



Section I : Spring 2022-2023 catalog

Liberal Education

Updated Liberal Education 2022-2023

LIBERAL EDUCATION MISSION STATEMENT

The mission of Bemidji State University's Liberal Education curriculum is to create an environment where students of diverse backgrounds and abilities can acquire the knowledge, the skills, the values, and the confidence necessary for effective and responsible participation in our changing global society.

LIBERAL EDUCATION REQUIREMENTS

- Goal Area 1: Communication (2 courses, 6 credits)
- Goal Area 2: Critical Thinking (requires completion of the rest of the Liberal Education program)
- Goal Area 3: Natural Science (2 courses, including 1 with a lab component [LC], 7 or more credits)
- Goal Area 4: Mathematics (1 course, 3 or more credits)
- Goal Area 5: History and the Social and Behavioral Sciences (2 courses, 6 or more credits)
- Goal Area 6: Humanities and the Arts (2 courses, 5 or more credits)
- Goal Area 7: Human Diversity in the United States (1 course, 2 or more credits)
- Goal Area 8: Global Perspective (1 course, 3 or more credits)
- Goal Area 9: Ethical and Civic Responsibility (1 course, 2 or more credits)
- Goal Area 10: People of the Environment (1 course, 3 credits)
- Goal Area 11: Performance and Participation (1 course, 1 or more credits)

Required Credits: 42

If the required courses are completed in less than 42 credits, additional Liberal Education credits must be taken, from any goal area, to bring the total to 42. For students planning to use the completed program to satisfy the general education requirements of another state institution, as provided by the Minnesota Transfer Curriculum, 40 credits must be in Goal Areas 1 through 10.

Goal Area 11 is a Bemidji State University graduation requirement. Students who have completed the Minnesota Transfer Curriculum prior to transfer to Bemidji State University and students who already hold an AA or baccalaureate degree are exempted from the Goal Area 11 requirement.

Graduation planning forms for Liberal Education are available online at <https://www.bemidjistate.edu/mybsu/resources/forms/.pdf>. Complete the Graduation Summary and Application Form

MINNESOTA TRANSFER CURRICULUM (MnTC)

Goal Areas 1 through 10 comprise the 40 credit Minnesota Transfer Curriculum. A minimum 2.00 GPA is required in MnTC coursework. Grades A, B, C, and D, are accepted in transfer. MnTC is designed to expedite the transfer of courses within the Minnesota State Colleges & Universities system (Minnesota State), and to or from the University of Minnesota. If a MnTC goal area is completed at one school, it is deemed to be completed at another Minnesota State school. If a student plans to transfer to the University of Minnesota without having completed the entire MnTC, a course-by-course evaluation will be done according to the University's liberal education requirements. Individual courses may be accepted in transfer. Students who complete the MnTC and then transfer to the University of Minnesota-Twin Cities have fulfilled the University's first-year writing requirement, as well as the liberal education requirements.

POLICIES

Some courses are listed in two goal areas, and may be used to meet the requirement in both goal areas. However, the credits may be counted only once toward the total. If credits taken do not total 42, the student must take additional credits (from any Liberal Education goal area). Forty credits must be from Goal Areas 1 through 10.

Courses not approved for Liberal Education will generally not be accepted as substitutions for approved courses.

For student transferring out of BSU to other state institutions, the MnTC will be validated with the completion of Goal Areas 1 through 10 and a minimum of 40 credits.

ASSOCIATE OF ARTS (A.A.) IN LIBERAL EDUCATION

Bemidji State University offers a curriculum (60 credits minimum) that leads to a two-year Associate of Arts (A.A.) degree in Liberal Education. The 60 credits include all Liberal Education requirements plus electives. With proper advising, this program may be used as the basis for continuing on in a four-year bachelor's degree program. For transfer students, 20 credits and a minimum of one semester must be completed at Bemidji State University.

THE HONORS PROGRAM

The Honors Program is an alternative Liberal Education program that emphasizes an interdisciplinary academic curriculum different from the Liberal Education program and a student's major. See "Honors" in Section VII for information.

DIMENSIONS OF STUDENT LEARNING AT BEMIDJI STATE

Liberal Education and other programs use the Dimensions of Student Learning for self-assessment.

1. Intellectual Development

- Higher Order Thinking: Use critical thinking and appropriate frameworks for inquiry.
- Knowledge, Value and Abilities Related to the Arts, Humanities, Sciences and Specialized Fields of Study: Understand concepts, ideas, and theories from various disciplines and abilities associated with specialized fields of study.

2. Understanding of Self / Relating to Others

- Values: Examine, evaluate, and express values.
- Communication: Present ideas clearly and effectively in visual, written, and oral form.
- Human Diversity: Recognize the experiences and contributions of diverse groups and cultures.
- Self Development: Demonstrate awareness of concepts, knowledge, and actions which promote one's well-being.

3. Participation in an Emerging Global Society

- Readiness for Careers: Demonstrate knowledge, ethics and abilities as they relate to one's specialization and career choice.
- Responsible Citizenship: Participate as a contributing member of a changing global society.

STUDY-TRAVEL COURSES

For Goal Areas 3 through 11, departments may propose, subject to approval,

study-travel courses (domestic or abroad) using the All-University course numbers specified under “Others” at the end of each goal area’s course listing.

Section II

Academic Integrity, Rights and Responsibilities

BSU Policy Statement on Academic Integrity

Bemidji State University fosters the highest standards of academic integrity and the highest regard for truth and honesty. The attempt by students to present as their own any work not actually performed by them; collusion, fabrication, and cheating on examinations, papers, and other course-related work; stealing, duplicating, or selling examinations; substituting for others in class discussions or examinations; producing other students' papers or projects; knowingly furnishing false or misleading academic information to University officials or on official University records; and altering such information on official University records are considered violations of academic integrity and destructive to the central mission of the University.

Students who violate academic integrity shall, after due process, be subject to University sanctions that may include failure on assignments and examinations and in courses, and suspension or expulsion.

Established academic integrity policies, procedures, and sanctions are communicated in classes and publications such as the student/faculty guides, and during orientation programs. For more information see the Student Handbook at <https://www.bemidjistate.edu/offices/student-life-success/handbook/>.

Rights and Responsibilities
Code of Conduct

STUDENT RESPONSIBILITIES

Students are also expected to be familiar with academic policies and procedures as described in this catalog, as well as in the Handbook.

Students are expected to be familiar with the Student Code of Conduct and the Student Conduct System as presented in the Student Handbook. The rights and responsibilities of students and the expectations of the University are described in the guide, along with grievance and other procedures. Behavior that is threatening to the safety or welfare of one's self or others, or that is harassing or discriminatory in nature, will be reviewed promptly by the University, and appropriate action will be taken. The Student Code of Conduct does not replace or reduce the requirements of civil or criminal laws. The Student Handbook is accessible at <https://www.bemidjistate.edu/offices/student-life-success/handbook/>

EXCERPT FROM THE PREAMBLE TO THE CODE OF CONDUCT

The campus is not a sanctuary from the general law. University community members violating civil or criminal law may be subject to University Conduct procedures for the same conduct when the conduct occurs on campus or when it occurs off campus but is directly related to the University community. The University may initiate Student Conduct action at its discretion.

Family Educational Rights and Privacy Act

Bemidji State University protects the privacy of student education records as required by the Family Educational Rights and Privacy Act (FERPA) of 1974 and the Minnesota Government Data Practices Act (MGDPA). These federal and state laws provide information on the privacy and confidentiality of student educational records. This notice of student rights, policy and procedures is available in hard copy and in alternative formats from the Office of Student Life & Success, Deputy Hall 313 and the Records and Registration Office, Deputy

Hall 101.

The laws are applicable to postsecondary institutions in two primary ways: 1) institutions must permit students to inspect and review their education records; and 2) in most instances only information defined and publicized by the institution in semester class schedules as "directory information" will be released without the expressed consent of the student unless otherwise directed by the student. However, under certain circumstances all educational records may be released without consent of the student.

More detailed information regarding data privacy laws is available in the Student Handbook.

Student Right to Know Act

As required by federal law, the rates at which full-time students complete bachelor's degrees from the University within a specified period of time are available on request in the Office of Institutional Research or in the Admissions Office in Deputy Hall.

Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act

The Annual Security Report, published by the Department of Public Safety, is distributed to all students, prospective students, faculty, staff, and prospective employees, and is available upon request. The report, which is in compliance with the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, contains security policies and practices and campus crime statistics. The report may also be viewed online at <https://www.bemidjistate.edu/services/public-safety/>.

Victims' Bill of Rights

Provisions addressing the rights of victims of sexual violence or assault were added to existing Minnesota State University Board policy on September 30, 1992. The Victims' Bill of Rights policy applies to all students, faculty, and staff, of Bemidji State University and the Minnesota State Colleges and Universities system. The policy is printed in the Student Handbook and in the Annual Security Report.

Additional Information on Rights and Responsibilities

For further information on rights and responsibilities, refer to the following publications:

The Student Handbook (<https://www.bemidjistate.edu/offices/student-life-success/handbook/>)

Annual Security Report (Department of Public Safety, Walnut Hall, 218-755-3888)

Residential Life Handbook (Residential Life, Walnut Hall, 218-755-3750)

Department and program handbooks (department and program offices)

Academic Grievances

The grievance procedures for challenging grades and registering complaints about faculty, courses, teaching procedures, and related academic concerns are described fully in the Policies and Procedures section of the Student Handbook. This section also describes administrative procedures for dealing with non-academic complaints such as discrimination and harassment. The Handbook is accessible at <https://www.bemidjistate.edu/offices/student-life-success/handbook/>.

Written Student Complaints

The University maintains a record of written student complaints filed with the offices of the President, the Provost and Vice President for Academic Affairs, the Vice President for Student Life & Success, and the Vice President for Finance and

Administration. Summary information regarding student complaints to these administrative offices is provided to the Higher Learning Commission (North Central Association), upon their request and in compliance with data privacy policy, as a part of the University's periodic accreditation review.

Bemidji State University endorses the Minnesota State Legislature's ethic of zero tolerance toward sexual violence and sexual harassment. All members of the Bemidji State Community are expected to comply with the letter of protective laws, and to take the spirit of such laws to heart. For information on the consequences of violating regulations, and on reporting incidents, refer to sexual violence/harassment publications available at the Hobson Memorial Union Information Desk and other campus locations, or contact the Office of Student Life & Success, Deputy Hall, 218-755-2075; Department of Public Safety, Walnut Hall, 218-755-3888; the Human Resources Office, Deputy Hall, 218-755-3966, or the Student Health and Counseling Office, 218-755-2080.

Academic Progress and Status

Academic Status

Full-time and Part-time Status: A full-time undergraduate student is defined as one who has enrolled for a minimum of twelve (12) semester credits per semester. A full-time graduate student is defined as one who has enrolled for a minimum of nine (9) semester credits. Full-time status is required to qualify for insurance coverage and for certain federal and state financial aid programs (contact the Financial Aid Office). The Deans' List requires a minimum of twelve (12) semester credits of letter grades (A, B, C, D, or F). Semester credits audited are excluded when computing full-time status.

Academic Progress

I. MINIMUM GRADE POINT AVERAGE REQUIREMENT

A student will be suspended if the following grade point average (GPA) is not attained:

Semester Hours Attempted *	Minimum GPA Required**
0-15	1.50
16-30	1.75
31-59	1.90
60 & above	2.00

* Credits transferred from other institutions as well as credits attempted at BSU.

**Cumulated GPA at Bemidji State University (excludes grades earned at previously attended institutions).

II. MINIMUM PERCENT COMPLETION

A student is required to obtain a 66.67% course completion rate. Credits accepted in transfer are added to the BSU attempted credits and BSU earned credits, the calculated total earned credits is then divided by the calculated attempted credits to determine the percent completion rate.

III. PROCESS

Cumulative values are used in determining if academic progress has been met. Students not meeting the minimum grade point average or the minimum percent

completion requirements will be notified of their academic progress status. Academic progress statuses include Academic Warning and Academic Suspension. See below for the criteria for each academic progress status.

IV. DETERMINATION OF ACADEMIC PROGRESS STANDING

Academic Warning

The first time a student fails the minimum cumulative grade point average requirement or the cumulative percent completion requirement during the semester, the student will be placed on Academic Warning.

Students placed on academic warning are eligible for continued enrollment and are expected to make progress toward meeting the minimum cumulative grade point average requirement and minimum percent completion requirement.

REQUIREMENTS FOR ACADEMIC WARNING

Upon conclusion of the warning term, if the student has met BSU's minimum cumulative grade point average and cumulative percent completion, the student's warning status will be removed.

Academic Suspension

At the conclusion of the warning term, those students not meeting the minimum cumulative GPA or minimum cumulative percent completion requirement will be suspended for the minimum time period indicated below.

of Suspensions / Period of Suspension

1 / One semester

2 / One calendar year

3 or more / Two calendar years

V. REINSTATEMENT/APPEAL PROCESS

Students suspended from Bemidji State University who wish to return following the period of suspension must submit a petition to the Records & Registration Office. The petition should include information on the circumstances that affected past performance and a plan to be successful in achieving future academic progress goals. Reinstatement will be considered provided that certain conditions regarding academic deficiencies are agreed to in advance and reflected in the subsequent registration.

Those students on suspension due to poor academic performance may submit a petition/appeal prior to sitting out the term of suspension if extenuating circumstances impeded their academic performance.

All petitions are submitted to the Records & Registration Office to be reviewed by the Student Programs & Admissions (SPA) Committee. In order to allow sufficient time to review the petition, it is recommended that appeals are submitted at least two weeks prior to the start of the semester for which the appeal is being requested.

Academic Probation

Students with an approved petition for academic reinstatement will be placed on academic probation. While on probation, the student will be required to meet the terms that are set forth in the approved petition.

Note: Students returning to BSU after suspension will always be subject to the minimum percent completion rate and GPA requirements stated above.

Extended Absences and Grade Point Average (GPA) Adjustment

If students have less than a 2.00 cumulative GPA, they may petition the Records and Registration Office for an adjustment of the GPA under the following conditions:

A minimum of two (2) years absence from the University;

When the first twenty-four (24) credits have been successfully completed after returning to Bemidji State University with at least a 2.25 GPA for each semester of enrollment;

The GPA may be adjusted to a 2.00 level at the time the above criteria have been satisfied by disallowing sufficient previous course work in which low grades have been earned. This may result in reduced total semester credits earned toward graduation.

A student may be required to validate course work that was completed more than ten (10) years prior to graduation which is to be included in an undergraduate major. Such validation requires the approval of both the department chair and the dean of the major field. The department of the major program may require that students repeat such courses or take additional course work.

Academic Policies

Academic Year

Bemidji State University functions on an academic semester system consisting of fall and spring semesters of approximately sixteen (16) weeks each, and a summer term. Credits earned during summer term may be applied toward the fulfillment of degree requirements.

Exceptions and Course Substitutions

Any student who has cause to request an exception and/or course substitution to existing academic requirements must fill out the appropriate form to initiate the request. Students requesting an exception should submit a petition to the Student Programs and Admissions (SPA) Committee. Students requesting a course substitution should fill out a Course Substitution Form. The student's advisor and department chair should sign the form.

The Substitute/Transfer Equivalency Form and Academic Petition Form are available online at www.bemidjistate.edu/mybsu/resources/forms and at the Records and Registration Office and must be returned to that office after the appropriate signatures have been secured.

Withdrawal from School

Complete withdrawal from all courses must be finished prior to the withdrawal deadline published in the Academic Calendar, except in hardship cases.

A "W" grade is assigned when students formally withdraw from a course for which they are financially responsible.

Failure to withdraw officially will result in "F" grades.

For refund information, see Tuition and Fees.

Withdrawal may require repayment of financial aid and/or GI Bill® payments and reassessment of eligibility.

Instructions for Complete Withdrawal from School

If you are withdrawing from ALL of your classes, you are advised to complete the following steps:

If you would like to speak to a counselor or faculty member about any academic or personal circumstances related to your withdrawal:

You are encouraged to stop by the Student Center for Health & Counseling in Cedar Hall 1st floor or call 755-2053 to set up a confidential meeting, or contact your academic advisor.

If you live in the residence halls and/or have a meal plan:

Contact Residential Life in Walnut Hall, 755-3750, to terminate your Residential Life Contract and receive directions for proper checkout procedures.

If you received any type of financial aid:

Contact the Financial Aid Office in Deputy 114, 755-2034, to address the following: 1) repayment of aid received if you are withdrawing prior to 60% of the term being completed; 2) your eligibility for future financial aid when you return to school; and 3) exit student loan information.

If you received a Perkins Loan:

Contact the Loan Repayment Office in Deputy 203, 755-2095, for an exit interview and to update your Perkins Loan information. Knowing your rights and responsibilities in relation to this loan may help you in future funding and enrollment.

All students withdrawing must:

Contact the Cashier's Office in Deputy 202, 755-2046, to determine if you are to receive a refund or if a financial aid repayment is necessary.

Finally, you must withdraw from all your classes prior to the last day to withdraw as published in the semester class schedule by:

Web Registration: Go to the BSU homepage (www.bemidjistate.edu) under myBSU, then e-Services.

Questions? Contact the Records and Registration Office, records@bemidjistate.edu | 218-755-2020 | Deputy 101, or the Office of Student Life & Success, 218-755-2075 | Deputy 313.

Registration Policies

Registration is not complete until tuition charges and fees incurred at registration have been paid in accordance with University procedures. Preregistered students are requested to comply with the payment deadline specified in the semester class schedule. Bemidji State University complies with Minnesota Statute 197.775 which exceeds all criteria of Title 38 United States Code Section 3679(e).

Late registrants must obtain instructors' approval to register for classes.

A hold will be placed on registration for students who have not paid any tuition charges and fees by the published deadline in the Academic Calendar.

Students must obtain instructor approval to register for a class after the "last day to add" date published in the Academic Calendar.

Add, Drop or Change of Courses

The following guidelines apply unless otherwise noted in the current Class Schedule.

- Schedule changes made through the first 5 days of the semester may be made without financial obligation or appearing on the transcripts.
- After the 5th day of the term, students may withdraw from a course at any time up to 80% of the course meetings. After this time, no course may be dropped or withdrawn from except in cases with extenuating circumstances.
 - Courses dropped after the fifth day of classes will be assigned a "W" grade and do not qualify for a refund unless the student is withdrawing from

all courses in the term. <https://www.bemidjistate.edu/mybsu/registration/withdrawing-dropping/>

- If withdrawing from all courses in the term, please refer to the Tuition and Fees Webpage for details: <https://www.bemidjistate.edu/offices/business-services/tuition-fees/>
- An instructor may decide to drop a student who does not attend(log-in) the first week of a given course.
- Students must obtain instructor approval to register for a class after the "last day to add" date published in the Academic Calendar.
- A student wishing to withdraw from a course must follow the proper procedure using eServices.
- Withdrawal from classes could affect continued eligibility for financial aid and/or future registration.
 - For details contact the Financial Aid Office: financialaid@bemidjistate.edu

Repeating Courses

Apart from those courses whose descriptions state they may be repeated for additional credit, any course may be repeated once for the purpose of replacing the former grade with a new grade. The new grade, whether higher, the same, or lower, will be substituted for the original grade in computing the grade point average and total semester credits applied toward graduation. However, the original course and its grade will remain on the transcript. Classes originally taken for a letter grade must be repeated for a letter grade.

Prerequisites and Corequisites

A prerequisite is a course that must be taken or an experience that must be acquired prior to registration for the course that lists the prerequisite. Departments may waive prerequisites in specific cases.

A corequisite is a course that must be taken or an experience that must be acquired concurrent with enrollment in the course that lists the corequisite. Departments may waive corequisites in specific cases.

It is the prerogative of the instructor to drop students from a class if they have not completed the prerequisites and/or corequisites as listed in the college catalog.

Schedule Conflicts

A student may not register for two or more courses scheduled to meet at the same time during a semester without the consent of both instructors.

Registration

Admissions: <http://www.bemidjistate.edu/admissions/undergrad/>

Academic Year

Bemidji State University functions on an academic semester system consisting of fall and spring semesters of approximately sixteen (16) weeks each, and a summer term. Credits earned during summer term may be applied toward the fulfillment of degree requirements.

Exceptions and Course Substitutions

Any student who has cause to request an exception and/or course substitution to existing academic requirements must fill out the appropriate form to initiate the request. Students requesting an exception should submit a Refund/Drop/Withdrawal petition form to the Financial Appeals (FAC) Committee. Students requesting a course substitution should fill out a Substitute/Transfer Equivalency Form. The student's advisor and department chair should sign the form. Forms

should be returned to the Records and Registration Office after the appropriate signatures have been secured.

Schedule Conflicts

A student may not register for two or more courses scheduled to meet at the same time during a semester without the consent of both instructors.

Withdrawal from School

Complete withdrawal from all courses must be finished prior to the withdrawal deadline published in the Academic Calendar, except in hardship cases.

A "W" grade is assigned when students formally withdraw from a course for which they are financially responsible.

Failure to withdraw officially will result in "F" grades.

For refund information, see the section on Tuition and Fees.

Withdrawal may require repayment of financial aid and/or GI Bill® payments and reassessment of eligibility. For return to the University see "Readmission of Former Students" under the Admission section of this catalog.

Instructions for Complete Withdrawal from School

If you are withdrawing from ALL of your classes, you are advised to complete the following steps:

If you would like to speak to a counselor or faculty member about any academic or personal circumstances related to your withdrawal:

You are encouraged to stop by the Student Health and Counseling Center in Cedar Hall or call 755-2053 to set up a confidential meeting, or contact your academic advisor.

If you live in the residence halls and/or have a meal plan:

Contact Housing and Residential Life in Walnut Hall, 755-3750, to terminate your Residential Life Contract and receive directions for proper checkout procedures.

If you received any type of financial aid:

Contact the Financial Aid Office in Deputy 114, 755-2034, to address the following: 1) repayment of aid received if you are withdrawing prior to 60% of the term being completed; 2) your eligibility for future financial aid when you return to school; and 3) exit student loan information.

If you received a Perkins Loan:

Contact the Loan Repayment Office in Deputy 203, 755-2095, for an exit interview and to update your Perkins Loan information. Knowing your rights and responsibilities in relation to this loan may help you in future funding and enrollment.

All students withdrawing must:

Contact the Cashier's Office in Deputy 202, 755-2046, to determine if you are to receive a refund or if a financial aid repayment is necessary.

Finally, you must withdraw from all your classes prior to the last day to withdraw as published in the semester class schedule by:

Web Registration: Go to the BSU homepage (www.bemidjistate.edu) under

myBSU, then e-Services.

Questions? Need assistance? Check out the last few pages of the class schedule for further information or stop by the Records and Registration Office, Deputy 101, or the Office of Student Life & Success, Deputy 313.

Senior Citizens

<https://www.bemidjistate.edu/academics/distance/student-resources/registration/>

Grades & Grading

Grade Point Average (GPA)

1. The grade point average is computed by dividing the number of quality points earned by the number of semester credits attempted for which grades of A, B, C, D, or F were given. Quality points for each course are calculated by multiplying the number of semester credits by the points awarded for the grade achieved in that course. Grade points are shown under "Grade Types" below.

For example, a student who received an A, two B's, and one C, each grade from a three semester credit course, would have the following GPA:

A x 3 semester credits = 4 x 3 = 12 quality points
B x 3 semester credits = 3 x 3 = 9 quality points
B x 3 semester credits = 3 x 3 = 9 quality points
C x 3 semester credits = 2 x 3 = 6 quality points

12 semester credits - 36 quality points
36 quality points divided by 12 semester credits = 3.00 GPA

2. Only the most recent grade of a repeated course will be used in computing the GPA. The first grade will be removed from the computation of the GPA once a Repeat Form is submitted to the Records and Registration Office. (See "Repeating Courses".)

3. Only credits taken at Bemidji State University or on the Common Market Program will be used in computing the GPA. (See "Common Market Program" under Academic Degrees and Programs.)

4. All BSU courses taken in the major and minor areas count in the computation of those GPAs and, therefore, must be taken for a letter grade.

Grade Types

The work of a student is recorded as follows:

A+ (4.0 quality points)
A (4.0 quality points) | excellent
A- (3.67 quality points)
B+ (3.33 quality points)
B (3.0 quality points) | very good
B- (2.67 quality points)
C+ (2.33 quality points)
C (2.0 quality points) | average
C- (1.67 quality points)
D+ (1.33 quality points)
D (1.0 quality point) | passing
D- (0.67 quality point)
F (0.0 quality points) | failure
I - incomplete*
IP - in-progress*

Z - no grade reported by the instructor
NC - no credit*
P - pass*
S - satisfactory*
U - unsatisfactory*
AU - audit *
W - withdraw (drop)*
EX -exchange*

*Additional information in "Grade Explanations" below.

The records of all courses completed prior to spring quarter 1975 are microfilmed and stored at Northwest Technical College, Bemidji, MN. Subsequent grade records are stored and backed up on computer disks.

Grade Explanations

I - Incomplete: To be used when prior arrangement is made between the student and the instructor or in the case of a verifiable emergency situation. An incomplete must be resolved by the end of the next regular term; otherwise, the grade is a failure and is so recorded. Any exception must be petitioned and approved by the Student Program and Admission Committee (petition forms in the Records and Registration Office). After one (1) year these grades may be discounted from the grade point average only when the courses are repeated. All "I" (Incomplete) grades must be resolved before a degree will be conferred.

IP - In-Progress: The student may, with the instructor's prior approval, be granted a grade of "IP" (In Progress) for an independent study project (e.g., thesis or research paper) or special course for which completion of the course within one semester may not normally be anticipated. All "IP" (In Progress) grades must be removed before a degree will be conferred.

S or U - Satisfactory or Unsatisfactory: Some courses, such as student teaching, internships, and some workshops, are offered only with the "S or U" grade designation. Letter grades are not available for these courses.

P, NC, or A - Pass, No Credit, or A Option: A student may enroll in certain courses on a Pass/No Credit (P/NC) basis by petitioning the Records and Registration Office. No letter grade is assigned unless a grade of "A" is achieved and then that grade is so recorded. Semester credits earned on a Pass/No Credit basis are not included in the computation of the student's grade point average (GPA), but the pass semester credits count toward graduation. If an "A" grade is achieved, it is included in the GPA computation. Pass/No Credit grades become a part of the student's permanent record. The option to register on a Pass/No Credit basis may be exercised until the end of the tenth class day of a semester (fourth day of class during summer term). The Pass/No Credit registrant is obligated to complete all course requirements and to take all examinations. The following restrictions apply to Pass/No Credit registration:

- Pass/No Credit courses may not be used as part of a major, a minor, an emphasis, or Liberal Education.
- Professional Education courses and courses required for teacher licensure may not be taken Pass/No Credit.
- Courses offered on a Satisfactory/Unsatisfactory basis may not be taken Pass/No Credit.
- No more than one class per semester (regardless of semester credit) may be taken Pass/No Credit.
- No more than thirteen (13) semester credits may be accrued for graduation using the Pass/No Credit grading option.

- A student who is on academic probation may not register for any course on a Pass/No Credit basis, unless it is in excess of the twelve (12) semester credits of letter grade (A, B, C, D, or F) course work required.
- No class taken initially for a letter grade may be repeated on a Pass/No Credit basis.
- A petition to take a class on a Pass/No Credit must be filed with the Records Office by the 15th day of the semester.

AU-Audit Option: Students who desire to take a course without credit and without regard for the usual prerequisites may enroll as "audit." These students must notify the instructor that they are auditing. Students taking a course as 'audit' must pay the regular tuition and fees required of other students, but they are not permitted to take examinations. Audited courses do not earn credits and therefore cannot be counted toward graduation requirements or as part of the student's course load. Grades are recorded only as "AU" - audit. A petition to take a class as 'Audit' must be filed with the Records Office by the 15th day of the semester.

W-Withdraw: Given to students who withdraw prior to the withdrawal deadline published in the Academic Calendar from a class for which they are financially responsible. No one may withdraw from class after that time except in special hardship cases. (Course withdrawal dates can be seen when selecting the course title within eServices/Courses & Registration /Search for a Course. Please contact the Records Office with questions.)

EX-Exchange: Eligible students have the option of taking courses at other state universities while maintaining their residency at Bemidji State University. These courses are designated with an EX grade and are considered "residence credits" for all other university policies (GPA computation, residency requirements, etc.).

Graduation

Requirements for All Baccalaureate Degrees (B.A., B.F.A., B.S., B.A.S.)

1. Scholarship

- General Scholarship - minimum cumulative 2.00 ("C") GPA. Some programs require higher GPAs. Please refer to the appropriate catalog sections.
- Major Field - minimum 2.25 GPA - the major field includes all courses taken at Bemidji State University in the area of study. Some majors require higher GPAs. Please refer to the appropriate catalog sections.
- Minor Field - minimum 2.00 GPA. Some minors require higher GPAs. Please refer to the appropriate catalog sections.

2. Graduation plan forms should be submitted to the Records Office for approval two (2) semesters before graduation.

3. All financial obligations, incomplete grades, or other course problems must be cleared by the end of the last semester before graduation.

4. Departmental approval for a major or minor in the department.

5. Successful completion of one-hundred twenty (120) semester credits minimum for all B.A., B.F.A., B.S., and B.A.S degrees, (select majors up to 136 minimum credits). Note: No credits from courses numbered 0800-0899 may be used to fulfill graduation requirements. A maximum of four (4) credits from courses numbered 0900-0999 may be used to fulfill graduation requirements.

6. A minimum of forty (40) semester credits at the 3000 level or above must be

completed through four-year degree-granting institutions.

7. Thirty (30) residence semester credits must be completed through Bemidji State University.

8. Transfer Students: At least one-third of the credits to be included in the major, minor and/or certificate must be successfully completed at Bemidji State University. Some minors, and/or certificates require more than one-third of the credits be completed at Bemidji State University.

9. Students are encouraged to discuss with their advisor the option of a second major, minor, or field of emphasis that might strengthen or complement their major.

10. Multiple credentials: Any additional major, minor or certificate in a degree must be significantly different from the majors and any other minors or certificates in the degree. Unless stated otherwise in the catalog significantly different means at least six credits of course work that is not used to meet the requirements of any other single major, minor, or certificate in the degree.

IMPLEMENTATION AND TRANSITION PERIOD:

This policy goes into effect Spring 2022. The prior version of this policy also remains in effect as an option through Fall 2023. The prior version is only used if a student graduating during this transition period (Spring 22 – Fall 23) does not meet the requirements under the new policy but does meet the requirements under the prior version of the policy.

11. For any degree program, completion of a major, minor or a certificate in the same discipline (as determined by the department and college) is not permitted.

12. Liberal Education requirements or completion of the Minnesota Transfer Curriculum.

13. Contact the major department for specific information on screening criteria for entry into the major program.

Requirements for the Associate of Arts (A.A.) Degree

1. Sixty (60) semester credits minimum, meeting all Liberal Education requirements plus electives. All transfer students must complete a minimum of one semester at Bemidji State University. In addition, twenty (20) semester credits must be completed at Bemidji State University.

2. Minimum 2.00 ("C") GPA.

Multiple Majors

Students are encouraged to pursue more than one major to enhance their educational background. A student completing two or more majors with different degree designations will be awarded the degree associated with the primary major. However, if one of the majors is in a field of professional teaching, the B.S. degree shall be awarded. Graduation planning forms must be filed in the Records and Registration Office for all majors.

Multiple Degrees

A student completing two or more majors with different degree designations (B.A., B.F.A., B.S., or B.A.S. only) who wishes both degrees will be required to complete at least thirty (30) additional semester credits beyond the first degree.

An A.A. degree will not be awarded simultaneously with or subsequent to a four-year degree.

A student who holds a baccalaureate degree from another regionally accredited institution may earn an additional baccalaureate degree from Bemidji State University by completing all of the course requirements for that degree with

at least thirty (30) additional semester credits in residence at Bemidji State University.

Policy of Catalog Use

Students working toward an associate or baccalaureate degree may elect to fulfill degree requirements as outlined in any one catalog in effect during the dates of registration for resident credit at Bemidji State University. Students who have not attended the University for more than five (5) consecutive years prior to re-enrolling must meet all degree requirements as outlined in the catalog in effect at the date of their re-enrollment or any subsequent catalog in effect during their dates of registration for University credit. Students admitted to the University directly from a Minnesota community college may, provided not more than two (2) consecutive semesters have elapsed since their attendance at the community college, elect to fulfill degree requirements as outlined in any BSU catalog in effect during their dates of attendance at the Minnesota community college, or any subsequent catalog in effect during their dates of registration at Bemidji State University. This provision does not apply to State Teaching Licensure requirements.

Students should decide as early as possible which catalog is to be used in meeting degree requirements, and follow the curriculum outlined therein.

Graduation Honors, Dean's List and President's Honor Roll

Deans' List

The Dean's List, published at the end of each semester, contains the names of students who have earned a GPA between 3.5—3.99*. To be eligible, students must have completed a minimum of twelve (12) semester credits of letter-graded (A, B, C, D, F) coursework; pass/no credit coursework is not included.

Dean's List recognition is noted on a student's official transcripts and honorees receive a letter from the Provost congratulating them on their achievement. The Office of Communications & Marketing (218-755-2041) notifies the hometown newspaper of Dean's List honorees within six weeks after grades are posted. Hometowns are taken from student-provided permanent address information on file with the BSU Records Office.

Questions about the Dean's List may be directed to the Division of Academic and Student Affairs at 218-755-2015.

*For students admitted prior to fall 2014, the minimum GPA is 3.25.

President's Honor Roll

President's Honor Roll Criteria

Bemidji State University's President's Honor Roll recognizes students who during each semester who have earned a grade-point average of 4.0 for 12 or more semester credits of letter-graded course work. Courses taken pass/no credit are not counted toward the Honor Roll.

Students who are recognized on the Honor Roll receive a letter and a certificate, which is mailed by the Office of the President to the student's permanent mailing address as listed in BSU's official student record system. Honor Rolls are announced separately for the fall and spring semesters each year, and announcements typically occur approximately six weeks after the semester ends.

BSU's Office of Communications & Marketing also sends notification of Honor

Roll awards to newspapers serving the hometown listed in a student's permanent address. This also typically happens approximately six weeks after the end of a semester. The complete President's Honor Roll is also published on the BSU website.

Questions about the President's Honor Roll list may be directed to the Office of the President at (218) 755-2011 / (218) 755-2017.

Graduation Honors

Computation of Graduation Honors

For instructions in calculating grade point average, see Grades and Grading later in this section.

Eligibility of graduation honors is based on residence credits and residence (BSU) grade point average.

- 1. Students completing a minimum of fifty (50) semester credits in residence of letter-graded (A, B, C, D, F) course work with a minimum BSU cumulative GPA of 3.50 are eligible for graduation honors. Graduation honors designations:

Summa cum laude: at least 3.90 GPA.
Magna cum laude: at least 3.70, but less than 3.90 GPA.
Cum laude: at least 3.50, but less than 3.70 GPA.

- 2. Students who have earned a total of thirty (30) to forty-nine (49) credits in residence at Bemidji State University of letter-graded (A, B, C, D, F) course work may be considered for graduation honors if their cumulative

BSU grade point average (GPA) is 3.60 or higher.

Graduation honors designations:

Summa cum laude: at least 3.90 GPA.
Magna cum laude: at least 3.75, but less than 3.90 GPA.
Cum laude: at least 3.60, but less than 3.75 GPA.

- 3. Honors at the time of the commencement ceremony are computed on the cumulative grades at the end of the semester prior to commencement exercises. However, actual degree honors will be based on the cumulative GPA at the time the degree is awarded.
- 4. Incompletes are computed as "F" grades.

Understanding Degrees and Programs

Academic Degrees and Programs

Records and Registration Office
101 Deputy Hall
218-755-2020
records@bemidjistate.edu

Bemidji State University offers programs and awards degrees under the authority of the Minnesota State Colleges and Universities Board. For bachelor's degrees, at least forty (40) of the required credits for the degree shall be upper division credits; thirty (30) credits shall be taught by the faculty recommending the degree. Transfer students: At least one-third of the credits to be included in the major must be successfully completed at Bemidji State University.

Bachelor of Arts (B.A.)

The Bachelor of Arts degree (120 credits minimum) combines liberal education with sufficient specialization for most occupations in the arts, sciences, industry, and government service. It is an appropriate degree for students planning graduate study in the arts, humanities, and the behavioral and social sciences, and for those planning to enter certain professional schools, such as law or theology. Students planning to major in the sciences should discuss their professional career goals with a faculty advisor before deciding whether to seek a B.A. or a B.S. degree in their major subject.

Bachelor of Fine Arts (B.F.A.)

The Bachelor of Fine Arts degree (120 semester credits minimum) combines liberal education with specialization in the arts. It is an appropriate degree for students planning careers or graduate study in their fields.

Bachelor of Science (B.S.)

The Bachelor of Science degree (120 credit minimum) provides intensive concentration in a specific area and a foundation in the liberal arts. It is an appropriate degree for students pursuing entry-level positions in a variety of occupations and professions. Completion of this degree with a major in one of the numerous teacher education programs and passing scores on required professional tests makes one eligible to apply for teacher licensure in Minnesota. Such a degree holder may have a non-teaching minor recorded on the permanent transcript, but it would not appear on the teaching license. This degree appropriately prepares students whose future goals include graduate studies. Students planning to major in the sciences should discuss their professional career goals with a faculty advisor before deciding whether to seek a B.A. or a B.S. degree in their major subject.

Bachelor of Applied Science (B.A.S.)

The Bachelor of Applied Science degree (120 credits minimum) provides thorough study in a technical area and a foundation in the liberal arts. It is an appropriate degree for students pursuing employment in a technical field in industry. This degree is especially ideal for students who transfer from a Technical College.

Associate of Arts (A.A.)

Bemidji State University offers a curriculum (60 credits minimum) that leads to a two-year Associate of Arts degree in Liberal Education. With proper advising, this program may be used as the basis for continuing on in a four-year bachelor's degree program.

Teacher Licensure Programs

Licensure programs are offered for students currently enrolled in or who have completed a Bachelor of Science degree with teacher licensure (see "Major Fields" for list).

Consult with a faculty advisor to plan a program that will lead to the completion of a licensure program and to follow the University's recommendation for endorsement.

Persons who have a valid teaching license may update or add on to their licensure fields in many of the special areas noted in the Professional Education section of this catalog or the BSU Graduate Catalog. Upon completion of a program and the required professional tests, a license application, available through the Minnesota Department of Education website (<http://education.state.mn.us/mde/index.html>), should be completed. For further information about post-baccalaureate programs in Professional Education, see the Graduate Catalog or contact the Office of Graduate Studies.

Honors Program

A.C. Clark Library 229
218-755-3355

The Honors Program is challenging and rigorous. It is intended for outstanding students who wish to develop flexible, independent, and creative minds. Entrance requirements are flexible, but most students in the Honors Program qualify by graduating in the top 10 percent of their high school class or by scoring above a preset minimum on standardized tests such as the ACT or SAT. Interested students should contact the director of the Honors Program. See also entry in Section VII.

Internship Program

Career Services, 202 Decker
218-755-2038

The Internship Program provides students with the opportunity to work under a carefully planned and approved program with a participating firm or organization for one or more semesters of an academic year or during the summer. This program affords the student an opportunity to perform an internship in the world of work while a student. It also affords the agencies involved an opportunity to cooperate with the University in preparing students for employment after graduation.

Most internships are arranged during the student's junior or senior year directly through their departments. Explore the "Students" link on the Career Services Web site (at www.bemidjistate.edu/students/services/career/) for postings of internship openings, an Internship Database, and schedule of internship workshops and fairs. Also, for more information, contact Career Services.

Servicemember's Opportunity College

Extended Learning, 105 Deputy Hall
218-755-2068

Bemidji State University has been identified by the American Association of Community and Junior Colleges as a Servicemember's Opportunity College (SOC) providing educational assistance to active duty servicemembers. Contact the SOC representative, Extended Learning, Deputy Hall, Bemidji State University, 1500 Birchmont Drive, Bemidji, MN 56601-2699.

Common Market Program

Records and Registration Office, 101 Deputy Hall
218-755-2020
records@bemidjistate.edu

This is a cooperative, system-wide program in which students may attend other Minnesota State universities, one institution for one semester or two institutions for a total of two semesters. The courses and semester credits are transferred as residence semester credits and are computed in the grade point average. Contact the Records and Registration Office for further information.

Graduate Studies

Memorial 310
218-755-2027

Understanding University Credit

Semester Credits

The unit of credit is the semester credit, representing the satisfactory completion of a subject pursued for a period of not less than fifty (50) classroom minutes per week for the semester, or two periods (100 minutes) of laboratory work per week

for the semester, or the equivalent.

Students who transfer quarter credits are awarded .67 semester credits for every quarter credit accepted.

