
ART	499	Individual Study (1-6)
ENG	499	Individual Study (1-4)

GERO	200	Aging: Interdisciplinary Perspectives (3)
GERO	485	Topics in Gerontology (1-3)
GERO	499	Individual Study in Gerontology (1-4)
LAVVE	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)
SOWK	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 will provide an overview of their geography, history, culture, society and current political situation in comparison to the U.S.

Fall, Spring  
WI, GE-6, GE-8  
Diverse Cultures - Purple

### 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 adequately and critically central issues and theories. The course may be repeated for credit.

Fall, Spring

### 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

## SCHOOL HEALTH EDUCATION BS

### School Health Education

College of Allied Health & Nursing

Department of Health Science  
213 Highland Center N • 507-389-1527  
Website: [www.mnsu.edu/dept/health/](http://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](http://www.mnsu.edu/programs/#All)**

**Accreditation:** NCATE: Health and Physical Education, BS; School Health Education, BS, MS SABPAC: Community 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. 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 (online-plus) as well as advanced degree programs in Community Health Education (M.S.) (online-plus) and School Health Education (M.S.) (online-plus).

#### POLICIES/INFORMATION

**Admission Requirements.** Please see the admission requirements specific to each of the undergraduate programs offered by the Department of Health Science

#### 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 and a full letter grade deduction from the final course grade (e.g., "A" to "B-"). An act of plagiarism will result in a 0 on the assessment or assessments 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.

#### School Health Education BS

**Program Information.** Students must earn a "C" or better in all required general education (except Chemistry) and required courses (except Human Anatomy) and elective courses in the School Health Education major. Students must also maintain a G.P.A. of 2.5 or better in the major (required general education, required, and elective courses). A G.P.A. of 2.5 in the major is also required for graduation in School Health Education.

#### Admission Requirements.

School Health Education major admission requirements include:

- completion of a minimum of 32 credit hours,
- a minimum cumulative G.P.A. 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 MTLE 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	101	Health and the Environment (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 Process Part I (General) (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 BS

## Science Teaching

Websites: [cset.mnsu.edu/biology/](http://cset.mnsu.edu/biology/)  
[cset.mnsu.edu/chemgeol/](http://cset.mnsu.edu/chemgeol/)  
[cset.mnsu.edu/pa/](http://cset.mnsu.edu/pa/)  
[sbs.mnsu.edu/earthscience](http://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.

### Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)

## 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 degree 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 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.

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.

## SCIENCE TEACHING PROGRAMS

Required for all Science Teaching Programs unless otherwise noted.

## REQUIRED GENERAL EDUCATION

HLTH 240 DRUG EDUCATION (3)

## Required General Science Core (31 credits)

AST	101	Introduction to Astronomy (3)
BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)
CHEM	201	General Chemistry I (5)
GEOL	121	Physical Geology (4)
GEOL	310	Earth and Space Systems (3)
PHYS	211	Principles of Physics I (4)*
PHYS	212	Principles of Physics II (4)*

\* PHYS 221, PHYS 222, PHYS 223 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

## LEVEL 1

KSP	220W	Human Relations in a Multicultural Society (3)
KSP	222	Introduction to the Learner and Learning (2)
Floating course (can be taken with LEVEL 1 or LEVEL 2)		
KSP	202	Technology Integration in the Classroom (1)

## 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 Community (3)
KSP	442	Reading, Literacy, and Differentiated Instruction in the Inclusive Classrooms (3)

## LEVEL 4

KSP	464	Professional Seminar (1)
KSP	477	5-12 Student Teaching (11)

## CHEMISTRY 9-12 BS TEACHING

Degree completion = 120 credits

## Required General Education

BIOL	105	General Biology I (4)
CHEM	201	General Chemistry I (5)
HLTH	240	Drug Education (3)
MATH	121	Calculus I (4)

## Major Common Core

CHEM	202	General Chemistry II (5)
CHEM	305	Analytical Chemistry (4)
CHEM	316	Descriptive Main Group Chemistry (3)
CHEM	322	Organic Chemistry I (4)
CHEM	324	Organic Chemistry II (3)
CHEM	325	Organic Chemistry II Lab (1)
CHEM	340	Quant for Chem and Biochem I (1)
CHEM	341	Quant for Chem and Biochem II (1)
CHEM	360	Principles of Biochemistry (4)
CHEM	381W	Introduction to Research (2)
CHEM	440	Physical Chemistry I (3)
CHEM	450	Physical Chemistry Laboratory I (1)
CHEM	479	Teaching Physical Science (4)
CHEM	495	Senior Seminar (1)
PHYS	211	Principles of Physics I (4)
PHYS	212	Principles of Physics II (4)

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.



**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 Professional Education** (30 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)
PHYS	211	Principles of Physics 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	212	Principles of Physics II (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)
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**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)
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(choose 2 credits)

2 credits are required for the core.

PHYS	493	Undergraduate Research (1-6)
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**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 fulfillment 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 AND 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/](http://ed.mnsu.edu/ksp/)

Chair: Scott Page

Faculty: Johnson Afolayan, Qijie Cao, Bernadette Castillo, Carrie Chapman, Stephanie Hanson, Deborah Jesseman, Teresa Kruszeng, 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](http://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
- "C" grade in General Education Math

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 prerequisite courses qualifies students for the applicant pool but does not guarantee admission to the K-12 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

HLTH 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)

**LEVEL 4 Student Teaching**

KSP 464 Professional Seminar (1) Course is taken in each level with credit awarded in Level 4

**For 5-12 majors**

KSP 477 5-12 Student Teaching (11)

**For K-12 majors**

KSP 476 K-12 Student Teaching (11)

\* Note: Double licensure majors also enroll in KSP 482 (6)

**Student Teaching.** (119 Armstrong Hall)

Director of Office 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 knowledge, skills and dispositions. 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 learning communities, and participation in activities reflective of the professional responsibilities of teachers (e.g., parent conferences). The Director of the Office of Field and International Experience requests placements for all teacher candidates in partner districts, especially our Professional Development Schools. Teacher candidates should not contact schools regarding their placement.

**Admission to the student teaching experience is contingent upon completion of:**

1. Completion of all coursework in major and General Education requirements.
2. A cumulative grade point average of 2.75, grades of a "C" or better for all professional education coursework.
3. Admittance into Professional Education.
4. Completion of all methods and professional education course work (except KSP 475).
5. Completion and validation of formal application materials one year prior to student teaching semester.
6. Attendance at all preliminary student teaching meeting(s).
7. Recommendation of advisor.
8. 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.

**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. Students participating in study abroad opportunities will be required to complete course requirements in a shorter timeframe, thus long-term placements for level 3 field experiences and student teaching will be highly recommended. Additional fees will be incurred with participation in student teaching abroad programs. Application material and specific deadline dates are available online at <http://ed.mnsu.edu/field/studentteaching/applications.html>.

**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,

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.

WI, 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**

Short-term workshops dealing with specific subjects germane to the broader disciplines with in Educational Foundations: Social/Philosophic Issues in Education, Development and Learning Psychology, Human Relations and Cultural Diversity, Research and Assessment/ Evaluation, and Teaching in Higher Education.

**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.

**KSP 330 (3) Planning and Instruction in the Classroom**

The course is designed to guide K-12 and 5-12 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, KSP 442

**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 220V 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) Filmmaking**

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 society 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 (2) 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.

## SOCIAL STUDIES BS

### Social Studies

College of Social & Behavioral Sciences  
Department of History  
Social Studies Program  
110 Armstrong Hall • 507-389-5718  
Website: [sbs.mnsu.edu/socialstudies](http://sbs.mnsu.edu/socialstudies)

Director: Kyle Wood

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 non-teaching major in social studies is also offered, and provides the student an opportunity to create a program to meet her or his personal academic needs.

#### 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 program. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 ("C").

Contact the social studies coordinator for application procedures.

**Admission to the Social Studies Program.** Students enrolling in SOST 450 must be admitted to the social studies program, a process in addition to admission to the major. Admission to the social studies (teaching) program is limited. Preference 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. Students are encouraged to work closely with their advisor to prepare for admission to the social studies program.

**GPA Policy.** A grade of "C" or better is required in all courses in the major.

**P/N Grading Policy.** No more than 12 credits may be taken P/N.

#### 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)

#### Major Emphasis: Area of Concentration

A minimum of 24 credits must be taken in ONE of the following areas (15 credits of the 24 credits must be upper division courses). Areas include: Anthropology, Economics, Ethnic Studies, Gender & Women Studies, Geography, History, Political Science, Psychology, Sociology.

(choose 24 credits)

Students taking the history option are required to take at least six credits from each of the following areas: Europe, Third World (i.e. Latin America, Middle East, Asia, and Africa) 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

##### SOST 450 (4) Teaching Social Studies Secondary School

Organization and presentation of social studies in secondary schools. Preparation of units for teaching purposes, examination of materials useful to the social studies teacher. Application of national and state standards to teaching social studies.

Prerequisite: Concurrently with KSP 440

Fall, Spring

##### SOST 485 (1-6) Topics

Designed to provide students the opportunity to explore a variety of topics related to social studies.

##### SOST 491 (1-6) In-Service

Designed to provide students the opportunity to integrate academic learning with professional practice.

##### SOST 499 (1-8) Individual Study



## SOCIAL STUDIES TEACHING BS

### Social Studies Teaching

College of Social & Behavioral Sciences  
Department of History  
Social Studies Program  
110 Armstrong Hall • 507-389-5718  
Website: [sbs.mnsu.edu/socialstudies](http://sbs.mnsu.edu/socialstudies)

Director: Kyle Wood

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 non-teaching major in social studies is also offered, and provides the student an opportunity to create a program to meet her or his personal academic needs.

**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 program. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 ("C").

Contact the social studies coordinator for application procedures.

**Admission to the Social Studies Program.** Students enrolling in SOST 450 must be admitted to the social studies program, a process in addition to admission to the major. Admission to the social studies (teaching) program is limited. Preference 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. Students are encouraged to work closely with their advisor to prepare for admission to the social studies program.

**GPA Policy.** A grade of "C" or better is required in all courses in the major.

**P/N Grading Policy.** No more than 12 credits may be taken P/N.

#### SOCIAL STUDIES BS TEACHING

Degree completion = 120 credits

#### ANTHROPOLOGY 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: Anthropology (15 credits)

(choose 4 credits)

ANTH 220 Human Origins (4)

ANTH 230 Peoples and Cultures of the World (4)

ANTH 240 Languages and Cultures (4)

(choose 11 credits of 300-400 level anthropology courses)

ANTH 300 - ANTH 400

##### 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)

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: Economics (15 credits)

ECON 314W Current Economic Issues (3)

ECON 403 Labor Economics (3)

ECON 412 Resources and Environmental Economics (3)

ECON 416 Sport Economics (3)

ECON 420 International Economics (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)

#### 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>U.S. History to 1877</u> (choose 4 credits from the following)		
HIST	190	United States to 1877 (4)
HIST	190W	United States to 1877 (4)
<u>U.S. History Since 1877</u> (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)
<u>Physical Geography</u> (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)
<u>Regional Geography Course</u> (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)
<u>Culture Geography</u> (choose 3 credits)		
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>U.S. History to 1877</u> (choose 4 credits from the following)		
HIST	190	United States to 1877 (4)
HIST	190W	United States to 1877 (4)
<u>U.S. History Since 1877</u> (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>U.S. History to 1877</u> (choose 4 credits)		
HIST	190	United States to 1877 (4)
HIST	190W	United States to 1877 (4)
<u>U.S. History Since 1877</u> (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: 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 (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)

**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 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)
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 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: 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 Ethnography (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)

**COURSE DESCRIPTIONS SEE SOCIAL STUDIES**

## SOCIAL WORK BSSW AND MINOR

### 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](http://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 Hagemeister, Paul Mackie, Jennifer Parker, Sky Smith, Laurie Strunk, Kimberly Zammitt

**Accreditations.** Council on Social Work Education (CSWE) since 1974.

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](http://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 GPAs,
- 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/NC.