Time expectations:

Instruction Delivery Mode	Hours of in class "Seat Time" per credit	Expected hours of course work outside of class per credit
Lecture	1 hour/credit/week for 15 weeks	2 hours/credit/week for 15 weeks
Lab	2 hours/credit/week for 15 weeks	1 hours/credit/week for 15 weeks
Internships/ Practicums	3 hours/credit/week for 15 weeks	As required
Online		3 hours/credit/week for 15 weeks

Hybrid courses and courses offered in condensed formats need to make appropriate adjustments. See Minnesota State Policies/Procedure 3.36/3.36.1

Class Level

A student must satisfactorily complete the following number of semester credits in order to attain the corresponding class level:

- 1-29 Freshman
- 30-59 Sophomore
- 60-89 Junior
- 90 & above Senior

Maximum Credit Load

The normal semester load for on- or off-campus students is sixteen (16) semester credits. Students who have less than an overall GPA of 3.00 may not enroll for more than eighteen (18) semester credits without the approval of an advisor. Approval should be obtained prior to the beginning of classes. A student must petition the Student Programs and Admissions (SPA) committee for permission to register for more than 22 credits in a semester.

The normal summer term load is from eight (8) to sixteen (16) semester credits. The minimum load for full-time student status in the summer is twelve (12) credits.

Residence Credit

Residence credits are semester credits earned on the Bemidji State University campus, through External Studies, or at off-campus centers that meet University extension credit requirements.

Students earning a B.A., B.F.A., B.S., or B.A.S. degree shall earn a minimum of thirty (30) semester credits of residence credit during the junior and senior years.

A minimum of forty (40) semester credits at the 3000 level or above from a senior institution is required. Students earning a two-year degree shall earn at least twenty (20) semester credits of residence credit.

0800-0999 Credits

No credits from courses numbered 0800-0899 may be used to fulfill graduation requirements. A maximum of four (4) credits from Bemidji State University courses numbered 0900-0999 may be used to fulfill graduation requirements. All 0800-0899 and 0900-0999 credits appear on student transcripts, and are included in the cumulative GPA.

Extended Learning

Credits earned through Extended Learning are considered Bemidji State University residence credits.

Correspondence Credits

Correspondence credits are semester credits earned in courses taken by correspondence through an accredited institution of higher education.

Non-Collegiate and Experiential Learning

Extended Learning, 105 Deputy Hall
218-755-2068

The University's program for the evaluation of non-college and experiential learning which occurred prior to or outside a formal academic institution enables students to enrich or accelerate their program of study. Such learning may be the result of a variety of life experiences, such as continuing education, work experience, or individual study. Experiential university credit is not awarded on the basis of experience alone, but for the achievement of an advanced level of knowledge and/or skill.

The methods of determining either recognition or university credit are predicated on prior learning that is considered to be at a university level. Each department determines the criteria, if any, which if satisfied, will result in the awarding of university credit. The departments have the prerogative of determining which courses, if any, may be evaluated for non-college or experiential learning.

Standardized Proficiency Examinations

Office of Admissions, 102 Deputy Hall
218-755-2040

Standardized proficiency examinations are recognized by many of the departments and include the College Board Advanced Placement Examinations (AP); the College-Level Examination Program (CLEP) subject examinations; the Defense Activity for Non-Traditional Education Support (DANTES) subject standardized tests; the International Baccalaureate (IB) higher level selected subsidiary level results and the diploma; the College Board Scholastic Aptitude Achievement Test; and various military service school transcripts (DD-214 Forms). No course may be repeated or grade raised by such an examination.

Credit by Special Examination

Requests to take a special examination must be made to the course instructor. The opportunity to take a special exam is limited to students enrolled for residence

credits. No grade may be raised or repeated by such an examination. The "Request to Take Special Exam" form is available from the Records and Registration Office (101 Deputy Hall, 218-755-2020, records@bemidjistate.edu).

Transfer of Credits to Other Institutions

Credits earned at Bemidji State University are accepted by other colleges and universities, if they are applicable to the student's undergraduate or graduate program.

As the University cannot certify credit earned at other institutions, copies of transcripts other than those from Bemidji State University will not be issued.

(related link > [Transfer of Credits in Admissions](#))

Understanding University Courses

Common Course Outlines

Common course outlines are available in the course catalog under each course description. A common course outline is intended to provide additional course information that may be used to evaluate a course for transfer.

Course Levels by Number

Courses numbered 0800 through 0899 are considered college preparation courses. These will appear on transcripts and be included in the cumulative grade point average (GPA) for the purpose of some academic progress reports, but will not be included in the total credits or the cumulative GPA required for graduation.

Courses numbered 0900 through 0999 are considered developmental courses. A maximum of four (4) semester credits will be included in the total semester credits for graduation. Courses taken in excess of the first four (4) semester credits will be included in the cumulative GPA for academic progress and suspension but will not be included in the total semester credits or GPA required for graduation.

Courses numbered 1000 to 1999 are freshmen-level courses and are considered "lower division" courses.

Courses numbered 2000 to 2999 are sophomore-level courses and are considered "lower division" courses.

Courses numbered 3000 to 3999 are junior-level courses and are considered "upper division" courses. Some of these courses also carry numbers in the 5000 series, which indicates they are open to graduate students.

Courses numbered 4000 to 4999 are senior-level courses and are considered "upper division" courses. Some of these courses also carry numbers in the 5000 series, which indicates they are open to graduate students.

Courses numbered 5000 to 5999 are double-numbered courses (with courses in the 3000-4999 series) and are open to graduate students (see Graduate Catalog).

Courses numbered 6000 to 6999 are exclusively for graduate students (see Graduate Catalog).

Freshmen registering for courses numbered above 2999 should consult with their advisor or the instructor of the course.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
Arranged individual study.

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
Arranged group study.

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
A course proposed for inclusion in the University curriculum. May not be offered more than two times as an experimental course.

1940, 2940, 3940, 4940 IN-SERVICE COURSE
A course for practitioners seeking additional training or expertise in their current vocation or profession. The in-service format typically includes an educational experience in which a University faculty member and a group of students concentrate on working toward the resolution of a specific problem.

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
An intense, credit-granting academic experience of short duration (usually from two days to two weeks) that is not listed in the current University curriculum. Provides for the practical application of theoretical learning within a group setting, and may include the development of methods and skills and the discussion of ideas and principles.

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
A course intended for specific groups or organizations outside the University community.

1970, 2970, 3970, 4970 INTERNSHIP
Graded Satisfactory/Unsatisfactory only.

Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

1980, 2980, 3980, 4980 RESEARCH
Research carried out by the student that is based on appropriate methodology and scholarship.

1990, 2990, 3990, 4990 THESIS
A thesis written by the student that reports extensive original research carried out by the student and demonstrates appropriate methodology and scholarship.

Administration

Dr. John Hoffman, President

Accounting

Accounting is an information system that represents the economic resources and responsibilities of business or non-business enterprises. Monitored over time, it is used as a decision-making tool for the allocation of resources and evaluation of responsibilities.

Accounting information impacts major economic decisions that have national and even global impact. The Accounting program teaches analytical, theoretical, communication, and leadership skills necessary for effective accounting and for advancement in public, private, government, and fraud examination careers.

Upon graduation, Accounting majors may write the Uniform Certified Public Accounting Examination, the Certified Internal Auditor Examination, the Certified Management Accountant Examination, and/or the Certified Fraud Examination. Certificates are issued upon attainment of a satisfactory score and completion of appropriate credits and the appropriate work experience.

Programs

- Accounting, B.S. *major*
- Accounting *minor*
- Fraud Examination *minor*
- Accounting Systems and Analytics *cert*
- Fraud Examination *cert*

Career Directions

Financial Accounting
Fraud Examination
Government Accounting
Management Accounting
Public Accounting (Certified Public Accountant)

Preparation

Recommended High School Courses

- Mathematics
- English

Accounting, B.S. *major*

Required Credits: 71

Required GPA: 2.25

I REQUIRED COURSES

Complete the following courses:

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- ACCT 3110 Accounting Systems (3 credits)
- ACCT 3201 Intermediate Accounting I (3 credits)
- ACCT 3202 Intermediate Accounting II (3 credits)
- ACCT 3301 Cost Accounting I (3 credits)
- ACCT 3322 Business Law (3 credits)
- ACCT 3404 Income Taxes I (3 credits)
- ACCT 4110 Advanced Accounting (3 credits)
- ACCT 4160 Business Communication (3 credits)
- ACCT 4210 Auditing I (3 credits)
- ACCT 4600 Senior Seminar: Accounting (1 credit)
- BUAD 2220 Legal Environment (3 credits)
- BUAD 2231 Business Statistics I (3 credits)
- BUAD 2280 Computer Business Applications (3 credits)
- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3771 Financial Management (3 credits)
- BUAD 4559 Strategic Management (3 credits)
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

Select 2 courses:

- ACCT 4150 Advanced Accounting Systems (3 credits)
- ACCT 4170 Governmental and Not-for-Profit Accounting (3 credits)

- ACCT 4302 Strategic Cost Management (3 credits)
- ACCT 4320 Accounting Analytics (3 credits)
- ACCT 4405 Income Taxes II (3 credits)

Select 1 course:

A MATH course from Liberal Education Goal Area 4 at a higher level than College Algebra may be substituted for this requirement

- MATH 1170 College Algebra (4 credits)

Accounting *minor*

Required Credits: 21

Required GPA: 2.00

I REQUIRED COURSES

Complete the following courses:

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- ACCT 3201 Intermediate Accounting I (3 credits)
- BUAD 2280 Computer Business Applications (3 credits)

II REQUIRED ELECTIVES

Select 3 courses from the following:

- ACCT 3117 Managerial Analysis (3 credits)
- ACCT 3140 Fraud Examination (3 credits)
- ACCT 3202 Intermediate Accounting II (3 credits)
- ACCT 3301 Cost Accounting I (3 credits)
- ACCT 3404 Income Taxes I (3 credits)

- ACCT 4110 Advanced Accounting (3 credits)
- ACCT 4405 Income Taxes II (3 credits)

BUSINESS ADMINISTRATION MAJORS MINORING IN ACCOUNTING

Business Administration majors minoring in Accounting must select 9 semester credits in the minor which are not repeated in their major.

Fraud Examination *minor*

(The Fraud Examination minor is not available to students pursuing a Fraud Examination certificate.)

Required Credits: 21
Required GPA: 2.00

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- ACCT 3140 Fraud Examination (3 credits)
- BUAD 3520 Business Ethics (3 credits)
- CRJS 1120 Criminal Justice and Society (3 credits)

II REQUIRED ELECTIVES

SELECT ONE COURSE FROM EACH OF THE FOLLOWING GROUPS:

GROUP A

- ACCT 3117 Managerial Analysis (3 credits)
- ACCT 3118 Financial Statement Analysis (3 credits)
- ACCT 4210 Auditing I (3 credits)

GROUP B

- BUAD 2220 Legal Environment (3 credits)
- CRJS 3358 Criminal Law (3 credits)

ACCOUNTING, BUSINESS ADMINISTRATION, CRIMINAL JUSTICE

Accounting, Business Administration, and Criminal Justice majors who are minoring in Fraud Examination must select 9 semester credits in the minor that are not repeated in the major.

Accounting Systems and Analytics *cert*

Required Credits: 28
Required GPA: 2.00

I REQUIRED COURSES

Complete the following courses:

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- ACCT 3110 Accounting Systems (3 credits)
- ACCT 4150 Advanced Accounting Systems (3 credits)
- ACCT 4320 Accounting Analytics (3 credits)
- BUAD 2280 Computer Business Applications (3 credits)
- BUAD 2231 Business Statistics I (3 credits)
- BUAD 3232 Business Statistics II (3 credits)
- MATH 1170 College Algebra (4 credits)

Fraud Examination *cert*

(The Fraud Examination certificate is not available to students pursuing a Fraud Examination minor.)

Required Credits: 21
Required GPA: 2.00

I REQUIRED COURSES

Required courses:

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- ACCT 3140 Fraud Examination (3 credits)
- BUAD 3520 Business Ethics (3 credits)
- CRJS 1120 Criminal Justice and Society (3 credits)

II REQUIRED ELECTIVES

Select one course from each of the following groups:

GROUP A:

- ACCT 3117 Managerial Analysis (3 credits)
- ACCT 3118 Financial Statement Analysis (3 credits)
- ACCT 4210 Auditing I (3 credits)

GROUP B:

- BUAD 2220 Legal Environment (3 credits)
- CRJS 3358 Criminal Law (3 credits)

ACCOUNTING, BUSINESS ADMINISTRATION, CRIMINAL JUSTICE

Accounting, Business Administration, and Criminal Justice majors pursuing a certificate in Fraud Examination must select 9 semester credits in the certificate that are not repeated in the major.

Accounting Courses

ACCT 1100 Financial Literacy (3 credits)

An introduction to the use and interpretation of financial information needed to be a functioning member of society. Topics include business and non-business financial statements, compound interest related to loans and investment opportunities, banking transactions, personal financial statements, and the basic impact of Federal taxes on personal financial decisions. Prerequisite: Completion of a Goal Area 4 course. Liberal Education Goal Areas 5 & 9. NOTE: On-campus/Online course rotation information can be found at: <https://www.bemidjistate.edu/academics/departments/accounting/student-resources/course-rotation/>

ACCT 1200 Introduction to Accounting & How to file your own Tax Return (3 credits)

This course is an introduction to basic concepts and standards underlying financial accounting systems using GAAP Principles including analyzing, summarizing, reporting, and interpreting financial information. Topics will include: ethics in accounting, accounting cycle, revenue recognition, the accounting equation, double entry framework, journalizing and posting transactions, adjusting entries, financial statements, the closing process, and U.S. Tax Bracket history and how to file a Federal 1040 Tax Return.

ACCT 2101 Principles of Accounting I (3 credits)

Modern accounting concepts including financial statement preparation, internal controls, short and long term assets, and introduction to corporations. Prerequisite(s): MATH 1170 or consent of instructor.

ACCT 2102 Principles of Accounting II (3 credits)

An introduction to management accounting topics, including costing systems, cost-volume-profit analysis, incremental analysis, standard cost and variance analysis, budgetary planning and control, and capital budgeting. Prerequisite(s): ACCT 2101.

ACCT 2590 Sustainability Measures (1 credit)

An Exploration of how organizations can meet the triple bottom line: strong profits, healthy environment, and vital communities.

ACCT 3110 Accounting Systems (3 credits)

The theory and methodology of analyzing, designing, and implementing accounting information systems. Emphasizes integrated general ledger application software and the managerial aspects of systems design. Prerequisites: ACCT 2102 and BUAD 2280.

ACCT 3117 Managerial Analysis (3 credits)

Explanation of how accounting data can be interpreted and used by management in planning and controlling business activities. Course is not open to accounting majors. Course is not acceptable as a business administration elective if Cost Accounting I or II is completed. Prerequisite: ACCT 2102.

ACCT 3118 Financial Statement Analysis (3 credits)

Comparisons of items on the financial statements of modern business concerns to determine their strengths and weaknesses. Methods include vertical and horizontal analysis, ratio analysis, and the interpretation of financial statement disclosures. Not recommended for accounting majors. Prerequisite: ACCT 2102.

ACCT 3140 Fraud Examination (3 credits)

Principles and methodology of fraud prevention, detection, and deterrence. Topics include the nature of fraud and the fraud triangle, the symptoms of fraud, and different fraud schemes, including financial statement fraud, skimming, disbursement schemes, billing schemes, misappropriations, and corruption. Prerequisites: ACCT 2101 and ACCT 2102.

ACCT 3201 Intermediate Accounting I (3 credits)

Emphasizes the accounting theory upon which financial accounting is based by studying the fundamental interrelationships within the financial statements. Also includes detailed study of current and long-term assets. Prerequisites: ACCT 2101, ACCT 2102, and MATH 1170.

ACCT 3202 Intermediate Accounting II (3 credits)

A detailed study of the statement of cash flows plus several complex financial accounting topics. Prerequisite: ACCT 3201 and BUAD 2280.

ACCT 3301 Cost Accounting I (3 credits)

Fundamentals of cost accounting information systems, including cost-volume-profit relationships, costing in the service and manufacturing sectors, cost behavior, and budget variance analysis. Prerequisites: ACCT 2102, ENGL 1151, and (ENGL 2152 or ENGL 3150), or consent of instructor.

ACCT 3322 Business Law (3 credits)

A study of sales, secured transactions, negotiable instruments, accountants' legal liability, securities regulation, debt or/creditor relations, antitrust, property, consumer protection, environmental protection, and trusts and estates. Prerequisite: BUAD 2220.

ACCT 3404 Income Taxes I (3 credits)

The federal income tax laws and regulations concerning taxable income and computation of tax as they affect individuals. Prerequisites: ACCT 2102, ENGL 1151, and ENGL 2152 or ENGL 3150, or consent of instructor.

ACCT 4110 Advanced Accounting (3 credits)

Accounting for partnerships, combined corporate entities, consolidated statements, foreign currency transactions, interim financial statements, segment reporting, fiduciary accounting, and SEC reporting. Prerequisite: ACCT 3202.

ACCT 4150 Advanced Accounting Systems (3 credits)

In-depth coverage of advanced accounting information systems topics that will be critical for future accounting professionals. These include awareness and exposure to SEC coding - XBRL, the use of data analytics in accounting for management support, auditing engagements, internal control tools, etc., advanced excel skills such as pivot tables and lookups, and exposure to an Enterprise Resource Planning system (ERP) used by the vast majority of mid-size and large enterprises throughout the world. Prerequisite(s): Acceptance into the Master of Professional Accountancy (MPA) program.

ACCT 4160 Business Communication (3 credits)

This course is intended to provide students with increased knowledge and communication competencies in a business setting. The course is divided into three sections, which allows students to analyze data and present recommendations to a simulated investing business committee. Students will execute higher-level excel functions, produce professional business correspondence based on excel data, and prepare and deliver individual and group presentations applicable to their findings. Overall, this course emphasizes the importance of professional communication used in business settings.

ACCT 4170 Governmental and Not-for-Profit Accounting (3 credits)

Accounting and financial reporting for state and local governmental entities and how to apply the Government Accounting Standards Board (GASB) principles to those entities; Budgeting and evaluation processes; Not-for-profit entities, Budget and performance measurement; Regulation and taxation; Federal government budget process; Current issues and governmental responsibilities. Undergraduate Prerequisites: ACCT 2102.

ACCT 4210 Auditing I (3 credits)

Duties and responsibilities of an auditor, kinds of audits, and audit programs. Preparation of audit working papers and compilation of audit data. Prerequisites: ACCT 3202.

ACCT 4302 Strategic Cost Management (3 credits)

Strategic cost management integrates cost information with strategy. Key cost drivers will be identified for essential activities in organizations (both manufacturing and service) processes. Appropriate strategic cost management framework will be applied to reduce costs in key areas on which organization success depends. Cost management systems and management controls systems are applied to strategy. The application of instruments and models of strategic cost management will result in a more realistic presentation of the amount of costs and achieving more efficient and effective operations.

ACCT 4320 Accounting Analytics (3 credits)

This course provides an understanding of the use of statistical and quantitative models to effectively manage and utilize information for the purpose of auditing, taxation, and business decision-making. Concepts covered include data analysis and visualization, comparison of software for internal controls testing, statistical inference, and estimation. Students will use analytics software such as Access (including SQL), Tableau, Power BI, Teammate, IDEA, or other software for computer-assisted auditing and tax analysis techniques. Altrix, Sas Studio, or other similar software may also be used. Competency in Microsoft Excel is required. Prerequisite(s): ACCT 2102 or equivalent

ACCT 4405 Income Taxes II (3 credits)

The federal income tax laws and regulations concerning taxable income and computation of tax as they affect corporations, estates, and trusts. This course covers the complexity of tax law affecting business entities, gifts, and estates. VITA participation will also be expected. Prerequisite: ACCT 3404 or equivalent.

ACCT 4600 Senior Seminar: Accounting (1 credit)

Course consists of recommended common professional components (major core courses required for both Accounting and Business Administration majors), and preparation for and completion of assessment exams for all Accounting majors. Assessment exams measure student knowledge of required basic core courses in accounting, economics, business law, statistics, computer business applications, management, marketing, finance, and strategic management. Test results allow the Accounting department to compare departmental with national student outcomes and implement subsequent curriculum improvements. This course is required of all Accounting, B.S. majors. Prerequisites: Completion of the required basic core. Course must be taken during the students last term of enrollment and graduation must follow at the end of that term.

ACCT 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

ACCT 4970 Internship (2-12 credits)

See all university descriptions

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Anthropology

Please note that even though a program is no longer offered in this area, there are Anthropology courses that may be taken for credit as part of a program in a related area.

Anthropology Courses

ANTH 1100 Becoming Human - Tracing our Origins (3 credits)

Humans as biological and cultural organisms. The physical origin of humans and the primates; the interplay of biological and cultural factors in our evolution; physical variations among modern human populations. Liberal Education Goal Area 5.

ANTH 1110 Cultural Anthropology (3 credits)

Comparative study of a variety of modern human groups serves to illustrate the methodology of Cultural Anthropology. Analyses of technologies, family forms, social organizations, religions, and cultural change. Liberal Education Goal Area 8.

ANTH 2510 Visual Anthropology: Films and Culture (3 credits)

This course examines visual communication through the medium of films. We will employ a visual anthropology framework to understand how cultures shape knowledge making through visual elements. We will focus on films made around the world in order to examine how cultural values are embedded in film. We focus on subjectivity, authority and value formation and the ideas of authenticity and representation. As we explore world cinema, the primary objective of the course remains to understand how cultures around the world see themselves and are seen by others. Liberal Education Goal Area 8.

ANTH 2610 Women around the World (3 credits)

This course explores the concepts of sex, gender and of gender identity around diverse countries in the world. We will survey how womanhood is defined in cultures around the world. We will focus on issues connected to women, on transgender issues as they relate to identification as women. The course surveys the embedded nature of women's lives in cultural institutions like family, community, patriarchy and the state. Liberal Education Goal Area 8.

ANTH 2710 Anthropology of Religion (3 credits)

This course examines world religions from an anthropological lens. In addition to understanding major religions of the world and their practices, we will study how religions affect culture and how culture in turn affects religions. Liberal Education Goal Areas 7 & 8.

ANTH 2810 Anthropology of Current World Issues (3 credits)

Uses anthropological theory to analyze current world events and focus on interconnected nature of global economics, politics, religion, development and cultures. Liberal Education Goal Area 8.

ANTH 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

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1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Applied Public Policy

Public policies - such as criminal and civil laws, social service programs, tax codes, environmental laws, planning and land use regulations, among others - affect our lives daily. Such policies are generated by interaction between governments and individuals.

The Applied Public Policy minor offers students the opportunity to acquire a more sophisticated understanding of the public policy process and policy analysis along with a basic set of skills needed to communicate with and perhaps influence decision makers. It is intended to complement majors in related programs such as business, geography, political science, economics, urban and regional planning, environmental studies, and others. Students who complete the Applied Public Policy minor will have the tools needed to be more active leaders in their chosen professions.

Programs

- Applied Public Policy *minor*

Career Directions

Business
Criminal Justice
Environmental Policy
Health Care
Land Use Planning
Social Work
Also: Graduate Study

Preparation

Recommended High School Courses

English
Social Studies
Math
Speech
History
Computers
Languages

Recommended Activities

Reading Newspapers
Attention to News Events

Applied Public Policy *minor*

Required Credits: 32

Required GPA: 2.00

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 3010 Public Economics (3 credits)
- ECON 3230 Benefit/Cost Analysis (3 credits)
- GEOG 2400 Introduction to Planning (3 credits)
- POL 1200 Introduction to American Politics (3 credits)
- POL 3200 Minnesota Politics (3 credits)
- POL 3210 Public Administration (3 credits)

II REQUIRED OPTION

SELECT 12 SEMESTER CREDITS FROM ONE OF THE FOLLOWING OPTIONS:

A. ENVR POLICY:

- GEOG 3560 Metropolitan Land Use Planning (3 credits)
- POL 3230 Environmental Politics (3 credits)
- SOC 3050 Environmental Sociology (3 credits)
- ECON 3040 Environmental Economics (3 credits)
or ENVR 3040 Environmental Economics (3 credits)

B. PLANNING:

- GEOG 2100 Introduction to Physical Geography (3 credits)

- GEOG 3570 Public Lands Planning (3 credits)
- GEOG 3560 Metropolitan Land Use Planning (3 credits)
- GEOG 3580 Regional Development Planning (3 credits)

C. AM POL/ECON:

- ECON 2100 Macroeconomics and the Business Cycle (3 credits)
- ECON 3070 Labor Economics (3 credits)
- ECON 3200 Economics of the Financial Sector (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- POL 3420 Campaigns and Elections (3 credits)

D. INT/POL/ECON:

- ECON 2100 Macroeconomics and the Business Cycle (3 credits)
- ECON 3400 International Trade and Finance (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- POL 3170 International Relations (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3190 International Political Economy (3 credits)

E. PUBLIC POLICY SERVICE LEARNING

COMPLETE THE FOLLOWING COURSE. (1 credit per semester; must be taken twice, but no more than 4 credits total)

- POL 3910 Directed Independent Study: Student Leadership (1 credit)

COMPLETE THE FOLLOWING COURSE:

- POL 3970 Internship (3 credits)

Economics Courses

ECON 1500 Historical Development of the Mixed Economy (3 credits)

Examines the origins and developments of the mixed economy, identifying its key institutions and their evolution. Differences in the historical experiences of different regions/nations are explored, as is the availability of alternative economic systems. Liberal Education Goal Area 8.

ECON 2000 Markets and Resource Allocation (3 credits)

Develops microeconomic principles to explain and evaluate markets as mechanisms to signal buyers preferences and induce suppliers' response. Considers the origin and historical development of market economies as well as theory. Liberal Education Goal Areas 5 and 9.

ECON 2100 Macroeconomics and the Business Cycle (3 credits)

Develops macroeconomic concepts to explore the determination of aggregate output, employment, and the price level in modern mixed economies. The interaction between the financial sector and commodity markets and the potential of monetary and fiscal policy to guide the course of the macro economy are also explored. Prerequisite: ECON 2000 or consent of instructor. Liberal Education Goal Area 5.

ECON 2150 Interdependence of the Hawaiian Economy and the Environment: Field Projects (1-3 credits)

Economic concepts and techniques in environmental valuation, sustainable development, and green accounting based on the report "Environmental Valuation and the Hawaiian Economy." Interconnection of the Hawaiian economy and environment through investigation of major environmental issues such as the role of forests, water quality and quantity, coral reef ecosystems, extractive activities versus eco-tourism, and invasive species. Direct observation of investment efforts toward achieving sustainability. Liberal Education Goal Area 5.

ECON 2925 People of the Environment: Economic Perspective (3 credits)

This course is a module linked to the interdisciplinary environmental issues course, People and the Environment. It is an integrative study of the natural, social, value-based, and citizen-action contexts for environmental awareness. The disciplinary component surveys economic approaches to and institutional settings for environmental decision making, including our behaviors as consumers and producers. Interdisciplinary perspectives are evaluated in light of different concepts of social well being, including economic efficiency, equity, and sustainability. Liberal Education Goal Area 10.

ECON 3010 Public Economics (3 credits)

Examines the rationale of public provision of selected goods and services and compares alternative tax structures in terms of their effects on the rest of the economy and their capacity for financing government expenditures. The effects of the political process on taxes and spending and selected topics in intergovernmental fiscal relations are also considered. Prerequisites: ECON 2000 and ECON 2100.

ECON 3040 Environmental Economics (3 credits)

Examines environmental problems as consequence of market's failure to accurately value environmental resources. Alternative private and public policies are examined in terms of their effectiveness in improving the efficiency and equity with which water, air and other resources are allocated. Prerequisite: ECON 2000 or consent of instructor. (Also offered under ENVR 3040.)

ECON 3070 Labor Economics (3 credits)

Analyzes structure and operation of labor markets as a background to exploring issues and topics related to collective bargaining and public policy. The impact of technological and institutional change on labor markets is considered. Prerequisite: ECON 2000 or consent of instructor.

ECON 3200 Economics of the Financial Sector (3 credits)

Looks at the operation of intermediaries and securities markets to allocate financial capital and price financial assets. The role of the central bank and related agencies in guiding the financial sector and influencing the macroeconomy are considered. Prerequisites: ECON 2000 and ECON 2100 or consent of instructor.

ECON 3230 Benefit/Cost Analysis (3 credits)

Develops the theoretical base of benefit/cost analysis in reviewing public investment projects and examines the application of this tool by specific agencies. Emphasis on the meaning and treatment of risk in policy analysis. Prerequisite: ECON 2000 or consent of instructor.

ECON 3400 International Trade and Finance (3 credits)

The origins and effects of trade and capital flows. The role of international financial markets in influencing trade flows and international investment. Prerequisite: ECON 2000.

ECON 3700 Current Economic Topics (1-3 credits)

Customized course providing in-depth investigation of a current issue of theory or policy. Content and credits may vary. Prerequisites: ECON 2000 and ECON 2100.

ECON 4000 Microeconomic Decisions (3 credits)

Individual decision making of households and firms. Resource allocation via market exchange in alternative market structures. Prerequisites: ECON 2000 or consent of instructor.

ECON 4100 Macroeconomic Growth and Fluctuations (3 credits)

Examines the sources of economic growth and cyclical fluctuations in a market economy, techniques for forecasting economic activity, and the potential for policy to improve performance. Prerequisites: ECON 2000 and ECON 2100 or consent of instructor.

ECON 4880 Economics Capstone (3 credits)

Investigates advanced topics in micro and macro alternating years. Students are responsible for considerable out-of-class research and in-class presentations. Note: An appropriate internship may substitute for ECON 4880 in the major with department's permission. Prerequisites: ECON 4000 and ECON 4100, or consent of instructor.

ECON 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

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1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Environmental Studies Courses

ENVR 2000 Introduction to Environmental Science (3 credits)

An introduction to environmental science emphasizing biological, physical-chemical and cross-cultural environmental social principles underlying major world environmental, political and economic issues; examination of the impacts of human activities and technology on global environmental and socio-economic stability; application of critical thinking and working with graphic skills and lab-like data analysis related to global environmental, biological, physical-chemical, cultural, and socio-economic topics. Liberal Education Goal Areas 3 & 10.

ENVR 2150 Wilderness Ethics: Projects for Environmental Field Programs (1-3 credits)

Major schools of thought on the meaning of wilderness, its importance to modern society, and implications for responsible citizenship. Notions of wilderness and wilderness ethics advanced by major authors, past and present. Wilderness policy in the United States and recommendations for revisions to the Wilderness Act. Relation of sustainability to wilderness protection and the benefits provided to society. Experiential learning by visiting key areas that meet certain criteria for wilderness and relation of these experiences to personal values, including ethical behavior in "wilderness" settings. Liberal Education Goal Area 9.

ENVR 2925 People of the Environment: Global Pollution Perspective (3 credits)

This course is a section of the interdisciplinary environmental issues course, People of the Environment. The focus of this course is to explore the scientific aspects of global pollution, including causes, effects, and solutions. Liberal Education Goal Area 10.

ENVR 3040 Environmental Economics (3 credits)

Examines environmental problems as consequence of market's failure to accurately value environmental resources. Alternative private and public policies are examined in terms of their effectiveness in improving the efficiency and equity with which water, air, and other resources are allocated. Prerequisite: ECON 2000 or consent of instructor. (Also offered under ECON 3040.)

ENVR 3300 Environmental Management and Safety (3 credits)

Helps students pursuing environmental studies to develop environmental management skills required in both manufacturing and non-manufacturing businesses. Safe handling, transport, and storage of hazardous materials with respect to their physical and chemical nature, and application of regulatory requirements relevant to specific business and hazardous materials involved. Prerequisites: CHEM 1112 or CHEM 2212 or ENVR 2000 or GEOL 1110 or consent of instructor. May not be offered every year.

ENVR 3600 Environmental Justice and Sustainability (3 credits)

The ethical and moral dimensions of environmental choices. The legal, philosophical, political, and economic underpinnings of various theories of justice. A major focus is the inequitable distribution of environmental risks and the implications of policies that attempt to combat these risks. Prerequisite: ENVR 2000 or consent of instructor.

ENVR 3700 Natural Resource Management (3 credits)

This class offers an interdisciplinary introduction to the principles of natural resource management highlighting the biological and physical science aspects of natural resource management at local, national, and global scales. Topics covered may include resource management of soil, water, forests, rangelands, wetlands, waterways, and wildlife. This is an intermediate-level course designed to introduce key concepts and topical areas in natural resource management. A specific focus for the course will be the application of adaptive natural resource management to key Minnesota resources at multiple levels of government (local, county, state, federal, and tribal) over time. Prerequisite(s): ENVR 2000 or consent of instructor.

ENVR 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)

Indigenous cultures refer to pre-colonial societies who today represent a minority, non-dominant group in the societies presently residing in territories these cultures once developed. Throughout their history, Indigenous people have developed their own body of environmental knowledge that they have passed on, generation to generation. This course will provide students with a global perspective of Indigenous environmental knowledge and how this knowledge has affected the relationship of the Indigenous peoples with the natural world and its resources. Students will also investigate present-day political, economic, social, and technological issues related to incorporating Indigenous environmental knowledge into sustainability efforts. Liberal Education Goal Areas 7 & 8. (Also offered under INST 3710)

ENVR 3720 Food Sovereignty, Health & Indigenous Environments (3 credits)

This course is designed to help students understand the interconnections of food sovereignty, health and environmental sustainability. Students will explore why it is not only important for people to control the way their food is produced, distributed, and consumed but why the food should be appropriate to the cultural background of the people consuming it. Students will learn the critical connections between food and health with an exploration of those influences within the context of Indigenous worldviews and ways of knowing. This is an experiential learning course -- learning through interaction, projects, and reflection. This course may be suitable as an elective in Indigenous Studies and Environmental Studies, Health and Nursing degree programs. Liberal Education Goal Areas 7 & 8. (Also offered under INST 3720)

ENVR 3730 Sustainable Communities: Local Indigenous Perspective (3 credits)

Human societies all across the globe have developed rich sets of experiences and explanations relating to the sustainable communities they live, work and play in. This course is designed to introduce students to the basic concepts of these sustainable communities. Students will learn how these communities function, their challenges, and the critical networks that exist with the environment. This class will explore the role of Indigenous knowledge and traditional ways of learning, as well as scientific knowledge in maintaining the sustainability of a community. This is an experiential learning course -- learning through interaction, projects, and reflection. Liberal Education Goal Areas 5 & 7. (Also offered under INST 3730)

ENVR 3740 Environment, Wellness & the Sacred Connection to Place (3 credits)

In Indigenous communities, there is a deep and lasting connection to place. Today, there exists overwhelming evidence that connection to place offers important elements for overall individual wellness. However, many communities face challenges in their environments that are detrimental to their health and well-being. To support these communities, there is a need to reconnect them with ways to restore the sustainability of their environment and connection to place. In this course, students will learn the critical connections between the environment and health and will explore the influences of connection to place within the context of Indigenous worldviews and ways of knowing. This is an experiential learning course -- learning through interaction, projects, and reflection. Liberal Education Goal Areas 5 & 7. (Also offered under INST 3740)

ENVR 3750 Sustainable Communities: Global Indigenous Perspective (3 credits)

Throughout their history, Indigenous people have developed their own body of knowledge on global sustainability that they have passed on, generation to generation. This course will provide students with a large picture perspective of global Indigenous sustainability knowledge and viewpoints and how this perspective continues to affect the relationship of the Indigenous peoples with the natural world and its resources. Students will also investigate present-day global political, economic, social, and technological issues related to incorporating Indigenous views into sustainability efforts across the continents. Liberal Education Goal Areas 7 & 8. (Also offered under INST 3750)

ENVR 3800 Environmental Data Analysis (3 credits)

The aim of this course is to expose students to both introductory and advanced analytical methods for environmental applications. The class will provide a primer on introductory inferential statistics (sampling, probability, central tendencies, spread, t- tests and ANOVA) and work towards more advanced analytical applications which are geared towards research questions in Environmental Studies, Geology, and Geography. These techniques include multiple regression, logistic regression, multi-dimensional scaling, regression trees, cluster analysis, survival analysis and basic time series analysis. This class will focus on learning both the theoretical background and application of these methods and discuss the ethical and contextual issues that surround the use of statistical analysis in environmental research.

ENVR 3840 Wetlands Ecology (3 credits)

Survey course develops a basic understanding of the terminology, classification, ecology, values, and conservation of wetlands. Covers wetland systems from around the world, with emphasis on wetlands in North America. Prerequisites: BIOL 1400 and BIOL 1500, or consent of instructor.

ENVR 3880 Environmental Controversies (2 credits)

Faculty and student presentations followed by group discussion of classic and current problems, and governmental policies/regulations. Prerequisite: ENVR 2000 or consent of instructor.

ENVR 4050 Geochemistry (3 credits)

Study of processes in the lithosphere, hydrosphere, and atmosphere; cycling of the elements; weathering; microbe-mineral interactions; nanoparticles; microscopic imaging. Prerequisites: CHEM 1112 or CHEM 2212 or ENVR 2000 or GEOL 1110 or consent of instructor.

ENVR 4110 Environmental Chemistry (3 credits)

Intensive study of biogeochemical cycles of natural and man-made pollutants including transformations, transport, fate and persistence mechanisms. Environmental effects, long-term impacts, and methods of treatment/prevention are discussed. Prerequisites: CHEM 1112 or CHEM 2212 or consent of instructor.

ENVR 4200 Wastewater Treatment (3 credits)

Introduction to the operation of the principal methods and treatment processes of municipal and industrial wastewaters, and for the disposal of treated effluent and sludges, and other solid materials. Integration of fundamental principles of science with different aspects of sanitary technology. Prerequisites: BIOL 1500, CHEM 1112 or CHEM 2212, MATH 1170, or consent of instructor. BIOL 1500 is not required for Chemistry majors.

ENVR 4210 Environmental Law and Policy (3 credits)

Overview of environmental laws, regulations, and policies. Prerequisite: Consent of instructor.

ENVR 4220 Sampling and Analysis (4 credits)

Methods of sampling and analysis of air, water, soil and other environmental compartments will be described in lecture and experienced in laboratory session. The focus is on regulations and prescribed protocols for environmental field and lab work. Lecture and laboratory. Prerequisites: CHEM 1112 or CHEM 2212 or ENVR 2000 or GEOL 1110 or consent of instructor.

ENVR 4240 Waste Management (4 credits)

An overview of the solid and hazardous waste situation at the local, state, national and international levels. The focus on management will include a systems approach to prevention, and remediation of wastes. Prerequisites: CHEM 1112 or CHEM 2212 or ENVR 2000 or GEOL 1110 or consent of instructor.

ENVR 4260 Risk, Resilience and Sustainable Community Development (3 credits)

We are experiencing dramatic, rapid, unexpected environmental changes due to human caused global climate change, stresses on natural resources as well as our ability to manage our waste generation. In this course, we will explore risk and resilience from a community development perspective. How can we work together in community to survive disruption and anticipate, adapt, and flourish in the face of change. Using Bemidji State University and the greater Bemidji area as a case study we will explore key quantitative as well as qualitative indicators of resilience such as energy, housing, transportation, water, materials & waste, health & wellness, and economic opportunity. Students will be asked to produce quantitative and qualitative assessments of the resilience in our BSU-Bemidji community and actively engage with citizens and working professionals to advance suggestions on how to strengthen our campus and community's resilience. Prerequisite(s): ENVR 2000 or consent of instructor

ENVR 4400 Environmental Microbiology (3 credits)

Fundamental aspects of microbiology as related to land production, environmental pollution and water quality control processes. The role of major groups of microbes as pollutants, as purifying agents, and as agents of biochemical changes, and ecological functions and importance of each group in the environment. Prerequisites: BIOL 1110 or BIOL 1120 or CHEM 1112 or CHEM 2212 or consent of instructor.

ENVR 4500 Environmental Toxicology (4 credits)

An overview of major environmental pollutants, their transport, fate and toxicology. Pollutant effects studied from practical and theoretical focus on stress at various levels of biological organization. Prerequisites: BIOL 1500, BIOL 2610, and CHEM 1112 or CHEM 2212, or consent of instructor.

ENVR 4610 Sustainability: Theory and Practice (4 credits)

Becoming agents of positive change in our communities requires building many different skill sets. This course will build core competencies of community leadership and focus on sustainability issues in our community. We will integrate theories, principles and practices of sustainability throughout the course and explore how various entities such as the University, the City of Bemidji, local tribes, companies, non-profits and individuals approach sustainability actions and choices. We will explore issues such as energy, water, waste, food and transportation as well as diversity, equity and inclusion in decision making. Students will be asked to identify a specific problem facing our community and utilize Problem and Project Based Learning (PBL) techniques to directly engage with these local issues, connect with the stakeholders involved and work together to propose potential solutions. Prerequisite(s): ENVR 2000 or consent of instructor.

ENVR 4880 Senior Seminar I (1 credit)

Senior level seminar in which students explore the environmental job market and graduate school opportunities. Prerequisites: Senior status and ENVR 3880.