**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 background 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)
- ENG 211W Perspectives in Literature and Human Diversity (4)
- ETHN 100 American Racial Minorities (3)
- ETHN 101 Introduction to Multicultural & Ethnic Studies (3)
- ETHN 150 Multi-Cultural/Ethnic Experience (3)
- GEOG 103 Introductory Cultural Geography (3)
- HUM 281W Human Diversity and Humanities Traditions (4)
- KSP 220W Human Relations in a Multicultural Society (3)
- PHIL 115W Philosophy of Race, Class and Gender (3)
- PHIL 205W Culture, Identity, and Diversity (3)

Diversity and Social Justice B (choose 3 - 4 credits)

Select one course from the following:

- AIS 101 Introduction to American Indigenous Studies (3)
- AIS 210W Oral Traditions (3)
- AIS 230W American Indians of Minnesota (3)
- AIS 240W American Indian Women (3)
- CDIS 290 Introduction to Communication Disorders (3)
- ETHN 201W Perspectives on African Americans (3)
- ETHN 203W Perspectives on Asian Americans (3)
- ETHN 204W Perspectives on Latinos/Hispanics (3)
- 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 225 Introduction to Lesbian, Gay, Bisexual, and Transgender Studies (4)
- GWS 225W Introduction to Lesbian, Gay, Bisexual, and Transgender Studies (4)
- REHB 110W Sensitivity to Disability (3)

Social, Economic, and Political Perspectives (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 Microeconomics (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)
- SOC 150 Social Problems (3)
- URBS 150 Sustainable Communities (3)



## Statistical Analysis Methods (choose 3 - 4 credits)

PSYCH 201 or HLTH 475 may be taken to meet program requirements, but are not counted in General Education

ECON	207	Business Statistics (4)
SOC	202	Introductory Social Statistics (3)
STAT	154	Elementary Statistics (3)

## Human Development (choose 3 - 4 credits)

Select one course from the following:

FCS	301	Lifespan Development (3)
KSP	235	Human Development (3)
PSYC	343	Introduction to Developmental Psychology (4)

## Psychology (choose 4 credits)

PSYC	101	Introduction to Psychological Science (4)
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## Major Common Core

SOWK 215W may be completed for SOWK 215. SOWK 310 may be completed for SOWK 310W.

SOWK	212	Introduction to Social Work (4)
SOWK	215	Introduction to Social Welfare Services (4)
SOWK	310W	Human Behavior in the Social Environment (4)
SOWK	315	Junior Field Experience (4)
SOWK	410	Social Welfare Policy (4)
SOWK	435	Applied Social Work Research (4)
SOWK	441	Generalist Social Work Practice (4)
SOWK	443	Social Work Interviewing and Counseling Skills (4)
SOWK	446	Organizations and Community Practice (4)
SOWK	450	Integrative Seminar (4)
SOWK	455	Social Work Practicum (8)

## 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 Minor: None.

## SOCIAL WELFARE MINOR

### Required for 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)

One additional course from the following:

SOWK	255	Global Responses to Human Need (3)
SOWK	415	Child-Family Welfare Services (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)

\*SOWK 315 and SOWK 435 may be considered at part of the Social Welfare Minor with the approval of the Chair.

## 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.

GE-5, GE-9

Diverse Cultures - Purple

### 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

GE-5, GE-8

Diverse Cultures - Purple

### 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

Fall, Spring, Summer (On Demand)

### 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 212; SOWK 215 or SOWK 215W

Fall, Spring, Summer

### SOWK 410 (4) Social Welfare Policy

Exploration of the interrelatedness 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, SOWK 310

Fall, Spring; Summer (On Demand)

### 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 hoping 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 HLTH 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 443 (4) 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.

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## SOCIOLOGY BA, BS AND MINOR

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### Sociology

*College of Social & Behavioral Sciences  
Department of Sociology & Corrections  
113 Armstrong Hall • 507-389-1561  
Website: <http://sbs.mnsu.edu/soccorr>*

Chair: Luis A Posas

Faculty: Afroza Anwary, Emily Boyd, Barbara Carson, Jeffery Dennis, Donald Ebel, Sarah Epplen, Carol Glasser, Diane Graham, Vicki Hunter, Saiful Islam, Jessica McLaughlin, Christine Mollenkopf-Pigsley, Luis Posas, Paul Prew, Kristi Rendahl, Pedro Thomas, Sherisse Truesdale-Moore, Tyler Vaughan, 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 global 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](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 2.00.

**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:** 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 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 GERO 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 21 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 493 Sociology in Action (3)  
 SOC 495W Senior Seminar (3)  
 SOC 497 Internship: Sociology (3-6)

**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)

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 499	Individual Study (1-6)

#### Other Graduation Requirements

Required for Bachelor of Arts (BA) ONLY: Language (8 credits)

Required Minor. Yes. Any.

#### SOCIOLOGY BS

Degree completion = 120 credits

#### Option I: General Sociology

##### Required General Education

SOC 101	Introduction to Sociology (3)
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##### Major Common Core

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 291	Exploratory Studies (1-3)
SOC 307	Sex & Gender in Contemporary Society (3)
SOC 325	Sociology of Popular Culture (3)
SOC 360	Indigenous Peoples 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)
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SOC 451	Law & Social Justice in Society (3)
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SOC 466	Program Planning (3)
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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)

#### Option II: Applied Sociology

##### Required General Education

SOC 101	Introduction to Sociology (3)
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##### Major Common Core

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 Emphasis - Option II: Applied Sociology

SOC 493	Sociology in Action (3)
SOC 497	Internship: Sociology (3-6)

##### Major Electives (choose 6-9 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 285	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 Peoples 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	499	Individual Study (1-6)

Required Minor. Yes. Any.