ENVR 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

ENVR 4970 Internship (3 credits)

Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

ENVR 4990 Thesis (3 credits)

A thesis written by the student that reports extensive original research carried out by the student and demonstrates appropriate methodology and scholarship.

All-University Courses

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1970, 2970, 3970, 4970 INTERNSHIP
1980, 2980, 3980, 4980 RESEARCH
1990, 2990, 3990, 4990 THESIS

Geography Courses

GEOG 1224 Introduction to Map Use (3 credits)

This course is designed for the liberal education program and provides an introduction to common characteristics and use of map media. Topographic maps will be used for physical analysis as well as to discern cultural and economic features of landscapes. Thematic maps, their use and applications will be presented. Includes some study out-of-doors with map and compass. Liberal Education Goal Areas 5 & 11.

GEOG 1400 World Regional Geography (3 credits)

A survey of physical, cultural, and economic aspects of world regions. An introduction to how constituent parts of the world differ from one another in their associated resources, cultures and economics. Attention is given to the interrelationships, interdependencies, and associations that bind together the diverse communities of the world. Liberal Education Goal Areas 7 & 8.

GEOG 2100 Introduction to Physical Geography (3 credits)

This course is designed for the liberal education program and provides an introduction to spatial patterns derived from earth system processes. The course provides a systematic survey of land forms, weather and climate, soils and vegetation. This course utilizes a combination of in class discussion and laboratory-like exercises to investigate these topics. Liberal Education Goal Area 3.

GEOG 2200 Introduction to Human Geography (3 credits)

Emphasizes the study of geographical relationships and interactions of cultural, social, economic, ethnic, and political phenomena. Topical approach to population subgroups, religions, languages, urban and rural settlements, and other attributes of the cultural landscape. Liberal Education Goal Areas 7 & 8.

GEOG 2400 Introduction to Planning (3 credits)

This course is designed for the liberal education program and provides information on the background and fundamentals of the community planning process. Includes discussion of contemporary issues in physical, environmental and social planning. Emphasis is on the local and subregional levels. Liberal Education Goal Areas 5 & 9.

GEOG 2925 People of the Environment: Geography Perspective (3 credits)

An integrative study of the natural, social, value-based, and citizen-action contexts for environmental awareness. The disciplinary component surveys geographic approaches to and institutional settings for environmental problems and decision making, including our spatial behaviors as either sources or recipients of environmental impacts. Interdisciplinary perspectives are evaluated in light of different geographic concepts of spatial distributions, physical geography, and regional planning. Liberal Education Goal Area 10.

GEOG 3125 Weather and Climate (3 credits)

Weather is the study of the atmosphere over short time scales, while climate is the study of long-term weather trends. The study of weather is commonly termed meteorology, which is actually a branch of physics associated with fluid dynamics. Climate is associated with statistical procedures and analyses. This course examines the geographic patterns and processes of global climate and weather, as well as topics such as global climate change, global climate models, and extreme weather events. Students learn about the Earth's atmosphere; energy budgets and astronomical controls on weather processes; oceanic and atmospheric circulation; the basic atmospheric parameters; atmospheric hazards such as tornadoes, hurricanes, hail, and lightning; and global climate change issues. Prerequisite: GEOG 2100 or consent of instructor.

GEOG 3226 Cartography (3 credits)

This course provides a more integrated, practical link between cartographic theory and practice for users of GIS. This course blends theoretical discussion of GIS as a science and GIS as a software application and addresses through lecture and laboratory work map productions for a variety of audiences. A particular focus of this course is on quality communication through maps. Experience with GIS software is essential. Prerequisite: GEOG 3231.

GEOG 3231 Introduction to Geographic Information Systems (3 credits)

This course develops a proficiency in basic GIS skills for those new to GIS. The premise of the course revolves around analytical problem solving using spatial data and techniques. The course also focuses on graphic communication of quantitative data including cartographic mapping concepts and data classification. This course concentrates on learning to navigate the current version of ArcGIS software at a beginner's level and developing and creating maps as communication tools. Liberal Education Goal Area 4.

GEOG 3232 Intermediate Geographic Information Systems (3 credits)

An intermediate course on the theories and application of GIS for spatial data management and analysis, thematic mapping, environmental modeling. This course expands on the concepts and methods presented in Introduction to GIS and guides students through a more comprehensive overview of principles and techniques used in GIS. Course objectives include (1) enhance and build knowledge of GIS as a system and science, (2) improve skills at GIS analysis, and (3) develop and improve problem solving skills. Prerequisite: GEOG 3231 or consent of instructor.

GEOG 3255 Introduction to Remote Sensing (3 credits)

Analysis of a special class of pictures that provide an overhead perspective. These images have unique properties that provide a distinct advantage to assessing spatial changes and patterns of change on the Earth's surface. Students develop an understanding and the skills necessary for interpreting air photos, satellite, and remotely sensed images. Prerequisite: GEOG 3231 or consent of instructor.

GEOG 3400 Economic Geography (3 credits)

This course helps students understand the world's increasingly complex economic interdependence by examining issues confronting the Global Economy today. This course looks at countries' economic and social well-being, their relationships to other countries and internal and global economic patterns of productivity, wealth and development. Liberal Education Goal Area 5.

GEOG 3410 Geography of North America (3 credits)

A regional analysis of the physical, demographic, economic and cultural characteristics of the nations in North America. Liberal Education Goal Areas 5 & 7.

GEOG 3531 Political Geography (3 credits)

This course utilizes "World Systems Theory" to investigate 1) theories of State formation and organization; 2) historical processes of imperialism, colonialism, and decolonization; 3) major issues of the emerging political economy; 4) historical and contemporary geopolitics; and 5) the political geography of everyday life.

GEOG 3532 Political Ecology (3 credits)

Political ecology utilizes a necessary geographical perspective to understand and analyze the biophysical processes that shape issues otherwise inadequately conceptualized as political, economic or social. This spatial understanding developed by political geographers reveals relationships of the ecological and the political that are simultaneously mutually reinforcing and, often, mutually antagonistic. Prerequisite: GEOG 3531 or consent of instructor.

GEOG 3550 Site and Resource Analysis in Planning (3 credits)

This course emphasizes techniques and methods in the location, analysis, evaluation, and design of sites, focusing on identifying use potentials and impact limitations for planning and management. Prerequisite: GEOG 2400 or consent of instructor.

GEOG 3560 Metropolitan Land Use Planning (3 credits)

An examination of the identification and inventory methods of land use analysis including the designing of land use models which are compatible with environmental, social, and economic goals. Prerequisites: GEOG 2100, GEOG 2400, or consent of instructor. Prior completion of or concurrent enrollment in either GEOG 3550 or GEOG 3570 is recommended.

GEOG 3570 Public Lands Planning (3 credits)

Comparison and evaluation of natural resource management policies and analytical techniques of the U.S. Forest Service, Bureau of Land Management, National Park Service and U.S. Fish and Wildlife Service. Attention is paid to the historical and contemporary land management approaches used to protect, exploit, manage, and/or use public lands in the United States. Especially relevant are jurisdictional issues over public land, federal agencies involved in land management, state and local issues and land management, and contemporary issues associated with land management in the 21st Century. Prerequisites: GEOG 2400 and GEOG 3550, or consent of instructor.

GEOG 3580 Regional Development Planning (3 credits)

An examination of methods and processes emphasizing contemporary relationships between planners and governments, the private sector, and nongovernmental organizations regarding relationships between regions nationally and internationally, with special attention to environmental sustainability. Prerequisite(s): GEOG 2400 or consent of instructor.

GEOG 3630 Conservation Biology (3 credits)

Principles and theories of conservation biology. Topics include biodiversity, threats to biodiversity, extinctions, management of threatened and endangered species, managing habitats for conservation, and methods to mitigate biodiversity loss. Prerequisites: BIOL 1400 and BIOL 1500, or consent of instructor. Also BIOL 3630.

GEOG 3800 Regional Geography (1-3 credits)

A regional and topical analysis of the cultural and physical features of a continent or major region of the earth. May be repeated provided different regions are involved. Note: Recommended for students in international studies, foreign languages, and for prospective teachers in the humanities or social studies.

GEOG 3810 Geography of Europe (3 credits)

A regional analysis of the cultural, economic, physical and landscape patterns of the European cultural region. NOTE: Recommended for students in Euro-Spring, International Studies, foreign languages, and prospective teachers. Liberal Education Goal Areas 5 & 8.

GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)

This course is designed to provide a more in depth look at Asian sub regions of South, East and Southeast Asia. Geographically, we will examine and analyze activities in this part of the world through cultural, demographic, political, economic, urban and geopolitical lenses. Liberal Education Goal Area 8. Might not be offered every year. Prerequisite: GEOG 1400 or GEOG 2200.

GEOG 3840 Geography of Africa (3 credits)

Despite persistent bias about it, Africa's cultural complexity, social dynamism, and political/economic struggle have tremendous relevance for the study of global trends at the start of the twenty-first century. The central purpose of this course is to demonstrate that relevance by investigating the cultural, historical, economic, and political dimensions of change in Africa.

GEOG 3850 Geography of the Middle East (3 credits)

This course is designed to provide a more in depth look at the region we routinely describe as the Middle East. Geographically, we will examine activities in SW Asia and the nations of North Africa. We may extend our discussion to the countries of Afghanistan, the Sudan, South Sudan and Turkey to provide a more comprehensive analysis of a particular topic or subtopic. This is a highly complex region and may be looked at from numerous perspectives. Our objective thus is to examine the region through economic, cultural, environmental, urban and geopolitical lenses. Prerequisite: GEOG 1400 or GEOG 2200.

GEOG 3860 Geography of Latin America and the Caribbean (3 credits)

This course is designed to provide a more in depth look at the region of Latin America and the Caribbean. We recognize at the outset that this is a broad subject and may be looked at from numerous perspectives. Our objective thus is to examine this geographic region through economic, cultural, environmental, urban and political lenses. The text book provides the basis for our study which is further complemented by each students (1) research into an issue or event that had a far reaching impact on this region or within its sub-regions, (2) reading of works of fiction set in Latin America and (3) viewing feature films with Latin American themes. Prerequisite: GEOG 1400 or GEOG 2200.

GEOG 3870 Planning for Sustainable Cities (3 credits)

Using a World Regional Geography approach, this course examines the dynamics of urban development across the globe, with particular reference to sustainable urban design and urban biodiversity. Political, cultural, environmental and economic influences on the city are examined in both the developed and the developing world. Liberal Education Goal Area 5.

GEOG 4130 Biogeography (3 credits)

This course examines the distribution and diversity of flora and fauna across multiple scales. It will focus on the factors that shape and influence these patterns and investigate the role of disturbance in this process. It will also incorporate both field and lab experiences to further examine the key concepts of biogeography. Prerequisites: GEOG 2100 and GEOG 3231.

GEOG 4140 Landscape Ecology (3 credits)

This course examines the connection of pattern and process at the scale of the landscape. Students will utilize several analytical methods to examine and explain how humans, disturbance and natural process work in concert to create landscape-level dynamics and change. The course will also cover how landscape ecology is applied to assist in conservation efforts. Prerequisites: GEOG 2100 and GEOG 3231.

GEOG 4150 Machine Learning for Environmental Modeling (3 credits)

The uses of machine learning, data science and artificial intelligence are everywhere today. Much of the data we create through our daily activities gets processed and used to customize services, offer better health care, or target you for specific advertising. Although there are many benefits of using data in these ways, there can be pitfalls and caution is always warranted when employing these tools. As such this class attempts to teach you the basic foundations of machine learning with particular emphasis to its application in environmental and spatial analysis. To this end, we will use the python development environment and we will emphasize the most commonly used tools including supervised learning algorithms (logistic regression, linear regression, neural networks), unsupervised learning algorithms (k- means, principal component analysis). In addition, we also cover anomaly detection, natural language processing and building recommender systems. A central focus will be building this foundation so students can successfully participate in a Kaggle competition which is a premier venue for testing your machine learning skillset.

GEOG 4190 Qualitative Methods in Geographic Research (3 credits)

As a geographic perspective becomes increasingly important in analysis of critical issues at multiple scales from the local to the global, this course demonstrates how research grounded in qualitative methodologies encourages innovative approaches and yields significant insights. Prerequisite: GEOG 2200. While not required, it is highly recommended that GEOG 4210 and GEOG 4265 be taken previously or concurrently.

GEOG 4210 The History and Development of Geographic Thought (3 credits)

Development of the discipline of Geography with emphasis on both the historical and recent developments in the field. Includes a critical analysis of writing of representative geographers.

GEOG 4265 Spatial Analysis (3 credits)

An examination in the concepts and application of advance spatial statistical methodologies. These include, kriging, spatial autocorrelation, spatial regression models, and cluster analysis. Prerequisites: STAT 2610 or PSY 3401 or BUAD 2231 and GEOG 3231.

GEOG 4275 Advanced Geographic Information Systems (3 credits)

This course will give students hands on experience working with advanced geodatabases, the basic automation and scripting of geospatial processes, web mapping, and server side application in GIS. Prerequisites: GEOG 3231 and GEOG 3232.

GEOG 4910 Directed Independent Study (3 credits)

Arranged individual study.

GEOG 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

GEOG 4930 Experimental Course (3 credits)

A course proposed for inclusion in the University curriculum. May not be offered more than two times as an experimental course.

GEOG 4970 Internship (3 credits)

Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

GEOG 4980 Research (3 credits)

Research carried out by the student that is based on appropriate methodology and scholarship.

GEOG 4990 Thesis (3 credits)

Working individually with a thesis advisor, the student produces a Geography thesis. The thesis must be a scholarly piece of work, based on empirical or archival research of a geographical issue (physical, demographic, economic, cultural, and/or political) of present or future relevance. The end product is a documented essay of at least minimally required length and format that must be approved by the advisor and at least one other member of the Geography Department after a brief oral defense.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Political Science Courses

POL 1100 Understanding Politics (3 credits)

An introduction to the basic ideologies, concepts, processes and institutions of modern government and politics. Liberal Education Goal Areas 6 & 9.

POL 1200 Introduction to American Politics (3 credits)

An introductory survey to the institutions and actors, such as the media, interest groups, political parties, congress, and presidency of contemporary American government and politics. Liberal Education Goal Area 5 & 7.

POL 1300 Introduction to International Relations (3 credits)

Surveys various theories explaining the behavior of nation-states, the causes of war and peace as well as the role of multinational corporations and international organizations in international politics. Liberal Education Goal Areas 8 & 9.

POL 1400 Introduction to Comparative Politics (3 credits)

A comparative analysis of political systems and their functions in the context of unique cultures and histories. Liberal Education Goal Area 8.

POL 2925 People of the Environment: Political Science Perspective (3 credits)

An introduction to political processes and institutions involved in making environmental policy. Might not be offered every year. Liberal Education Goal Area 10.

POL 2953 Study-Travel, History and the Social and Behavioral Sciences (1-6 credits)

Study Travel course in Political Science for Lib Ed Goal Area 5.

POL 3100 American Foreign Policy (3 credits)

Traces the development of American foreign policy: its objectives, limitations, domestic and international factors influencing foreign policy. Prerequisite: POL 1300. (Might not be offered every year.)

POL 3130 Asian Political Development (3 credits)

Course investigates the unique political and economic challenges facing the countries of Asia and South Asia. Prerequisite: POL 1400. (Might not be offered every year.)

POL 3140 Canadian Politics (3 credits)

Explanation of Canada's history, political and economic systems, and regional variations within the nation-state. Special attention to political parties, ideologies, policy processes, and outcomes. (Might not be offered every year.)

POL 3150 Topics in Political Science (1-3 credits)

Course explores underlying political dimensions of topical issues. (Might not be offered every year.)

POL 3160 Comparative European Politics (3 credits)

Course includes an analysis of political structures and processes in Europe. The mechanisms of parliamentary governments, political parties, interest groups and ideologies are included. Prerequisite: POL 1400. (Might not be offered every year.)

POL 3170 International Relations (3 credits)

The study of conflict and cooperation in international relations, the foreign policies of the great powers, international organizations, and the United Nations. Prerequisite: POL 1300. (Might not be offered every year.)

POL 3180 International Law and Organization (3 credits)

Explores the role of international organizations such as the United Nations, economic alliances, international law, and regional consolidation in international politics. Prerequisite: POL 1300. (Might not be offered every year.)

POL 3190 International Political Economy (3 credits)

Analyzes how economic policy decisions are made within and between countries and the effect those decisions have on affected interests in domestic and international politics. Prerequisite: POL 1300. (Might not be offered every year.)

POL 3200 Minnesota Politics (3 credits)

Using Minnesota politics as a central focus, the role of and function of state and local governments in the context of American federalism is examined. (Might not be offered every year.) Liberal Education Goal Areas 5 & 9.

POL 3210 Public Administration (3 credits)

An introduction to the field of public administration. Emphasis is on the political dimensions of management in the public sector. Prerequisite: POL 1200. (Might not be offered every year.)

POL 3230 Environmental Politics (3 credits)

Surveys the dynamics of the policy process that produce our environmental policies. An analysis of actors, institutions, and organizations that shape U.S. environmental law and policy. Prerequisite: POL 1200 or consent of instructor. (Might not be offered every year.)

POL 3240 Political Analysis (3 credits)

Examines the application of political science research methodology to current questions of politics and public policy. Prerequisite: Completion of Core Curriculum mathematics requirement (Goal Area 4) or consent of instructor.

POL 3310 Intersection of Public and Non-Profit Sectors (3 credits)

Studies federal, state and local agency policy domains and interactions; government agency grant making policies and procedures, ideological and partisan views of the public and non-profit sectors. Prerequisite(s): none.

POL 3320 Non-Profit Management (3 credits)

This course deepens students' understanding of the role of management and leadership in today's nonprofit sector. Topics covered include: the responsibilities and challenges facing today's non-profit managers, the role of the board of directors, planning, funding and staffing programs, financial accountability, and ethical decision making. Prerequisite(s): none.

POL 3330 Non-Profit Financial Management (3 credits)

This course examines the critical financial considerations of nonprofit organization, including sources of funds and fundraising, grant writing and management and financial accountability. The students will consider the key financial measures and strategies required to ensure the effectiveness and sustainability of the organization. The course will also consider nonprofit financial statements as indicators of financial health and sound management. Prerequisite(s): none.

POL 3400 Political Theory (3 credits)

This course surveys the development of western political thought. Included is an examination of some of the ideas and values associated with major social and political movements in Europe and the United States. Topics will vary and may include liberalism, conservatism, populism, democracy, communism, nationalism, fascism, environmentalism, realism, and feminism. POL 1100 or consent of instructor. (Might not be offered every year.)

POL 3410 Legislative and Executive Relations (3 credits)

Explores the legislative process by analyzing the motives and evolving legislative styles of legislators in relation to the evolution and powers of the modern presidency and executive establishment. Prerequisite: POL 1200. (Might not be offered every year.)

POL 3420 Campaigns and Elections (3 credits)

Includes analysis of the congressional and presidential electoral process, including the role of political parties, interest groups, and the media. Prerequisite: POL 1200. (Might not be offered every year.)

POL 3910 Directed Independent Study: Student Leadership (1 credit)

Directed Independent Study

POL 3970 Internship (3 credits)

Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

POL 4100 Political Inquiry (3 credits)

Students will learn the theory and practice of quantitative political analysis through the completion of original research projects.

POL 4200 Constitutional Law (3 credits)

An examination of legal interpretations of the constitution regarding the separation of powers and the Bill of Rights. Prerequisite: POL 1200. (Might not be offered every year.)

POL 4500 Thesis and Career Preparation (3 credits)

This is a senior year capstone course. In a seminar format, students discuss progress on their individual research projects and develop career plans and skills. Prerequisite: POL 4100 or consent of instructor.

POL 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
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 1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
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 1970, 2970, 3970, 4970 INTERNSHIP
 1980, 2980, 3980, 4980 RESEARCH
 1990, 2990, 3990, 4990 THESIS

Sociology Courses

SOC 1104 Society and Social Issues (3 credits)

Examines concepts and theories that describe and explain social life. Focuses on aspects of culture, social class, race relations, and gender relations as they are determined by society, and on how humans create and recreate groups, structures, and institutions. Liberal Education Goal Area 5.

SOC 2230 Race and Ethnic Relations (3 credits)

Study of dominant-subordinate relations with emphasis on racial and ethnic inequalities. Examination of privilege, prejudice and discrimination. Liberal Education Goal Areas 7 & 9.

SOC 2240 Men, Women, and Society: A Sociological Interpretation (3 credits)

Study of the construction of gender in society and the differential consequences of particular social arrangements on the lives of men and women. Examines gender, male and female sexuality, intimate relationships, gendered patterns of work and education, the gender of violence, and sociological theories of femininity and masculinity. Emphasizes changes in gendered social patterns in U.S. society in the 21st century and compares those changes to shifting patterns in other societies. Liberal Education Goal Areas 5 & 7.

SOC 3001 Social Statistics (3 credits)

Covers a conceptual understanding of basic descriptive and inferential statistics. Choice of statistic and interpretation of SPSS results is discussed. Prerequisite: Completion of Liberal Education mathematics requirement (Goal Area 4) or consent of instructor.

SOC 3003 Research Methods (3 credits)

Examines the basic methods used to study diverse social processes and to improve our understanding of social issues. Topics include the relationship of theory to research, research ethics, evaluation of qualitative and quantitative research designs and patterns of analysis, and associated concerns. Prerequisite: SOC 1104.

SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)

In this class we will explore classic and contemporary sociological theories. We will begin by examining Karl Marx, Emile Durkheim, Max Weber, Georg Simmel, and W.E.B. Du Bois, and then move toward more contemporary understandings about culture and society as discussed by symbolic interactionism, feminist theory and poststructuralism. The class is designed to help students understand how theorists think about structures and individuals, how historical time periods and intellectual environments shape theoretical understandings, and how theoretical discussions inform social research. Although much of the material in this class is designed to help students understand theory, another goal of the course is to help students critique existing theories and actually 'do theory'. Prerequisites: SOC 1104 or consent of instructor.

SOC 3050 Environmental Sociology (3 credits)

Examines the relationship between society and the environment. Emphasis on political and economic institutions and the consumer lifestyle and values. Considers how the treadmill of production affects ecosystems and discusses possible solutions to environmental problems. Prerequisites: SOC 1104 or consent of instructor.

SOC 3210 Social Movements and Change (3 credits)

Changing the world means changing the social world; we're really talking about social change, and that process involves social movements. The purpose of this course is to draw some general conclusions about what social movements are, and how social change is pursued and prevented by looking at how others have done it, how they are trying to do it now, and what can be learned from their successes and failures. This course fosters a deeper understanding of how people are persuaded to do the things they do, and how others' reasons for doing what they're doing are often as complex as our own. Liberal Education Goal Area 8.

SOC 3250 Religion and Politics: A Sociological Analysis (3 credits)

Religion and Politics are the things we U.S.-Americans are expected not to talk about in polite company. The U.S. appears to be deeply divided on a number of issues. But why? The goal of this course is to describe and explain. This course is not about taking partisan political positions, advocating for specific political interests, or arguing about the truth of religious worldviews. The sociological study of religion and politics involves understanding how religion as a worldview and social phenomenon is related to politics as interests and social phenomena, both in the U.S. and globally. Trends in religious identity and practice shape political behaviors, movements, and changes. They have done so in the past and will continue to do so in the future. I'm going to examine a lot of controversial stuff in this course, but I'm going to "take a big step back" to do it. Perhaps it will provide you with the tools to have difficult conversations with friends, family, and strangers; and/or help understand why people disagree on what they disagree on and respond the way they do.

SOC 3300 Family and Society (3 credits)

After a brief introduction to basic sociological concepts, frameworks, methods, and relevant historical materials, students examine several documents that address particular contemporary family issues. Students also learn how to evaluate the materials discussed. Liberal Education Goal Area 5.

SOC 3310 Community Organizing for Social Change (3 credits)

This course explores the history of community organizing and how individuals have come together to more deeply understand the rights and obligations of citizenship and how to organize for social justice for themselves and others in their communities. Students will develop deeper knowledge of the overall worldview associated with community organizing and will be able to articulate and apply the tools and tactics to effect change. They will also learn how to assess action taken and they will address how alternative approaches inform future action cycles. Liberal Education Goal Area 9.

SOC 3320 Social Class and Inequality (3 credits)

On some level, most people understand that social class matters; rarely do they grasp how by how much. The primary goal of this course is to examine social stratification, particularly focusing on social class, primarily in the contemporary United States, but also including historical and comparative information. It is only by doing so that we can understand why stratification is as it is in the United States and how and why it is different from those systems found elsewhere. Liberal Education Goal Areas 5 & 7.

SOC 3330 Sociology of Health and Medicine (3 credits)

In this course we will explore, from a sociological perspective, how health care is organized, inequalities related to health care organization, and how, as an institution, health care systems interact with other institutions. We will also be examining delivery interactions within the medical systems, the culture of medicine, professional power, and who gets to define 'wellness'. Finally, we will explore how health care is shaping individual lives and the understandings of the human.

SOC 3340 Sociology of Education (3 credits)

This course will focus not on how we learn, but why we go to school, from multiple sociological perspectives. What roles has schooling played, past and present? How is formal education connected to other social structures? How is education connected to social status, and social inequality? In this course, we will address the development and functions of public education, how and to what extent education both fosters social mobility and reproduces social inequality, how patterns of racial segregation, gender inequality, and social/class divides were, and are, related to education, the cultural dimensions and conflicts surrounding education, and future possibilities in an economy increasingly shaped by information and automation. This course focuses largely (but not exclusively) on the United States, after the Second World War.

SOC 4270 Intersectionality (3 credits)

This course will explore the complexity of the interaction of race, class, gender, sexuality, citizenship, and age with a specific focus on sexual norms in Western and non-Western societies. As part of this exploration, we will examine aspects of inequality and privilege and the social and political implications of hierarchies. We will also look at how the nature of race, sexuality, and gender can create hybrid identities and communities and cultures that resist and reinforce ethnic and national boundaries. Prerequisite(s): SOC 2230 or SOC 2240.

SOC 4600 Work and Careers (3 credits)

Students identify career avenues complementary to their chosen major and develop materials necessary for conducting a job search. In addition, students will learn what sociology has to say about work, occupations, and the organizations within which that work takes place. Prerequisites: Junior or senior standing suggested.

SOC 4800 Capstone in Sociology (3 credits)

Students decide on a research question and carry out an independent project.

SOC 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the

completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

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1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Art & Design (Technology, Art, & Design)

The School of Technology, Art & Design offers a variety of programs that span the application of technology, art and design in response to a range of human wants and needs. Courses nurture the development of individual creative expression, critical thinking and problem solving skills. Degree programs foster the development of knowledge and skills to design and develop creative solutions that address operations and future needs in an array of cultural, design, business, technological and industrial settings.

The school offers a nationally accredited* Bachelor of Science program in Engineering Technology, with specializations in Construction Management and Manufacturing Management. Along with the associated Bachelor of Applied Science programs in Applied Engineering and Technology Management, these degree options offer both four-year and transfer students the opportunity to prepare for leadership roles in a wide range of technologically based enterprises including but not limited to the fields of construction, energy, manufacturing and sustainability.

Transfer students have the option to enroll in either the Bachelor of Applied Science program in Applied Engineering or Technology Management. Both degrees are offered as "2 + 2**" programs online or on campus for working professionals who have either an Associate of Science degree, Associate of Applied Science degree, diploma or certificate and wish to complete a Bachelor's degree.

The Bachelor of Science in Design offers students a unique and exciting opportunity to pursue careers that demand excellence in a combination of technical, creative, and artistic capabilities. Students can pursue specializations in Studio Arts, Graphic Design or Exhibit Design. All Design students benefit from a portfolio review process, a graduation requirement that offers them the opportunity to present their professional portfolios to leaders in their industries from across the nation. Students transferring from a Minnesota State Community and/or Technical College with an Associate degree in a related design field may be eligible for articulated transfer into the Design program.

The School of Technology, Art & Design offers five exhibition spaces that present local, regional, national and international exhibits. The gallery program also maintains permanent collections in ceramics and prints.

*The BS in Engineering Technology is accredited by the Association of Technology, Management, and Applied Engineering (<http://atmae.org>).

**May vary based on the individual's degree being transferred to the university, and the number of general education (Liberal Education) credits and technical or professional credits.

Programs

- Technology, Art and Design, B.S. (Digital Illustration & Animation Emphasis) *major*
 - Art *minor*
 - Design *minor*
 - Event Design *minor*
 - Event Planning *minor*
 - Interactive Multimedia Design *minor*
 - Maker Space Technology *minor*
 - Technology, Art & Design *minor*
 - 2-D Art & Design Technology *cert*
 - 3-D Art & Design Technology *cert*
 - Educational Technology *cert*
 - Maker Space Technology *cert*
 - Making Money As A Maker *cert*
-
- Art: New Studio Practice, B.F.A. (3-D Arts Emphasis) *major*
 - Art: New Studio Practice, B.F.A. (Illustration Emphasis) *major*
 - Technology, Art and Design, B.S. (Exhibit & Experience Design Emphasis) *major*
 - Technology, Art and Design, B.S. (Event Planning & Project Management Emphasis) *major*
 - Technology, Art and Design, B.S. (Creativity & Innovation Emphasis) *major*
 - Technology, Art and Design, B.S. (Prototype Engineering & Model Making Emphasis) *major*
 - Technology, Art and Design, B.S. (Interactive Multimedia Design Emphasis) *major*
 - Technology, Art and Design, B.S. (Graphic Design Emphasis) *major*

Career Directions

Applications Engineering
Art Director
Artist/Technician
Construction Management
Construction Management Engineer
Engineer
Exhibit Designer
Field Engineer
Graphic Designer
Industrial/Architectural Rendering
Management
Manufacturing Engineering
Model Building
Multimedia Specialist/Designer
Pre-press Production
Print Production
Process Planning
Quality Control Engineering
Research and Development
Safety Engineer
Teaching
Technical Sales
Web Page Development
Also: Graduate Study

Art: New Studio Practice, B.F.A. *major* 3-D Arts Emphasis

Required Credits: 78
Required GPA: 2.00

Required TAD Core Courses

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 3090 Leadership in Creative Industries (2 credits)
- TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)

Culmination Core

Complete the following courses:

- TADD 3899 Junior Culmination: Internship Planning (2 credits)
- TADD 4899 Senior Culmination: Career Planning (2 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

Art & Design Core

Complete the following courses:

- TADD 1150 Drawing Fundamentals (2 credits)
- TADD 2100 History, Philosophy, and Application of Color (3 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 3350 History of Modern Art & Design: 1820-1950 (3 credits)

3D Core

Complete the following courses:

- TADD 3200 Introduction to Model Making (2 credits)
- TADD 3380 Designing for Experiences (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)

TAD Lab Core

Complete 6 credits from the following courses:

- TADD 2670 Painting (4 credits)
- TADD 3557 TAD LAB: Molding & Casting (2 credits)
- TADD 3558 TAD LAB: Machining (2 credits)
- TADD 3559 TAD LAB: Traditional Woods (2 credits)
- TADD 3660 TAD LAB: Welding (2 credits)
- TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)
- TADD 3678 TAD LAB: CNC Woods (2 credits)
- TADD 3679 TAD LAB: CNC Metals (2 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

3D ARTS EMPHASIS

3D Arts Core

Complete the following courses:

- ARTH 2551 Art History Survey I (4 credits)
- ARTH 2552 Art History Survey II (4 credits)
- TADD 3400 Sculpture: Experimental (2 credits)
- TADD 3410 Sculpture: Traditional (2 credits)
- TADD 3448 Tech Toolbox II: Fusion 360 (2 credits)
- TADD 3480 Ceramics: Hand & Wheel (4 credits)
- TADD 3700 Materials, Lighting, and Structures (2 credits)
- TADD 4430 Sculpture: CNC (2 credits)
- TADD 4870 Advanced 3D Arts (2 credits)
- TADD 4897 Senior Exhibition (0 credit)

Art: New Studio Practice, B.F.A. *major*

Illustration Emphasis

Required Credits: 78

Required GPA: 2.00

Required TAD Core Courses

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 3090 Leadership in Creative Industries (2 credits)
- TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)

Culmination Core

Complete the following courses:

- TADD 3899 Junior Culmination: Internship Planning (2 credits)
- TADD 4899 Senior Culmination: Career Planning (2 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

Art & Design Core

Complete the following courses:

- TADD 1150 Drawing Fundamentals (2 credits)
- TADD 2100 History, Philosophy, and Application of Color (3 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 3350 History of Modern Art & Design: 1820-1950 (3 credits)

2D Core

Complete the following courses:

- TADD 2200 Introduction to Graphic Design (2 credits)
- TADD 2550 Tech Toolbox II: InDesign (2 credits)
- TADD 3020 Typography: Hand Lettering (2 credits)

TAD Lab Core

Complete 2 credits from the following courses:

- TADD 2670 Painting (4 credits)
- TADD 3557 TAD LAB: Molding & Casting (2 credits)
- TADD 3558 TAD LAB: Machining (2 credits)
- TADD 3559 TAD LAB: Traditional Woods (2 credits)
- TADD 3660 TAD LAB: Welding (2 credits)
- TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)
- TADD 3678 TAD LAB: CNC Woods (2 credits)
- TADD 3679 TAD LAB: CNC Metals (2 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

ILLUSTRATION EMPHASIS

Illustration Core

Complete the following courses:

- ARTH 2551 Art History Survey I (4 credits)
- ARTH 2552 Art History Survey II (4 credits)
- TADD 3100 Digital Illustration: Vector Art (2 credits)
- TADD 3140 Figure Illustration (2 credits)
- TADD 3160 Spatial Illustration (2 credits)
- TADD 3180 Digital Painting: Raster Art (2 credits)
- TADD 3340 Branding & Identity Design (2 credits)
- TADD 3460 Printmaking: Traditional (2 credits)
- TADD 3470 Printmaking: Experimental (2 credits)
- TADD 4120 Illustrative Storytelling (2 credits)
- TADD 4190 Animated Illustration (2 credits)
- TADD 4880 Advanced Illustration (2 credits)
- TADD 4897 Senior Exhibition (0 credit)

Technology, Art and Design, B.S. *major*

Exhibit & Experience Design Emphasis

Required Credits: 78

Required GPA: 2.00

Required TAD Core Courses

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 3090 Leadership in Creative Industries (2 credits)
- TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)

Culmination Core

Complete the following courses:

- TADD 3899 Junior Culmination: Internship Planning (2 credits)
- TADD 4899 Senior Culmination: Career Planning (2 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

Art & Design Core

Complete the following courses:

- TADD 1150 Drawing Fundamentals (2 credits)
- TADD 2100 History, Philosophy, and Application of Color (3 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 3350 History of Modern Art & Design: 1820-1950 (3 credits)

2D Core

Complete the following courses:

- TADD 2200 Introduction to Graphic Design (2 credits)
- TADD 2550 Tech Toolbox II: InDesign (2 credits)
- TADD 3020 Typography: Hand Lettering (2 credits)

3D Core

Complete the following courses:

- TADD 3200 Introduction to Model Making (2 credits)
- TADD 3380 Designing for Experiences (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)

Creative Core

Complete the following courses:

- TADD 3040 Typography: Digital Typefaces (2 credits)
- TADD 3300 Wayfinding & Signage Design (2 credits)
- TADD 3340 Branding & Identity Design (2 credits)
- TADD 3449 Tech Toolbox II: Premiere Pro (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)

TAD Lab Core

Complete 2 credits from the following courses:

- TADD 2670 Painting (4 credits)
- TADD 3557 TAD LAB: Molding & Casting (2 credits)
- TADD 3558 TAD LAB: Machining (2 credits)
- TADD 3559 TAD LAB: Traditional Woods (2 credits)
- TADD 3660 TAD LAB: Welding (2 credits)
- TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)
- TADD 3678 TAD LAB: CNC Woods (2 credits)
- TADD 3679 TAD LAB: CNC Metals (2 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

Exhibit & Experience Design Emphasis

Complete the following courses:

- TADD 3700 Materials, Lighting, and Structures (2 credits)
- TADD 3750 Tradeshow Exhibit Design (2 credits)
- TADD 3780 Museum Experience Design (2 credits)
- TADD 4700 Pop-up Shop & Visual Merchandising Design (2 credits)
- TADD 4750 Event Design (2 credits)

- TADD 4820 Advanced Experience Design (2 credits)

Program Learning Outcomes | Technology, Art & Design, B.S.

1. Students will communicate effectively in oral, written and visual forms.
2. Demonstrate knowledge in diverse cultural and historical perspectives and apply them to their art and design practice.
3. Students will develop and demonstrate competence in implementing art and/or design principles.
4. Students will demonstrate the ability to implement the creative process independently and/or interdependently.
5. Students will exhibit the ability to seek, give and accept constructive criticism.

Technology, Art and Design, B.S. *major* Event Planning & Project Management Emphasis

Required Credits: 78

Required GPA: 2.00

Required TAD Core Courses

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 3090 Leadership in Creative Industries (2 credits)
- TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)

TAD Lab Core

Complete 2 credits from the following courses:

- TADD 2670 Painting (4 credits)
- TADD 3557 TAD LAB: Molding & Casting (2 credits)
- TADD 3558 TAD LAB: Machining (2 credits)
- TADD 3559 TAD LAB: Traditional Woods (2 credits)
- TADD 3660 TAD LAB: Welding (2 credits)
- TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)
- TADD 3678 TAD LAB: CNC Woods (2 credits)
- TADD 3679 TAD LAB: CNC Metals (2 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

EVENT PLANNING & PROJECT MANAGEMENT EMPHASIS

Project Management Core

Complete the following courses:

- TADT 1109 Computer Applications for Project Managers (3 credits)
- TADT 1111 Introduction to Project Management (3 credits)
- TADT 1220 Introduction to Manufacturing Processes II (3 credits)
- TADT 2211 Introduction to Cost Management (3 credits)
- TADT 2250 Built Environment (3 credits)
- TADT 2252 Construction Materials and Methods (3 credits)
- TADT 3112 Leadership in a Team Environment (3 credits)
- TADT 3250 Print Reading and Project Documentation (3 credits)
- TADT 3260 Project Bidding and Estimating (3 credits)
- TADT 3885 Technical Sales, Service and Training (3 credits)

Event Planning Core

Complete the following courses:

- TADD 2200 Introduction to Graphic Design (2 credits)
- TADD 3240 Prototype Engineering & Detailing (2 credits)
- TADD 3380 Designing for Experiences (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)
- TADD 3700 Materials, Lighting, and Structures (2 credits)
- TADD 3750 Tradeshow Exhibit Design (2 credits)
- TADD 4700 Pop-up Shop & Visual Merchandising Design (2 credits)
- TADD 4750 Event Design (2 credits)
- TADD 4830 Advanced Event Planning & Project Management (2 credits)

Program Learning Outcomes | Technology, Art & Design, B.S.

1. Students will communicate effectively in oral, written and visual forms.
2. Demonstrate knowledge in diverse cultural and historical perspectives and apply them to their art and design practice.
3. Students will develop and demonstrate competence in implementing art and/or design principles.
4. Students will demonstrate the ability to implement the creative process independently and/or interdependently.
5. Students will exhibit the ability to seek, give and accept constructive criticism.

Technology, Art and Design, B.S. *major* Creativity & Innovation Emphasis

Required Credits: 78

Required GPA: 2.00

Required TAD Core Courses

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 3090 Leadership in Creative Industries (2 credits)

- TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)

Creativity & Innovation

Once students successfully complete the TAD Common Core (26 credits), they must work with their academic advisor to build their educational plan. To earn the Creativity and Innovation emphasis, this educational plan must consist of an additional 52 credits mutually agreed upon from the School of Technology, Art & Design.

In other words, these remaining 52 credits can be any TADD or TADT courses offered by the School of Technology, Art & Design.

Program Learning Outcomes | Technology, Art & Design, B.S.

1. Students will communicate effectively in oral, written and visual forms.
2. Demonstrate knowledge in diverse cultural and historical perspectives and apply them to their art and design practice.
3. Students will develop and demonstrate competence in implementing art and/or design principles.
4. Students will demonstrate the ability to implement the creative process independently and/or interdependently.
5. Students will exhibit the ability to seek, give and accept constructive criticism.

Technology, Art and Design, B.S. *major* Prototype Engineering & Model Making Emphasis

Required Credits: 78

Required GPA: 2.00

Required TAD Core Courses

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 3090 Leadership in Creative Industries (2 credits)
- TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)

Culmination Core

Complete the following courses:

- TADD 3899 Junior Culmination: Internship Planning (2 credits)
- TADD 4899 Senior Culmination: Career Planning (2 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

3D Core

Complete the following courses:

- TADD 3200 Introduction to Model Making (2 credits)
- TADD 3380 Designing for Experiences (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)

TAD Lab Core

Complete 14 credits from the following courses:

- TADD 2670 Painting (4 credits)
- TADD 3557 TAD LAB: Molding & Casting (2 credits)
- TADD 3558 TAD LAB: Machining (2 credits)
- TADD 3559 TAD LAB: Traditional Woods (2 credits)
- TADD 3660 TAD LAB: Welding (2 credits)
- TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)
- TADD 3678 TAD LAB: CNC Woods (2 credits)
- TADD 3679 TAD LAB: CNC Metals (2 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

PROTOTYPE ENGINEERING & MODEL MAKING EMPHASIS

Complete the following courses:

- TADD 3220 Conceptual Prototype Engineering (2 credits)
- TADD 3240 Prototype Engineering & Detailing (2 credits)
- TADD 3250 Product Model Making (2 credits)
- TADD 3260 Architectural Model Making (2 credits)
- TADD 3280 Furniture Design & Model Making (2 credits)
- TADD 3320 Package Design (2 credits)
- TADD 3400 Sculpture: Experimental (2 credits)
- TADD 3410 Sculpture: Traditional (2 credits)
- TADD 3448 Tech Toolbox II: Fusion 360 (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)
- TADD 3700 Materials, Lighting, and Structures (2 credits)
- TADD 4430 Sculpture: CNC (2 credits)
- TADD 4860 Advanced Prototype Engineering & Model Making (2 credits)

Program Learning Outcomes | Technology, Art & Design, B.S.

1. Students will communicate effectively in oral, written and visual forms.
2. Demonstrate knowledge in diverse cultural and historical perspectives and apply them to their art and design practice.
3. Students will develop and demonstrate competence in implementing art and/or design principles.
4. Students will demonstrate the ability to implement the creative process independently and/or interdependently.
5. Students will exhibit the ability to seek, give and accept constructive criticism.

Technology, Art and Design, B.S. *major* Interactive Multimedia Design Emphasis

Required Credits: 78

Required GPA: 2.00

Required TAD Core Courses

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 3090 Leadership in Creative Industries (2 credits)
- TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)

Culmination Core

Complete the following courses:

- TADD 3899 Junior Culmination: Internship Planning (2 credits)
- TADD 4899 Senior Culmination: Career Planning (2 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

Art & Design Core

Complete the following courses:

- TADD 1150 Drawing Fundamentals (2 credits)
- TADD 2100 History, Philosophy, and Application of Color (3 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 3350 History of Modern Art & Design: 1820-1950 (3 credits)

2D Core

Complete the following courses:

- TADD 2200 Introduction to Graphic Design (2 credits)
- TADD 2550 Tech Toolbox II: InDesign (2 credits)
- TADD 3020 Typography: Hand Lettering (2 credits)

3D Core

Complete the following courses:

- TADD 3200 Introduction to Model Making (2 credits)
- TADD 3380 Designing for Experiences (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)

Creative Core

Complete the following courses:

- TADD 3040 Typography: Digital Typefaces (2 credits)

- TADD 3300 Wayfinding & Signage Design (2 credits)
- TADD 3340 Branding & Identity Design (2 credits)
- TADD 3449 Tech Toolbox II: Premiere Pro (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)

TAD Lab Core

Complete 2 credits from the following courses:

- TADD 2670 Painting (4 credits)
- TADD 3557 TAD LAB: Molding & Casting (2 credits)
- TADD 3558 TAD LAB: Machining (2 credits)
- TADD 3559 TAD LAB: Traditional Woods (2 credits)
- TADD 3660 TAD LAB: Welding (2 credits)
- TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)
- TADD 3678 TAD LAB: CNC Woods (2 credits)
- TADD 3679 TAD LAB: CNC Metals (2 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

Interactive Multimedia Design Emphasis

Complete the following courses:

- TADD 3800 Tech Toolbox III: After Effects (2 credits)
- TADD 3850 Digital Signage (2 credits)
- TADD 4020 Web & Social Media Design (2 credits)
- TADD 4040 UX Design (2 credits)
- TADD 4810 Advanced Extended Reality (2 credits)
- TADD 4840 Advanced Interactive Multimedia Design (2 credits)

Program Learning Outcomes | Technology, Art & Design, B.S.

1. Students will communicate effectively in oral, written and visual forms.
2. Demonstrate knowledge in diverse cultural and historical perspectives and apply them to their art and design practice.
3. Students will develop and demonstrate competence in implementing art and/or design principles.
4. Students will demonstrate the ability to implement the creative process independently and/or interdependently.
5. Students will exhibit the ability to seek, give and accept constructive criticism.

Technology, Art and Design, B.S. *major* Graphic Design Emphasis

Required Credits: 78

Required GPA: 2.00

Required TAD Core Courses

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)

- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 3090 Leadership in Creative Industries (2 credits)
- TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)

Culmination Core

Complete the following courses:

- TADD 3899 Junior Culmination: Internship Planning (2 credits)
- TADD 4899 Senior Culmination: Career Planning (2 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

Art & Design Core

Complete the following courses:

- TADD 1150 Drawing Fundamentals (2 credits)
- TADD 2100 History, Philosophy, and Application of Color (3 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 3350 History of Modern Art & Design: 1820-1950 (3 credits)

2D Core

Complete the following courses:

- TADD 2200 Introduction to Graphic Design (2 credits)
- TADD 2550 Tech Toolbox II: InDesign (2 credits)
- TADD 3020 Typography: Hand Lettering (2 credits)

3D Core

Complete the following courses:

- TADD 3200 Introduction to Model Making (2 credits)
- TADD 3380 Designing for Experiences (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)

Creative Core

Complete the following courses:

- TADD 3040 Typography: Digital Typefaces (2 credits)
- TADD 3300 Wayfinding & Signage Design (2 credits)
- TADD 3340 Branding & Identity Design (2 credits)
- TADD 3449 Tech Toolbox II: Premiere Pro (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)

TAD Lab Core

Complete 2 credits from the following courses:

- TADD 2670 Painting (4 credits)
- TADD 3557 TAD LAB: Molding & Casting (2 credits)
- TADD 3558 TAD LAB: Machining (2 credits)
- TADD 3559 TAD LAB: Traditional Woods (2 credits)
- TADD 3660 TAD LAB: Welding (2 credits)
- TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)

- TADD 3678 TAD LAB: CNC Woods (2 credits)
- TADD 3679 TAD LAB: CNC Metals (2 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

Graphic Design Emphasis

Complete the following courses:

- TADD 3320 Package Design (2 credits)
- TADD 3460 Printmaking: Traditional (2 credits)
- TADD 3470 Printmaking: Experimental (2 credits)
- TADD 4800 Advanced Typography (2 credits)
- TADD 4850 Advanced Branding & Identity Design (2 credits)
- TADD 4898 Advanced Graphic Design (2 credits)

Program Learning Outcomes | Technology, Art & Design, B.S.

1. Students will communicate effectively in oral, written and visual forms.
2. Demonstrate knowledge in diverse cultural and historical perspectives and apply them to their art and design practice.
3. Students will develop and demonstrate competence in implementing art and/or design principles.
4. Students will demonstrate the ability to implement the creative process independently and/or interdependently.
5. Students will exhibit the ability to seek, give and accept constructive criticism.

Technology, Art and Design, B.S. *major* Digital Illustration & Animation Emphasis

Required Credits: 78

Required GPA: 2.00

Required TAD Core Courses

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 3090 Leadership in Creative Industries (2 credits)
- TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)
- TADD 3551 Tech Toolbox II: 3ds Max (2 credits)

Culmination Core

Complete the following courses:

- TADD 3899 Junior Culmination: Internship Planning (2 credits)
- TADD 4899 Senior Culmination: Career Planning (2 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

Art & Design Core

Complete the following courses:

- TADD 1150 Drawing Fundamentals (2 credits)
- TADD 2100 History, Philosophy, and Application of Color (3 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 3350 History of Modern Art & Design: 1820-1950 (3 credits)

TAD Lab Core

Complete 2 credits from the following courses:

- TADD 2670 Painting (4 credits)
- TADD 3557 TAD LAB: Molding & Casting (2 credits)
- TADD 3558 TAD LAB: Machining (2 credits)
- TADD 3559 TAD LAB: Traditional Woods (2 credits)
- TADD 3660 TAD LAB: Welding (2 credits)
- TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)
- TADD 3678 TAD LAB: CNC Woods (2 credits)
- TADD 3679 TAD LAB: CNC Metals (2 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

Digital Illustration Core

Complete the following courses:

- TADD 2200 Introduction to Graphic Design (2 credits)
- TADD 2550 Tech Toolbox II: InDesign (2 credits)
- TADD 3020 Typography: Hand Lettering (2 credits)
- TADD 3100 Digital Illustration: Vector Art (2 credits)
- TADD 3140 Figure Illustration (2 credits)
- TADD 3160 Spatial Illustration (2 credits)
- TADD 3180 Digital Painting: Raster Art (2 credits)
- TADD 3449 Tech Toolbox II: Premiere Pro (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)
- TADD 3800 Tech Toolbox III: After Effects (2 credits)
- TADD 3850 Digital Signage (2 credits)
- TADD 4020 Web & Social Media Design (2 credits)
- TADD 4040 UX Design (2 credits)
- TADD 4120 Illustrative Storytelling (2 credits)
- TADD 4190 Animated Illustration (2 credits)
- TADD 4880 Advanced Illustration (2 credits)

Program Learning Outcomes | Technology, Art & Design, B.S.

1. Students will communicate effectively in oral, written and visual forms.
2. Demonstrate knowledge in diverse cultural and historical perspectives and apply them to their art and design practice.
3. Students will develop and demonstrate competence in implementing art and/or design principles.
4. Students will demonstrate the ability to implement the creative process independently and/or interdependently.
5. Students will exhibit the ability to seek, give and accept constructive criticism.

Art *minor*

Required Credits: 30

Required GPA: 2.00

I REQUIRED COURSES

Note: The Art minor is not available to students pursuing the Technology, Art and Design major with the Creativity and Innovation emphasis.

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1150 Drawing Fundamentals (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 2670 Painting (4 credits)
- TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)

II ELECTIVE BLOCK

Complete 11 credits from the following:

- ARTH 2551 Art History Survey I (4 credits)
- ARTH 2552 Art History Survey II (4 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 2100 History, Philosophy, and Application of Color (3 credits)
- TADD 3100 Digital Illustration: Vector Art (2 credits)
- TADD 3140 Figure Illustration (2 credits)
- TADD 3160 Spatial Illustration (2 credits)
- TADD 3180 Digital Painting: Raster Art (2 credits)
- TADD 3350 History of Modern Art & Design: 1820-1950 (3 credits)
- TADD 3400 Sculpture: Experimental (2 credits)
- TADD 3410 Sculpture: Traditional (2 credits)
- TADD 3480 Ceramics: Hand & Wheel (4 credits)
- TADD 4120 Illustrative Storytelling (2 credits)
- TADD 4190 Animated Illustration (2 credits)

Design *minor*

Required Credits: 30

Required GPA: 2.00

I REQUIRED COURSES

Note: The Design minor is not available to not available to students pursuing the Technology major with the Creativity and Innovation emphasis.

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 2200 Introduction to Graphic Design (2 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 2550 Tech Toolbox II: InDesign (2 credits)

- TADD 3020 Typography: Hand Lettering (2 credits)
- TADD 3040 Typography: Digital Typefaces (2 credits)
- TADD 3320 Package Design (2 credits)
- TADD 3340 Branding & Identity Design (2 credits)
- TADD 4800 Advanced Typography (2 credits)
- TADD 4850 Advanced Branding & Identity Design (2 credits)
- TADD 4898 Advanced Graphic Design (2 credits)

Event Design *minor*

Required Credits: 30

Required GPA: 2.00

I REQUIRED COURSES

Note: The Event Design minor is not available to students pursuing the Technology, Art and Design major with the Creativity and Innovation emphasis.

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 3300 Wayfinding & Signage Design (2 credits)
- TADD 3380 Designing for Experiences (2 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)
- TADD 3700 Materials, Lighting, and Structures (2 credits)
- TADD 3750 Tradeshow Exhibit Design (2 credits)
- TADD 3780 Museum Experience Design (2 credits)
- TADD 4700 Pop-up Shop & Visual Merchandising Design (2 credits)
- TADD 4750 Event Design (2 credits)
- TADD 4820 Advanced Experience Design (2 credits)

Event Planning *minor*

Required Credits: 30

Required GPA: 2.00

I REQUIRED COURSES

Note: The Event Planning minor is not available to students pursuing the Technology, Art and Design major with the Creativity and Innovation emphasis.

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 3380 Designing for Experiences (2 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)
- TADD 3750 Tradeshow Exhibit Design (2 credits)
- TADD 4750 Event Design (2 credits)
- TADT 1109 Computer Applications for Project Managers (3 credits)
- TADT 1111 Introduction to Project Management (3 credits)
- TADT 2252 Construction Materials and Methods (3 credits)
- TADT 3260 Project Bidding and Estimating (3 credits)

Interactive Multimedia Design *minor*

Required Credits: 30

Required GPA: 2.00

I REQUIRED COURSES

Note: The Interactive Multimedia Design minor is not available to students pursuing the Technology, Art and Design major with the Creativity and Innovation emphasis.

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 2550 Tech Toolbox II: InDesign (2 credits)
- TADD 3380 Designing for Experiences (2 credits)
- TADD 3449 Tech Toolbox II: Premiere Pro (2 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)
- TADD 3800 Tech Toolbox III: After Effects (2 credits)
- TADD 3850 Digital Signage (2 credits)
- TADD 4020 Web & Social Media Design (2 credits)
- TADD 4040 UX Design (2 credits)
- TADD 4840 Advanced Interactive Multimedia Design (2 credits)

Maker Space Technology *minor*

Required Credits: 30

Required GPA: 2.00

I REQUIRED COURSES

Note: The Maker Space Technology minor is not available to students pursuing the Technology, Art and Design major with the Creativity and Innovation emphasis. This minor is not available to students pursuing the Maker Space Technology certificate.

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 3448 Tech Toolbox II: Fusion 360 (2 credits)
- TADD 3480 Ceramics: Hand & Wheel (4 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

II ELECTIVE BLOCK

Complete 14 credits from the following:

- TADD 2670 Painting (4 credits)
- TADD 3557 TAD LAB: Molding & Casting (2 credits)
- TADD 3558 TAD LAB: Machining (2 credits)
- TADD 3559 TAD LAB: Traditional Woods (2 credits)
- TADD 3660 TAD LAB: Welding (2 credits)
- TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)
- TADD 3678 TAD LAB: CNC Woods (2 credits)

- TADD 3679 TAD LAB: CNC Metals (2 credits)
- TADD 4867 Advanced Studio Practice (2 credits)

Technology, Art & Design *minor*

Required Credits: 30

Required GPA: 2.00

I REQUIRED COURSES

Note: The Technology, Art and Design minor is not available to students pursuing the Technology, Art and Design major with the Creativity and Innovation emphasis.

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1800 Creativity in Action (2 credits)

II REQUIRED ELECTIVES

Complete 16 credits from the following:

- TADD 2200 Introduction to Graphic Design (2 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 2550 Tech Toolbox II: InDesign (2 credits)
- TADD 3020 Typography: Hand Lettering (2 credits)
- TADD 3040 Typography: Digital Typefaces (2 credits)
- TADD 3300 Wayfinding & Signage Design (2 credits)
- TADD 3320 Package Design (2 credits)
- TADD 3340 Branding & Identity Design (2 credits)
- TADD 3380 Designing for Experiences (2 credits)
- TADD 3449 Tech Toolbox II: Premiere Pro (2 credits)
- TADD 3460 Printmaking: Traditional (2 credits)
- TADD 3470 Printmaking: Experimental (2 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)
- TADD 3700 Materials, Lighting, and Structures (2 credits)
- TADD 3750 Tradeshow Exhibit Design (2 credits)
- TADD 3780 Museum Experience Design (2 credits)
- TADD 3800 Tech Toolbox III: After Effects (2 credits)
- TADD 3850 Digital Signage (2 credits)
- TADD 4020 Web & Social Media Design (2 credits)
- TADD 4040 UX Design (2 credits)
- TADD 4700 Pop-up Shop & Visual Merchandising Design (2 credits)
- TADD 4750 Event Design (2 credits)
- TADD 4800 Advanced Typography (2 credits)
- TADD 4850 Advanced Branding & Identity Design (2 credits)

2-D Art & Design Technology *cert*

Required Credits: 18

Required GPA: 2.00

REQUIRED COURSES

Note: The 2D Art and Design Technology certificate is not available to students pursuing the Technology, Art and Design major with the Creativity and Innovation emphasis.

Complete the following courses:

- TADD 1150 Drawing Fundamentals (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 2550 Tech Toolbox II: InDesign (2 credits)
- TADD 3449 Tech Toolbox II: Premiere Pro (2 credits)
- TADD 3800 Tech Toolbox III: After Effects (2 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

3-D Art & Design Technology *cert*

Required Credits: 18

Required GPA: 2.00

REQUIRED COURSES

Note: The 3D Art and Design Technology certificate is not available to students pursuing the Technology, Art and Design major, Creativity and Innovation emphasis. This certificate is also not available to students pursuing the Art: New Studio Practice major with the 3D Arts emphasis.

Complete the following courses:

- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 3448 Tech Toolbox II: Fusion 360 (2 credits)
- TADD 3449 Tech Toolbox II: Premiere Pro (2 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

Educational Technology *cert*

Required Credits: 19

Required GPA: 2.00

REQUIRED COURSES

Note: The Educational Technology certificate is not available to students pursuing the Technology, Art and Design major with the Creativity and Innovation emphasis.

Complete the following courses:

- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 3449 Tech Toolbox II: Premiere Pro (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)
- TADD 3678 TAD LAB: CNC Woods (2 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

Maker Space Technology *cert*

Required Credits: 30

Required GPA: 2.00

REQUIRED COURSES

Note: The Maker Space Technology certificate is not available to students pursuing the Technology, Art and Design major with the Creativity and Innovation emphasis. This certificate is not available to students pursuing the Maker Space Technology minor.

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 3448 Tech Toolbox II: Fusion 360 (2 credits)
- TADD 3480 Ceramics: Hand & Wheel (4 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

Complete 14 credits from the following courses:

- TADD 2670 Painting (4 credits)
- TADD 3557 TAD LAB: Molding & Casting (2 credits)
- TADD 3558 TAD LAB: Machining (2 credits)
- TADD 3559 TAD LAB: Traditional Woods (2 credits)
- TADD 3660 TAD LAB: Welding (2 credits)
- TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)
- TADD 3678 TAD LAB: CNC Woods (2 credits)
- TADD 3679 TAD LAB: CNC Metals (2 credits)
- TADD 4867 Advanced Studio Practice (2 credits)

Making Money As A Maker *cert*

Required Credits: 25

Required GPA: 2.00

REQUIRED COURSES

Note: The Making Money as a Maker certificate is not available to students pursuing the Technology, Art and Design major with the Creativity and Innovation emphasis.

Complete the following courses:

- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 2200 Introduction to Graphic Design (2 credits)
- TADD 3090 Leadership in Creative Industries (2 credits)
- MUS 3150 Arts Organization Management (3 credits)
- MUS 3170 Arts Organization Fundraising and Grant Writing (3 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

Technology, Art and Design - Design Courses

TADD 1100 Orientation to Technology, Art, and Design (2 credits)

The purpose of the Orientation to Technology, Art, and Design course at Bemidji State University is to introduce the School of Technology, Art & Design (The TAD School). Students will explore majors and minors, career options, and salary data for technology, art, and design-related careers. Students will also meet faculty and learn about available resources, clubs, and the junior and senior screening process. Students will become familiar with the facilities in The TAD School.

TADD 1150 Drawing Fundamentals (2 credits)

This course introduces students to classical and contemporary observational drawing techniques and drawing strategies. This class has an emphasis on the understanding of the formal language and the fundamentals of artistic expression. Projects direct observation of nature, still life, and the human form. Assignments are designed to improve drawing skills, engage creative problem-solving, as well as broaden students' knowledge of the cultural/historical relevance of drawing. Students will discuss, analyze, and critique their original drawings and 2D design work with a group of their peers using standard critique procedures. Liberal Education Goal Areas 6 & 11.

TADD 1200 Two-Dimensional Visual Foundations (2 credits)

This course is a foundation-level study of the elements of art and principles of design related to two-dimensional visual literacy. Students will explore the concepts of composition through guided projects and demonstrations, discovering a working creative process, an awareness of design in our culture, and awareness of current art and design issues. Students will experience both traditional and digital studio practices. Students will discuss, analyze, and critique their original drawings and 2D design work with a group of their peers using standard critique procedures. Liberal Education Goal Area 6 and 11.

TADD 1300 Three-Dimensional Visual Foundations (2 credits)

This course is a foundation level study of the elements of art and principles of three-dimensional design. Students will use a variety of media and art techniques to explore three-dimensional design; form, line, plane, volume, mass, space, texture, light, and time. Projects emphasize a creative process for problem-solving in three dimensions, as well as a general knowledge of historical and contemporary design issues. Students will discuss, analyze, and critique their original drawings and 2D design work with a group of their peers using standard critique procedures. Liberal Education Goal Area 6 & 11.

TADD 1400 The Art of Napkin Sketching (2 credits)

This course introduces the idea of rough sketching as a communication tool rather than a fine art. Designers can easily find inspiration at any moment. Napkin sketches represent the visualization of spur of the moment inspiration, allowing for the rapid exploration of thoughts and ideas. This approach to drawing aids the expression of feelings, ideas, and even philosophies to others. It is a process that illustrates how people think, what is important to them, and the spirit of their thoughts. This communication tool is often the basis for turning ideas into more meaningful works of art and design. Liberal Education Goal Area 6.

TADD 1500 Tech Toolbox I: Illustrator (2 credits)

In this course students will use Adobe Illustrator for the creation and manipulation of vector graphics. Topics will include: file formats, resolution, illustration and color systems. This course introduces and explains software skills where they would naturally fall into a project workflow. The project-based approach employed in this course gets students an in-depth understanding of the software through step-by-step instructions through every phase of a project.. When students complete the projects in this class, they will have a substantial body of work that should express their understanding of the Adobe Illustrator software.

TADD 1550 Tech Toolbox I: Photoshop (2 credits)

In this course students will use Adobe Photoshop for the creation and manipulation of raster graphics. Topics will include: file formats, resolution, illustration and color systems. This course introduces and explains software skills where they would naturally fall into a project workflow. The project-based approach employed in this course gets students an in-depth understanding of the software through step-by-step instructions through every phase of a project. When students complete the projects in this class, they will have a substantial body of work that should express their understanding of the Adobe Photoshop software.

TADD 1600 Fundamentals of Digital Photography (2 credits)

This course will explore digital photography and imaging techniques with special application to art, design and communication, with an emphasis put on understanding the control and effects of light. Projects will address a range of design, aesthetics, and conceptual issues fundamental to the art of digital photography. Strong emphasis is on the development of both a technical foundation and a critical awareness of the medium as a creative tool. Students will discuss, analyze, and critique their original drawings and 2D design work with a group of their peers using standard critique procedures. Liberal Education Goal Area 6 & 11.

TADD 1700 Presentation Planning, Design, and Delivery (3 credits)

Students will learn to thoroughly plan, design, and deliver a successful live presentation that is human-centered and effective. This course focuses on delivering meaningful presentations with self-awareness, creativity, intentionality, and an authentic personal voice. Students investigate motivation and self-expression. Students will learn to organize, prepare, practice, and deliver short and long-form presentations. This course will introduce students to the theory and practice of visual rhetoric, the art of creating persuasive presentations and delivering them with confidence. Liberal Education Goal Area 1.

TADD 1800 Creativity in Action (2 credits)

Creativity in Action is a course that explores an understanding of creativity and innovation, including leading theorists and the generation of ideas. Questions investigated include who is creative, and why? What does it mean to be creative? Is creativity a general attribute, or is it discipline-specific? Students will learn how creative juices flow and how such creative flow materializes into meaningful ideas. Sure, some ideas are wacky, and some are slightly humorous, but we are looking to develop creativity into solving revolutionary challenges. This course values creativity in action, which goes beyond merely risk-taking and solving problems. Liberal Education Goal Area 6.

TADD 2100 History, Philosophy, and Application of Color (3 credits)

This course is an exploration into the nature and meaning of color using methods of historical, philosophical, and experimental inquiry. Beyond discovering the history and philosophy of color, students in this course will learn how to apply color through creative projects. Learners will study hue, value, and chroma/saturation. Students will discover color systems that allow them to communicate color effectively. By the completion of this course, students will be able to combine colors with technology, art, design, and life. Students will discuss, analyze, and comprehend cultural meanings of color and its experience globally. Liberal Education Goal Areas 6 and 8.

TADD 2200 Introduction to Graphic Design (2 credits)

This course introduces students to the profession of graphic design as a conceptual, visual, and commercial discipline. Through lectures, demonstration, research, and studio experiences, students become familiar with the theoretical and processes of the working graphic designer. Topics include: (1) developing a visual vocabulary, (2) essential elements of art, (3) principles of design, (4) visual communication problem solving, (5) employing a creative design process to create designs that meet clients' needs, and (6) understanding the appropriate software to produce works of graphic design. Prerequisite(s): TADD 1500, TADD 1550.

TADD 2300 Introduction to Typography (2 credits)

Great typography is timeless. While technology is inevitably going to change, setting great type has more to do with creativity and aesthetics than technology. This hands-on course explains clearly how typography works and is an introduction to the expressive and functional use of typography. Topics include typographic terms and techniques, early writing systems as well as computer-generated type and fonts. Activities help students learn the essential concepts and skills needed to use and create type.

TADD 2550 Tech Toolbox II: InDesign (2 credits)

This course is intended to familiarize students with the majority of Adobe InDesign tools, so students can apply the design process in building their design portfolio. Understanding the robust publishing application, Adobe InDesign, will allow students to become more productive by integrating what was learned about vector graphics, raster images, and typography. The relevance of Adobe InDesign to design for traditional print media, screen media, interactive multimedia, and web-based media platforms will be introduced and discussed in this course. The software will be used to create, export, and present all design tutorials and individual projects. The project-based approach employed in this course gets students an in-depth understanding of the software through step-by-step instructions through every phase of a project. The projects in this class reflect a range of different types of work represented in the various academic pathways students may choose to pursue in The School of Technology, Art & Design. When students complete the projects in this class, they will have a substantial body of work that should express their understanding of the Adobe InDesign software. Prerequisite(s): TADD 1500, TADD 1550.

TADD 2670 Painting (4 credits)

This course is an Introduction to the medium of oil painting and to the processes involved in perceptual and conceptual exploration. Liberal Education Goal Areas 6 & 11.

TADD 2925 People of the Environment: Technology, Art, and Design Perspective (3 credits)

Discussion and evaluation of current environmental topics related to technology, art, and design. Liberal Education Goal Area 10.

TADD 3020 Typography: Hand Lettering (2 credits)

In this course, students incorporate hand lettering into their illustration process. They explore lettering as free gestural expression, outside of the confines of the computer, made by hand using a variety of traditional media. Students gain an appreciation for hand lettering as an art form, as well as learn how to incorporate hand lettering into their illustrations. Hand lettering is the synthesis of typography and illustration. Prerequisite(s): TADD 2300.

TADD 3040 Typography: Digital Typefaces (2 credits)

This course will provide a theoretical and practical study of the visual nature and expressive potential of digital type forms as a fundamental tool of the graphic designer. Students will practice the preparation and production of digital typographic and graphic assets. Work will include digital illustration, layout, and export for online use as well as for print production with current technologies. Prerequisite(s): TADD 2300

TADD 3090 Leadership in Creative Industries (2 credits)

Whether a student wants to become a Bootstrapping Freelancer, Art Director, or Creative Cottage Industrialist, this Leadership in Creative Industries course effectively matches artists, designers, and makers creative skills and interests with the developing marketplace. Through case studies, guest lectures, and presentations, students will develop creative solutions that support and expand their artistic capacity. Students will learn the theory and practice of the innovative leadership skills essential to lead effectively in creative fields. Through this learning experience, students will understand the creative process, creativity, and the range of variables to lead creative people more effectively.

TADD 3100 Digital Illustration: Vector Art (2 credits)

Vector art is art made with vector illustration software like Adobe Illustrator. Vector artwork is built from vector graphics, which are images created with mathematical formulas. In comparison, raster art (also referred to as bitmaps or raster images) is created with colorized pixels. Enlarge pixel-based art in a raster file too much and it looks jaggy, whereas you can enlarge vector art to any size without negatively affecting its appearance. This resolution independence allows vector art to be used in a variety of forms, from small illustrations to massive billboards. This course is an exploration of digital illustration using vector graphics. Prerequisite(s): TADD 1150, TADD 1500. Liberal Education Goal Area 6.

TADD 3140 Figure Illustration (2 credits)

In this course students will study of the figure and its relationship and application in contemporary Illustration. Course work and assignments will focus on an understanding of anatomy through observation, expressive gesture, and practical applications. Traditional and non-traditional drawing methods will be introduced and explored. Prerequisite(s): TADD 1150. Liberal Education Goal Area 6.

TADD 3160 Spatial Illustration (2 credits)

This course introduces students to the illustrative graphic presentation of spaces, ideas and products. Sketching and refining techniques are practiced in various media including graphite, ink, colored pencils, marker pens, and collage. Perspective drawing tools and techniques are demonstrated and practiced. Conceptualization, production, and presentation techniques are discussed. Prerequisite(s): TADD 1150. Liberal Education Goal Area 6.

TADD 3180 Digital Painting: Raster Art (2 credits)

Raster artwork is any digital art composed of horizontal and vertical rows of pixels. In comparison, vector artwork is digital art composed of mathematical lines and curves. This hands-on course allows students to get creative and productive with brushes and other pixel-based digital tools. This course will explore how to manage layers, effects, selection techniques, working with text, and maximizing colors. This course includes several projects to help students learn how to use digital tools effectively. Once students have completed the course, he or she will be fully capable of using the pixel-based tools to create meaningful digital artwork. Prerequisite(s): TADD 1150, TADD 1550. Liberal Education Goal Area 6.

TADD 3200 Introduction to Model Making (2 credits)

This course exposes students interested in technology, art, and design to learn more about model making. Prior model making experience is helpful, but not required. The course provides a basic introduction to methods of constructing with sheet materials, shaping soft materials to achieve complicated forms, and achieving realistic textures. Students are guided through demonstrations each day. Introduction to Model Making leverages a variety of hand tools and fabrication techniques. Emphasis is on shop safety, hand skills, accuracy, professionalism, and working within specified tolerances to build three-dimensional models.

TADD 3220 Conceptual Prototype Engineering (2 credits)

This course will explore the various steps needed to create a concept/mockup prototype model. Models are design tools and are employed greatly in all aspects of industry. This creative process will include brainstorming, research, sketching, and creation of the model. It aids clients in visualizing and understanding their products' characteristics prior to creation of a high-level prototype. The course will have an emphasis on shop safety, project management and professionalism.

TADD 3240 Prototype Engineering & Detailing (2 credits)

This course is an in-depth look into the finishing and detailing process required of professional prototype models. A finished model must accurately resemble the final prototype in every aspect. Prototype Finishing and Detailing will cover project preparation using various materials, surface finishes/textures and the paints required for the finishing process such as primer, basecoat, single stage and clear coat. The technique of spray finishing will be explored and demonstrated utilizing aerosol, air brush and spray guns. The course will have a strong emphasis on shop safety, project management and professionalism.

TADD 3250 Product Model Making (2 credits)

This course will explore the processes utilized in the creation of a consumer product model by means of a product redesign or new design. This will include an introduction to the basics of form, fit and function and its relationship to the creation of a 3D model. The process will include a scaled 3D drawing to be utilized in the construction of a physical model. The course will require students to utilize many processes, including traditional machining (woods/metals), 3D printing, CNC and other shop equipment. Emphasis will be on shop safety, accuracy, professionalism, project management, problem solving and working within specified tolerances.

TADD 3260 Architectural Model Making (2 credits)

Course Description: This course is the study of architectural model-making techniques, processes, and materials needed to construct a scaled version of a real building project. This model is used as a visual design tool to communicate a client's idea. This course will utilize 2D & 3D software, traditional & non-traditional machining, laser cutter, and various hand skills to construct a professional model. Emphasis will be on shop safety, accuracy, professionalism, project management, and problem-solving.

TADD 3280 Furniture Design & Model Making (2 credits)

This course is the study of model-making techniques, processes, and materials needed to construct a scaled version of furniture. This model is used as a visual design tool to communicate a client's idea. This course will utilize 2D & 3D software, traditional & non-traditional machining, laser cutter, and various hand skills to construct a professional model. Emphasis will be on shop safety, accuracy, professionalism, project management, problem-solving, and working within specified tolerances.

TADD 3300 Wayfinding & Signage Design (2 credits)

Our need to communicate with our fellow humans is fundamental to our well-being and, indeed, our survival. We have long made marks on objects and in our surrounding environment to communicate information visually. These marks communicate meaning, and over time has become a shared language among the people who made and understood them. Signage and wayfinding design are essential and most commonly expressed in unified signs that informationally and visually knit together a site, a collection of related sites, such as regional parks or global corporate facilities, or networks, such as a transportation system. This course focuses on understanding wayfinding and designing signage to communicate our surrounding environment better visually. Prerequisite(s): TADD 2300.

TADD 3320 Package Design (2 credits)

In Packaging Design, as well as Display Design, students are introduced to the process of designing three-dimensional containers, individually, or as systems for the mutual benefit of the end-user and the manufacturer. Emphasis is placed on symbols, shape, color, illustration, and typography and how they relate to three-dimensional problems. Prerequisite(s): TADD 1500.

TADD 3340 Branding & Identity Design (2 credits)

An introduction to the visual and conceptual problems related to branding. Students also practice digital print production management techniques for all digital assets, and digital layout assembly to create marketing materials in relation to branding. Prerequisite(s): TADD 2200, TADD 2300.

TADD 3350 History of Modern Art & Design: 1820-1950 (3 credits)

This course is a survey of major movements, period tendencies, and key figures in the development of art, graphic design, craft, and industrial design between the early-19th century and 1950. Examination of technological advancements, world historical and art historical trends that surround these movements will also be an important goal in order to gain an effective understanding of this period. Course material seeks to articulate a global perspective of art and design in this era, including Asian, Indian, African, and South American models. Liberal Education Goal Areas 6 and 8.

TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)

This course is a survey of the major movements, period tendencies, and key figures in art, graphic design, craft, and industrial design that affect us today. Starting from our current (contemporary) point of view, we discuss existing influences while reviewing the precedents that have been set in the last one hundred years. Students will examine recent, current, and predicted future technologies, as well as current political and economic trends' effects on design trends. Importance will be placed on the influence of historical perspective and future predictions on our current design practice. Course material seeks to articulate a global perspective of art and design in this era, including Asian, Indian, African, and South American models. Liberal Education Goal Areas 6 and 8.

TADD 3380 Designing for Experiences (2 credits)

Experience design is the collection of intentional strategies, touchpoints, and activities chosen to deliver constructions of meaning through engaging interactions. Experiences are what drive the economy. What distinguishes okay companies from truly great companies is the experiences that they provide their customers, as well as their employees. Designing for experiences is about making individuals feel alive and helping organizations take their business to the next level. In this introductory course, students will be exposed to the design, build, execution, evaluation, and management of meaningful experiences. Liberal Education Goal Area 11.

TADD 3400 Sculpture: Experimental (2 credits)

This course introduces students to a variety of methods for combining materials and processes to create sculptural forms. Hands-on projects expand 3D design concepts to include non-traditional media and encourage students to develop their creative ideas. Students will explore contemporary trends and applications, as well as research cultural traditions throughout history. Coursework includes access to a variety of labs and equipment to enhance projects. Students will discuss, analyze, and critique their original drawings and 2D design work with a group of their peers using standard critique procedures. Liberal Education Goal Area 6 and 11.

TADD 3410 Sculpture: Traditional (2 credits)

This course introduces students to a variety of traditional materials and processes common to sculpture. Hands-on projects expand 3D design concepts and encourage students to develop their creative ideas through additive, subtractive and casting methods. Students will explore contemporary trends and applications, as well as research cultures throughout history. Students will discuss, analyze, and critique their original drawings and 2D design work with a group of their peers using standard critique procedures. Liberal Education Goal Area 6 and 11.

TADD 3448 Tech Toolbox II: Fusion 360 (2 credits)

This course introduces students to the use and application of Autodesk Fusion 360 software, which is the key to instant 3D creativity, used by designers, model makers, engineers, and other makers. Students will learn to use Fusion 360 to turn ideas into designs that flow into 3D printing, CNC milling, or injection molding.

TADD 3449 Tech Toolbox II: Premiere Pro (2 credits)

This course is an introduction to video-editing techniques using Adobe Premiere Pro, the industry-leading application for video-editing. This course utilizes and expands student designers' skillset. Students will learn: to transform raw footage into impactful stories, how to edit video and audio, correct color, add titles and effects, and more. Prerequisite(s): TADD 1550.

TADD 3460 Printmaking: Traditional (2 credits)

An introduction to the concepts and techniques of relief printmaking and the aesthetic issues within traditional printmaking practices. Students will evaluate visual art within historical and contemporary contexts. Students will develop image-making and studio processes skills through several printmaking projects. Reading, discussions, and demonstrations will support this development. Students will discuss, analyze, and critique their original drawings and 2D design work with a group of their peers using standard critique procedures. Liberal Education Goal Area 6 and 11.

TADD 3470 Printmaking: Experimental (2 credits)

This course will introduce students to the concepts and techniques of silkscreen and related stencil printing forms. Demonstration, discussion, sketching, art production, and critique will support development of students' skills. Students will practice working in a shared studio environment, solving layered design issues, and evaluating silkscreen art within historical and contemporary contexts. Students will discuss, analyze, and critique their original drawings and 2D design work with a group of their peers using standard critique procedures. Liberal Education Goal Area 6 and 11.

TADD 3480 Ceramics: Hand & Wheel (4 credits)

Three-dimensional visual design and problem-solving is integrated with the introduction to basic hand-forming methods, glazing, and firing of ceramic forms. This course is an introduction to the functional and sculptural process of ceramics using various hand-building techniques. Students will explore processes including pinch, coil, and slab building, as well as gain an understanding of the tools and methods involved in hand building. Students will learn about glazing and how color and surface design can bring life to their unique works of art. Liberal Education Goal Area 6 & 11.

TADD 3551 Tech Toolbox I: 3ds Max (2 credits)

This course is an introductory software-based course focusing on the 3ds Max design workflow as it relates to basic modeling, necessary materials, and essential lighting techniques. Students will learn how to use this software related to architectural exhibits and spaces, as well as model making, graphic design, and motion graphics. This course is just the beginning of learning dozens of features and techniques that students will someday master, from sculpting and texturing to lighting and rendering.

TADD 3552 Tech Toolbox II: 3ds Max (2 credits)

This course is a level two software-based course focusing on the 3ds Max design workflow as it relates to advanced materials, lighting and modeling techniques. Prerequisite(s): TADD 3551.

TADD 3553 Tech Toolbox III: 3ds Max (2 credits)

This course is a level three software-based course focusing on the 3ds Max design workflow as it relates to advanced output options. Course also serves as an introduction to 3D game engines, augmented and virtual reality. Prerequisite(s): TADD 3552.

TADD 3557 TAD LAB: Molding & Casting (2 credits)

In this course, students will learn how to make molds that will allow them to cast multiples of practically any object using a variety of materials. Students will gain a solid understanding of fundamental techniques that will empower them to tackle almost any mold-making project. Students will discover what undercuts are and how to recognize them on their models; they will determine what kind of mold and mold material to use and how to build and adequately seal mold walls. Mold and cast your way to a customized world!

TADD 3558 TAD LAB: Machining (2 credits)

This course introduces students to the basics of operating a lathe and a milling machine. Students will learn essential machine and lab safety procedures, use of bench tools, layout tools, drill presses, precision measurement tools, and various hand tools related to the machine shop. Students will study the vertical milling machine and the horizontal lathe as well as their components and controls. They will gain an understanding of speeds and feeds, utilizing various tools and tool holders. They will identify basic tool geometry, and the use of standard lathe spindle tooling.

TADD 3559 TAD LAB: Traditional Woods (2 credits)

In this foundational woodworking course, students will learn the basics of the traditional woodshop. This course serves as the prerequisite for makers to reach their full potential. Students will go through a learning process grounded in understanding hand tools and grow into learning more high-tech woodshop processes. Once students complete this foundational course, they will have the skills and confidence to continue excelling as a maker in the woodshop.

TADD 3660 TAD LAB: Welding (2 credits)

This course will provide students with entry-level skills in Welding. This course includes basic welding theory, safety in welding, introduction to oxygen, basic weld symbols for blueprint reading. Students will learn oxyacetylene welding using the cutting torch and brazing, electric arc and other welding techniques, and stick welding with a variety of electrodes in the flat and horizontal fillet positions.

TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)

The purpose of this course is to provide the student an understanding of materials, principles, and techniques of spray finishing required to complete a professional form. Processes may include model construction, surface preparation, materials selection and paint application.