#### SOCIOLOGY MINOR

##### Required for Minor

SOC	101	Introduction to Sociology (3)
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##### 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; interdependence of society and the individual; emphasis on cultural diversity and globalism.

Fall, Spring  
GE-5, GE-8  
Diverse Cultures - Purple

##### **SOC 150 (3) Social Problems**

A critical description and analysis of selected social problems, with an 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

##### **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. Student 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 our 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 first-hand 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

## SOCIOLOGY 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, Sherrise Truesdale-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 global 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](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 2.00.

**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:** 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.

### SOCIOLOGY: GLOBALIZATION STUDIES BA

#### **Required General Education**

SOC 101 Introduction to Sociology (3)

#### **Major Common Core**

SOC 200 Foundations of Sociology (3)  
 SOC 202 Introductory Social Statistics (3)  
 SOC 301W Social Research I (3)  
 SOC 458 Sociological Theory (3)  
 SOC 463 Social Stratification (3)  
 SOC 495W Senior Seminar (3)  
 Add ONE of the following (choose 3 credits)  
 SOC 469 Survey Research (3)  
 SOC 479 Sociological Ethnography (3)  
 SOC 480 Qualitative Methods (3)

#### **Major Restricted Electives**

Please select a total of 18 credits of major restricted electives.

#### **Departmental Courses** (choose 12-15 credits)

SOC 307 Sex & Gender in Contemporary Society (3)  
 SOC 360 Indigenous Peoples and Environmental Struggles (3)  
 SOC 407 Population Dynamics (3)  
 SOC 425 Social Movements (3)  
 SOC 430 Sociology of Globalization (3)  
 SOC 446 Race, Culture & Ethnicity (3)  
 SOC 460 Environmental Sociology (3)  
 SOC 461 Urban Sociology (3)  
 SOC 482 Social Change (3)

#### **Other College of Social and Behavioral Sciences Electives**

(choose 3-6 credits)

ANTH 436W Anthropology of Aging (3)  
 ETHN 330 Immigration and Ethnicity (3)

GEOG 425 Economic Geography (3)  
 GWS 220 Sex and Gender Worldwide (4)  
 POL 231 World Politics (3)  
 POL 241 Introduction to Comparative Politics (3)  
 POL 431 International Relations (3)  
 POL 435 Capitalism, Nationalism, and Democracy (3)  
 POL 436 International Political Economy (3)  
 POL 448 Political Development & Change (3)  
 SOWK 255 Global Responses to Human Need (3)  
 URBS 150 Sustainable Communities (3)

#### **Other Graduation Requirements**

**Required for Bachelor of Art (BA) ONLY:** Language (8 credits)

**Required Minor.** Yes. Any.

### SOCIOLOGY: GLOBALIZATION STUDIES BS

#### **Required General Education**

SOC 101 Introduction to Sociology (3)

#### **Major Common Core**

SOC 200 Foundations of Sociology (3)  
 SOC 202 Introductory Social Statistics (3)  
 SOC 301W Social Research I (3)  
 SOC 458 Sociological Theory (3)  
 SOC 463 Social Stratification (3)  
 SOC 495W Senior Seminar (3)  
 (choose 3 credits - one course from the following)  
 SOC 469 Survey Research (3)  
 SOC 479 Sociological Ethnography (3)  
 SOC 480 Qualitative Methods (3)

#### **Major Restricted Electives**

Please select a total of 18 credits of major restricted electives.

#### **Departmental Courses** (choose 12-15 credits)

SOC 307 Sex & Gender in Contemporary Society (3)  
 SOC 360 Indigenous Peoples and Environmental Struggles (3)  
 SOC 407 Population Dynamics (3)  
 SOC 425 Social Movements (3)  
 SOC 430 Sociology of Globalization (3)  
 SOC 446 Race, Culture & Ethnicity (3)  
 SOC 460 Environmental Sociology (3)  
 SOC 461 Urban Sociology (3)  
 SOC 482 Social Change (3)

#### **Other College of Social and Behavioral Sciences Electives**

(choose 3-6 credits)

ANTH 436W Anthropology of Aging (3)  
 ETHN 330 Immigration and Ethnicity (3)  
 GEOG 425 Economic Geography (3)  
 GWS 220 Sex and Gender Worldwide (4)  
 POL 231 World Politics (3)  
 POL 241 Introduction to Comparative Politics (3)  
 POL 431 International Relations (3)  
 POL 435 Capitalism, Nationalism, and Democracy (3)  
 POL 436 International Political Economy (3)  
 POL 448 Political Development & Change (3)  
 SOWK 255 Global Responses to Human Need (3)  
 URBS 150 Sustainable Communities (3)

**Required Minor.** Yes. Any.

### **COURSE DESCRIPTIONS SEE SOCIOLOGY**

## SPANISH BA, BS AND MINOR

### Spanish

College of Arts & Humanities  
Department of World Languages & Cultures  
227 Armstrong Hall • 507-389-2116  
Website: [www.mnsu.edu/languages](http://www.mnsu.edu/languages)

Chair: Adriana Gordillo

Faculty: Kimberly Contag 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 post-graduate 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 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 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' 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 both 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 Co-Op 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 co-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 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
- 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](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 2.00 ("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 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 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)  
Spanish American Literature (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)  
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)  
Spanish American Literature (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 and 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)

**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  
Diverse Cultures - Gold

**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, health 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.

Fall, Spring

**SPAN 499 (1-4) Individual Study**

Variable topics.

Prerequisite: completion of eight 300-level credits, or equivalent

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## SPANISH FOR THE PROFESSIONS BS

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### Spanish for the Professions

College of Arts & Humanities  
Department of World Languages & Cultures  
227 Armstrong Hall • 507-389-2116  
Website: [www.mnsu.edu/languages](http://www.mnsu.edu/languages)

Chair: Adriana Gordillo

Faculty: Kimberly Contag 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 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 post-graduate 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 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 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. 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.