TADD 3668 TAD LAB: Laser (2 credits)

There has never been a better time to learn about and try Laser cutting and etching. This course draws a roadmap for getting started with Laser, which is also known as additive manufacturing). This course will discuss the different Laser operations used for Vector graphics (cutting) and Raster graphics (etching). Students will learn how to properly prepare digital files for projects of their own creation and operate laser equipment. Knowledge of materials and how to apply them is also an important part of this course. This TAD Lab is a hands-on production-based course that walks students through a step-by-step process of Laser cutting.

TADD 3677 TAD LAB: 3D Printing (2 credits)

There has never been a better time to learn about and try 3D printing. This course draws a roadmap for getting started with 3D printing, which is also known as additive manufacturing). This course will discuss the different 3D Printers used for 3D modeling (filament-based, laser sintering, and more). This TAD Lab is a hands-on production-based course that walks students through a step-by-step process of 3D printing.

TADD 3678 TAD LAB: CNC Woods (2 credits)

This course is designed to introduce students to vector-based cutting operations in wood and paper products. Students will apply knowledge gained in the classroom to sketch, create measured files in various software and execute their assignments using a variety of CNC equipment available to them. Laser cutting/etching, cardboard cutting/folding, and wood CNC milling are basic operations we will cover.

TADD 3679 TAD LAB: CNC Metals (2 credits)

This course is designed to introduce students to vector-based cutting operations in metal. Students will apply knowledge gained in the classroom to sketch, create measured files in various software and execute their assignments using a variety of CNC equipment available to them.

TADD 3680 TAD LAB: AutoCAD (2 credits)

This course introduces students to the use and application of Autodesk AutoCAD software. AutoCAD is used by architects, designers, model makers, engineers, and other makers. Students will learn to use AutoCAD to turn ideas into designs that flow into 3D modeling and other output formats.

TADD 3700 Materials, Lighting, and Structures (2 credits)

This course is an overview of the materials, lighting, and structures used in the exhibit industry. Students will explore fabric, aluminum extrusion systems, printing substrates, sustainable options, lighting technologies, and building techniques.

TADD 3750 Tradeshow Exhibit Design (2 credits)

This course aims to help make students better understand the art of creating immersive experiences that tell a story. Tradeshows are not new but designing meaningful experiences with intentionality is an entirely new industry. This form of spatial storytelling takes guests through meaningful experiences that incorporate graphics, spatial planning, architecture, modern media, theatrical arts, interaction, entertainment, marketing, learning, lighting, engineering, networking, personal growth, and more. This course focuses on designing immersive and experiential tradeshow exhibits for meaningful social interaction. This class will assume that students have had some experience design coursework under their belt and exposed to the basics of Two and Three- Dimensional Design. This course will move students into more advanced levels of experience design. Above all, this course encourages students to think about design by putting the tradeshow attendee at the center of their constructed experience. Prerequisite(s): TADD 3552.

TADD 3780 Museum Experience Design (2 credits)

In this course, students will gain a comprehensive understanding of the different kinds of museums (permanent, temporary, and travel), their various missions, and their experiential characteristics (visitors, research, theories, history, techniques, institutional challenges, educational vision, and public service) common to museums. Students will also explore the various technical and aesthetic approaches for designing museum experiences. The primary focus will be the importance of quality signage, graphics, and engaging media for museums. Prerequisite(s): TADD 3380, TADD 3552.

TADD 3800 Tech Toolbox III: After Effects (2 credits)

This course builds off the video-editing techniques learned in Adobe Premiere Pro, the industry-leading application for video-editing. After Effects adds visual effects, motion graphics, and compositing capabilities to the video-editing skillset. Students will learn: to enhance videographic storytelling with techniques such as keying, tracking, compositing, animation and more. Prerequisite(s): TADD 3449.

TADD 3850 Digital Signage (2 credits)

Every day new digital screens are being installed at locations in every industry. However, the process of developing and deploying engaging digital signage is much more complicated than simply hanging a screen and turning it on. This production-based course will guide students through the process of creating an effective digital signage strategy, from understanding the user and the environment to building experiential content. Learning will focus on storytelling and effective communication through the creation of digital signage and motion graphics. Students will explore the software, tools, and techniques needed to start designing meaningful digital signs in 2D and 3D. Prerequisite(s): TADD 2300.

TADD 3899 Junior Culmination: Internship Planning (2 credits)

In this course, students learn the importance of the internship game, which will give the tools needed to get an internship and the necessary actions for turning that internship into an eventual career. This course will give student artists and designers professional guidance to them to where they want to be after graduation. Students will learn how to apply entrepreneurial strategies to their own life, their internship decisions, and their eventual career. Whether students want to work for a giant multinational corporation, a small local business, or launch their own business, this course will provide vital information and help them develop a personalized plan for their future. Prerequisite(s): Instructor consent.

TADD 4020 Web & Social Media Design (2 credits)

In this course, students will discover how to communicate creatively through websites and social media platforms. Students will learn about the key features on Facebook, Twitter, Instagram, and other platforms to grow an online presence. This course examines how to design websites and social media platforms to extend experiences beyond the face-to-face world and into the virtual world. By the end of this course, students will have a solid introduction to these key platforms so that they can design a virtual strategy that increases brand awareness and maximizes opportunities for meaningful experiences. Prerequisite(s): TADD 2300.

TADD 4040 UX Design (2 credits)

A good user experience design (UX Design) keeps visitors engaged. A bad one will make them go somewhere else. This class teaches students how to apply simple UX design principles to make users behave in the way that designers want and expect when creating compelling digital experiences. Students will learn Adobe XD's capabilities and features to go from concept to interactive prototype. Prerequisite(s): TADD 3850.

TADD 4120 Illustrative Storytelling (2 credits)

The course will integrate image and text within a design context to promote a comprehensive understanding of the role of the illustrator, the art director, and the designer. Students are required to think beyond the content and aesthetics of an image and consider the formal and conceptual context of its application. Prerequisite(s): TADD 3100, TADD 3140, TADD 3160, TADD 3180.

TADD 4190 Animated Illustration (2 credits)

This course allows students to get creative and transform concepts into meaningful 2D animations. Students will investigate the concepts and tools used for creating time and motion-based animations. Prerequisite(s): TADD 3100, TADD 3140, TADD 3160, TADD 3180.

TADD 4430 Sculpture: CNC (2 credits)

This course introduces students to a variety of CNC processes common to sculpture/design. Hands-on projects expand 3D design concepts through the use of design software and a variety of machines. Students will explore contemporary trends and applications, as well as research cultural traditions throughout history. Coursework includes access to TAD Lab facilities. TADD 3448 recommended.

TADD 4630 Topics in Technology, Art & Design (1-4 credits)

Research, advanced exploration, and/or applied study of various topics related to technology, art & design.

TADD 4700 Pop-up Shop & Visual Merchandising Design (2 credits)

Pop-up shops are the temporary use of physical space to create a meaningful experience with current or potential customers. A pop-up shop allows an organization to communicate brand promises through the use of a unique and engaging physical environment while creating an immersive shopping experience. Designing pop-up shops and visual merchandising displays into unforgettable experiences is what this course is all about. Prerequisite(s): TADD 3552.

TADD 4750 Event Design (2 credits)

Event design is the application of form and experience processes to invent festivals, conferences, ceremonies, weddings, formal parties, concerts, tradeshows, or large conventions. It involves studying the brand, identifying its target audience, devising the event concept, and imagining all aspects before actually building and launching the event. In this course, students will learn a systematic visual approach to event design grounded in experience and based on stakeholder needs. Prerequisite(s): TADD 3380, TADD 3552.

TADD 4800 Advanced Typography (2 credits)

This class is an advanced exploration of the elements and forms of typography. We will address the role of these elements as highly abstracted symbols that nevertheless function as the vehicle for the most literal and expressive communication. This class is an opportunity for advanced design students to develop portfolio quality pieces which demonstrate their breadth of expression as well as their personal aesthetic of type. Prerequisite(s): TADD 3020, TADD 3040.

TADD 4810 Advanced Extended Reality (2 credits)

This course turns student's understanding of Virtual Reality (VR), Augmented reality (AR), and Mixed Reality (MR) into advanced knowledge of Extended Reality (XR). This course goes beyond the latest developments in hardware, software, equipment, and computing and their impact on creating meaningful human-centered experiences. Students will learn how knowledge in XR can be maximized and applied in the real world, ultimately making students more employable after graduation. Prerequisite(s): TADD 3553.

TADD 4820 Advanced Experience Design (2 credits)

This course aims to help students create immersive experiences that tell meaningful stories. Designing such meaningful experiences with intentionality is an advanced art form. This advanced form of spatial storytelling takes guests through meaningful experiences that incorporate graphics, spatial planning, architecture, modern media, theatrical arts, interaction, entertainment, marketing, learning, lighting, engineering, networking, personal growth, and more. This advanced course assumes that students have had most other design-related coursework under their belt. Above all, this course prepares students for employment and encourages them to put the guest at the center of the experience. Prerequisite(s): TADD 3750, TADD 3780.

TADD 4830 Advanced Event Planning & Project Management (2 credits)

Advanced Event Planning & Project Management is a culminating course that provides students with the opportunity to apply the skills and knowledge learned from previous courses. Students will increase their level of expertise and confidence through the planning and managing of a simulated educational project. Students in this class will learn to work in a team to develop the conceptualization of an event and manage it to its completion. Successful students in this class will be expected to employ all the communication, design, management, and planning skills learned in previous courses. Students will understand deadlines as an essential component in this course and to utilize external vendors to ensure a successful and enjoyable event that meets goals and expectations. Prerequisite(s): TADD 1111.

TADD 4840 Advanced Interactive Multimedia Design (2 credits)

The future of typography and motion graphics is here. Type is conquering motion, space, and interaction to play across all media. Imagine type that is alive and dynamic, that adapts to the environment. This Advanced Interactive Multimedia course provides students with this form of storytelling expressed in a variety of visual media and environments, including screen-based, print-based, and emerging media. This course explores the new ecosystems that typography now resides in and the tools that designers can use to develop meaningful interactive content and experiences. Students will also learn about the exciting career opportunities in this cutting-edge space. The goal of this course is for students to build from previous interactive and multimedia coursework and develop professional portfolio pieces through a production-based learning experience. Prerequisite(s): TADD 4040.

TADD 4850 Advanced Branding & Identity Design (2 credits)

This course is an advanced theoretical study of the visual and conceptual problems related to branding. Students also practice digital print production management techniques for all digital assets, and digital layout assembly to create full visual identity systems, and related marketing materials. Prerequisite(s): TADD 3340.

TADD 4860 Advanced Prototype Engineering & Model Making (2 credits)

In this course the student will work in collaboration with an industry professional to construct a physical architectural or prototype model. This project will be determined by the student's desired career path. This project will require a culmination of skill sets learned to complete the project as well as the appropriate use of materials, processes and interpretation of client documentation. Emphasis will be on shop safety, accuracy, and professionalism, and project management, problem solving and working within specified tolerances. Prerequisite(s): Senior status.

TADD 4867 Advanced Studio Practice (2 credits)

This Studio-based course is project-based. This format is grounded in sound adult learning theory (andragogy) and is often more popular with students than traditional lecture-based format. In this course, students will work on a complex and demanding project for the entire semester or predetermined timeline. The goal of this course is for students to explore an advanced topic of personal interest. The student will guide much of the coursework and the direction of the project. Therefore, this format requires students to take responsibility for their learning and their time. The course facilitator is there to help students start the project, provide essential resources, and be on hand as a resource for students to use. The course facilitator is a mentor in the process, acting as a learning guide, not an authority. Course is repeatable for up to 12 credits. Prerequisite(s): TAD Common Core or instructor consent.

TADD 4870 Advanced 3D Arts (2 credits)

This course is an advanced level exploration of conceptual approaches to the creation of sculptural forms in addition to continued exploration of processes and techniques on an advanced level. This course will also give students the opportunity to create significant works to add to a senior portfolio. Prerequisite(s): TADD 4430, Instructor consent.

TADD 4880 Advanced Illustration (2 credits)

This course is an advanced level exploration of conceptual approaches to the creation of illustration in addition to continued exploration of processes and techniques on an advanced level. This course will also give students the opportunity to create significant works to add to a senior portfolio. Prerequisite(s): TADD 4120.

TADD 4897 Senior Exhibition (0 credit)

Students will work with the professor to create a solo or team art exhibition.

TADD 4898 Advanced Graphic Design (2 credits)

This course is an opportunity for students to achieve and become creative graphic design professionals. Before students take this course, they should have learned all the foundational skills in Graphic Design. The intention of this course is to take those foundational skills to the next level and become a unique design professional that stands out in a seemingly overcrowded industry. From day one of this course, students will hit the ground running, and ignite their inspiration into creative ideas. This course focuses on becoming a design professional that utilizes and expands students' design skills and abilities through a professionally crafted portfolio. Prerequisite(s): TADD 4800.

TADD 4899 Senior Culmination: Career Planning (2 credits)

In this course, students will explore the volatile, and sometimes scary, employment landscape. Students will learn the importance of creating a career plan that allows them to pursue their future. An effective career plan will allow students to determine essential goals, articulate a pathway reach goals, and assemble a body of work (portfolio) to market themselves to key stakeholders. This course will give student artists and designers professional guidance to land their next opportunity, whether students want to work for a giant multinational corporation, a small local business, or launch their own business. Topics will include dream jobs, graduate school, lifelong learning, career planning, negotiation, interviewing, monetization of passion, personal branding, networking, presentation skills, and how to build a compelling portfolio. Prerequisite(s): Instructor consent.

TADD 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
1940, 2940, 3940, 4940 IN-SERVICE COURSE
1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
1970, 2970, 3970, 4970 INTERNSHIP
1980, 2980, 3980, 4980 RESEARCH
1990, 2990, 3990, 4990 THESIS

Biology

The Biology program grants several majors, including Biology, B.S.; Biology, B.A.; Aquatic Biology, B.S.; Life Science Specialty, Science Education, B.S.; and Medical Laboratory Science, B.S. In addition, students may choose from several emphases within the Biology major, including Wildlife Management, Medical Sciences, and Cellular and Molecular Biology. From field to laboratory studies, the Biology program offers diverse opportunities for personal and professional study and growth.

Programs

- Aquatic Biology, B.S. (Aquatic Systems Emphasis) *major*
- Aquatic Biology, B.S. (Wetlands Ecology Emphasis) *major*
- Aquatic Biology, B.S. (Fisheries Biology Emphasis) *major*
- Biochemistry, Cellular and Molecular Biology, B.S. (Cellular and Molecular Emphasis) *major*
- Biochemistry, Cellular and Molecular Biology, B.S. (Biochemistry Emphasis) *major*
- Biology, B.A. *major*
- Biology, B.S. *major*
- Biology, B.S. (Medical Sciences Emphasis (Optional)) *major*
- Medical Laboratory Science, B.S. ((3 + 1 Option)) *major*
- Medical Laboratory Science, B.S. ((4 + 1 Option)) *major*
- Science Education, B.S. (Life Science Specialty (Teacher Licensure)) *major*
- Wildlife Biology, B.S. *major*
- Aquatic Systems *minor*
- Biology *minor*
- Fisheries Biology *minor*
- Wetlands Ecology *minor*
- Wildlife Biology *minor*

Career Directions

Agricultural Sales
Allied Health Professions
Aquatic Biology
Biotechnology
Clinical Laboratory Sciences
Consultant
Education
Field Biology
Fisheries Biology
Food Sciences
Government Service
Industry
Invertebrate Zoology
Laboratory Biology
Medical Professions
Microbiology
Natural History
Pharmaceutical and Biomedical Products Sales
Research
Science and Technical Writing
Wetlands Science
Wildlife Sciences
Also: Graduate Study

Preparation

Recommended High School Courses

Algebra
Biology
Chemistry
Physics
Precalculus
Trigonometry

Aquatic Biology, B.S. *major* Aquatic Systems Emphasis

Required Credits: 74
Required GPA: 2.50

I REQUIRED BIOLOGY CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)

II REQUIRED AQUATIC BIOLOGY CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- BIOL 3361 Limnology (4 credits)

- BIOL 3362 Streams and Rivers (4 credits)
- BIOL 3830 Aquatic Plants and Algae (4 credits)
- BIOL 4200 Freshwater Invertebrates (4 credits)
- BIOL 4534 Ichthyology (4 credits)
- CHEM 3507 Analytical Chemistry (3 credits)
or ENVR 4220 Sampling and Analysis (4 credits)
or GEOL 3211 Environmental Hydrology (3 credits)
or GEOL 3212 Hydrogeology (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)

III CAPSTONE PROJECT

CAPSTONE PROJECT The Aquatic Biology capstone project, completed in the senior year, provides a culminating experience that integrates the knowledge and skills learned in previous courses and applies them to a scholarly activity. Examples of capstone projects may include original research projects or internships with state and federal agencies. The capstone project must be designed or chosen by the student in consultation with a faculty mentor or advisor, who must approve the project before work begins. Students should consult with their faculty mentor or advisor before their senior year commences. All capstone projects will include a written and oral component. Specific

capstone requirements vary by field of emphasis. Refer to requirements as listed in specific emphases. CHOOSE ONE OF THE FOLLOWING THREE OPTIONS:

COMPLETE THE FOLLOWING COURSE:

- BIOL 4894 Advanced Research Project I (2 credits)

COMPLETE THE FOLLOWING COURSE:

- BIOL 4895 Advanced Research Project II (2 credits)

COMPLETE THE FOLLOWING COURSES:

- BIOL 4894 Advanced Research Project I (2 credits)
- BIOL 4895 Advanced Research Project II (2 credits)

AQUATIC SYSTEMS EMPHASIS

REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSE:

- BIOL 3850 Marine Biology (3 credits)

ELECTIVE CORE COURSES

SELECT A MINIMUM OF 9 CREDITS FROM THE FOLLOWING:

- BIOL 3310 Entomology (3 credits)
- BIOL 3420 Human Dimensions of Wildlife and Fisheries Management (3 credits)
- BIOL 3610 Principles of Wildlife Management (3 credits)
- BIOL 3630 Conservation Biology (3 credits)
or GEOG 3630 Conservation Biology (3 credits)
- BIOL 3723 Ecosystem Ecology (3 credits)
- BIOL 4620 Evolution (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)

ADDITIONAL ELECTIVES

SELECT AN ADDITIONAL 3-4 CREDITS OF BIOLOGY ELECTIVES AT THE 3000 LEVEL OR ABOVE.

V REQUIRED COURSES IN RELATED FIELDS

COMPLETE THE FOLLOWING COURSES:

- CHEM 1111 General Chemistry I (4 credits)
or CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 1112 General Chemistry II (4 credits)
or CHEM 2212 Principles of Chemistry II (4 credits)
- STAT 2610 Applied Statistics (4 credits)
or PSY 3401 Basic Statistics for Research (4 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- PHYS 1101 General Physics I (4 credits)
- PHYS 2101 Physics I (4 credits)

Program Learning Outcomes | Aquatic Biology, B.S.

1. Communicate: Effectively present research using common, professional formats (written and/or verbal). This includes using figures, graphs, tables, and illustrations to promote dissemination and clarity of knowledge.

2. Create Purpose or Hypothesis: Provide justification for the importance of pursuing a project or construct a testable hypothesis (or hypotheses).

3. Observe and Question: Integrate information or observations to promote curiosity and question generation.

4. Recognize Larger Implications: Demonstrate understanding of the ethical/social dimensions or societal implications of science, recognize inherent biases, and communicate scientific ideas to non-science audiences.

5. Re-engage: Demonstrate an ability to re-engage with the research process by identifying sources of error, possible limitations of their research, next steps in a project, or re-designing more appropriate experimental methods/controls.

6. Research: Plan and execute research, experiments, data collection, analysis of the results, and/or synthesis of new or coalesced knowledge.

7. Review Research Literature: Search and review appropriate sources with a goal of independent information discovery or critically identifying knowledge gaps.

Suggested Semester Schedule | Aquatic Biology, B.S., Aquatic Systems Emphasis

The following is a list of required Aquatic Biology Major, B.S., Aquatic Systems Emphasis courses arranged by year. This schedule is intended to assist students in planning their courses. There is some flexibility in this schedule, but graduation within four years will require close adherence to the specified sequence of courses. Always consult your academic advisor in Aquatic Biology as to the proper courses and sequence of courses needed for graduation. Note: With proper student planning and in consultation with the Aquatic Biology academic advisor a student may complete his or her academic degree in 120 semester credits. It is possible, in some circumstances, that courses in a student's Core Curriculum program may be used in his or her academic major.

Freshman

- BIOL1400
- BIOL1500
- CHEM1111
or CHEM2211
- CHEM1112
or CHEM2212
- Core Curriculum Requirements

Sophomore

- BIOL2360
- BIOL2610
- PHYS1101
or PHYS2101
- STAT2610
or PSY3401
- Core Curriculum Requirements

Junior

- BIOL3361
- BIOL3362
- BIOL3830
- CHEM3507
or ENVR4220
or GEOL3211
or GEOL3212

- Elective courses in field of emphasis
- Complete Core Curriculum Requirements

Senior

- BIOL4200
- BIOL4534
- GEOG3231
- Capstone Project
- Elective courses in field of emphasis

Aquatic Biology, B.S. *major* Wetlands Ecology Emphasis

Required Credits: 72

Required GPA: 2.50

I REQUIRED BIOLOGY CORE COURSES

Complete the following courses:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)

II REQUIRED AQUATIC BIOLOGY CORE COURSES

Complete the following courses:

- BIOL 3361 Limnology (4 credits)
- BIOL 3362 Streams and Rivers (4 credits)
- BIOL 3830 Aquatic Plants and Algae (4 credits)
- BIOL 4200 Freshwater Invertebrates (4 credits)
- BIOL 4534 Ichthyology (4 credits)
- CHEM 3507 Analytical Chemistry (3 credits)
or ENVR 4220 Sampling and Analysis (4 credits)
or GEOL 3211 Environmental Hydrology (3 credits)
or GEOL 3212 Hydrogeology (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)

III CAPSTONE PROJECT

CAPSTONE PROJECT The Aquatic Biology capstone project, completed in the senior year, provides a culminating experience that integrates the knowledge and skills learned in previous courses and applies them to a scholarly activity. Examples of capstone projects may include original research projects or internships with state and federal agencies. The capstone project must be designed or chosen by the student in consultation with a faculty mentor or advisor, who must approve the project before work begins. Students should consult with their faculty mentor or advisor before their senior year commences. All capstone projects will include a written and oral component. Specific capstone requirements vary by field of emphasis. Refer to requirements as listed in specific emphases. **CHOOSE ONE OF THE FOLLOWING THREE OPTIONS:**

COMPLETE THE FOLLOWING COURSE:

- BIOL 4894 Advanced Research Project I (2 credits)

COMPLETE THE FOLLOWING COURSE:

- BIOL 4895 Advanced Research Project II (2 credits)

COMPLETE THE FOLLOWING COURSES:

- BIOL 4894 Advanced Research Project I (2 credits)
- BIOL 4895 Advanced Research Project II (2 credits)

WETLANDS ECOLOGY EMPHASIS

REQUIRED CORE COURSES:

COMPLETE THE FOLLOWING COURSES:

- BIOL 3840 Wetlands Ecology (3 credits)
or ENVR 3840 Wetlands Ecology (3 credits)
- BIOL 3844 Wetlands Ecology Lab (1 credit)
- BIOL 4030 Wetland Delineation and Classification (3 credits)

ELECTIVE CORE COURSES

SELECT A MINIMUM OF 6 CREDITS FROM THE FOLLOWING:

- BIOL 3120 Soils (4 credits)
or GEOL 3120 Soils (4 credits)
- BIOL 3420 Human Dimensions of Wildlife and Fisheries Management (3 credits)
or ENVR 4210 Environmental Law and Policy (3 credits)
- BIOL 3610 Principles of Wildlife Management (3 credits)
- BIOL 3630 Conservation Biology (3 credits)
or GEOG 3630 Conservation Biology (3 credits)
- BIOL 3723 Ecosystem Ecology (3 credits)
- BIOL 3850 Marine Biology (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)

V REQUIRED COURSES IN RELATED FIELDS

COMPLETE THE FOLLOWING COURSES:

- CHEM 1111 General Chemistry I (4 credits)
or CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 1112 General Chemistry II (4 credits)
or CHEM 2212 Principles of Chemistry II (4 credits)
- STAT 2610 Applied Statistics (4 credits)
or PSY 3401 Basic Statistics for Research (4 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- PHYS 1101 General Physics I (4 credits)
- PHYS 2101 Physics I (4 credits)

Program Learning Outcomes | Aquatic Biology, B.S.

1. **Communicate:** Effectively present research using common, professional formats (written and/or verbal). This includes using figures, graphs, tables, and illustrations to promote dissemination and clarity of knowledge.
2. **Create Purpose or Hypothesis:** Provide justification for the importance of pursuing a project or construct a testable hypothesis (or hypotheses).
3. **Observe and Question:** Integrate information or observations to promote curiosity and question generation.
4. **Recognize Larger Implications:** Demonstrate understanding of the ethical/social dimensions or societal implications of science, recognize inherent biases, and communicate scientific ideas to non-science audiences.

5. Re-engage: Demonstrate an ability to re-engage with the research process by identifying sources of error, possible limitations of their research, next steps in a project, or re-designing more appropriate experimental methods/controls.

6. Research: Plan and execute research, experiments, data collection, analysis of the results, and/or synthesis of new or coalesced knowledge.

7. Review Research Literature: Search and review appropriate sources with a goal of independent information discovery or critically identifying knowledge gaps.

Suggested Semester Schedule | Aquatic Biology, B.S., Wetlands Emphasis

The following is a list of required Aquatic Biology Major, B.S., Wetlands Emphasis courses arranged by year. This schedule is intended to assist students in planning their courses. There is some flexibility in this schedule, but graduation within four years will require close adherence to the specified sequence of courses. Always consult your academic advisor in Aquatic Biology as to the proper courses and sequence of courses needed for graduation. Note: With proper student planning and in consultation with the Aquatic Biology academic advisor a student may complete his or her academic degree in 120 semester credits. It is possible, in some circumstances, that courses in a student's Core Curriculum program may be used in his or her academic major.

Freshman

- BIOL1400
- BIOL1500
- CHEM1111
or CHEM2211
- CHEM1112
or CHEM2212
- Core Curriculum requirements

Sophomore

- BIOL2360
- BIOL2610
- PHYS1101
or PHYS2101
- STAT2610
or PSY3401
- Core Curriculum requirements

Junior

- BIOL3361
- BIOL3362
- BIOL3830
- BIOL4030
- CHEM3507
or ENVR4220
or GEOL3211
or GEOL3212
- Complete Core Curriculum requirements
- Elective courses in field of emphasis

Senior

- BIOL3840

or ENVR3840

- BIOL3844
- BIOL4200
- GEOG3231
- Capstone Project
- Elective courses in field of emphasis

Aquatic Biology, B.S. *major* Fisheries Biology Emphasis

Special Note: Students seeking fisheries certification through the American Fisheries Society are encouraged to carefully select their Liberal Education courses to include 9 credits from courses related to composition, technical writing and/or verbal communications.

Required Credits: 73

Required GPA: 2.50

I REQUIRED BIOLOGY CORE COURSES

Complete the following courses:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)

II REQUIRED AQUATIC BIOLOGY CORE COURSES

Complete the following courses:

- BIOL 3361 Limnology (4 credits)
- BIOL 3362 Streams and Rivers (4 credits)
- BIOL 3830 Aquatic Plants and Algae (4 credits)
- BIOL 4200 Freshwater Invertebrates (4 credits)
- BIOL 4534 Ichthyology (4 credits)
- CHEM 3507 Analytical Chemistry (3 credits)
or ENVR 4220 Sampling and Analysis (4 credits)
or GEOL 3211 Environmental Hydrology (3 credits)
or GEOL 3212 Hydrogeology (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)

III CAPSTONE PROJECT

CAPSTONE PROJECT The Aquatic Biology capstone project, completed in the senior year, provides a culminating experience that integrates the knowledge and skills learned in previous courses and applies them to a scholarly activity. Examples of capstone projects may include original research projects or internships with state and federal agencies. The capstone project must be designed or chosen by the student in consultation with a faculty mentor or advisor, who must approve the project before work begins. Students should consult with their faculty mentor or advisor before their senior year commences. All capstone projects will include a written and oral component. Specific capstone requirements vary by field of emphasis. Refer to requirements as listed in specific emphases.

Complete the following courses:

- BIOL 4898 Fisheries Research I (2 credits)
- BIOL 4899 Fisheries Research II (2 credits)

FISHERIES BIOLOGY EMPHASIS

Required Core Courses

Complete the following course:

- BIOL 4545 Fisheries Management (4 credits)

Elective Core Courses

Select a minimum of 6 credits from the following:

- BIOL 2339 Ethics of Fish and Wildlife Management (3 credits)
- BIOL 3400 Fish & Wildlife Law and Administration (3 credits)
- BIOL 3420 Human Dimensions of Wildlife and Fisheries Management (3 credits)
- ENVR 3040 Environmental Economics (3 credits)
or ECON 3040 Environmental Economics (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)

V REQUIRED COURSES IN RELATED FIELDS

Complete the following courses:

- CHEM 1111 General Chemistry I (4 credits)
or CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 1112 General Chemistry II (4 credits)
or CHEM 2212 Principles of Chemistry II (4 credits)

Select 2 of the following courses:

- ENVR 3800 Environmental Data Analysis (3 credits)
- GEOG 4265 Spatial Analysis (3 credits)
- MATH 2471 Calculus I (5 credits)
- PSY 3401 Basic Statistics for Research (4 credits)
- PSY 4403 Advanced Statistics and Research Design (4 credits)
- STAT 2610 Applied Statistics (4 credits)
- STAT 3610 Time Series Analysis (3 credits)

Select 1 of the following courses:

- PHYS 1101 General Physics I (4 credits)
- PHYS 2101 Physics I (4 credits)

SUGGESTED SEMESTER SCHEDULE FOR AQUATIC BIOLOGY MAJOR, B.S., FISHERIES BIOLOGY EMPHASIS

Freshman

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
- CHEM 1111 General Chemistry I (4 credits)
or CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 1112 General Chemistry II (4 credits)
or CHEM 2212 Principles of Chemistry II (4 credits)
- Liberal Education Requirements

Sophomore

- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)
- PHYS 1101 General Physics I (4 credits)
or PHYS 2101 Physics I (4 credits)
- Liberal Education Requirements
- Math/Statistics Requirements

Junior

- BIOL 3361 Limnology (4 credits)
- BIOL 3362 Streams and Rivers (4 credits)
- BIOL 3830 Aquatic Plants and Algae (4 credits)
- BIOL 4200 Freshwater Invertebrates (4 credits)
- CHEM 3507 Analytical Chemistry (3 credits)
or ENVR 4220 Sampling and Analysis (4 credits)
or GEOL 3211 Environmental Hydrology (3 credits)
or GEOL 3212 Hydrogeology (3 credits)
- Elective courses in field of emphasis
- Complete Liberal Education Requirements
- Math/Statistics Requirements

Senior

- BIOL 4534 Ichthyology (4 credits)
- BIOL 4545 Fisheries Management (4 credits)
- BIOL 4898 Fisheries Research I (2 credits)
- BIOL 4899 Fisheries Research II (2 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- Elective courses in field of emphasis

Biochemistry, Cellular and Molecular Biology, B.S. *major* Cellular and Molecular Emphasis

Required Credits: 76

Required GPA: 2.25

I REQUIRED COURSES

BIOLOGY CORE

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 2360 Genetics (4 credits)
- BIOL 3380 Molecular Genetics (3 credits)
- BIOL 3590 Cell Biology (3 credits)
- BIOL 3710 Microbiology (4 credits)

CHEMISTRY CORE

COMPLETE THE FOLLOWING COURSES:

- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4412 Biochemistry II (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)

RELATED FIELD REQUIREMENTS

SELECT ONE OF THE FOLLOWING GROUPS:

GROUP 1:

- PHYS 1101 General Physics I (4 credits)
- PHYS 1102 General Physics II (4 credits)

GROUP 2:

- PHYS 2101 Physics I (4 credits)
- PHYS 2102 Physics II (4 credits)

SEMINARS

COMPLETE THE FOLLOWING COURSES:

- BCMB 1000 Biochemistry, Cell and Molecular Biology Careers (BCMB Careers) (1 credit)
- BCMB 3000 Biochemistry, Cell and Molecular Biology Research (BCMB Research) (1 credit)

TECHNIQUES CORE

SELECT ONE OF THE FOLLOWING:

- BCMB 3074 Molecular Techniques (2 credits)
or BIOL 3074 Molecular Techniques (2 credits)

SELECT ONE OF THE FOLLOWING:

- BCMB 3075 Cellular Techniques (2 credits)
- BIOL 3075 Cellular Techniques (2 credits)
- BCMB 3076 Biochemical Techniques (2 credits)
- CHEM 3076 Biochemical Techniques (2 credits)

RESEARCH

SELECT ONE OF THE FOLLOWING GROUPS:

GROUP 1:

- BIOL 4894 Advanced Research Project I (2 credits)
- BIOL 4895 Advanced Research Project II (2 credits)

GROUP 2:

- CHEM 4894 Research I (2 credits)
- CHEM 4895 Research II (2 credits)

II REQUIRED EMPHASIS - CELLULAR AND MOLECULAR BIOLOGY

BIOLOGY ELECTIVES

SELECT 3 COURSES:

- BIOL 3250 Human Anatomy (4 credits)
- BIOL 3260 Human Physiology (4 credits)
- BIOL 3300 Introduction to Hematology (4 credits)
- BIOL 3580 Immunology (3 credits)
- BIOL 4270 Histology (4 credits)
- BIOL 4360 Developmental and Tumor Biology (3 credits)
- BIOL 4447 Genomics (3 credits)
- BIOL 4460 Stem Cells and Regenerative Medicine (3 credits)
- BIOL 4470 Introduction to Vaccinology (4 credits)
- BIOL 4715 Clinical Microbiology (3 credits)

CHEMISTRY ELECTIVES

SELECT ONE OF THE FOLLOWING GROUPS:

GROUP 1:

- CHEM 3507 Analytical Chemistry (3 credits)

- CHEM 3570 Analytical Chemistry Laboratory (1 credit)

GROUP 2:

- CHEM 4614 Medicinal Chemistry: Drug Design (3 credits)
- CHEM 4615 Medicinal Chemistry: Drug Action (3 credits)

RELATED FIELD REQUIREMENTS

COMPLETE THE FOLLOWING COURSE:

- STAT 2610 Applied Statistics (4 credits)

SUGGESTED SEMESTER SCHEDULE FOR BIOCHEMISTRY, CELLULAR, AND MOLECULAR BIOLOGY, B.S. MAJOR CELLULAR AND MOLECULAR BIOLOGY EMPHASIS

Freshman:

- BIOL 1400 Cellular Principles (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
- BIOL 2360 Genetics (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- BCMB 1000 Biochemistry, Cell and Molecular Biology Careers (BCMB Careers) (1 credit)

Sophomore:

- BIOL 3590 Cell Biology (3 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- PHYS 1101 General Physics I (4 credits)
or PHYS 2101 Physics I (4 credits)
- BIOL 3380 Molecular Genetics (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- BCMB 3074 Molecular Techniques (2 credits)
or BIOL 3074 Molecular Techniques (2 credits)
- PHYS 1102 General Physics II (4 credits)
or PHYS 2102 Physics II (4 credits)

Junior:

- BIOL 3710 Microbiology (4 credits)
- CHEM 4411 Biochemistry I (3 credits)
- BCMB 3075 Cellular Techniques (2 credits)
or BIOL 3075 Cellular Techniques (2 credits)
- CHEM 4412 Biochemistry II (3 credits)
- BCMB 3000 Biochemistry, Cell and Molecular Biology Research (BCMB Research) (1 credit)
- STAT 2610 Applied Statistics (4 credits)
- Emphasis Biology elective

Senior:

- BIOL 4894 Advanced Research Project I (2 credits)
- BIOL 4895 Advanced Research Project II (2 credits)
- Emphasis Chemistry elective(s)
- Emphasis Biology electives

Biochemistry, Cellular and Molecular Biology, B.S.

major

Biochemistry Emphasis

Required Credits: 81

Required GPA: 2.25

I REQUIRED COURSES

BIOLOGY CORE

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 2360 Genetics (4 credits)
- BIOL 3380 Molecular Genetics (3 credits)
- BIOL 3590 Cell Biology (3 credits)
- BIOL 3710 Microbiology (4 credits)

CHEMISTRY CORE

COMPLETE THE FOLLOWING COURSES:

- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4412 Biochemistry II (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)

RELATED FIELD REQUIREMENTS

SELECT ONE OF THE FOLLOWING GROUPS:

GROUP 1:

- PHYS 1101 General Physics I (4 credits)
- PHYS 1102 General Physics II (4 credits)

GROUP 2:

- PHYS 2101 Physics I (4 credits)
- PHYS 2102 Physics II (4 credits)

SEMINARS

COMPLETE THE FOLLOWING COURSES:

- BCMB 1000 Biochemistry, Cell and Molecular Biology Careers (BCMB Careers) (1 credit)
- BCMB 3000 Biochemistry, Cell and Molecular Biology Research (BCMB Research) (1 credit)

TECHNIQUES CORE

SELECT ONE OF THE FOLLOWING:

- BCMB 3074 Molecular Techniques (2 credits)
or BIOL 3074 Molecular Techniques (2 credits)

SELECT ONE OF THE FOLLOWING:

- BCMB 3075 Cellular Techniques (2 credits)
- BIOL 3075 Cellular Techniques (2 credits)
- BCMB 3076 Biochemical Techniques (2 credits)
- CHEM 3076 Biochemical Techniques (2 credits)

RESEARCH

SELECT ONE OF THE FOLLOWING GROUPS:

GROUP 1:

- BIOL 4894 Advanced Research Project I (2 credits)
- BIOL 4895 Advanced Research Project II (2 credits)

GROUP 2:

- CHEM 4894 Research I (2 credits)
- CHEM 4895 Research II (2 credits)

II REQUIRED EMPHASIS - BIOCHEMISTRY

CHEMISTRY

COMPLETE THE FOLLOWING COURSES:

- CHEM 3507 Analytical Chemistry (3 credits)
- CHEM 3570 Analytical Chemistry Laboratory (1 credit)
- CHEM 4614 Medicinal Chemistry: Drug Design (3 credits)
- CHEM 4615 Medicinal Chemistry: Drug Action (3 credits)

CHEMISTRY ELECTIVES

SELECT ONE OF THE FOLLOWING GROUPS:

GROUP 1:

- CHEM 4510 Instrumental Methods of Analysis (3 credits)
- CHEM 4571 Instrumental Analysis Laboratory I (1 credit)

GROUP 2:

- CHEM 4711 Physical Chemistry I (3 credits)
- CHEM 4771 Physical Chemistry Laboratory I (1 credit)

GROUP 3:

- CHEM 4811 Advanced Inorganic Chemistry I (3 credits)
- CHEM 4871 Inorganic Chemistry Laboratory I (1 credit)

BIOLOGY ELECTIVES

SELECT ONE OF THE FOLLOWING:

- BIOL 3250 Human Anatomy (4 credits)
- BIOL 3260 Human Physiology (4 credits)
- BIOL 3300 Introduction to Hematology (4 credits)
- BIOL 3580 Immunology (3 credits)
- BIOL 4270 Histology (4 credits)
- BIOL 4360 Developmental and Tumor Biology (3 credits)
- BIOL 4447 Genomics (3 credits)
- BIOL 4460 Stem Cells and Regenerative Medicine (3 credits)
- BIOL 4470 Introduction to Vaccinology (4 credits)
- BIOL 4715 Clinical Microbiology (3 credits)

RELATED FIELD REQUIREMENTS

COMPLETE THE FOLLOWING COURSE:

- MATH 2471 Calculus I (5 credits)

SUGGESTED SEMESTER SCHEDULE FOR BIOCHEMISTRY, CELLULAR, AND MOLECULAR BIOLOGY, B.S. MAJOR BIOCHEMISTRY EMPHASIS

Freshman:

- BIOL 1400 Cellular Principles (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
- BIOL 2360 Genetics (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- BCMB 1000 Biochemistry, Cell and Molecular Biology Careers (BCMB Careers) (1 credit)
- MATH 2471 Calculus I (5 credits)

Sophomore:

- BIOL 3590 Cell Biology (3 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- BIOL 3380 Molecular Genetics (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- BCMB 3074 Molecular Techniques (2 credits) or BIOL 3074 Molecular Techniques (2 credits)
- CHEM 3507 Analytical Chemistry (3 credits)

Junior:

- BIOL 3710 Microbiology (4 credits)
- CHEM 4411 Biochemistry I (3 credits)
- PHYS 2101 Physics I (4 credits)
- CHEM 4412 Biochemistry II (3 credits)
- BCMB 3000 Biochemistry, Cell and Molecular Biology Research (BCMB Research) (1 credit)
- BCMB 3076 Biochemical Techniques (2 credits) or CHEM 3076 Biochemical Techniques (2 credits)
- PHYS 2102 Physics II (4 credits)

Senior:

- CHEM 4894 Research I (2 credits)
- CHEM 4895 Research II (2 credits)
- CHEM 4614 Medicinal Chemistry: Drug Design (3 credits)
- CHEM 4615 Medicinal Chemistry: Drug Action (3 credits)
- Emphasis Chemistry elective(s)
- Emphasis Biology elective

Biology, B.A. *major*

Required Credits: 40

Required GPA: 2.25

I REQUIRED BIOLOGY CORE COURSES

Complete the following courses:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)

II REQUIRED BIOLOGY ELECTIVES

Select 25 semester credit electives from Biology courses (except 1000 level BIOL classes and BIOL 2925) to achieve a minimum of 40 semester credits in BIOL courses. These electives can also include any of the following options from other departments:

- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)
- ENVR 4400 Environmental Microbiology (3 credits)
- ENVR 4500 Environmental Toxicology (4 credits)

SUGGESTED SEMESTER SCHEDULE FOR BIOLOGY MAJOR, B.A.

The following is a list of required Biology Major, B.A. courses arranged by year. This schedule is intended to assist students in planning their courses. There is some flexibility in this schedule, but graduation within four years will require close adherence to the specified sequence of courses. Always consult your Biology academic advisor as to the proper courses and sequence of courses needed for graduation.

Freshman

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
- Liberal Education requirements
- Consult with your Biology academic advisor

Sophomore

- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)
- Writing course
- Biology degree requirements
- Liberal Education requirements
- Consult with your Biology academic advisor

Junior

- Biology degree requirements
- Liberal Education requirements
- Consult with your Biology academic advisor

Senior

- Complete Biology degree requirements
- Complete Liberal Education requirements
- Consult with your Biology academic advisor

Biology, B.S. *major*

Required Credits: 60

Required GPA: 2.25

I REQUIRED BIOLOGY CORE COURSES

Complete the following courses:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)

II REQUIRED BIOLOGY ELECTIVES

Select Biology course electives (2000 level or above) to achieve a minimum of 40 credits. (BIOL 2925 is excluded as an option) Electives can include one of the following options from other departments.

- ENVR 4400 Environmental Microbiology (3 credits)
- ENVR 4500 Environmental Toxicology (4 credits)

III CAPSTONE PROJECT

The Biology capstone project, completed in the senior year, provides a culminating experience that integrates the knowledge and skills learned in previous courses and applies them to a scholarly activity. Examples of capstone projects may include original research projects, internships with state or federal agencies or shadowing experiences with professionals. The capstone project must be designed or chosen by the student in consultation with a faculty mentor or advisor, who must approve the project before work begins. Students should consult with their faculty mentor or advisor before their senior year commences. All capstone projects will include a written and oral component.

The capstone project may be completed in one of the following ways (2-4 credits):

1. Complete BIOL 4894 OR BIOL 4895 (2 credits):
 - BIOL 4894 Advanced Research Project I (2 credits)
 - BIOL 4895 Advanced Research Project II (2 credits)
2. Complete BIOL 4894 AND BIOL 4895 (2 credits each):
 - BIOL 4894 Advanced Research Project I (2 credits)
 - BIOL 4895 Advanced Research Project II (2 credits)
3. Complete BIOL 4449 (4 credits):
 - BIOL 4449 Gene Expression (4 credits)

IV REQUIRED COURSES IN RELATED FIELDS

A. Select 1 of the following groups (8 credits):

GROUP 1:

- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)

GROUP 2:

- CHEM 1111 General Chemistry I (4 credits)
- CHEM 1112 General Chemistry II (4 credits)

B. Complete 8 credits from the following courses:

- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)
- PHYS 1101 General Physics I (4 credits)
or PHYS 2101 Physics I (4 credits)
- PHYS 1102 General Physics II (4 credits)
or PHYS 2102 Physics II (4 credits)

C. Select 1 of the following courses:

- MATH 2471 Calculus I (5 credits)
- STAT 2610 Applied Statistics (4 credits)
- PSY 3401 Basic Statistics for Research (4 credits)

Program Learning Outcomes | Biology, B.S.

1. Communicate: Effectively present research using common, professional formats (written and/or verbal). This includes using figures, graphs, tables, and illustrations to promote dissemination and clarity of knowledge.
2. Create Purpose or Hypothesis: Provide justification for the importance of pursuing a project or construct a testable hypothesis (or hypotheses).
3. Observe and Question: Integrate information or observations to promote curiosity and question generation.
4. Recognize Larger Implications: Demonstrate understanding of the ethical/social dimensions or societal implications of science, recognize inherent biases, and communicate scientific ideas to non-science audiences.
5. Re-engage: Demonstrate an ability to re-engage with the research process by identifying sources of error, possible limitations of their research, next steps in a project, or re-designing more appropriate experimental methods/controls.
6. Research: Plan and execute research, experiments, data collection, analysis of the results, and/or synthesis of new or coalesced knowledge.
7. Review Research Literature: Search and review appropriate sources with a goal of independent information discovery or critically identifying knowledge gaps.

Biology, B.S. *major* Medical Sciences Emphasis (Optional)

Required Credits: 73

Required GPA: 2.25

I REQUIRED BIOLOGY CORE COURSES

Complete the following courses:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)

II REQUIRED MEDICAL SCIENCES CORE COURSES

Complete the following courses:

- BIOL 3250 Human Anatomy (4 credits)
- BIOL 3260 Human Physiology (4 credits)
- BIOL 3710 Microbiology (4 credits)

III CAPSTONE PROJECT

The Biology capstone project, completed in the senior year, provides a culminating experience that integrates the knowledge and skills learned in previous courses and applies them to a scholarly activity. Examples of capstone projects may include original research projects, internships with state or federal agencies or shadowing experiences with professionals.

The capstone project must be designed or chosen by the student in consultation with a faculty mentor or advisor, who must approve the project before work begins. Students should consult with their faculty mentor or advisor before their senior year commences. All capstone projects will include a written and oral component.

The capstone project may be completed in one of the following ways (2-4 credits):

1. Complete BIOL 4894 OR BIOL 4895 (2 credits):
 - BIOL 4894 Advanced Research Project I (2 credits)
 - BIOL 4895 Advanced Research Project II (2 credits)
2. Complete BIOL 4894 AND BIOL 4895 (2 credits each):
 - BIOL 4894 Advanced Research Project I (2 credits)
 - BIOL 4895 Advanced Research Project II (2 credits)
3. Complete BIOL 4449 (4 credits):
 - BIOL 4449 Gene Expression (4 credits)

IV REQUIRED MEDICAL SCIENCES ELECTIVES

Select 16 credits of electives from the following:

- BIOL 3300 Introduction to Hematology (4 credits)
- BIOL 3337 Science Communication (3 credits)
- BIOL 3338 Science Communication Lab (1 credit)
- BIOL 3339 Bioethics (3 credits)
- BIOL 3380 Molecular Genetics (3 credits)
- BIOL 3580 Immunology (3 credits)
- BIOL 3590 Cell Biology (3 credits)
- BIOL 4210 Parasitology (4 credits)
- BIOL 4270 Histology (4 credits)
- BIOL 4360 Developmental and Tumor Biology (3 credits)
- BIOL 4447 Genomics (3 credits)
- BIOL 4460 Stem Cells and Regenerative Medicine (3 credits)
- BIOL 4470 Introduction to Vaccinology (4 credits)
- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)

V REQUIRED COURSES IN RELATED FIELDS

A. Select 1 of the following groups:

GROUP 1:

- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)

GROUP 2:

- CHEM 1111 General Chemistry I (4 credits)
- CHEM 1112 General Chemistry II (4 credits)

B. Select 1 of the following courses:

- MATH 2471 Calculus I (5 credits)
- STAT 2610 Applied Statistics (4 credits)
- PSY 3401 Basic Statistics for Research (4 credits)

C. Complete 2 courses from the following:

- PHYS 1101 General Physics I (4 credits)

- or PHYS 2101 Physics I (4 credits)
- PHYS 1102 General Physics II (4 credits)
- or PHYS 2102 Physics II (4 credits)

D. Complete the following courses:

- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)

Program Learning Outcomes | Biology, B.S.

1. Communicate: Effectively present research using common, professional formats (written and/or verbal). This includes using figures, graphs, tables, and illustrations to promote dissemination and clarity of knowledge.
2. Create Purpose or Hypothesis: Provide justification for the importance of pursuing a project or construct a testable hypothesis (or hypotheses).
3. Observe and Question: Integrate information or observations to promote curiosity and question generation.
4. Recognize Larger Implications: Demonstrate understanding of the ethical/social dimensions or societal implications of science, recognize inherent biases, and communicate scientific ideas to non-science audiences.
5. Re-engage: Demonstrate an ability to re-engage with the research process by identifying sources of error, possible limitations of their research, next steps in a project, or re-designing more appropriate experimental methods/controls.
6. Research: Plan and execute research, experiments, data collection, analysis of the results, and/or synthesis of new or coalesced knowledge.
7. Review Research Literature: Search and review appropriate sources with a goal of independent information discovery or critically identifying knowledge gaps.

Medical Laboratory Science, B.S. *major* (3 + 1 Option)

Required Credits: 88

Required GPA: 2.25

REQUIRED CLINICAL STUDIES 3 + 1 OPTION

In this option, the student completes the required Medical Laboratory Science and Liberal Education courses at Bemidji State University, and then applies for admission to the clinical year program through the University of North Dakota or other affiliated institution. Please be aware admission to a clinical year program is competitive and not guaranteed; however, completion of a clinical year is required to complete a MLS 3+1 major. Additionally, a minimum 2.80 GPA in science courses is a requirement for admission to a clinical year program. The Medical Laboratory Science student must consult with the Medical Laboratory Science advisor at the start of the academic program and regularly throughout the course of study. The student must complete the Bemidji State University Liberal Education requirements before the clinical year of study.

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 2360 Genetics (4 credits)
- BIOL 3074 Molecular Techniques (2 credits)
or BCMB 3074 Molecular Techniques (2 credits)
- BIOL 3260 Human Physiology (4 credits)
- BIOL 3300 Introduction to Hematology (4 credits)
- BIOL 3580 Immunology (3 credits)
- BIOL 3710 Microbiology (4 credits)
- BIOL 4210 Parasitology (4 credits)
- BIOL 4715 Clinical Microbiology (3 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 4411 Biochemistry I (3 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- MATH 1170 College Algebra (4 credits)
- MATH 1470 Precalculus (5 credits)

II REQUIRED CLINICAL STUDIES

Clinical year courses, taken during the senior year beginning with summer term, are taken through entrance into the clinical year program at the University of North Dakota or at affiliated hospitals. The clinical year will consist of at least 37 credits.

NOTE: A clinical year position is not guaranteed. Students must apply for a clinical year position in October of the junior year. Please see advisor regarding the clinical year of study.

The following courses are recommended, but not required for completion of the major:

- BIOL 1500 Diversity of Life (4 credits)
- STAT 2610 Applied Statistics (4 credits)
or PSY 3401 Basic Statistics for Research (4 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 4471 Biochemistry Laboratory I (1 credit)

SUGGESTED SEMESTER SCHEDULE FOR MEDICAL LABORATORY SCIENCE MAJOR, B.S. 3+1 option

The following is a list of Medical Laboratory Science courses arranged by year. This suggested schedule is intended to help students plan their courses without course conflicts.

Freshman

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 2360 Genetics (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- ENGL 1151 Composition (3 credits)
- ENGL 2152 Argument and Exposition (3 credits)
- MATH 1170 College Algebra (4 credits)

- or MATH 1470 Precalculus (5 credits)
- Additional liberal education requirements

Sophomore

- BCMB 3074 Molecular Techniques (2 credits)
or BIOL 3074 Molecular Techniques (2 credits)
- BIOL 3260 Human Physiology (4 credits)
- BIOL 3710 Microbiology (4 credits)
- BIOL 4210 Parasitology (4 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- Additional liberal education requirements

Junior

- BIOL 3300 Introduction to Hematology (4 credits)
- BIOL 3580 Immunology (3 credits)
- BIOL 4715 Clinical Microbiology (3 credits)
- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)
- STAT 2610 Applied Statistics (4 credits)
or PSY 3401 Basic Statistics for Research (4 credits)
- Any remaining liberal education requirements

Senior

- Clinical year courses

Medical Laboratory Science, B.S. *major* (4 + 1 Option)

Required Credits: 108

Required GPA: 2.25

REQUIRED CLINICAL STUDIES 4 + 1 OPTION

NOTE: After completing the clinical year courses, students will receive a double major: Biology, B.S. and Medical Laboratory Science, B.S. In this option, the student completes a Biology, B.S., major at Bemidji State University, and then applies for admission to the clinical year program through the University of North Dakota or other affiliated institution. Be aware that a 2.80 gpa in in science courses is one requirement for entrance into the clinical year program. This option may be of interest to students considering a pre-professional program such as pre-medicine, pre-physician's assistant, or other pre-professional area. Students have the option of pursuing a health-related career in Medical Laboratory Science but also gain clinical hours and experience that can facilitate admission to pre-professional programs.

I REQUIRED BIOLOGY COURSES

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)
- BIOL 3074 Molecular Techniques (2 credits)
or BCMB 3074 Molecular Techniques (2 credits)
- BIOL 3260 Human Physiology (4 credits)
- BIOL 3300 Introduction to Hematology (4 credits)
- BIOL 3580 Immunology (3 credits)
- BIOL 3710 Microbiology (4 credits)
- BIOL 4210 Parasitology (4 credits)
- BIOL 4715 Clinical Microbiology (3 credits)

II CAPSTONE PROJECT

The Biology capstone project, completed in the senior year, provides a culminating experience that integrates the knowledge and skills learned in previous courses and applies them to a scholarly activity. Examples of capstone projects may include original research projects, internships with state or federal agencies, shadowing experiences with professionals, or successfully passing professional/ graduate school entrance exams. The capstone project must be designed or chosen by the student in consultation with a faculty mentor or advisor, who must approve the project before work begins. Students should consult with their faculty mentor or advisor before their senior year commences. All capstone projects will include a written and oral component (except for professional/graduate school entrance exams).

PLEASE NOTE: For students admitted to a clinical year program, the required clinical studies (see Section IV below) can be used to satisfy the Capstone Project requirement.

Alternatively, the capstone project may be completed in one of the following ways (0-4 credits):

1. Students using a professional or graduate entrance exam as their capstone project must register for this course. Students must place in at least the 60th percentile on their exam to successfully complete this course.

- BIOL 4800 Advanced Project Certification (0 credit)

2. Complete BIOL 4894 OR BIOL 4895 (2 credits):

- BIOL 4894 Advanced Research Project I (2 credits)
- BIOL 4895 Advanced Research Project II (2 credits)

3. Complete BIOL 4894 AND BIOL 4895 (2 credits each):

- BIOL 4894 Advanced Research Project I (2 credits)
- BIOL 4895 Advanced Research Project II (2 credits)

III REQUIRED COURSES IN RELATED FIELDS

COMPLETE THE FOLLOWING COURSES:

- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)
- PHYS 1101 General Physics I (4 credits)
or PHYS 2101 Physics I (4 credits)
- PHYS 1102 General Physics II (4 credits)
or PHYS 2102 Physics II (4 credits)
- STAT 2610 Applied Statistics (4 credits)
or PSY 3401 Basic Statistics for Research (4 credits)

IV REQUIRED CLINICAL STUDIES

Clinical year courses, taken after the senior year beginning with summer term, are taken through entrance into the clinical year program at the

University of North Dakota or at affiliated hospitals. The clinical year will consist of at least 37 credits.

NOTE: A clinical year position is not guaranteed. Students must apply for a clinical year position in October of the junior year. Please see advisor regarding the clinical year of study.

Science Education, B.S. *major* Life Science Specialty (Teacher Licensure)

Required Credits: 83

Required GPA: 2.50

Core Courses for Science Teaching in Grades 5-8

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
or BIOL 1110 Human Biology (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
or BIOL 1120 General Biology: Evolution And Ecology (3 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
or CHEM 1111 General Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
or CHEM 1112 General Chemistry II (4 credits)
- GEOL 1110 Physical Geology (4 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)
or ED 3410 Secondary Science Methods (4 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

LIFE SCIENCE SPECIALTY

A. REQUIRED BIOLOGY COURSES

COMPLETE THE FOLLOWING COURSES:

- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)
- BIOL 3710 Microbiology (4 credits)
- BIOL 4620 Evolution (3 credits)
- BIOL 3720 Plant Form and Function (4 credits)
or BIOL 3830 Aquatic Plants and Algae (4 credits)

- BIOL 4894 Advanced Research Project I (2 credits)
or BIOL 4895 Advanced Research Project II (2 credits)

B. REQUIRED BIOLOGY ELECTIVE

SELECT 1 OF THE FOLLOWING COURSES:

- BIOL 3150 Animal Behavior (3 credits)
- BIOL 3310 Entomology (3 credits)
- BIOL 4510 Ornithology (3 credits)
- BIOL 4520 Mammalogy (3 credits)
- BIOL 4534 Ichthyology (4 credits)

SUGGESTED SEMESTER SCHEDULE FOR LIFE SCIENCE SPECIALTY, SCIENCE EDUCATION MAJOR, B.S. (TEACHER LICENSURE)

The following is a list of required Science (Life Science) Major, B.S. courses arranged by year. This schedule is intended to assist students in planning their courses. There is some flexibility in this schedule, but graduation within four years will require close adherence to the specified sequence of courses. Always consult your Biology academic advisor as to the proper courses and sequence of courses needed for graduation. It is possible, in some circumstances, that courses in a student's Liberal Education program may be used in his or her academic major.

Freshman

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
- Liberal Education requirements

Sophomore

- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)
- BIOL 4894 Advanced Research Project I (2 credits) or BIOL 4895
- BIOL 3720 Plant Form and Function (4 credits)
- GEOL 1110 Physical Geology (4 credits)
- PHYS 1101 General Physics I (4 credits)
or PHYS 2101 Physics I (4 credits)
- Consider starting Professional Education sequence
- Liberal Education requirements

Junior

- BIOL 3710 Microbiology (4 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)
- Other Professional Education requirements
- Liberal Education requirements

Senior

- Biology Elective (BIOL 3150, 3310, 3510, 4520, or 4534)
- BIOL 4620 Evolution (3 credits)
- Complete Professional Education requirements, including one semester of student teaching
or Complete liberal education requirements

Wildlife Biology, B.S. *major*

The Wildlife Biology major is designed for students preparing for careers with

natural resources agencies or for graduate school in wildlife biology.

With careful selection of liberal education courses, graduates can fulfill the educational requirements for certification as an Associate Wildlife Biologist by The Wildlife Society.

Required Credits: 74

Required GPA: 2.25

I REQUIRED BIOLOGY CORE COURSES

Complete the following courses:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
- BIOL 2610 General Ecology (3 credits)

II REQUIRED WILDLIFE BIOLOGY CORE COURSES

Complete the following courses:

- BIOL 3610 Principles of Wildlife Management (3 credits)
- BIOL 4510 Ornithology (3 credits)
- BIOL 4520 Mammalogy (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- BIOL 3630 Conservation Biology (3 credits)
or GEOG 3630 Conservation Biology (3 credits)
or BIOL 4330 Upland Wildlife Management (3 credits)
or BIOL 4530 Ecology and Management of Large Mammals (3 credits)

Select two of the following courses:

- BIOL 2360 Genetics (4 credits)
- BIOL 3150 Animal Behavior (3 credits)
- BIOL 3310 Entomology (3 credits)
- BIOL 3850 Marine Biology (3 credits)
- BIOL 4210 Parasitology (4 credits)
- BIOL 4534 Ichthyology (4 credits)
- BIOL 4620 Evolution (3 credits)

Select two of the following courses, with at least one being BIOL 3170 or BIOL 3730 or BIOL 3830:

- BIOL 3170 Dendrology (2 credits)
- BIOL 3730 Plant Diversity (4 credits)
- BIOL 3830 Aquatic Plants and Algae (4 credits)

- BIOL 3720 Plant Form and Function (4 credits)
- BIOL 4623 Forest Ecology (4 credits)

Select two of the following courses:

- BIOL 3420 Human Dimensions of Wildlife and Fisheries Management (3 credits)
- BIOL 3400 Fish & Wildlife Law and Administration (3 credits)
or ENVR 4210 Environmental Law and Policy (3 credits)
- POL 3230 Environmental Politics (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)

III REQUIRED WILDLIFE BIOLOGY ELECTIVES

Select two additional Biology courses (3-8 credits) at the 2000 level or above, except BIOL 2925:

IV CAPSTONE PROJECT

Complete the following course:

- BIOL 4780 Wildlife Management Techniques (5 credits)

V REQUIRED COURSES IN RELATED FIELDS

Complete the following courses:

- CHEM 1111 General Chemistry I (4 credits)
or CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 1112 General Chemistry II (4 credits)
or CHEM 2212 Principles of Chemistry II (4 credits)

Select 1 of the following courses:

- STAT 2610 Applied Statistics (4 credits)
- PSY 3401 Basic Statistics for Research (4 credits)

Select 1 of the following courses:

- PHYS 1101 General Physics I (4 credits)
- PHYS 2101 Physics I (4 credits)
- GEOL 1110 Physical Geology (4 credits)
- GEOL 1120 Historical Geology (4 credits)
- BIOL 3120 Soils (4 credits)
- GEOL 3120 Soils (4 credits)

Select 1 of the following courses:

- MATH 2471 Calculus I (5 credits)
- ENVR 4220 Sampling and Analysis (4 credits)
- GEOG 4265 Spatial Analysis (3 credits)
- PSY 4403 Advanced Statistics and Research Design (4 credits)

SUGGESTED SEMESTER SCHEDULE FOR WILDLIFE BIOLOGY MAJOR, B.S.

Freshman

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
- CHEM 1111 General Chemistry I (4 credits)
or CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 1112 General Chemistry II (4 credits)
or CHEM 2212 Principles of Chemistry II (4 credits)
- Liberal Education requirements

Sophomore

- BIOL 2610 General Ecology (3 credits)
- STAT 2610 Applied Statistics (4 credits)
or PSY 3401 Basic Statistics for Research (4 credits)
- Wildlife Biology degree requirements
- Liberal Education requirements
- Consult with your academic advisor

Junior

- Wildlife Biology degree requirements
- Complete Liberal Education requirements
- Consult with your Biology academic advisor

Senior

- Capstone Project
- Complete Wildlife Biology degree requirements
- Consult with your Biology academic advisor

Aquatic Systems *minor*

Required Credits: 25

Required GPA: 2.25

I REQUIRED BIOLOGY CORE COURSES

Complete the following courses:

- BIOL 1500 Diversity of Life (4 credits)
- BIOL 2610 General Ecology (3 credits)

II REQUIRED AQUATIC BIOLOGY CORE COURSES

Complete the following courses:

- BIOL 3361 Limnology (4 credits)
- BIOL 3362 Streams and Rivers (4 credits)
- BIOL 3840 Wetlands Ecology (3 credits)
or ENVR 3840 Wetlands Ecology (3 credits)
- BIOL 3844 Wetlands Ecology Lab (1 credit)
- BIOL 3850 Marine Biology (3 credits)
- BIOL 3723 Ecosystem Ecology (3 credits)

Biology *minor*

Required Credits: 24

Required GPA: 2.00

I REQUIRED BIOLOGY CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)

II REQUIRED BIOLOGY ELECTIVES

Select 9 credits from the following areas with at least 1 course in each area.

SUBORGANISMAL

SELECT 1 OF THE FOLLOWING COURSES:

- BIOL 2750 Medical Microbiology (3 credits)
- BIOL 3260 Human Physiology (4 credits)
- BIOL 3300 Introduction to Hematology (4 credits)
- BIOL 3380 Molecular Genetics (3 credits)
- BIOL 3580 Immunology (3 credits)
- BIOL 3590 Cell Biology (3 credits)
- BIOL 3720 Plant Form and Function (4 credits)
- BIOL 4270 Histology (4 credits)

ORGANISMAL

SELECT 1 OF THE FOLLOWING COURSES:

- BIOL 2110 Human Anatomy and Physiology (5 credits)
- BIOL 4200 Freshwater Invertebrates (4 credits)

- BIOL 3250 Human Anatomy (4 credits)
- BIOL 3310 Entomology (3 credits)
- BIOL 3710 Microbiology (4 credits)
- BIOL 3730 Plant Diversity (4 credits)
- BIOL 3830 Aquatic Plants and Algae (4 credits)
- BIOL 4210 Parasitology (4 credits)
- BIOL 4510 Ornithology (3 credits)
- BIOL 4520 Mammalogy (3 credits)
- BIOL 4534 Ichthyology (4 credits)

Fisheries Biology *minor*

Required Credits: 26
Required GPA: 2.25

I REQUIRED BIOLOGY CORE COURSES

Complete the following courses:

- BIOL 1500 Diversity of Life (4 credits)
- BIOL 2610 General Ecology (3 credits)

II REQUIRED FISHERIES BIOLOGY CORE COURSES

Complete the following courses:

- BIOL 3361 Limnology (4 credits)
- BIOL 3362 Streams and Rivers (4 credits)
- BIOL 4534 Ichthyology (4 credits)
- BIOL 4545 Fisheries Management (4 credits)

III REQUIRED FISHERIES BIOLOGY ELECTIVES

Select one of the following courses:

- BIOL 2339 Ethics of Fish and Wildlife Management (3 credits)
- BIOL 3400 Fish & Wildlife Law and Administration (3 credits)
- BIOL 3420 Human Dimensions of Wildlife and Fisheries Management (3 credits)
- ENVR 3040 Environmental Economics (3 credits)
or ECON 3040 Environmental Economics (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)
- POL 3230 Environmental Politics (3 credits)

Wetlands Ecology *minor*

Required Credits: 25
Required GPA: 2.00

I REQUIRED BIOLOGY CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)

II REQUIRED BIOLOGY AND ENVIRONMENTAL STUDIES

COMPLETE THE FOLLOWING COURSES:

- BIOL 2610 General Ecology (3 credits)
- BIOL 3830 Aquatic Plants and Algae (4 credits)
or BIOL 3730 Plant Diversity (4 credits)

- BIOL 3840 Wetlands Ecology (3 credits)
or ENVR 3840 Wetlands Ecology (3 credits)
- BIOL 3844 Wetlands Ecology Lab (1 credit)
- BIOL 4030 Wetland Delineation and Classification (3 credits)
- BIOL 3400 Fish & Wildlife Law and Administration (3 credits)
or ENVR 4210 Environmental Law and Policy (3 credits)

Wildlife Biology *minor*

Required Credits: 24
Required GPA: 2.25

I REQUIRED BIOLOGY CORE COURSES

Complete the following courses:

- BIOL 1500 Diversity of Life (4 credits)
- BIOL 2610 General Ecology (3 credits)

II REQUIRED WILDLIFE BIOLOGY CORE COURSES

Complete the following courses:

- BIOL 3610 Principles of Wildlife Management (3 credits)
- BIOL 4510 Ornithology (3 credits)
- BIOL 4520 Mammalogy (3 credits)

Select 1 of the following courses:

- BIOL 3170 Dendrology (2 credits)
- BIOL 3730 Plant Diversity (4 credits)
- BIOL 3830 Aquatic Plants and Algae (4 credits)

Select 1 of the following courses:

- BIOL 3630 Conservation Biology (3 credits)
or GEOG 3630 Conservation Biology (3 credits)
- BIOL 4330 Upland Wildlife Management (3 credits)
- BIOL 4530 Ecology and Management of Large Mammals (3 credits)

Select 1 of the following courses:

- BIOL 3400 Fish & Wildlife Law and Administration (3 credits)
- BIOL 3420 Human Dimensions of Wildlife and Fisheries Management (3 credits)
- POL 3230 Environmental Politics (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)

Biology Courses

BIOL 1110 Human Biology (4 credits)

General introduction to biology, focusing on humans, including topics on cell biology, genetics, molecular biology, form and function of organ systems, and the interaction between humans and their environment. Intended for nonbiology majors. Lecture and laboratory. Liberal Education Goal Area 3 (LC).

BIOL 1111 Anatomy and Physiology for Allied Health I (4 credits)

This course is designed as the first semester of a year-long human anatomy and physiology course for allied health students including nursing and community health. The course covers aspects of the structure, function, and development of the human body from the cellular level through an introduction to the nervous system. Both lecture and laboratory are required.

BIOL 1112 Anatomy and Physiology for Allied Health II (4 credits)

This course is designed as the second semester of a year-long human anatomy and physiology course for allied health students including nursing and community health. The course covers aspects of the structure, function, and development of the human body from the nervous system through digestion and nutrition. Both lecture and laboratory are required. Prerequisite: BIOL 1111.

BIOL 1120 General Biology: Evolution And Ecology (3 credits)

A general introduction to biology with an emphasis on evolution, ecology, and the diversity of life. Intended for nonbiology majors. Includes laboratory simulations and field exercises. Liberal Education Goal Area 3 and 10.

BIOL 1300 Medical Terminology (2 credits)

A study of anatomical and medical terminology by examining word roots, prefixes, and suffixes. Designed to assist pre-professional and allied health students who desire to increase their usage and understanding of medical terminology. This course does not satisfy any Biology major or minor degree requirements.

BIOL 1400 Cellular Principles (4 credits)

An introduction to the structure and function of living systems, with an emphasis on basic mechanisms and concepts in biochemistry and in cellular and molecular biology. Intended for biology majors and minors, preprofessional students, and open to any student wishing to fulfill their Liberal Education requirement. Lecture and laboratory. Liberal Education Goal Area 3 (LC) Student must register for BIOL 1400 (Lecture) and BIOL 1410 (Lab)

BIOL 1410 Cellular Principles Lab (0 credit)

An introduction to the structure and function of living systems, with an emphasis on basic mechanisms and concepts in biochemistry and in cellular and molecular biology. Intended for biology majors and minors, preprofessional students, and open to any student wishing to fulfill their Liberal Education requirement. Lecture and laboratory. Liberal Education Goal Area 3 (LC) Student must register for BIOL 1400 (Lecture) and BIOL 1410 (Lab).

BIOL 1500 Diversity of Life (4 credits)

An introduction to living organisms, with an emphasis on the basic mechanisms and concepts in organismal biology, ecology, and evolutionary biology. Topics include taxonomy and classification of the major groups of plants and animals, structure and function, development, and behavior. Intended for biology majors and minors, preprofessional students, and open to any student wishing to fulfill their Liberal Education requirement. Liberal Education Goal Area 3 (LC). Student must register for BIOL 1500 (Lecture) and BIOL 1510 (Lab).

BIOL 1510 Diversity of Life Lab (0 credit)

An introduction to living organisms, with an emphasis on the basic mechanisms and concepts in organismal biology, ecology, and evolutionary biology. Topics include taxonomy and classification of the major groups of plants and animals, structure and function, development, and behavior. Intended for biology majors and minors, preprofessional students, and open to any student wishing to fulfill their Core Curriculum requirement. Liberal Education Goal Area 3 (LC). Student must register for BIOL 1500 (Lecture) and BIOL 1510 (Lab).

BIOL 2110 Human Anatomy and Physiology (5 credits)

The structure, function, and development of the human body. Lecture and laboratory. Prerequisite(s): BIOL 1400 or BIOL 1500.

BIOL 2339 Ethics of Fish and Wildlife Management (3 credits)

This class is designed to explore the ethical aspects of various fish and wildlife management related topics in order to better understand how ethical viewpoints at both the social and political levels have influenced natural resource policy throughout history at the local, regional, and global scales. Liberal Education Goal Area 9.

BIOL 2360 Genetics (4 credits)

Fundamental principles of heredity in plants, animals, and microorganisms. Includes both classical and molecular genetic approaches to studying organisms. Prerequisites: BIOL 1400.

BIOL 2610 General Ecology (3 credits)

Introduction to the interrelationships of organisms and their environments, emphasizing the historic development of fundamental principles at the levels of individual, population, community, and ecosystem through examination of theoretical and empirical findings. Prerequisites: BIOL 1110, 1120 or BIOL 1400, 1500 or consent of instructor.

BIOL 2750 Medical Microbiology (3 credits)

Introduction to pathogenic microorganisms, the interaction of pathogens and the immune system, transmission of infections, and methods of controlling infections. The laboratory portion of the class covers aseptic technique, pure culture techniques, microscopy, and diagnostic microbiology. This course is intended primarily for Nursing majors. Prerequisites: (BIOL 1110 or BIOL 1111 or BIOL 1400) and (CHEM 1110 or CHEM 1111 or CHEM 2211)

BIOL 2925 People of the Environment: Biological Perspectives (3 credits)

Discussion and evaluation of current environmental biology topics, including biodiversity, ecosystems, biological resources, and human impact on the environment. This course fulfills Liberal Education requirements only and does not satisfy and Biology major or minor degree requirements. Liberal Education Goal Area 10.

BIOL 3074 Molecular Techniques (2 credits)

This is a hybrid lecture and lab-based course and is an introduction to several common molecular-based techniques. Students will learn basic pipetting, protein assays, electrophoresis, PCR, and other molecular genetic techniques. Prerequisite(s): BIOL 1400, BIOL 2360, CHEM 2211, CHEM 2212; or consent of instructor.

BIOL 3075 Cellular Techniques (2 credits)

This course is the one of two options for completion of techniques core requirement for the BCMB major and for specific Biology majors. Includes an introduction to cell culture, cell imaging, cell-based assays, and stem cell biology. Prerequisite(s): BIOL 3074 or BCMB 3074.

BIOL 3120 Soils (4 credits)

Introduction to principles of soil genesis, classification, physical and chemical properties, and biological significance. Lecture and laboratory. Prerequisites: (BIOL 1400 or BIOL 1120) and (GEOL 1110 or BIOL 1500) or consent of instructor. May not be offered every year.

BIOL 3150 Animal Behavior (3 credits)

Introduction to the study of the diversity, physiology, ecological context, and evolutionary development of behavior of invertebrate and vertebrate animals. Prerequisite: BIOL 1400 and BIOL 1500, or PSY 1100.

BIOL 3170 Dendrology (2 credits)

The main function of a dendrology class is to learn the identification and basic ecology of woody plants (trees, shrubs, woody vines) for a region, along with the basic vocabulary used to describe woody plants. Prerequisite(s): (BIOL 1400, 1500, and 2610) or consent of instructor.

BIOL 3250 Human Anatomy (4 credits)

Anatomical structure of the human body, from individual organ systems to the integrated whole. BIOL 1400.

BIOL 3260 Human Physiology (4 credits)

Physiological and pathophysiological principles and control mechanisms of organ systems within humans. Lecture and laboratory. Prerequisites: BIOL 1400 and (CHEM 1111 or CHEM 2211); or consent of instructor.

BIOL 3299 Virology (3 credits)

This course explores virology, which is the study of viruses that infect all manner of life on earth. We will focus on animal viruses and those that impact human health. Important discoveries from viruses that infect microbes, plants, and non-human animals will be included. Prerequisite(s): One year introductory biology or consent of instructor.

BIOL 3300 Introduction to Hematology (4 credits)

Introduction to the principles of blood cell formation, function, and associated disorders. Lecture and Laboratory. Prerequisites: BIOL 1400, CHEM 2211, and CHEM 2212. BIOL 2360 or BIOL 3380 is recommended.

BIOL 3310 Entomology (3 credits)

The biology of insects and their importance. Prerequisites: BIOL 1400 and BIOL 1500, or consent of instructor.

BIOL 3337 Science Communication (3 credits)

This online course includes training in the skills, tools, and habits of mind of the practicing scientist. These skills include navigating and understanding the scientific literature, framing evidence-based and model-driven scientific questions, proposing and testing hypotheses, conducting research responsibly and ethically, analyzing and visualizing data, and communicating scientific rationale and results in lab meetings, presentations, research funding applications, and job searches.

BIOL 3338 Science Communication Lab (1 credit)

All students in the Biology Baccalaureate Partnership at North Hennepin Community College are expected to co-enroll in this 1 credit face-to-face section on the NHCC campus when taking BIOL 3337 online. The on-campus discussion section will cover supplementary topics and material and is intended to build scientific community and communications skills among the BBP cohort. The lab section will not impact the main course grades. Co-requisite BIOL 3337. Liberal Education Goal Area 11.

BIOL 3339 Bioethics (3 credits)

In this online Bioethics course we will grapple with the many philosophical, ethical, and practical questions created by advances in medicine and biology using a combination of readings, case studies, scientific literature, and popular culture. The course has undergraduate and graduate sections and is intended for students in their Junior year of college or later. Topics include prenatal testing, abortion, assisted suicide, human augmentation/transhumanism, cloning, disability rights, animal rights, genetically modified organisms, and environmental ethics. Liberal Education Goal Area 9.

BIOL 3361 Limnology (4 credits)

Introduction to the biology, chemistry, geology, and physics of lakes and streams. Lecture, field, and laboratory work. Prerequisites: BIOL 1400, BIOL 1500, BIOL 2610, CHEM 1111 or CHEM 2211, CHEM 1112 or CHEM 2212, or consent of instructor.

BIOL 3362 Streams and Rivers (4 credits)

An introduction to the physical characteristics, chemistry, and biology of lotic systems such as streams and rivers. Includes information on morphology, hydrology, and alteration of these natural systems. Includes laboratory simulations and field exercises. Lecture and laboratory. Prerequisites: BIOL 1400 and BIOL 1500, or consent of instructor.

BIOL 3380 Molecular Genetics (3 credits)

Study of the structure, replication, repair, expression, regulation, and change of genetic material. Introduction to theory and procedures by which recombinant DNA molecules are formed, cloned, and expressed. Prerequisites: BIOL 1400 and BIOL 2360.

BIOL 3400 Fish & Wildlife Law and Administration (3 credits)

This course is for majors in natural resources, biology, and related fields. The lectures throughout the course will cover the history, philosophy, evolution, and application of these laws in the management of fish, wildlife, and other renewable resources for the benefit of the public. The course concludes with contemporary economic, administrative and political aspects of fish and wildlife management. The course fulfills some certification requirements of The Wildlife Society and the American Fisheries Society and is recommended for students planning graduate study or employment in natural resources management. Prerequisite: BIOL 2610.

BIOL 3420 Human Dimensions of Wildlife and Fisheries Management (3 credits)

This course is for majors in natural resources, biology, and related fields. The lectures throughout the course will cover the history, philosophy, evolution, and application of human dimensions in wildlife and fisheries management. The course fulfills some certification requirements of The Wildlife Society and the American Fisheries Society and is recommended for students planning graduate study or employment in natural resources management. Prerequisite: BIOL 2610.

BIOL 3580 Immunology (3 credits)

The study of disease fighting mechanisms of the innate and adaptive immune systems. Prerequisites: BIOL 2360 and one year of chemistry.

BIOL 3590 Cell Biology (3 credits)

Microscopic anatomy and physiological mechanisms of plant and animal cells. Gene control of cellular metabolism, mechanism of energy utilization in cells and pathways of synthesis of molecules. Prerequisites: (BIOL 2360 or BIOL 3380) and (CHEM 2211, CHEM 2212) or consent of instructor.

BIOL 3610 Principles of Wildlife Management (3 credits)

Introduction to the field of wildlife management, including the biological principles important to the understanding of wildlife populations and the management strategies implemented by natural resource managers. Prerequisite(s): BIOL 1500 and BIOL 2610.

BIOL 3630 Conservation Biology (3 credits)

Principles and theories of conservation biology. Topics include biodiversity, threats to biodiversity, extinctions, management of threatened and endangered species, managing habitats for conservation, and methods to mitigate biodiversity loss. Prerequisites: BIOL 1400 and BIOL 1500, or consent of instructor. Also GEOG 3630.

BIOL 3710 Microbiology (4 credits)

Structure, classification, and physiology of bacteria and related microorganisms. Lecture and laboratory. Prerequisites or Corequisites: One year introductory biology and one year introductory chemistry or consent of instructor.

BIOL 3720 Plant Form and Function (4 credits)

Structure, function, and development of vascular plants. Interrelationships between anatomical structures and physiological processes and how plants cope with environmental challenges. Lecture and laboratory. Prerequisites: BIOL 1400, 1500 and one year of college chemistry or consent of instructor.

BIOL 3723 Ecosystem Ecology (3 credits)

Fundamentals of the study of ecosystems, with emphasis on the integration of abiotic and biotic components in the development of ecosystem processes. Comparisons and interactions between terrestrial, wetland, aquatic, and atmospheric systems across the major biomes. Prerequisite: BIOL 2610.

BIOL 3730 Plant Diversity (4 credits)

Classification, phylogeny, collection, field identification, and uses of wild plants. Lecture and laboratory. Prerequisites: BIOL 1400 and BIOL 1500 or consent of instructor.

BIOL 3830 Aquatic Plants and Algae (4 credits)

Survey of the morphology, physiology, taxonomy, systematics, and ecology of algae and aquatic vascular plants. Lecture, laboratory, and field study. Prerequisites: BIOL 1400 and BIOL 1500.