**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' 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 in diverse communities in North, Central and South America, the Caribbean, island 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 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 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 Co-Op 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 Co-Op experience in the professional workplace (SPAN 398 or VLC 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 toward timely 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

conversation table, 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](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 2.00 ("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 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 careers 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 skills, translation of documents for the professions, etc.) 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 advanced courses in culture, civilization and 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 skills in written and oral communication and competencies in literacy and cultures. This program requires study abroad immersion in a Spanish-speaking country.

#### Required General Education

ANTH	240	Language and Culture (4)
CMST	203	Intercultural Communication (3)
CMST	212	Professional Communication and Interviewing (3)
ENVR	101	Perspectives in Environmental Science (4)
ETHN	150	Multi-Cultural/Ethnic Experience (3)
ETHN	204W	Perspectives on Latinos/Hispanics (3)
GEOG	103	Introductory Cultural Geography (3)
Select two (choose 6-8 credits)		
BLAW	131	Consumer Law & Ethics (3)
PHIL	224W	Business Ethics (3)
PHIL	240W	Law, Justice & Society (3)
PHIL	321W	Social & Political Philosophy (3)

#### 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 course at the appropriate level in another language of their choice.

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)

SPAN	201	Intermediate Spanish I (4)
SPAN	202	Intermediate Spanish II (4)
SPAN	293	Individual Study Abroad: Intermediate Spanish I (1-6)
SPAN	294	Individual Study Abroad: Intermediate Spanish II (1-6)

#### Major Common Core

ENG	272W	Business Communication (4)
SPAN	210W	Composition & Conversation (4)
SPAN	450	Spanish for the Professions (4)

#### Major Restricted Electives

Integrative Skills (choose 14 credits)

SPAN	393	Individual Study Abroad: Advanced Spanish I (1-6)
SPAN	394	Supervised Study Abroad: Advanced Spanish II (1-6)
SPAN	396	Experiencing Diverse Cultures (1-3)
SPAN	407	Topics in Translation (1-4)
SPAN	498	Internship: Spanish for the Professions (1-4)

Cultural Competency (choose 7-8 credits)

HIST	442	History of Latin America (4)
SPAN	355	Spanish Civilization (1-4)
SPAN	356	Latin American Civilization (1-4)
SPAN	496	Ind. Study Abroad: Topics in Spanish American Culture (1-6)
SPAN	497	Ind. Study Abroad: Topics in Spanish Peninsular Culture (1-6)

Literacy Competency (choose 8 credits)

SPAN	365	Selected Readings (1-4)
SPAN	395	Individual Study Abroad: Readings in Hispanic Literature (1-6)
SPAN	402	Topics in Spanish Peninsular Literature (1-4)
SPAN	403	Topics in Spanish American Literature (1-4)

#### Major Unrestricted Electives

Spanish Electives (choose 8-11 credits)

Choose electives in consultation with an advisor.

SPAN	256	Individual Study Abroad: Supervised Project (1-6)
SPAN	301	Topics in Language (1-4)
SPAN	310	Conversation and Composition (1-4)
SPAN	365	Selected Readings (1-4)
SPAN	395	Individual Study Abroad: Readings in Hispanic Literature (1-6)
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	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)

(choose 0-3 credits)

Number of elective credits will depend upon total number of credits completed in the core and restricted and unrestricted electives.

SPAN 201 through SPAN 499

#### 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, Scandinavian Studies, Social Welfare, Sports Medicine.

#### COURSE DESCRIPTIONS SEE SPANISH

## SPANISH TEACHING BS

### Spanish Teaching

College of Arts & Humanities  
Department of World Languages & Cultures  
227 Armstrong Hall • 507-389-2116  
Website: [www.mnsu.edu/languages](http://www.mnsu.edu/languages)

Chair: Adriana Gordillo

Faculty: Kimberly Contag 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 post-graduate 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 5-12 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 a variety of fields or for graduate work in Spanish. Many 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. Choosing the BS Spanish for the Professions degree means you are committed to gaining a higher level of language proficiency, developing a broad understanding 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. For additional information, contact a Spanish faculty member to help you

decide which major and learning opportunities are best for you!

#### 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' 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.

BS Spanish Teaching majors need first-hand experience in a Spanish-speaking community. To facilitate your completion of degree requirements, the department currently has Minnesota State University, Mankato-approved fall, spring and summer study abroad options that meet degree requirements for the BS Spanish Teaching degree 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 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 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 co-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 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



Standard 1.3 on a variety of topics.  
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](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 2.00 ("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 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 BS, TEACHING

Degree completion = 120 credits

#### Prerequisites to the Major

SPAN 201 Intermediate Spanish I (4)  
SPAN 202 Intermediate Spanish II (4)  
SPAN 293 Individual Study Abroad: Intermediate Spanish I (1-6)  
SPAN 294 Individual Study Abroad: Intermediate Spanish II (1-6)

#### Major Common Core

WLC 460 Methods of Teaching Modern Languages (3)  
WLC 461 Applied Modern Language Teaching Methods (1)  
WLC 462 Foreign Language in the Elem. School (FLES) Methods (3)  
WLC 463 Applied FLES Method (1)  
SPAN 210W Composition and Conversation (4)

#### Major Restricted Electives

Conversation (choose 3-6 credits)

SPAN 310 Conversation and Composition (1-4)  
SPAN 393 Individual Study Abroad: Spanish I (1-6)

Language/Linguistics (choose 3-6 credits)

SPAN 301 Topics in Language (1-4)  
SPAN 394 Individual Study Abroad: Advanced Spanish II (1-6)  
SPAN 401 Topics in Linguistics (1-4)

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 Peninsular Spanish 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)  
Spanish American Literature (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 256 Individual Study Abroad: Supervised Project (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 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 Lit. (1-6)  
SPAN 495 Ind. Study Abroad: Topics in Spanish Peninsular Lit. (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)

**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 BS

### Special Education: Academic and Behavioral Strategist

College of Education  
Department of Special Education  
313 Armstrong Hall • 507-389-1122  
Website: [ed.mnsu.edu/sped/undergrad\\_programs/](http://ed.mnsu.edu/sped/undergrad_programs/)

Chair: Alexandra Panahon Ph.D.