BIOL 3840 Wetlands Ecology (3 credits)

Survey course develops a basic understanding of the terminology, classification, ecology, values, and conservation of wetlands. Covers wetland systems from around the world, with emphasis on wetlands in North America. Prerequisites: BIOL 1400 and BIOL 1500, or consent of instructor.

BIOL 3844 Wetlands Ecology Lab (1 credit)

Laboratory course to supplement BIOL/ENVR 3840 Wetlands Ecology. Intended to strengthen a basic understanding of the terminology, classification, ecology, values, and conservation of wetlands. Prerequisite or Corequisite: BIOL/ENVR 3840 or consent of instructor.

BIOL 3850 Marine Biology (3 credits)

Lecture course introducing major concepts and theories. Includes physical and chemical components of the oceans, with special interest paid to the major groups of organisms living in marine systems. Emphasis on the different types of marine systems (coral reefs, mangroves, open water, etc.). Prerequisites: BIOL 1400 and 1500. Might not be offered every year.

BIOL 4030 Wetland Delineation and Classification (3 credits)

This training course for the identification, delineation, and classification of wetlands covers the major types of wetlands and their general delineation procedures. Hydrological, soil, and vegetation characteristics will be used to identify and map wetland boundaries. Focuses on current regulations as established by the US Army Corps of Engineers' 1987 Wetland Delineation Manual with additional regulations specific for the state of Minnesota. Satisfies the requirements for basic delineation training as specified by the Corps of Engineers and certification programs in many states. Prerequisites: BIOL 1400, 1500, or consent of instructor.

BIOL 4200 Freshwater Invertebrates (4 credits)

Morphology and functional roles of representative freshwater invertebrates and their ecological interrelationships. Lecture and laboratory. Prerequisite: BIOL 1400, BIOL 1500, BIOL 3361, BIOL 3362, and junior status, or consent of instructor.

BIOL 4210 Parasitology (4 credits)

The biology of animal parasites, their identification, biochemistry, immunology, and epidemiology. Lecture and laboratory. Prerequisites: BIOL 1400, 1500, or consent of instructor.

BIOL 4270 Histology (4 credits)

Microscopic anatomy of vertebrate tissues and organs with functional correlations. Lecture and laboratory. Prerequisites: BIOL 1400 and BIOL 1500, BIOL 3250, and BIOL 3260. Might not be offered every year.

BIOL 4330 Upland Wildlife Management (3 credits)

An advanced pre-professional course for majors in natural resources, biology, and related fields. Lectures cover the history, philosophy, evolution, and application of wildlife management with a focus on upland wildlife as a renewable, sustainable natural resource. The course fulfills some professional certification requirements of The Wildlife Society and is recommended for students planning graduate study or employment in natural resources management. Prerequisite: BIOL 3610.

BIOL 4360 Developmental and Tumor Biology (3 credits)

Investigation of the mechanisms leading to the development of multicellular animal organisms from a fertilized egg. In contrast, the course also investigates how cells within a multicellular organism can become misregulated, leading to cancer. Prerequisites: BIOL 1400, BIOL 2360.

BIOL 4447 Genomics (3 credits)

Genomics is the study of the content, structure, organization, evolution, and conservation of whole genomes. Because of its reliance on precision instrumentation and scale, and the unprecedented volume of data produced, genomics is unusual among biological disciplines in its integration of engineering, statistics, and information science. Genomics also requires the biologist to engage in systems thinking by taking a wide view of the dynamic physical and informational network that comprises a single genome. One must further consider the human genome as itself a component of an even larger network of genomes that make up the holobiont—that's us plus our always-changing resident community of microbial pals. After covering these and other topics, and carrying out a substantial genome annotation project for the lab component of the course, we explore personal genomics, or how all this information and understanding affects our lives as 21st century human beings. Prerequisite: BIOL 2360.

BIOL 4448 Genomics Lab (2 credits)

All students in the Biology Baccalaureate Partnership at North Hennepin Community College are expected to co-enroll in this 2 credit face-to-face section on the NHCC campus when taking BIOL4447 online. This lab section consists of a hands-on genome annotation project in collaboration with the national Genomics Education Partnership, as well as practice using other bioinformatics tools and databases. Prerequisites: BIOL2360, co-enrollment with BIOL4447.

BIOL 4449 Gene Expression (4 credits)

While mutations in genomic DNA play a major role in human health and disease, the control of gene expression plays the pivotal role in establishing developmental patterning, cellular differentiation, responsiveness to environmental stimuli, and defense against pathogens and invasive genetic elements. Changes in genomic DNA over time are a key driver of evolution, but the control of gene expression is also a major generator of species diversity and a driver of genome structure and function. Chromosomes in eukaryotic nuclei are made up of a combination of DNA and proteins packaged and compacted into a composite called chromatin—in turn, chromatin structure and modification determines whether a gene is "open" for transcription or closed. One of the most efficient and well-characterized systems for studying the relationship between chromatin and gene expression is the so-called position effect variegation (PEV) in the compound eye of *Drosophila melanogaster*, in which the variable expression of a reporter transgene allows reproducible measurement of gene expression in response to genetic and environmental factors. We will use a combination of classroom and laboratory approaches to understand and complete original research projects using this system. Successful completion of this course satisfies BSU Biology's capstone requirement. Prerequisite: BIOL 2360.

BIOL 4460 Stem Cells and Regenerative Medicine (3 credits)

This course is designed as an introduction to stem cell biology and the medical applications of stem cells including in the field of regenerative medicine. Prerequisite(s): BIOL 2360.

BIOL 4470 Introduction to Vaccinology (4 credits)

This course will introduce students to the field of vaccinology and aspects of the bioscience industry related to vaccine discovery, production, and testing. Students will learn about the history of vaccines; the production of vaccines in a regulated environment; the benefits and concerns with vaccine use. The course will include a discussion of vaccine types, delivery, efficacy, and safety. Students will learn about the mechanism of action of different vaccines; traditional versus modern vaccine production methods, the process of clinical trials and approval for new vaccines; and discuss ethical concerns related to vaccine use. Prerequisite(s): BIOL 2360.

BIOL 4510 Ornithology (3 credits)

Morphology, ecology, behavior, classification, distribution, and evolution of birds. Lecture, laboratory, and field study (early morning field trips and one or two all-day field trips). Prerequisites: BIOL 1500 and BIOL 2610, or consent of instructor.

BIOL 4520 Mammalogy (3 credits)

Morphology, ecology, behavior, classification, distribution, and evolution of mammals. Lecture and laboratory. Prerequisite(s): BIOL 1500 and BIOL 2610, or consent of instructor.

BIOL 4530 Ecology and Management of Large Mammals (3 credits)

Large mammals are socially and ecologically important components of the landscape and are intensively managed by wildlife agencies and private landowners. The primary focus of the course will be on life-histories, investigative techniques, and management of the major large mammals in Minnesota; white-tailed deer, black bear, wolves, moose, and elk. Biology, management, and research of large mammals from the western United States (i.e., mule deer, cougar, bison, pronghorn antelope, bighorn sheep, brown bear, etc.) will also be discussed. Students will be introduced to current issues concerning the political and social aspects of big game management. Prerequisite(s): BIOL 3610.

BIOL 4534 Ichthyology (4 credits)

An overview of morphology, physiology, behavior, taxonomy, systematics, and ecology of fishes. This course emphasizes the evolution of ecological adaptations and the origin and conservation of biodiversity. Lecture, laboratory, and field work. Prerequisites: BIOL 1400 and BIOL 1500, or consent of instructor.

BIOL 4545 Fisheries Management (4 credits)

Theory and methods of fisheries management with an emphasis on quantitative methods and ecosystem management. Lecture and extensive field and laboratory work. Prerequisites: BIOL 3361 and BIOL 3362, or consent of instructor.

BIOL 4620 Evolution (3 credits)

Patterns and processes of biological evolution. Topics include phylogenies, speciation, extinctions, biogeography, adaptations, sexual selection, and behavior, with an emphasis on vertebrates and invertebrates. Prerequisite: BIOL 2360 or consent of instructor.

BIOL 4623 Forest Ecology (4 credits)

Fundamentals of forest ecology, including study of tree growth, tree demography, forest community dynamics, and ecosystem processes. Students also learn to identify forest trees native to the region and basic techniques of forest stand description. Prerequisite: BIOL 2610 or consent of instructor. Might not be offered every year.

BIOL 4715 Clinical Microbiology (3 credits)

Clinical techniques used to identify medically important microorganisms will be examined. Correlate the presence of microorganisms to health and disease. Prerequisite(s): BIOL 3710.

BIOL 4780 Wildlife Management Techniques (5 credits)

This course emphasizes application of ecological principles, knowledge, and practical field skills to data collection used in the management of wildlife resources and their habitats. Use of literature, development of basic field and laboratory skills, and application of management and research principles are integral. Designed for upper level students who have met prerequisites, and graduate students, who are preparing for professional careers in wildlife conservation, natural sciences, and related areas of natural resources management. The course helps fulfill The Wildlife Society professional certification requirements. Prerequisite: BIOL 3610.

BIOL 4800 Advanced Project Certification (0 credit)

A course designed to document a students successful completion of a professional or graduate school entrance exam, with a student placing in at least the 60th percentile. This course is one of the options for completing the capstone project requirement in Biology.

BIOL 4894 Advanced Research Project I (2 credits)

This course provides a culminating experience that integrates the knowledge and skills learned in previous courses and applies them to a scholarly activity. Examples of an advanced research project may include an original research project, internship, or shadowing experience with a professional. Prerequisite: Junior status and consent of instructor.

BIOL 4895 Advanced Research Project II (2 credits)

This course is a continuation of BIOL 4894 for students who undertake a year-long research project. The course provides a culminating experience that integrates the knowledge and skills learned in previous courses and applies them to a scholarly activity. Examples of an advanced research project may include an original research project, internship, or shadowing experience with a professional. Prerequisite: Junior status and consent of instructor.

BIOL 4898 Fisheries Research I (2 credits)

Independent field projects based on the background and interests of the students and the instructor. Designed to give students experience developing original research objectives, designing methods, collecting data, and writing a research manuscript that conveys that research to their peers. Prerequisites: Completion of the Area II required writing course for the B.S. or B.A. Biology major, junior status and consent of instructor.

BIOL 4899 Fisheries Research II (2 credits)

This course is a continuation of BIOL 4898. It is designed to give students experience analyzing data, drawing conclusions, completing and preparing a research manuscript for publication, and developing an oral presentation for a professional meeting. Prerequisites: BIOL 4898, Completion of the Area II required writing course for the B.S. or B.A. Biology major, junior status and consent of instructor.

BIOL 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
 1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
 1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
 1940, 2940, 3940, 4940 IN-SERVICE COURSE
 1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
 1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
 1970, 2970, 3970, 4970 INTERNSHIP
 1980, 2980, 3980, 4980 RESEARCH
 1990, 2990, 3990, 4990 THESIS

Biochem, Cellular & Molecular Biology Courses**BCMB 1000 Biochemistry, Cell and Molecular Biology Careers (BCMB Careers) (1 credit)**

An introduction to biochemistry, cell and molecular biology careers and curriculum planning for BCMB majors or students considering pursuing a BCMB degree.

BCMB 3000 Biochemistry, Cell and Molecular Biology Research (BCMB Research) (1 credit)

An introduction to biochemistry, cell and molecular biology research available at BSU and professionally. Covers the basics of research and medical ethics. Identifying a research mentor for senior research projects and preparing a preliminary research proposal. Prerequisite(s): BCMB 1000.

BCMB 3074 Molecular Techniques (2 credits)

This is a hybrid lecture and lab-based course and is an introduction to several common molecular-based techniques. Students will learn basic pipetting, protein assays, electrophoresis, PCR, and other molecular genetic techniques. Prerequisite(s): BIOL 1400, BIOL 2360, CHEM 2211, CHEM 2212; or consent of instructor.

BCMB 3075 Cellular Techniques (2 credits)

This course is the one of two options for completion of techniques core requirement for the BCMB major and for specific Biology majors. Includes an introduction to cell culture, cell imaging, cell-based assays, and stem cell biology. Prerequisite(s): BIOL 3074 or BCMB 3074.

BCMB 3076 Biochemical Techniques (2 credits)

This course is one of two options for completion of the techniques core requirement for the BCMB major. Includes some basic biochemical techniques, but introduces more advanced biochemical laboratory experiments. Prerequisite(s): CHEM 4471 or BCMB 3074 or BIOL 3074.

BCMB 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Business Administration

The Business Administration program offers study in finance, management, marketing, entrepreneurship/small business management, international business, management information systems, computer forensics, computer information systems, fraud examination, and general business. The focus is undergraduate education in this student-oriented learning environment. Hands-on learning, full student participation, and technology are integrated throughout the Business Administration program. Neither narrow nor vocational in its approach, the course work includes critical and logical thinking, communication skills, creative problem solving, innovation, decision making, and theoretical, technical, and professional skills.

Business policies and practices both reflect and help form the ethical, global/international, and moral foundations of a society; business both draws upon and contributes to knowledge and understanding of the world. In recognition of this, the Department of Business Administration educates its students to be discerning, responsible citizens of both the business community and our democratic society.

The theoretical aspects of business are grounded in social sciences such as economics, political science, psychology, sociology, and anthropology. The Business Administration curriculum is therefore broadly conceived. It prepares students for entry into the business world or for graduate study, and offers them a liberal education that will contribute to their intellectual, personal, and ethical growth.

Programs

- Business Administration, B.S. (Indigenous Business) *major*
- Business Administration, B.S. (Entrepreneurship Emphasis) *major*
- Business Administration, B.S. (Marketing Emphasis) *major*
- Business Administration, B.S. (Finance Emphasis) *major*
- Business Administration, B.S. (Human Resources Management Emphasis) *major*
- Business Administration, B.S. (Professional Selling Emphasis) *major*
- Business Administration, B.S. (Indigenous Nations and Marketing Emphasis) *major*
- Business Administration, B.S. (Management Emphasis) *major*
- Computer Information Systems, B.S. *major*
- Marketing Communication, B.S. *major*
- Business Administration *minor*
- Management Information Systems *minor*
- Professional Selling *minor*

Career Directions

Account Representative
Administrative Services Manager
Administrator
Advertising
Advertising Executive
Advertising Manager
Agent Manager
Applications Development
Applications Support
Appraiser & Assessor
Bank Examiner
Bank Officer
Budget Analyst
Business Analyst
Business Director
Buying Agent
Claims Adjusters
College & University Administrator
Commodities Salespeople
Communications Directors
Compliance Officer & Inspector
Computer Forensics
Computer Operations Manager
Computer Programmer
Computer Securities Specialist
Computer Support Specialists
Computer Systems Analysts
Construction Managers
Corporate Trainer
Cost Estimator
Credit Analyst
Data Communications Analysts
Database Administrator
Demonstrators & Promoters
Doctoral Program - Graduate Study
E-Commerce Development
E-Commerce Support
E-Commerce Web Programmer
Education Administrators
Educator
Engineering Managers
Entrepreneur
Executives
Finance Director
Financial Analyst
Financial Counselor
Financial Information Specialist
Financial Manager
Financial Planner
Food Service Manager
Gaming Services
Health Services Administrators
Hotel & Motel Managers
Human Resource Manager
Human Resources Training
Industrial Production Managers
Information Center Specialist
Information Director
Information Systems Analyst

Information Systems Manager
 Information Technology Auditors
 Information Technology Consultant
 Insurance Adjuster
 Insurance Agents
 Insurance Examiner
 Insurance Investigators
 Insurance Underwriters
 Internet Website Developer
 IRS Agents
 Knowledge Engineer
 Labor Relations Specialists
 Loan Analyst
 Loan Counselor
 Loan Officers
 Lodging Managers
 Management Analyst
 Management Consultant
 Manager
 Manufacturing
 Marketing Executive
 Marketing Manager
 Master's Program - Graduate Study
 Media Relations
 Medical and Health Services Manager
 Natural Sciences Manager
 Network Specialist
 Operations Manager
 Personnel & Training Managers
 Postmaster & Mail Superintendent
 Product Support
 Production / Operations Supervisor
 Production Manager
 Project Leader
 Promotions Director
 Promotions Management
 Property & Real Estate Managers
 Proprietors
 Public Relations
 Public Speaking
 Purchasing Agents
 Purchasing Managers
 Real Estate Agents
 Resort Managers
 Restaurant Manager
 Sales Engineers
 Sales Executive
 Sales Manager
 Sales Representative
 Sales Worker Supervisors
 Securities Salespeople
 Small Business Management
 Software Engineer
 Storage & Transportation Manager
 Tax Examiners
 Telecommunications Specialist
 Web Site Developer
 Wholesalers
 Also: Graduate Study

Mathematics

Computing

Speech

Writing

Business Administration

Preparation

Recommended High School Courses

Business Administration, B.S. *major*

Indigenous Business

Students majoring in Business Administration are advised to complete at least one course in Psychology, Sociology, or Anthropology as part of their liberal education requirements.

Required Credits: 68

Required GPA: 2.25

I REQUIRED BASIC CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- BUAD 2220 Legal Environment (3 credits)
- BUAD 2231 Business Statistics I (3 credits)
- BUAD 2280 Computer Business Applications (3 credits)
- BUAD 3223 Operations Management (3 credits)
- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3381 Management Information Systems (3 credits)
- BUAD 3771 Financial Management (3 credits)
- BUAD 4559 Strategic Management (3 credits)
- BUAD 4600 Senior Seminar: Business Administration (1 credit)
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)
- MATH 1170 College Algebra (4 credits)

ADDITIONAL REQUIRED COURSES

Complete the following courses:

- BUAD 3450 Indigenous Business (3 credits)
- BUAD 4550 Indigenous Entrepreneurship (3 credits)

Complete 15 credits (one 3 credit course from each section); no course may be counted toward more than one of the fields:

Finance: Select one

- BUAD 3772 Advanced Financial Management (3 credits)
- BUAD 3872 Investments (3 credits)

Management: Select one

- BUAD 4354 Organizational Behavior (3 credits)
- BUAD 4456 Human Resources Management (3 credits)

Marketing: Select one

- BUAD 3567 Consumer Behavior (3 credits)
- BUAD 3568 Professional Selling (3 credits)
- BUAD 4467 Marketing Research (3 credits)

Entrepreneurship: Select one

- BUAD 4458 Entrepreneurship (3 credits)
- BUAD 4469 Small Business Case Analysis (3 credits)

Human Resources Management: Select one

- BUAD 3420 Labor and Employment Relations (3 credits)
- BUAD 4456 Human Resources Management (3 credits)

REQUIRED ELECTIVE

Select one course from the following:

- LEAD 3500 Theories and Contexts of Leadership (3 credits)
- INST 4000 Nation Building and Leadership (3 credits)
- BUAD 3281 Decision Support Systems (3 credits)
- BUAD 3520 Business Ethics (3 credits)
- BUAD 4507 Talent Acquisition (3 credits)
- BUAD 4387 Strategic Information Management (3 credits)
- BUAD 4750 International Management (3 credits)

SUGGESTED SEMESTER SCHEDULE FOR BUSINESS ADMINISTRATION, B.S. MAJOR, INDIGENOUS BUSINESS EMPHASIS

Freshman: All Fields of Emphasis

- Psychology, Sociology or Anthropology
- Liberal Education Requirements

Sophomore: All Fields of Emphasis

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- BUAD 2220 Legal Environment (3 credits)
- BUAD 2231 Business Statistics I (3 credits)
- BUAD 2280 Computer Business Applications (3 credits)
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

Junior: All Fields of Emphasis

- BUAD 3223 Operations Management (3 credits)
- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3381 Management Information Systems (3 credits)
- BUAD 3771 Financial Management (3 credits)

Senior: All Fields of Emphasis

- BUAD 4600 Senior Seminar: Business Administration (1 credit)

Junior: Indigenous Business Field of Emphasis

- BUAD 3450 Indigenous Business (3 credits)
- BUAD 3772 Advanced Financial Management (3 credits)
or BUAD 3872 Investments (3 credits)
- BUAD 3567 Consumer Behavior (3 credits)
or BUAD 3568 Professional Selling (3 credits)
or BUAD 4467 Marketing Research (3 credits)

Electives: Select one of the following. (4000 level courses should be taken as a senior.)

- LEAD 3500 Theories and Contexts of Leadership (3 credits)
- INST 4000 Nation Building and Leadership (3 credits)
- BUAD 3281 Decision Support Systems (3 credits)
- BUAD 3520 Business Ethics (3 credits)
- BUAD 4387 Strategic Information Management (3 credits)

- BUAD 4507 Talent Acquisition (3 credits)
- BUAD 4750 International Management (3 credits)

Senior: Indigenous Business Field of Emphasis

- BUAD 3420 Labor and Employment Relations (3 credits)
or BUAD 4456 Human Resources Management (3 credits)
- BUAD 4550 Indigenous Entrepreneurship (3 credits)
- BUAD 4354 Organizational Behavior (3 credits)
or BUAD 4456 Human Resources Management (3 credits)
- BUAD 4458 Entrepreneurship (3 credits)
or BUAD 4469 Small Business Case Analysis (3 credits)

Business Administration, B.S. *major* Entrepreneurship Emphasis

Students majoring in Business Administration are advised to complete at least one course in Psychology, Sociology, or Anthropology as part of their liberal education requirements.

Required Credits: 62

Required GPA: 2.25

I REQUIRED BASIC CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- BUAD 2220 Legal Environment (3 credits)
- BUAD 2231 Business Statistics I (3 credits)
- BUAD 2280 Computer Business Applications (3 credits)
- BUAD 3223 Operations Management (3 credits)
- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3381 Management Information Systems (3 credits)
- BUAD 3771 Financial Management (3 credits)
- BUAD 4559 Strategic Management (3 credits)
- BUAD 4600 Senior Seminar: Business Administration (1 credit)
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)
- MATH 1170 College Algebra (4 credits)

ADDITIONAL REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- BUAD 4458 Entrepreneurship (3 credits)
- BUAD 4469 Small Business Case Analysis (3 credits)

REQUIRED ELECTIVES

SELECT 4 OF THE FOLLOWING COURSES WITH THE CONSENT OF ADVISOR:

- ACCT 3118 Financial Statement Analysis (3 credits)
- ACCT 3404 Income Taxes I (3 credits)
- BUAD 3281 Decision Support Systems (3 credits)
- BUAD 3283 E-Commerce Web Development (3 credits)
- BUAD 3384 Systems Analysis and Design (3 credits)
- BUAD 3467 Advertising Management (3 credits)
- BUAD 3568 Professional Selling (3 credits)
- BUAD 3677 Real Estate (3 credits)

- BUAD 3678 Risk Management and Insurance (3 credits)
- BUAD 4385 Data Modeling and Design (3 credits)
- BUAD 4387 Strategic Information Management (3 credits)
- BUAD 4456 Human Resources Management (3 credits)
- BUAD 4467 Marketing Research (3 credits)
- BUAD 4750 International Management (3 credits)

SUGGESTED SEMESTER SCHEDULE FOR BUSINESS ADMINISTRATION, B.S. MAJOR, ENTREPRENEURSHIP EMPHASIS

Freshman: All fields of emphasis

- Psychology, Sociology or Anthropology courses
- Liberal Education requirements

Sophomore: All fields of emphasis

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- BUAD 2220 Legal Environment (3 credits)
- BUAD 2231 Business Statistics I (3 credits)
- BUAD 2280 Computer Business Applications (3 credits)
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

Junior: All fields of emphasis

- BUAD 3223 Operations Management (3 credits)
- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3381 Management Information Systems (3 credits)
- BUAD 3771 Financial Management (3 credits)

Senior: All fields of emphasis

- BUAD 4600 Senior Seminar: Business Administration (1 credit)

Junior: Entrepreneurship Field of Emphasis

Required Electives

Select four of the following courses with the consent of advisor (4000 level courses should be taken as a Senior)

- ACCT 3118 Financial Statement Analysis (3 credits)
- ACCT 3404 Income Taxes I (3 credits)
- BUAD 3281 Decision Support Systems (3 credits)
- BUAD 3283 E-Commerce Web Development (3 credits)
- BUAD 3384 Systems Analysis and Design (3 credits)
- BUAD 3467 Advertising Management (3 credits)
- BUAD 3568 Professional Selling (3 credits)
- BUAD 3677 Real Estate (3 credits)
- BUAD 3678 Risk Management and Insurance (3 credits)
- BUAD 4385 Data Modeling and Design (3 credits)
- BUAD 4387 Strategic Information Management (3 credits)
- BUAD 4456 Human Resources Management (3 credits)
- BUAD 4467 Marketing Research (3 credits)

Senior: Entrepreneurship Field of Emphasis

- BUAD 4458 Entrepreneurship (3 credits)
- BUAD 4469 Small Business Case Analysis (3 credits)
- BUAD 4559 Strategic Management (3 credits)

Business Administration, B.S. *major*

Marketing Emphasis

Students majoring in Business Administration are advised to complete at least one course in Psychology, Sociology, or Anthropology as part of their liberal education requirements.

Required Credits: 65
Required GPA: 2.25

I REQUIRED BASIC CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- BUAD 2220 Legal Environment (3 credits)
- BUAD 2231 Business Statistics I (3 credits)
- BUAD 2280 Computer Business Applications (3 credits)
- BUAD 3223 Operations Management (3 credits)
- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3381 Management Information Systems (3 credits)
- BUAD 3771 Financial Management (3 credits)
- BUAD 4559 Strategic Management (3 credits)
- BUAD 4600 Senior Seminar: Business Administration (1 credit)
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)
- MATH 1170 College Algebra (4 credits)

ADDITIONAL REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- BUAD 3500 Marketing Analytics (3 credits)
- BUAD 3567 Consumer Behavior (3 credits)
- BUAD 3568 Professional Selling (3 credits)
- BUAD 4467 Marketing Research (3 credits)
- BUAD 4468 Marketing Management (3 credits)

REQUIRED ELECTIVES

SELECT 2 OF THE FOLLOWING COURSES:

- ACCT 4160 Business Communication (3 credits)
or COMM 4160 Business Communication (3 credits)
- BUAD 4385 Data Modeling and Design (3 credits)
or BUAD 4387 Strategic Information Management (3 credits)
- BUAD 3232 Business Statistics II (3 credits)
- BUAD 3384 Systems Analysis and Design (3 credits)
- BUAD 3467 Advertising Management (3 credits)
- BUAD 3569 E-Marketing (3 credits)
- BUAD 3751 International Marketing (3 credits)
- BUAD 4469 Small Business Case Analysis (3 credits)
- ECON 4000 Microeconomic Decisions (3 credits)
- ECON 4100 Macroeconomic Growth and Fluctuations (3 credits)

Business Administration, B.S. *major*

Finance Emphasis

Students majoring in Business Administration are advised to complete at least one course in

Psychology, Sociology, or Anthropology as part of their liberal education requirements.

Required Credits: 65
Required GPA: 2.25

I REQUIRED BASIC CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- BUAD 2220 Legal Environment (3 credits)
- BUAD 2231 Business Statistics I (3 credits)
- BUAD 2280 Computer Business Applications (3 credits)
- BUAD 3223 Operations Management (3 credits)
- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3381 Management Information Systems (3 credits)
- BUAD 3771 Financial Management (3 credits)
- BUAD 4559 Strategic Management (3 credits)
- BUAD 4600 Senior Seminar: Business Administration (1 credit)
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)
- MATH 1170 College Algebra (4 credits)

ADDITIONAL REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- BUAD 3772 Advanced Financial Management (3 credits)
- BUAD 3872 Investments (3 credits)
- BUAD 4779 Corporate Financial Policies (3 credits)

RESTRICTED ELECTIVES

SELECT FOUR OF THE FOLLOWING COURSES:

- ACCT 3118 Financial Statement Analysis (3 credits)
- ACCT 3404 Income Taxes I (3 credits)
- ACCT 4405 Income Taxes II (3 credits)
- BUAD 3232 Business Statistics II (3 credits)
- BUAD 3520 Business Ethics (3 credits)
- BUAD 3677 Real Estate (3 credits)
- BUAD 3678 Risk Management and Insurance (3 credits)
- ECON 3200 Economics of the Financial Sector (3 credits)

Business Administration, B.S. *major*

Human Resources Management Emphasis

Students majoring in Business Administration are advised to complete at least one course in Psychology, Sociology, or Anthropology as part of their liberal education requirements.

Required Credits: 65
Required GPA: 2.25

I REQUIRED BASIC CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)

- BUAD 2220 Legal Environment (3 credits)
- BUAD 2231 Business Statistics I (3 credits)
- BUAD 2280 Computer Business Applications (3 credits)
- BUAD 3223 Operations Management (3 credits)
- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3381 Management Information Systems (3 credits)
- BUAD 3771 Financial Management (3 credits)
- BUAD 4559 Strategic Management (3 credits)
- BUAD 4600 Senior Seminar: Business Administration (1 credit)
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)
- MATH 1170 College Algebra (4 credits)

ADDITIONAL REQUIRED COURSES

Complete the following courses:

- BUAD 3420 Labor and Employment Relations (3 credits)
- BUAD 4456 Human Resources Management (3 credits)
- BUAD 4507 Talent Acquisition (3 credits)

REQUIRED ELECTIVES

Select 4 of the following courses:

- BUAD 3520 Business Ethics (3 credits)
- BUAD 4354 Organizational Behavior (3 credits)
- BUAD 4500 Compensation and Benefits (3 credits)
- BUAD 4508 Training, Development, and Evaluation (3 credits)
- BUAD 4509 Diversity and Inclusion (3 credits)
- BUAD 4800 Strategic Human Resource Management (3 credits)

SUGGESTED SEMESTER SCHEDULE FOR BUSINESS ADMINISTRATION, B.S. MAJOR, HUMAN RESOURCE MANAGEMENT EMPHASIS

The following is a list of required Business Administration Courses arranged by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions.

Freshman: All Fields of Emphasis

- Psychology, Sociology or Anthropology
- Liberal Education Requirements
- MATH 1170 College Algebra (4 credits)

Sophomore: All Fields of Emphasis

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- BUAD 2220 Legal Environment (3 credits)
- BUAD 2231 Business Statistics I (3 credits)
- BUAD 2280 Computer Business Applications (3 credits)
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

Junior: All fields of Emphasis

- BUAD 3223 Operations Management (3 credits)
- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3381 Management Information Systems (3 credits)
- BUAD 3771 Financial Management (3 credits)

Senior: All Fields of Emphasis

- BUAD 4559 Strategic Management (3 credits)
- BUAD 4600 Senior Seminar: Business Administration (1 credit)

Junior: Human Resources Management field of emphasis

- BUAD 3420 Labor and Employment Relations (3 credits)
- Select four of the following:
 - BUAD 3520 Business Ethics (3 credits)
 - BUAD 4354 Organizational Behavior (3 credits)
 - BUAD 4500 Compensation and Benefits (3 credits)
 - BUAD 4508 Training, Development, and Evaluation (3 credits)
 - BUAD 4509 Diversity and Inclusion (3 credits)
 - BUAD 4800 Strategic Human Resource Management (3 credits)
 - BUAD 4456 Human Resources Management (3 credits)

Senior: Human Resources Management field of emphasis

- BUAD 4507 Talent Acquisition (3 credits)

Business Administration, B.S. *major* Professional Selling Emphasis

Students majoring in Business Administration are advised to complete at least one course in Psychology, Sociology, or Anthropology as part of their liberal education requirements.

Required Credits: 64

Required GPA: 2.25

I REQUIRED BASIC CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- BUAD 2220 Legal Environment (3 credits)
- BUAD 2231 Business Statistics I (3 credits)
- BUAD 2280 Computer Business Applications (3 credits)
- BUAD 3223 Operations Management (3 credits)
- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3381 Management Information Systems (3 credits)
- BUAD 3771 Financial Management (3 credits)
- BUAD 4559 Strategic Management (3 credits)
- BUAD 4600 Senior Seminar: Business Administration (1 credit)
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)
- MATH 1170 College Algebra (4 credits)

ADDITIONAL REQUIRED COURSES

Complete the following courses:

- BUAD 3567 Consumer Behavior (3 credits)
- BUAD 3568 Professional Selling (3 credits)
- BUAD 4340 Sales Management (3 credits)
- BUAD 4568 Advanced Professional Selling (3 credits)
- COMM 4160 Business Communication (3 credits)

REQUIRED ELECTIVES

Select 2 elective courses for the Professional Selling emphasis:

- BUAD 3467 Advertising Management (3 credits)
- BUAD 3500 Marketing Analytics (3 credits)
- BUAD 3569 E-Marketing (3 credits)
- BUAD 3751 International Marketing (3 credits)
- BUAD 4347 Sales Simulator Lab (2 credits)
- COMM 3100 Interviewing (3 credits)

Business Administration. B.S. *major* Indigenous Nations and Marketing Emphasis

Students majoring in Business Administration are advised to complete at least one course in Psychology, Sociology, or Anthropology as part of their liberal education requirements.

Required Credits: 68
Required GPA: 2.25

I REQUIRED BASIC CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- BUAD 2220 Legal Environment (3 credits)
- BUAD 2231 Business Statistics I (3 credits)
- BUAD 2280 Computer Business Applications (3 credits)
- BUAD 3223 Operations Management (3 credits)
- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3381 Management Information Systems (3 credits)
- BUAD 3771 Financial Management (3 credits)
- BUAD 4559 Strategic Management (3 credits)
- BUAD 4600 Senior Seminar: Business Administration (1 credit)
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)
- MATH 1170 College Algebra (4 credits)

ADDITIONAL REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- BUAD 3567 Consumer Behavior (3 credits)
- BUAD 4467 Marketing Research (3 credits)
- INST 1107 Introduction to Turtle Island (3 credits)
- INST 3307 Ojibwe History (3 credits)
- INST 4000 Nation Building and Leadership (3 credits)
- INST 4418 Federal Indian Law (3 credits)

RESTRICTED ELECTIVES

SELECT 2 COURSES FROM THE FOLLOWING WITH CONSENT OF ADVISOR:

- BUAD 3232 Business Statistics II (3 credits)
- BUAD 3467 Advertising Management (3 credits)
- BUAD 3568 Professional Selling (3 credits)
- BUAD 3569 E-Marketing (3 credits)
- BUAD 4468 Marketing Management (3 credits)

SUGGESTED SEMESTER SCHEDULE FOR BUSINESS ADMINISTRATION, B.S. MAJOR, INDIGENOUS NATIONS AND MARKETING EMPHASIS

Freshman: All fields of emphasis

- Psychology, Sociology or Anthropology courses
- Liberal Education requirements

Sophomore: All fields of emphasis

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- BUAD 2220 Legal Environment (3 credits)
- BUAD 2231 Business Statistics I (3 credits)
- BUAD 2280 Computer Business Applications (3 credits)
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

Junior: All fields of emphasis

- BUAD 3223 Operations Management (3 credits)
- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3381 Management Information Systems (3 credits)
- BUAD 3771 Financial Management (3 credits)

Senior: All fields of emphasis

- BUAD 4600 Senior Seminar: Business Administration (1 credit)

Sophomore: Indigenous Nations and Marketing Field of Emphasis

- INST 1107 Introduction to Turtle Island (3 credits)

Junior: Indigenous Nations and Marketing Field of Emphasis

- INST 3307 Ojibwe History (3 credits)
- INST 4000 Nation Building and Leadership (3 credits)
- BUAD 3567 Consumer Behavior (3 credits)

Select two courses from the following list: (4000 level courses should be taken as a senior)

- BUAD 3232 Business Statistics II (3 credits)
- BUAD 3568 Professional Selling (3 credits)
- BUAD 4468 Marketing Management (3 credits)
- BUAD 3467 Advertising Management (3 credits)
- BUAD 3569 E-Marketing (3 credits)

Senior: Indigenous Nations and Marketing Field of Emphasis

- INST 4418 Federal Indian Law (3 credits)
- BUAD 4467 Marketing Research (3 credits)
- BUAD 4559 Strategic Management (3 credits)

Business Administration, B.S. *major* Management Emphasis

Students majoring in Business Administration are advised to complete at least one course in Psychology, Sociology, or Anthropology as part of their liberal education requirements.

Required Credits: 65
Required GPA: 2.25

I REQUIRED BASIC CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- BUAD 2220 Legal Environment (3 credits)
- BUAD 2231 Business Statistics I (3 credits)
- BUAD 2280 Computer Business Applications (3 credits)
- BUAD 3223 Operations Management (3 credits)
- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3381 Management Information Systems (3 credits)
- BUAD 3771 Financial Management (3 credits)
- BUAD 4559 Strategic Management (3 credits)
- BUAD 4600 Senior Seminar: Business Administration (1 credit)
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)
- MATH 1170 College Algebra (4 credits)

ADDITIONAL REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- ACCT 3117 Managerial Analysis (3 credits)
or ACCT 3118 Financial Statement Analysis (3 credits)
- BUAD 4354 Organizational Behavior (3 credits)
- BUAD 4456 Human Resources Management (3 credits)

REQUIRED ELECTIVES

SELECT 4 OF THE FOLLOWING COURSES:

- ACCT 3301 Cost Accounting I (3 credits)
- BUAD 3232 Business Statistics II (3 credits)
- BUAD 3281 Decision Support Systems (3 credits)
- BUAD 3420 Labor and Employment Relations (3 credits)
- BUAD 3520 Business Ethics (3 credits)
- BUAD 3678 Risk Management and Insurance (3 credits)
- BUAD 4387 Strategic Information Management (3 credits)
- BUAD 4458 Entrepreneurship (3 credits)
- BUAD 4469 Small Business Case Analysis (3 credits)
- BUAD 4750 International Management (3 credits)
- ECON 3070 Labor Economics (3 credits)

SUGGESTED SEMESTER SCHEDULE FOR BUSINESS ADMINISTRATION, B.S. MAJOR, MANAGEMENT EMPHASIS

Freshman: All Fields of Emphasis

- Psychology, Sociology or Anthropology
- Liberal Education Requirements

Sophomore: All Fields of Emphasis

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- BUAD 2220 Legal Environment (3 credits)
- BUAD 2231 Business Statistics I (3 credits)
- BUAD 2280 Computer Business Applications (3 credits)
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

Junior: All Fields of Emphasis

- BUAD 3223 Operations Management (3 credits)
- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3381 Management Information Systems (3 credits)
- BUAD 3771 Financial Management (3 credits)

Senior: All Fields of Emphasis

- BUAD 4600 Senior Seminar: Business Administration (1 credit)

Junior: Management Field of Emphasis

- ACCT 3117 Managerial Analysis (3 credits)
- Select four of the following (4000 level courses should be taken as a Senior):
- ACCT 3301 Cost Accounting I
- BUAD 3232 Business Statistics II (3 credits)
- BUAD 3281 Decision Support Systems (3 credits)
- BUAD 3420 Labor and Employment Relations (3 credits)
- BUAD 3520 Business Ethics (3 credits)
- BUAD 3678 Risk Management and Insurance (3 credits)
- BUAD 4387 Strategic Information Management (3 credits)
- BUAD 4458 Entrepreneurship (3 credits)
- BUAD 4469 Small Business Case Analysis (3 credits)
- ECON 3070 Labor Economics (3 credits)

Senior: Management Field of Emphasis

- BUAD 4354 Organizational Behavior (3 credits)
- BUAD 4456 Human Resources Management (3 credits)
- BUAD 4559 Strategic Management (3 credits)

Computer Information Systems, B.S. *major*

Required Credits: 76
Required GPA: 2.25

I REQUIRED BASIC CORE COURSES

Complete the following courses:

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- BUAD 2220 Legal Environment (3 credits)
- BUAD 2231 Business Statistics I (3 credits)
or STAT 2610 Applied Statistics (4 credits)
- BUAD 2280 Computer Business Applications (3 credits)
- BUAD 3223 Operations Management (3 credits)
- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3381 Management Information Systems (3 credits)
- BUAD 3771 Financial Management (3 credits)
- BUAD 4559 Strategic Management (3 credits)
- BUAD 4600 Senior Seminar: Business Administration (1 credit)
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)
- MATH 2210 Discrete Mathematics (4 credits)

II ADDITIONAL REQUIRED COURSES

Complete the following courses:

- BUAD 3382 Business Application Development (3 credits)

- BUAD 3384 Systems Analysis and Design (3 credits)
- BUAD 4385 Data Modeling and Design (3 credits)
- CS 1309 Problem Solving and Computation (3 credits)
- CS 2321 Computer Science I (4 credits)
- CS 2322 Computer Science II (4 credits)
- CS 4390 Social, Ethical, and Professional Issues in Computing (3 credits)

III REQUIRED ELECTIVES

Select three of the following: At least TWO courses must be from Group B

GROUP A.

- BUAD 3281 Decision Support Systems (3 credits)
- BUAD 3283 E-Commerce Web Development (3 credits)
- BUAD 3383 Data Communications (3 credits)
- BUAD 4386 Applied Software Development Project (3 credits)
- BUAD 4387 Strategic Information Management (3 credits)
May include 3 credits of
- BUAD 4970 Internship (1-12 credits)

GROUP B.