Undergraduate Major Coordinator: Kiersten Hensley Ph.D.

Faculty: Kyena Cornelius Ed.D.; Aaron Deris Ph.D.; Karen Eastman Ph.D.; Kiersten Hensley Ph.D.; Andrew Johnson Ph.D.; Kimberly Johnson Ph.D.; Alexandra Panahon Ph.D.; Sean Wachsmuth Ph.D.; Dana Wagner Ph.D.; Teri Wallace Ph.D.

**Accreditations.** 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.

**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://www.mnsu.edu/programs/#All)**

#### 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  
Mymique 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 Continuance.** 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 Exams
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.** Marisel 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 of up 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

HLTH 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)  
 HLTH 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.

##### 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.

##### 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 PBIS 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.  
 Diverse Cultures - Gold

##### 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 and other students in an inclusive classroom. As a result of taking this course, students will be able to plan and implement effective literacy lessons and utilize a variety of differentiation strategies.

##### SPED 422 (4) Strategies for Teaching Learners w/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.  
 WI

##### 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 LRE, and evaluate the effectiveness of instructional interventions.

Corequisite: SPED 458

**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.

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## SPORT MANAGEMENT BS

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### Sport Management

*College of Allied Health and Nursing*

Department of Human Performance  
1400 Highland Center • 507-389-6313  
Website: [ahn.mnsu.edu/hp/sm/](http://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](http://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) <b>OR</b>
ECON	202	Principles of Microeconomics (3)
CMST	100	Fundamentals of Communication (3) <b>OR</b>
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.

**GPA Policy.** Students must maintain a minimum cumulative GPA of 2.5 once admitted into the program in order to take the required sport management courses. 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, 507-389-5194,

#### SPORT MANAGEMENT BS

Degree completion = 120 credits

#### Required General Education

ENG	101	Composition (4)
MATH	112	College Algebra (4)
PSYC	101	Psychology (4)
SOC	101	Introduction to Sociology (3)
(choose 3 credits)		
ECON	201	Principles of Macroeconomics (3)
ECON	202	Principles of Microeconomics (3)
(choose 3 credits)		
CMST	100	Fundamentals of Communication (3)
CMST	102	Public Speaking (3)

#### Prerequisites to the Major

IT 101	Introduction to Information Systems (3)
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#### Major Common Core

Students must complete a minimum of 9 combined credits from HP 488 and HP 496.

ACCT	200	Financial Accounting (3)
HP	141	Introduction to Sport Management (2)
HP	290	Psycho-Social Aspects of Sport (3)
HP	325	Sport Ethics and Professional Development (3)
HP	360	Foundations of Sport Management (3)
HP	435	Planning Sport Facilities (3)
HP	459	Financial Aspects of Sport (3)
HP	462	Sports Administration (3)
HP	465	Legal Aspects of Physical Education and Sport (3)
HP	468	Sport Marketing (3)
HP	469	Event Management in Sport (3)
HP	488	Applied Sport Business (3)
HP	496	Internship (1-10)

#### Major Restricted Electives (choose 6 credits)

HP	437	Sport Media, Sponsorship and Sales (3)
HP	463	Seminar in Sport Management (3)
HP	464	Analysis of Sport Data (3)
HP	475	International Sport Management (3)

#### Minor:

Minor must be in one of the following areas: Accounting, Athletic Coaching, Business Law, Marketing, Economics, International Business, Financial Planning, and Human Resources Management. Other minors are accepted upon advisor's approval.

#### COURSE DESCRIPTIONS

##### LOCATED UNDER HUMAN PERFORMANCE (HP) COURSE DESCRIPTION

## 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](http://www.mnsu.edu/programs/#All)**

#### SPORT MEDICINE MINOR

The Sports Medicine Minor at Minnesota State Mankato is intended for the students who are interested in the broad field of Sports Medicine. It is intended for students in the following academic disciplines: exercise science, physical education, coaching, pre-athletic training, pre-physical therapy, psychology, pre-medicine, pre-chiropractic,

nutrition, and nursing. The objective is to provide interested students, from a variety of backgrounds, with the academic background and the opportunity to develop skills and interest in Sports Medicine.

Note: This minor is not accredited by the Commission on Accreditation of Athletic Training Education (CAATE) and is not intended for Athletic Training Majors. The minor will not prepare students for the Athletic Training Board of Certification (BOC) examination.

BIOL	220	Human Anatomy (4)
BIOL	330	Principles of Human Physiology (4)
HLTH	210	Advanced First Aid and CPR (3)
HP	291	Concepts of Fitness (2)
HP	340	Prevention and Care (2)
HP	415	Advanced Sports Medicine (2)

Note: This minor is not accredited by the Commission on Accreditation of Athletic Training Education (CAATE) and is not intended for Athletic Training Majors. The minor will not prepare students for the Athletic Training Board of Certification (BOC) examination.

#### 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/](http://www.cset.mnsu.edu/dept/mathstat/)

Chair: Ruijun Zhao, PhD  
Faculty: Hyekyung Min, PhD; Galkande Premarathna, 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](http://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 minimum university admission requirements of: a minimum of 32 earned semester credit hours and a minimum cumulative GPA of 2.00, students must complete 10 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 201 Elements of Mathematics I, or STAT 154 Elementary Statistics must demonstrate readiness to succeed by satisfying the placement table below.

Course	Minimum ACT/SAT Math Subscore		Minimum Accuplacer Intermediate Algebra Score		Minimum Accuplacer College Level Math Score		Minimum Accuplacer Calculus Readiness Score		Course Prerequisites
Math 112	ACT 22, Old SAT 520, New SAT* 550, 2-digit SAT 27.5** MCA 1158	OR	60		N/A		N/A	OR	Grade of P in MATH 098
Math 113	ACT 22, Old SAT 520, New SAT* 550, 2-digit SAT 27.5**	OR	60	AND	84		N/A	OR	Math 112 with "C" or better
Math 115	ACT 23, Old SAT 530, New SAT* 560, 2-digit SAT 28**	OR	60	AND	96		N/A	OR	Grade of P in MATH 098
Math 121	ACT 24, Old SAT 560, New SAT* 580, 2-digit SAT 29**	OR	60	AND	84	AND	21	OR	MATH 115, or both MATH 112 and MATH 113 with a "C" (2.0) or better
Math 130	ACT 23, Old SAT 530, New SAT* 560, 2-digit SAT 28**	OR	60	AND	84		N/A	OR	MATH 112 or MATH 115 with a "C" (2.0) or better
Math 181	ACT 23, Old SAT 530, New SAT* 560, 2-digit SAT 28**	OR	60	AND	84		N/A	OR	MATH 112 or MATH 115 with a "C" (2.0) or better
Math 201	ACT 22, Old SAT 520, New SAT* 550, 2-digit SAT 27.5** MCA 1148	OR	60		N/A		N/A	OR	Grade of P in Math 098 or "C" (2.0) or better in MATH 112, MATH 115, or MATH 12
Stat 154	ACT 19, Old SAT 460, New SAT* 500, 2-digit SAT 25** MCA 1148	OR	60		N/A		N/A	OR	Grade of P in Math 098, or "C" (2.0) or better in Math 112, Math 115, or Math 121

\*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

Degree completion = 120 credits

#### Required General Education

MATH 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)

MATH	290	Foundations of Mathematics (4)
MATH	321	Ordinary Differential Equations (4)
MATH	375	Introduction to Discrete Mathematics (4)
MATH	422	Partial Differential Equations (4)
MATH	425	Mathematical Modeling (4)
MATH	470	Numerical Analysis I (4)
MATH	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)
MATH	460	Actuarial Applications in Probability (3)
MATH	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)



IT	360	Introduction to Networking (4)
IT	380	Systems Analysis and Design (4)
MATH	470	Numerical Analysis I (4)

Required Minor: None

#### 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-4

##### **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 (3) 356 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 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

##### **STAT 450 (3) Regression Analysis**

Simple and multiple linear regression, model adequacy checking and validation, identification of outliers, leverage 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, Graco- 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.

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**SWEDISH COURSES**


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**Swedish**

College of Arts & Humanities  
 Department of World Languages & Cultures  
 227 Armstrong Hall • 507-389-2116  
 Website: [www.mnsu.edu/languages](http://www.mnsu.edu/languages)

Chair: Adriana Gordillo

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Please see to Scandinavian studies to view course descriptions.

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)

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**THEATRE ARTS BFA, BA, BS AND MINOR**


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**Theatre Arts**

College of Arts & Humanities  
 Department of Theatre and Dance  
 201 Earley Center for Performing Arts • 507-389-2118  
 Website: [www.MSUTheatre.com](http://www.MSUTheatre.com)  
 Fax: 507-389-2922

Chair: Paul J. Hustoles

Faculty: George Grubb, Heather Hamilton, Julie Kerr-Berry, Amanda Dyslin, David McCarl, John Paul, Melissa Rosenberger, Catherine Schmeal-Swope, Stephen Smith, Dan Stark, Nick Wayne, Paul J Hustoles

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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.

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**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. 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 practicum credits total. Only one activity or practicum credit is allowed per production.

**Summer Stock Activity Credits.** No one may take more than 4 summer stock activity credits per summer.

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**THEATRE ARTS****Required General Education**

THEA 100 Introduction to Theatre (3)

**Major 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 (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.

THEA 121 Movement for Theatre (1)  
 THEA 210 Intermediate Acting (3)  
 THEA 215 Audition Methods (2)  
 THEA 252 Theatre Technology (3)  
 THEA 265 Stage Makeup (2)  
 THEA 300 Summer Stock (3)  
 THEA 302 Practicum: Acting (1-2) (4 credits total)  
 THEA 315 Careers in Theatre (1)  
 THEA 410 Music 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 426 Stage Combat (2)

**Required Minor: None.**

**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.

DANC 223 Intermediate Jazz Dance (2)  
 DANC 226 Intermediate Ballet (2)  
 DANC 227 Intermediate Tap Dance (2)  
 THEA 111 Private Voice for the Actor (0) (4 times)  
 THEA 121 Movement for Theatre (1)  
 THEA 210 Intermediate Acting (3)  
 THEA 212 Music Skills for Theatre I (2)  
 THEA 213 Music Skills for Theatre II (2)  
 THEA 214 Singing for Actor (1)  
 THEA 215 Audition Methods (2)  
 THEA 252 Theatre Technology (3)  
 THEA 265 Stage Makeup (2)  
 THEA 300 Summer Stock (3)  
 THEA 302 Practicum: Acting (1-2) (4 credits total)  
 THEA 311 Private Voice for the Actor (0) (4 times)  
 THEA 315 Careers in Theatre (1)  
 THEA 410 Musical Theatre Acting I (3)  
 THEA 411 Musical Theatre Acting II (3)  
 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 426	Stage Combat (2)
THEA 483	Musical Theatre History (3)

Required Minor: None.

#### **BFA THEATRE DESIGN/TECHNOLOGY OPTION**

Degree completion = 120 credits

Must have 3 credits of THEA 300; must take 6 credits of any Theatre electives.

THEA 240	Basic Design (3)
THEA 255	Stagecraft (3)
THEA 260	Costume Construction (3)
THEA 270	Lighting Technology (3)
THEA 275	Sound Technology (3)
THEA 300	Summer Stock (3)
THEA 400	Portfolio Seminar (1)
THEA 430	Theatre Management (3)
THEA 451	Drafting for the Theatre (3)
THEA 485	Theatre Dramaturgy (3)

(choose 4 credits)

THEA 303	Practicum: Theatre Management (1-2)
THEA 304	Practicum: Scene Design (1-2)
THEA 305	Practicum: Scene Design (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)

(choose 3 credits)

THEA 444	Styles and Ornamentation (3)
THEA 464	Costume History (3)

(choose 9 credits)

THEA 440	Scene Design I (3)
THEA 460	Costume Design I (3)
THEA 470	Lighting Design I (3)
THEA 475	Sound Design I (3)

(choose 6 credits)

THEA 441	Scene Design II (3)
THEA 461	Costume Design II (3)
THEA 471	Lighting Design II (3)
THEA 476	Sound Design II (3)

Required Minor: None

#### **THEATRE ARTS GENERALIST BA OPTION**

Degree completion = 120 credits

##### **Required General Education**

THEA 100	Introduction to Theatre (3)
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##### **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)

THEA 275	Sound Technology (3)
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###### Foundations (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)
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)

##### **Other Graduation Requirements**

Required for Bachelor of Arts (BA) ONLY: Language (8 credits)

Required Minor: None.

#### **THEATRE GENERALIST BS OPTION**

Degree completion = 120 credits

##### **Required General Education**

THEA 100	Introduction to Theatre (3)
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##### **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)
THEA 275	Sound Technology (3)

###### Foundations (choose 9 credits) May also choose any 2-credit Dance class

THEA 121	Movement for Theatre (1)
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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)
<i>Advanced</i> (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: Dance Captain

Serve as Dance Captain, to assist the Choreographer, for a mainstage or approved production. May be repeated.

Prerequisite: Consent  
Fall, Spring

### THEA 105 (1-2) Theatre Activity: Stagecraft

Work on stage crew in a mainstage production. May be repeated.

Prerequisite: Consent  
Fall, Spring  
GE-11

### THEA 107 (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 108 (1-2) Theatre Activity: Lighting

Work on lighting crew in a mainstage production. May be repeated.

Prerequisite: Consent  
Fall, Spring  
GE-11

### THEA 109 (1-2) Theatre Activity: Sound

Work on sound crew in a mainstage production. May be repeated.

Prerequisite: Consent  
Fall, Spring  
GE-11

### 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

### 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 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 Construction**

The construction of costumes for theatre productions. May be repeated.

Prerequisite: Consent

Fall, Spring

**THEA 308 (1-2) Practicum: Light Design**

Preparation and execution of a major lighting design assignment. Requires a design with appropriate schedules, supervision of hanging, focusing and cues. 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 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 dramatics 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

Fall

### **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  
Prerequisite: THEA 455

**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-Spring

**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

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## TWIN CITIES ENGINEERING

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### Twin Cities Engineering (see Integrated Engineering)

Department of Integrated Engineering  
College of Science, Engineering & Technology  
141 Trafton Science Center N • 507-389-2744  
Website: [cset.mnsu.edu/ie](http://cset.mnsu.edu/ie)

Chair: Dean Kelley

Faculty: Rebecca Bates, Robert Sleezer, Jacob Swanson

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Location: Normandale Community College, Partnership Center, 9700 France Avenue South, Bloomington, MN

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This program provides upper division engineering coursework. Lower-division coursework is typically completed at a community college. Partners for this program include Normandale Community College in Bloomington, MN, Anoka-Ramsey College in Cambridge and Coon Rapids, MN, Century College in White Bear Lake, MN, Inver Hills Community College in Inver Grove Heights, MN, and Saint Paul College in St. Paul, MN.

Admission requires an application to Minnesota State Mankato and the Twin Cities Engineering program. For more information, please see the description at the Integrated Engineering major.

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## URBAN & REGIONAL STUDIES BS AND MINOR

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### Urban and Regional Studies

College of Social & Behavioral Sciences  
Urban & Regional Studies Institute  
106 Morris Hall • 507-389-1714  
Website: <http://sbs.mnsu.edu/ursi/>  
Email: [christine.gemlo@mnsu.edu](mailto:christine.gemlo@mnsu.edu)

Director/Chair:

Faculty: Raymond Asomani-Boateng PhD; Russell Fricano PhD; Beth Heidelberg DPA

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The Urban and Regional Studies Institute is an interdisciplinary degree program oriented toward examining and understanding the broad range of problems and challenges associated with the nation's cities and regional areas. There are many career opportunities in community development, urban/regional planning, local government, and local government management. Also, the major is excellent preparation for graduate work in the professional fields of planning, management, business, etc.

This national award-winning program includes classroom, research, and field experience. In addition to formal course work, students are encouraged to undertake independent study, become involved in community service projects, participate in field studies, and accept internships in local agencies. Students should contact the Urban and Regional Studies Institute for further information.

**Admission to Major** s 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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**Academic Map/Degree Plan at [www.mnsu.edu/programs/#All](http://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

#### Required for Major

URBS	100	Introduction to the City (3)
URBS	110	The City: Design and Architecture (3)
URBS	150	Sustainable Communities (3)
URBS	230	Community Leadership (3)
URBS	401	Foundations in Urban Management & Planning (3)
URBS	402	Urban Analysis (3)
URBS	489	Capstone (3)

#### 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

##### Minor Core

URBS	150	Sustainable Communities (3)
URBS	230	Community Leadership (3)
URBS	431	Urban Design Principles (3)

##### Minor Electives

Select 9 credits from URBS upper division courses, or see advisor for approval.

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#### 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-8

##### URBS 110 (3) The City: Design and Architecture

Appreciation of the city as the highest cultural achievement in design and architecture.

Fall, Spring  
GE-6

##### 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-10

##### 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

**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 county 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 481 (1-3) Selected Topics:**

Varying topics dealing with emerging trends and contemporary needs facing urban America.

**URBS 483 (1-6) Workshop**

Varying topics using applied techniques to address community issues.

**URBS 485 (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 489 (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

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## WORLD LANGUAGES & CULTURES COURSES

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### World Languages & Cultures

College of Arts and Humanities  
 Department of World Languages & Cultures  
 227 Armstrong Hall • 507-389-2116  
 Website: [www.mnsu.edu/languages](http://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](http://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-midproficiency 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 stu-

dent'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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