- CS 2270 Introduction to Web Programming (3 credits)
- CS 3270 Advanced Web Programming (3 credits)
- CS 3350 Event-Driven Programming in a Windows Environment (3 credits)
- CS 3360 Object-Oriented Software Development (3 credits)
- CS 3370 Mobile Application Development (3 credits)
- CS 3380 Game Development (3 credits)
- CS 3507 Introduction to Databases (3 credits)
- CS 3528 Data Structures and Algorithms (4 credits)
- CS 3560 Data Communications and Networks (3 credits)
- CS 4360 Software Engineering (3 credits)
- CS 4970 Internship (3 credits)

Program Learning Outcomes | Computer Information Systems, B.S.

1. Graduates will demonstrate a foundational knowledge in the field of business.

Students will be able to analyze information systems solutions professionally and ethically.

2. Graduates will demonstrate information literacy.

Student will be able to evaluate the management of data through computer technology.

3. Graduates will demonstrate professional communication skills.

Students will be able to apply information systems (IS) solutions within industry settings.

4. Graduates will demonstrate the ability to work effectively as part of a team.

Students will be able to apply algorithmically multiple problem solving techniques.

5. Graduates will demonstrate the ability to analyze complex business situations and ethical obligations in a realistic business environment.

Students will be able to develop software in at least one higher-level programming language using an object-oriented approach.

Marketing Communication, B.S. *major*

Required Credits: 60

Required GPA: 2.25

I REQUIRED COURSES

Compete the following courses:

- BUAD 2280 Computer Business Applications (3 credits)
- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3467 Advertising Management (3 credits)
- BUAD 3500 Marketing Analytics (3 credits)
- BUAD 3567 Consumer Behavior (3 credits)
- BUAD 3568 Professional Selling (3 credits)
- BUAD 3569 E-Marketing (3 credits)
- BUAD 4467 Marketing Research (3 credits)
- BUAD 4468 Marketing Management (3 credits)
- MASC 2243 Video Editing (3 credits)
- MASC 2250 Video Production (3 credits)
- MASC 2850 Media Writing I (3 credits)
- MASC 3260 Public Relations (3 credits)
- MASC 3270 Media and Social Change (3 credits)
- MASC 3500 Media Design (3 credits)
- MASC 3600 Social Media Marketing (3 credits)
- MASC 4220 Multimedia Marketing (3 credits)
- MASC 4840 Portfolio (3 credits)

Select 1 of the following courses, 3 credits:

- MASC 4970 Internship (1-12 credits)
- BUAD 4970 Internship (1-12 credits)

Business Administration *minor*

Required Credits: 24

Required GPA: 2.00

REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- BUAD 2231 Business Statistics I (3 credits)
- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3381 Management Information Systems (3 credits)
- BUAD 3771 Financial Management (3 credits)
- ECON 2000 Markets and Resource Allocation (3 credits)
or ECON 2100 Macroeconomics and the Business Cycle (3 credits)

Management Information Systems *minor*

Required Credits: 27

Required GPA: 2.00

REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- BUAD 2231 Business Statistics I (3 credits)
- BUAD 2280 Computer Business Applications (3 credits)
- BUAD 3381 Management Information Systems (3 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- ACCT 2101 Principles of Accounting I (3 credits)
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

REQUIRED ELECTIVES

SELECT 5 OF THE FOLLOWING COURSES, 3 OF WHICH MUST NOT BE REPEATED IN THE MAJOR

- BUAD 3281 Decision Support Systems (3 credits)
- BUAD 3283 E-Commerce Web Development (3 credits)
- BUAD 3382 Business Application Development (3 credits)
- BUAD 3383 Data Communications (3 credits)
- BUAD 3384 Systems Analysis and Design (3 credits)
- BUAD 4385 Data Modeling and Design (3 credits)
- BUAD 4386 Applied Software Development Project (3 credits)
- BUAD 4387 Strategic Information Management (3 credits)

MANAGEMENT INFORMATION SYSTEMS MINOR

Management Information Systems Minor must select 3 courses which are not repeated in their major.

Professional Selling *minor*

Required Credits: 15

Required GPA: 2.00

REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- BUAD 3568 Professional Selling (3 credits)
- BUAD 4340 Sales Management (3 credits)
- BUAD 4458 Entrepreneurship (3 credits)
- BUAD 4568 Advanced Professional Selling (3 credits)
- COMM 4160 Business Communication (3 credits)

Business Administration Courses

BUAD 1100 Introduction to Business (3 credits)

Course provides an overview of the world of business. Included is an introduction to basic business terminology, concepts, and functions featuring an analysis of marketing, finance, production, personnel management, accounting, and economics as they relate to business meeting its social responsibility of resource allocation. Not open to Business Administration juniors or seniors.

BUAD 2220 Legal Environment (3 credits)

An introduction to business and the law. Considers the general nature of law, the legal system, alternative dispute resolution, constitutional law, business ethics, torts, contracts, product liability, employment law, business organizations, consumer protection, and the rights and responsibilities of individuals and businesses in our society.

BUAD 2231 Business Statistics I (3 credits)

Collection, presentation, analysis, and interpretation of business and economic data. Prerequisite: MATH 1170 (or equivalent or higher.)

BUAD 2280 Computer Business Applications (3 credits)

Students develop applications employing decision support systems (DSS) technology to enable decision-making, planning, and auditing, utilizing client (MS-Office) software with emphasis on spreadsheets, graphic presentation software, and word processing, and database management systems. Students will test in attempt to attain Microsoft Office Specialist (MOS) Certification for Excel in the current version of study.

BUAD 2925 People of the Environment: Business Perspective (3 credits)

A survey of environmental issues in relation to business and commerce. Considers the rights and obligations of individuals and businesses in participating in decision-making regarding environmental concerns. Encompasses views on what makes environmentally responsible business. This course does not satisfy any Business Administration major or minor degree requirements. Liberal Education Goal Area 10.

BUAD 3223 Operations Management (3 credits)

Study of the operations function in both manufacturing and service organizations in terms of operations planning and control, inventory management, quality control, and job design. Prerequisites: ACCT 2102, BUAD 2231, and ECON 2100, or consent of instructor and junior standing.

BUAD 3232 Business Statistics II (3 credits)

Application of concepts for data analysis with emphasis on regression and correlation, time series, analysis of variance, and business forecasting. Prerequisite: BUAD 2231 or consent of instructor.

BUAD 3281 Decision Support Systems (3 credits)

Design and development of decision support systems with emphasis on management science techniques using a linear programming tool implemented in Excel. Design, documentation, and auditing standards are defined and applied to models and spreadsheet database applications. Prerequisites: ACCT 2102, BUAD 2280 and MATH 1170 (or equivalent or higher).

BUAD 3283 E-Commerce Web Development (3 credits)

WWW environment, browsers, Web 2.0, Ajax Client and programming techniques. Major topics include Web page design, Web-based multimedia/graphics, XHTML, W3C XHTML validation service, CSS AND JavaScript. Create Headings, Links, Images, Special characters, Tables, Lists, Forms, Positioning Elements, Embedded Style Sheets, Text Flow, Box Model, User Style sheet and Drop-Down Menu. Prerequisites: BUAD 2280 and any computer programming course.

BUAD 3351 Management (3 credits)

Management principles course emphasizing functional areas of management: Planning, organizing, leading and controlling. Prerequisites: ACCT 2102, ECON 2100, and BUAD 2231; or consent of instructor and junior standing.

BUAD 3361 Marketing (3 credits)

Procedures and institutions involved in the distribution of goods and services, product development and pricing, marketing costs, consumer motivation and buying habits, and government regulation. Prerequisites: ACCT 2102, ECON 2100, and BUAD 2231; or consent of instructor and junior standing.

BUAD 3381 Management Information Systems (3 credits)

A decision-making course in management information systems. Focus on the enhancement of competitive advantage by utilizing computer information systems to improve strategic decision-making, improve efficiency, and provide innovative products and services. Emphasis is on information technology's impact on competitive pressures, responses to competitive pressures, and optimal use of the types of information systems by management at the appropriate organizational level. Prerequisites: ACCT 2101, BUAD 2231, BUAD 2280, ECON 2000 or ECON 2100, or consent of instructor and junior standing.

BUAD 3382 Business Application Development (3 credits)

Advanced business application computer programming with emphasis on the highly structured design techniques used by industry. Interactive concepts are integrated within table processing, file processing, and web E-Commerce processing using Micro Focus, Visual Basic, or other similar tool. Prerequisites: BUAD 2280 or consent of instructor.

BUAD 3383 Data Communications (3 credits)

An overview of data communications network design issues and strategies critical to the design and implementation of effective distributed computing systems. Topics include data communications hardware and software, communications media, and OSI reference model. Prerequisite: BUAD 3381 or consent of instructor.

BUAD 3384 Systems Analysis and Design (3 credits)

Information systems methodologies to solve enterprise-wide managerial and organizational problems. Students will use systems design methodologies to develop information system projects and evaluate cases. Approaches to information system implementation, installation, and maintenance activities are also addressed. Includes structured laboratory exercises using computer-based software engineering tools. Prerequisites: ACCT 2101, BUAD 2280, and BUAD 3381, or consent of instructor and junior standing.

BUAD 3420 Labor and Employment Relations (3 credits)

Study of labor relations, collective bargaining, employment law practices, and current employee relations procedures. Prerequisites: BUAD 2220 and BUAD 3351.

BUAD 3450 Indigenous Business (3 credits)

The purpose of this course is to introduce students to indigenous business as a field of study. Focus on Indigenous business, business practices, and business education. It will further the inclusion of Indigenous perspectives and demonstrate the significant impact that Native Americans have had on business, as well as, cultural contributions to management, leadership, marketing, economic development, and entrepreneurship.

BUAD 3467 Advertising Management (3 credits)

Importance of advertising in the marketing function: buying motives, motivation and advertising research, media selection, advertising budgets, advertising agencies, social and economic effects of advertising, problems and testing of advertising effectiveness, and advertising as part of the marketing plan. Prerequisite: BUAD 3361.

BUAD 3500 Marketing Analytics (3 credits)

In this digital age, there is an unprecedented volume, velocity, and variety of marketing data available to firms. User characteristics and behaviors are tracked in detail for websites, social media pages, and ad campaigns, and information-rich user-generated content is contributed at breakneck speed throughout the web. The marketing world is a-buzz with excitement about using this "big data" to increase profits - yet, many marketers find real, measurable value-gain to be elusive. It is all too easy to suffer "analysis paralysis" in the face of a sea of metrics; to make misinformed recommendations based on flawed data or analytics; or to invest in an analytics tool that makes strong promises but doesn't deliver actionable insights. Prerequisite(s): BUAD 3361

BUAD 3520 Business Ethics (3 credits)

A survey of business ethics. Examines conflicts and problems which are facing business persons and the increase of consciousness in business ethics. Concentrates on organizational, market, and governmental regulations of business ethics and their effects on business and its stakeholders.

BUAD 3567 Consumer Behavior (3 credits)

An interdisciplinary approach to the study of the buying behaviors of consumers. Emphasizes the marketing implications of theory and findings from the behavioral sciences. Prerequisite: BUAD 3361.

BUAD 3568 Professional Selling (3 credits)

A study of the principles and psychology of personal selling. Course requires the preparation and presentation of a sales story. Prerequisite(s): BUAD 3361, or enrolled in Professional Selling minor, or Instructor Consent

BUAD 3569 E-Marketing (3 credits)

This course focuses on new marketing and promotion technologies and channels. Prerequisites: BUAD 2280 and BUAD 3361; or consent of instructor and junior standing.

BUAD 3677 Real Estate (3 credits)

An introduction to real estate principles and practices, including ethics, titles to and conveyance of real estate, legal descriptions and deeds, government controls, market valuation and appraisal, real estate finance, brokerage, closing the transaction, real estate investment and taxation.

BUAD 3678 Risk Management and Insurance (3 credits)

Principles for decision making involving risk taking and risk avoidance. An examination of the theory of economic risk with emphasis on insurance as a major tool for dealing with risk.

BUAD 3751 International Marketing (3 credits)

This course provides a global orientation for marketing in today's complex, rapidly changing international business environment. It focuses on developing an effective global marketing strategy through market segmentation, market targeting, and market positioning in the international business world. Prerequisites: ACCT 2102 and ECON 2100.

BUAD 3771 Financial Management (3 credits)

An investigation of the financial management of corporate organizations. Basic principles of analysis, planning, and control are considered for determining the best combinations of obtaining and investing capital. Prerequisites: ACCT 2102, BUAD 2231, and ECON 2100, or consent of instructor and junior standing.

BUAD 3772 Advanced Financial Management (3 credits)

An in-depth analysis of financial management in corporations with emphasis on decision making. Working capital management, short-term and long-term financing, mergers, business failures, and reorganizations are considered in depth with an extension of the valuation concepts presented in the basic financial management course. Prerequisite: BUAD 3771.

BUAD 3872 Investments (3 credits)

Analysis of alternatives in the investment environment required to evaluate the potential risk and return associated with an investment decision. Prerequisite: BUAD 3771.

BUAD 4340 Sales Management (3 credits)

This course is an overview of sales management including forecasting sales, territory development and management, training & motivation, supervision of salesforce, compensation, CRM management, and sales management problems with resolution. Prerequisite(s): BUAD 3568.

BUAD 4347 Sales Simulator Lab (2 credits)

The purpose of this course is to combine sales education with practical sales experience through experiential learning and role play. Students will participate in sales competition. Course is repeatable for up to 4 credits. Prerequisite(s): Instructor consent.

BUAD 4354 Organizational Behavior (3 credits)

Focuses on the problems encountered by employees in work relationships with fellow employees, supervisors, and subordinates. Empirical research providing models and tools for diagnosing and managing work situations, individual and group behavior, intergroup conflicts, supervisory problems and organizational change will be studied. Prerequisite: BUAD 3351.

BUAD 4385 Data Modeling and Design (3 credits)

The study of database design methodologies, implementation and administration for centralized and distributed database environments. Students will use database design methodologies to develop database projects. Includes study of Structured Query Language (SQL), security techniques, user interface design, testing, and implementation. Prerequisites: BUAD 3384 or consent of instructor.

BUAD 4386 Applied Software Development Project (3 credits)

Solve client information system problem using project management and information system methodologies as part of a team. Utilize CASE tools, develop systems documentation, implement system, and present completed project report to colleagues and client. Prerequisites: BUAD 3384 and BUAD 3382.

BUAD 4387 Strategic Information Management (3 credits)

A study of management systems, computer based or otherwise, in areas where the decision making process is semi-structured to unstructured. Emphasis is on corporate, upper-level strategic management and behavioral aspects of modern organization decision-making. Prerequisites: BUAD 3351, BUAD 3361, BUAD 3381, and BUAD 3771.

BUAD 4456 Human Resources Management (3 credits)

Role of human resource management function: Strategic human resource management; equal employment opportunity (EEO); staffing; talent management and development; total rewards; compensation and benefits; risk management and worker protection; and employee and labor relations. Prerequisite: BUAD 3351.

BUAD 4458 Entrepreneurship (3 credits)

Emphasizes the process of starting, financing, and managing a business of your own. Emphasis is on starting financing aspects, because of their uniqueness to small companies. Prerequisites: To be seriously considering starting a business, or to be actively engaged in operating a small business.

BUAD 4467 Marketing Research (3 credits)

Fundamentals and techniques involved in gathering, recording, analysis, and presentation of data used in solving problems in marketing management. Requires the preparation and presentation of a research project. Prerequisite: BUAD 3361.

BUAD 4468 Marketing Management (3 credits)

An integrative seminar focusing on the problems faced by marketing executive in administration of marketing operations including advertising, personal selling, channels, marketing research, and product development. Emphasizes the decisions that evolve around organizational issues and the implementation of strategic decisions. Prerequisites: BUAD 3361 and BUAD 4467.

BUAD 4469 Small Business Case Analysis (3 credits)

Provides management counseling experience for students and involvement in a business problem solving experience. Prerequisites: BUAD 3351 and BUAD 3361.

BUAD 4500 Compensation and Benefits (3 credits)

This course focuses on how managers can use compensation strategy to attract, retain, and motivate valued employees, while controlling labor costs. Part of the course revolves around application of principles to an ongoing case where students design all aspects of a compensation strategy. Shorter cases, as well as problem sets, will also be used. Prerequisite(s): BUAD 4456.

BUAD 4507 Talent Acquisition (3 credits)

This course focuses on a specific area in Human Resources Management, namely personnel selection and placement. In seeking to improve the performance and retention of employees, organizations recognize the importance of hiring as an important means to this end. This course is designed to provide a conceptual understanding of personnel selection practices, and how these practices contribute as a human resource (HR) function to job performance, organizational efficiency, and organizational effectiveness. This course will examine important concepts in personnel selection such as reliability and validity, as well as provide an understanding of various types of selection tests and assessments in current practice. Thus, part of this course will provide the background necessary for the future practice and application of personnel selection activities. As the course progresses, continually ask yourself, "How can I improve selection and placement processes in organizations?" Prerequisite(s): BUAD 4456.

BUAD 4508 Training, Development, and Evaluation (3 credits)

Organizations are increasingly turning to training and development to help meet the challenges of today's rapidly changing workplace. This course is designed to provide students with an in depth study of the concepts, processes, and issues associated with training and developing human resources. Attention will be given to planning, designing, implementing, and evaluating training and development programs. Broader issues concerning employee development and training for specific needs will also be addressed. Prerequisite(s): BUAD 3351.

BUAD 4509 Diversity and Inclusion (3 credits)

This course focuses on the importance of diversity and embracing diversity in organizations. Develop cultural competency and provides students with tools to meet the challenges of an increasingly diversified world. This course covers theories and legislation, global diversity as well as examines specific groups and categories. Prerequisite(s): BUAD 4456.

BUAD 4550 Indigenous Entrepreneurship (3 credits)

The purpose of this course is to introduce students to Indigenous Entrepreneurship as a field of study. Focus on Indigenous business practices and entrepreneurship. Students will be exposed to the process of starting, financing, and managing a business. Emphasis is on Indigenous economies, which blend the bottom line approach and sustainable development. Prerequisite(s): BUAD 3450.

BUAD 4559 Strategic Management (3 credits)

Presents the top management perspective in an organization in terms of formulating and implementing corporate strategy. Written and oral presentations are required. Prerequisites: BUAD 3351, BUAD 3361, BUAD 3381 or ACCT 3110, and BUAD 3771.

BUAD 4568 Advanced Professional Selling (3 credits)

The purpose of this course is to build advanced professional selling skills with focus on areas of the sales process such as negotiating, sales presentation, and relationship-building skills. Role playing and interactive exercises will be emphasized. Prerequisite(s): BUAD 3568.

BUAD 4600 Senior Seminar: Business Administration (1 credit)

Course consists of recommended common professional components (major core courses required for both Accounting and Business Administration majors), and preparation for and completion of assessment exams for all Business Administration majors. Assessment exams measure student knowledge of required basic core courses in accounting, economics, business law, statistics, computer business applications, management, marketing, finance, and strategic management. Test results allow the Business Administration department to compare departmental with national student outcomes and implement subsequent curriculum improvements. This course is required of all Business Administration, B.S. majors. Prerequisite(s): Completion of the required basic core. Course must be taken during the students last term of enrollment and graduation must follow at the end of that term.

BUAD 4750 International Management (3 credits)

Introduction to the international perspectives of starting, managing, or working in an organization. This course places students in international environments via case studies focusing on the management of exporting, international licensing, creating international joint ventures, and developing wholly owned global subsidiaries. Prerequisites: BUAD 3351 and ECON 2100.

BUAD 4779 Corporate Financial Policies (3 credits)

Analysis of financial concepts as they apply to financial decisions with an in-depth study of the scope and nature of corporate finance. Prerequisite: BUAD 3772

BUAD 4800 Strategic Human Resource Management (3 credits)

This course examines the context of strategic human resource and develops a framework and conceptual model for the practice of strategic human resources and examines the actual practice and implementation of strategic human resources through discussing strategic issues that need to be addressed while developing specific programs and policies related to traditional functional areas of human resources. Prerequisite(s): BUAD 4456.

BUAD 4910 Directed Independent Study (3 credits)

When taken as Readings in Business Administration, the following description applies: Research in one of the functional areas of management, finance, marketing, accounting, or real estate. Prerequisite: Major in Business Administration and consent of advisor.

BUAD 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

BUAD 4970 Internship (1-12 credits)

Students serve in a full- or part-time supervised field position in business administration or computer information systems, in a public or private organization. Students are expected to demonstrate and contribute acquired knowledge and skills to the organization, and be exposed to more than routine, entry-level, or part-time staff business operations. Students should arrange for this class during the semester prior to the internship. Students may register for only one business administration or computer information systems internship during their BSU academic career. Upon completion, students will be required to report on their experience (daily journal and final comprehensive paper). The department recommends that students return to BSU for at least one semester upon internship completion. Graded Satisfactory/Unsatisfactory.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Chemistry

Chemistry is often called the "Central Science," because chemical knowledge is essential not only to chemists, but also to biologists (through biochemistry, molecular biology, and environmental chemistry) and engineers (through materials science and polymers). A good knowledge of chemistry provides many options for graduate study and many options for career paths.

The study of chemistry can be divided into two parts: analysis and synthesis. Analysis determines the identities of the components of a real-world sample (a sample of polluted water, for example) and then measures how much of each component is present. Synthesis produces new, previously non-existent materials. Twenty-one million chemicals are known, and new ones are produced all the time. Will you synthesize one that reduces pollution? Cures a dreaded disease?

First- and second-year students interested in a chemistry major or minor are encouraged to discuss their career interests with members of the Department of Chemistry. This will allow good schedule planning, leading to on-time graduation.

Programs

- Biochemistry, Cellular and Molecular Biology, B.S. (Cellular and Molecular Emphasis) *major*
- Biochemistry, Cellular and Molecular Biology, B.S. (Biochemistry Emphasis) *major*
- Chemistry, B.A. *major*
- Chemistry, B.S. (Environmental Chemistry Emphasis) *major*
- Chemistry, B.S. (Criminalistics Emphasis) *major*
- Chemistry, B.S. (Biochemistry/ Biotechnology Emphasis) *major*
- Chemistry, B.S. (Chemistry Emphasis) *major*
- Science Education, B.S. (Chemistry Specialty (Teacher Licensure)) *major*
- Chemistry *minor*

Career Directions

Biologist
Chemist
Dentist
Engineer
Entrepreneur
Environmental Chemist
Forensic Scientist
Geochemist
Nutritionist
Optometrist
Pharmacist
Physical Therapist
Physician
Technical Management
Technical Sales
Toxicologist
Veterinarian
Also: Graduate Study

Preparation

Recommended High School Courses

Biology
Chemistry
Mathematics
Physics

Biochemistry, Cellular and Molecular Biology, B.S. *major*

Cellular and Molecular Emphasis

Required Credits: 76

Required GPA: 2.25

I REQUIRED COURSES

BIOLOGY CORE

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 2360 Genetics (4 credits)
- BIOL 3380 Molecular Genetics (3 credits)
- BIOL 3590 Cell Biology (3 credits)
- BIOL 3710 Microbiology (4 credits)

CHEMISTRY CORE

COMPLETE THE FOLLOWING COURSES:

- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)

- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4412 Biochemistry II (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)

RELATED FIELD REQUIREMENTS

SELECT ONE OF THE FOLLOWING GROUPS:

GROUP 1:

- PHYS 1101 General Physics I (4 credits)
- PHYS 1102 General Physics II (4 credits)

GROUP 2:

- PHYS 2101 Physics I (4 credits)
- PHYS 2102 Physics II (4 credits)

SEMINARS

COMPLETE THE FOLLOWING COURSES:

- BCMB 1000 Biochemistry, Cell and Molecular Biology Careers (BCMB)

- Careers) (1 credit)
- BCMB 3000 Biochemistry, Cell and Molecular Biology Research (BCMB Research) (1 credit)

TECHNIQUES CORE

SELECT ONE OF THE FOLLOWING:

- BCMB 3074 Molecular Techniques (2 credits)
or BIOL 3074 Molecular Techniques (2 credits)

SELECT ONE OF THE FOLLOWING:

- BCMB 3075 Cellular Techniques (2 credits)
- BIOL 3075 Cellular Techniques (2 credits)
- BCMB 3076 Biochemical Techniques (2 credits)
- CHEM 3076 Biochemical Techniques (2 credits)

RESEARCH

SELECT ONE OF THE FOLLOWING GROUPS:

GROUP 1:

- BIOL 4894 Advanced Research Project I (2 credits)
- BIOL 4895 Advanced Research Project II (2 credits)

GROUP 2:

- CHEM 4894 Research I (2 credits)
- CHEM 4895 Research II (2 credits)

II REQUIRED EMPHASIS - CELLULAR AND MOLECULAR BIOLOGY

BIOLOGY ELECTIVES

SELECT 3 COURSES:

- BIOL 3250 Human Anatomy (4 credits)
- BIOL 3260 Human Physiology (4 credits)
- BIOL 3300 Introduction to Hematology (4 credits)
- BIOL 3580 Immunology (3 credits)
- BIOL 4270 Histology (4 credits)
- BIOL 4360 Developmental and Tumor Biology (3 credits)
- BIOL 4447 Genomics (3 credits)
- BIOL 4460 Stem Cells and Regenerative Medicine (3 credits)
- BIOL 4470 Introduction to Vaccinology (4 credits)
- BIOL 4715 Clinical Microbiology (3 credits)

CHEMISTRY ELECTIVES

SELECT ONE OF THE FOLLOWING GROUPS:

GROUP 1:

- CHEM 3507 Analytical Chemistry (3 credits)
- CHEM 3570 Analytical Chemistry Laboratory (1 credit)

GROUP 2:

- CHEM 4614 Medicinal Chemistry: Drug Design (3 credits)
- CHEM 4615 Medicinal Chemistry: Drug Action (3 credits)

RELATED FIELD REQUIREMENTS

COMPLETE THE FOLLOWING COURSE:

- STAT 2610 Applied Statistics (4 credits)

SUGGESTED SEMESTER SCHEDULE FOR BIOCHEMISTRY, CELLULAR, AND MOLECULAR BIOLOGY, B.S. MAJOR CELLULAR AND MOLECULAR BIOLOGY EMPHASIS

Freshman:

- BIOL 1400 Cellular Principles (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
- BIOL 2360 Genetics (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- BCMB 1000 Biochemistry, Cell and Molecular Biology Careers (BCMB Careers) (1 credit)

Sophomore:

- BIOL 3590 Cell Biology (3 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- PHYS 1101 General Physics I (4 credits)
or PHYS 2101 Physics I (4 credits)
- BIOL 3380 Molecular Genetics (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- BCMB 3074 Molecular Techniques (2 credits)
or BIOL 3074 Molecular Techniques (2 credits)
- PHYS 1102 General Physics II (4 credits)
or PHYS 2102 Physics II (4 credits)

Junior:

- BIOL 3710 Microbiology (4 credits)
- CHEM 4411 Biochemistry I (3 credits)
- BCMB 3075 Cellular Techniques (2 credits)
or BIOL 3075 Cellular Techniques (2 credits)
- CHEM 4412 Biochemistry II (3 credits)
- BCMB 3000 Biochemistry, Cell and Molecular Biology Research (BCMB Research) (1 credit)
- STAT 2610 Applied Statistics (4 credits)
- Emphasis Biology elective

Senior:

- BIOL 4894 Advanced Research Project I (2 credits)
- BIOL 4895 Advanced Research Project II (2 credits)
- Emphasis Chemistry elective(s)
- Emphasis Biology electives

Biochemistry, Cellular and Molecular Biology, B.S.

major

Biochemistry Emphasis

Required Credits: 81

Required GPA: 2.25

I REQUIRED COURSES

BIOLOGY CORE

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 2360 Genetics (4 credits)
- BIOL 3380 Molecular Genetics (3 credits)
- BIOL 3590 Cell Biology (3 credits)
- BIOL 3710 Microbiology (4 credits)

CHEMISTRY CORE

COMPLETE THE FOLLOWING COURSES:

- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4412 Biochemistry II (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)

RELATED FIELD REQUIREMENTS

SELECT ONE OF THE FOLLOWING GROUPS:

GROUP 1:

- PHYS 1101 General Physics I (4 credits)
- PHYS 1102 General Physics II (4 credits)

GROUP 2:

- PHYS 2101 Physics I (4 credits)
- PHYS 2102 Physics II (4 credits)

SEMINARS

COMPLETE THE FOLLOWING COURSES:

- BCMB 1000 Biochemistry, Cell and Molecular Biology Careers (BCMB Careers) (1 credit)
- BCMB 3000 Biochemistry, Cell and Molecular Biology Research (BCMB Research) (1 credit)

TECHNIQUES CORE

SELECT ONE OF THE FOLLOWING:

- BCMB 3074 Molecular Techniques (2 credits)
or BIOL 3074 Molecular Techniques (2 credits)

SELECT ONE OF THE FOLLOWING:

- BCMB 3075 Cellular Techniques (2 credits)
- BIOL 3075 Cellular Techniques (2 credits)
- BCMB 3076 Biochemical Techniques (2 credits)
- CHEM 3076 Biochemical Techniques (2 credits)

RESEARCH

SELECT ONE OF THE FOLLOWING GROUPS:

GROUP 1:

- BIOL 4894 Advanced Research Project I (2 credits)
- BIOL 4895 Advanced Research Project II (2 credits)

GROUP 2:

- CHEM 4894 Research I (2 credits)
- CHEM 4895 Research II (2 credits)

II REQUIRED EMPHASIS - BIOCHEMISTRY

CHEMISTRY

COMPLETE THE FOLLOWING COURSES:

- CHEM 3507 Analytical Chemistry (3 credits)
- CHEM 3570 Analytical Chemistry Laboratory (1 credit)
- CHEM 4614 Medicinal Chemistry: Drug Design (3 credits)
- CHEM 4615 Medicinal Chemistry: Drug Action (3 credits)

CHEMISTRY ELECTIVES

SELECT ONE OF THE FOLLOWING GROUPS:

GROUP 1:

- CHEM 4510 Instrumental Methods of Analysis (3 credits)
- CHEM 4571 Instrumental Analysis Laboratory I (1 credit)

GROUP 2:

- CHEM 4711 Physical Chemistry I (3 credits)
- CHEM 4771 Physical Chemistry Laboratory I (1 credit)

GROUP 3:

- CHEM 4811 Advanced Inorganic Chemistry I (3 credits)
- CHEM 4871 Inorganic Chemistry Laboratory I (1 credit)

BIOLOGY ELECTIVES

SELECT ONE OF THE FOLLOWING:

- BIOL 3250 Human Anatomy (4 credits)
- BIOL 3260 Human Physiology (4 credits)
- BIOL 3300 Introduction to Hematology (4 credits)
- BIOL 3580 Immunology (3 credits)
- BIOL 4270 Histology (4 credits)
- BIOL 4360 Developmental and Tumor Biology (3 credits)
- BIOL 4447 Genomics (3 credits)
- BIOL 4460 Stem Cells and Regenerative Medicine (3 credits)
- BIOL 4470 Introduction to Vaccinology (4 credits)
- BIOL 4715 Clinical Microbiology (3 credits)

RELATED FIELD REQUIREMENTS

COMPLETE THE FOLLOWING COURSE:

- MATH 2471 Calculus I (5 credits)

SUGGESTED SEMESTER SCHEDULE FOR BIOCHEMISTRY, CELLULAR, AND MOLECULAR BIOLOGY, B.S. MAJOR BIOCHEMISTRY EMPHASIS

Freshman:

- BIOL 1400 Cellular Principles (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
- BIOL 2360 Genetics (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)

- BCMB 1000 Biochemistry, Cell and Molecular Biology Careers (BCMB Careers) (1 credit)
- MATH 2471 Calculus I (5 credits)

Sophomore:

- BIOL 3590 Cell Biology (3 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- BIOL 3380 Molecular Genetics (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- BCMB 3074 Molecular Techniques (2 credits)
or BIOL 3074 Molecular Techniques (2 credits)
- CHEM 3507 Analytical Chemistry (3 credits)

Junior:

- BIOL 3710 Microbiology (4 credits)
- CHEM 4411 Biochemistry I (3 credits)
- PHYS 2101 Physics I (4 credits)
- CHEM 4412 Biochemistry II (3 credits)
- BCMB 3000 Biochemistry, Cell and Molecular Biology Research (BCMB Research) (1 credit)
- BCMB 3076 Biochemical Techniques (2 credits)
or CHEM 3076 Biochemical Techniques (2 credits)
- PHYS 2102 Physics II (4 credits)

Senior:

- CHEM 4894 Research I (2 credits)
- CHEM 4895 Research II (2 credits)
- CHEM 4614 Medicinal Chemistry: Drug Design (3 credits)
- CHEM 4615 Medicinal Chemistry: Drug Action (3 credits)
- Emphasis Chemistry elective(s)
- Emphasis Biology elective

Chemistry, B.A. *major*

Required Credits: 31
Required GPA: 2.25

I REQUIRED COURSES

Note: Students enrolled in CHEM 1111 who elect this major should enroll in CHEM 2212 during the second semester.

SELECT 1 OF THE FOLLOWING COURSES:

- CHEM 1111 General Chemistry I (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)

COMPLETE THE FOLLOWING COURSES:

- CHEM 2212 Principles of Chemistry II (4 credits)
- CHEM 3100 Journal Club (1 credit)
- CHEM 3110 Laboratory Management and Safety (2 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 3507 Analytical Chemistry (3 credits)
- CHEM 3570 Analytical Chemistry Laboratory (1 credit)

SELECT 1 OF THE FOLLOWING COURSES:

- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4811 Advanced Inorganic Chemistry I (3 credits)

II REQUIRED ELECTIVES

SELECT 5 SEMESTER CREDITS OF ELECTIVES FROM CHEM 3100 OR ABOVE. UP TO 4 SEMESTER CREDITS OF RESEARCH CHEM 3980 OR CHEM 4980 MAY BE USED IN THIS AREA.

SUGGESTED SEMESTER SCHEDULE FOR CHEMISTRY MAJOR, B.A.

The following is a list of required courses for the Chemistry Major, B.A., arranged by year. This schedule is intended to assist students in planning their academic program and may be altered somewhat to fit the students background and circumstances.

Freshman

- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- Liberal Education requirements
- Electives

Sophomore

- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 3507 Analytical Chemistry (3 credits)
- CHEM 3570 Analytical Chemistry Laboratory (1 credit)
- Liberal Education requirements

Junior/Senior

- CHEM 3100 Journal Club (1 credit)
- CHEM 3110 Laboratory Management and Safety (2 credits)
- CHEM 4411 Biochemistry I (3 credits)
or CHEM 4811 Advanced Inorganic Chemistry I (3 credits)
- Chemistry electives
- Complete Liberal Education requirements
- Electives

Chemistry, B.S. *major*

Environmental Chemistry Emphasis

Required Credits: 69
Required GPA: 2.25

I REQUIRED COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- CHEM 1111 General Chemistry I (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)

COMPLETE THE FOLLOWING COURSES:

- CHEM 2212 Principles of Chemistry II (4 credits)
- CHEM 3100 Journal Club (1 credit)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)

- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 3507 Analytical Chemistry (3 credits)
- CHEM 3570 Analytical Chemistry Laboratory (1 credit)
- CHEM 4510 Instrumental Methods of Analysis (3 credits)
- CHEM 4571 Instrumental Analysis Laboratory I (1 credit)
- CHEM 4572 Instrumental Analysis Laboratory II (1 credit)
- MATH 2471 Calculus I (5 credits)
- PHYS 2101 Physics I (4 credits)

II REQUIRED EMPHASIS

COMPLETE ONE OF THE FOLLOWING COURSES:

- CHEM 4110 Environmental Chemistry (3 credits)
or ENVR 4110 Environmental Chemistry (3 credits)

COMPLETE 4 SEMESTER CREDITS FROM THE FOLLOWING COURSE:

- CHEM 4970 Internship (3-4 credits)

II REQUIRED EMPHASIS

Select 3 semester credits of electives from CHEM 3100 or above. (CHEM 3100 may be repeated with 1 credit applying to this area.)

SELECT 24 SEMESTER CREDITS FROM THE FOLLOWING COURSES:

- BIOL 2610 General Ecology (3 credits)
- BIOL 3361 Limnology (4 credits)
- CHEM 3140 Chemical Toxicology (3 credits)
- CHEM 3150 Standard Methods of Water Analysis (3 credits)
or ENVR 4220 Sampling and Analysis (4 credits)
- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4412 Biochemistry II (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)
- ENVR 4050 Geochemistry (3 credits)
- ENVR 4200 Wastewater Treatment (3 credits)
- ENVR 4240 Waste Management (4 credits)
- ENVR 4260 Risk, Resilience and Sustainable Community Development (3 credits)
- ENVR 4400 Environmental Microbiology (3 credits)
- ENVR 4500 Environmental Toxicology (4 credits)
- GEOL 3211 Environmental Hydrology (3 credits)

Program Learning Outcomes | Chemistry, B.S.

1. Use the structure of atoms and their subatomic particles to explain chemical and physical properties.
2. Explain how atoms interact via chemical bonds and the energy changes associated with making and breaking bonds.
3. Relate the three dimensional geometric structures of chemical compounds to their chemical and physical behaviors.
4. Evaluate how intermolecular forces dictate the physical behavior of matter.
5. Categorize and analyze the chemical reactions involved in transforming matter into products with new chemical and physical properties.
6. Evaluate the energy changes that accompany chemical reactions.

7. Assess the various ways that affect how reaction rates vary with time.
8. Analyze the various factors that affect the equilibrium of chemical reactions.
9. Perform laboratory experiments that involve collecting and analyzing data and practicing chemical safety.
10. Evaluate chemical constructs at the particulate and macroscopic levels using models, graphs to visualize data, and mathematical equations.
11. Develop written reports and oral presentations that effectively communicate scientific principles and processes.

Chemistry, B.S. *major* Criminalistics Emphasis

Required Credits: 73

Required GPA: 2.25

I REQUIRED COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- CHEM 1111 General Chemistry I (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)

COMPLETE THE FOLLOWING COURSES:

- CHEM 2212 Principles of Chemistry II (4 credits)
- CHEM 3100 Journal Club (1 credit)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 3507 Analytical Chemistry (3 credits)
- CHEM 3570 Analytical Chemistry Laboratory (1 credit)
- CHEM 4510 Instrumental Methods of Analysis (3 credits)
- CHEM 4571 Instrumental Analysis Laboratory I (1 credit)
- CHEM 4572 Instrumental Analysis Laboratory II (1 credit)
- MATH 2471 Calculus I (5 credits)
- PHYS 2101 Physics I (4 credits)

II REQUIRED EMPHASIS

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
- BIOL 3380 Molecular Genetics (3 credits)
- CHEM 2210 Criminalistics (3 credits)
- CHEM 2270 Criminalistics Laboratory (1 credit)
- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)
- CRJS 1120 Criminal Justice and Society (3 credits)
- CRJS 3358 Criminal Law (3 credits)
- CRJS 3359 Criminal Investigation (3 credits)
- STAT 2610 Applied Statistics (4 credits)

COMPLETE THE FOLLOWING COURSE FOR 3 CREDITS:

- CHEM 4970 Internship (3-4 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- CHEM 4711 Physical Chemistry I (3 credits)

- CHEM 4712 Physical Chemistry II (3 credits)

Chemistry, B.S. *major*

Biochemistry/ Biotechnology Emphasis

Required Credits: 63
Required GPA: 2.25

I REQUIRED COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- CHEM 1111 General Chemistry I (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)

COMPLETE THE FOLLOWING COURSES:

- CHEM 2212 Principles of Chemistry II (4 credits)
- CHEM 3100 Journal Club (1 credit)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 3507 Analytical Chemistry (3 credits)
- CHEM 3570 Analytical Chemistry Laboratory (1 credit)
- CHEM 4510 Instrumental Methods of Analysis (3 credits)
- CHEM 4571 Instrumental Analysis Laboratory I (1 credit)
- CHEM 4572 Instrumental Analysis Laboratory II (1 credit)
- MATH 2471 Calculus I (5 credits)
- PHYS 2101 Physics I (4 credits)

II REQUIRED EMPHASIS

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4412 Biochemistry II (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)

SELECT 1 OF THE FOLLOWING COURSES:

- CHEM 3076 Biochemical Techniques (2 credits)
- BCMB 3076 Biochemical Techniques (2 credits)
- CHEM 4472 Biochemistry Laboratory II (1 credit)

SELECT 2 OF THE FOLLOWING COURSES:

- BIOL 2110 Human Anatomy and Physiology (5 credits)
- BIOL 2360 Genetics (4 credits)
- BIOL 3580 Immunology (3 credits)
- BIOL 3590 Cell Biology (3 credits)
- BIOL 3710 Microbiology (4 credits)

II REQUIRED EMPHASIS

Select 6 semester credits from CHEM 3100 or above.
CHEM 3100 may be repeated with 1 credit
applying to this area.

Chemistry, B.S. *major*

Chemistry Emphasis

Required Credits: 71
Required GPA: 2.25

I REQUIRED COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- CHEM 1111 General Chemistry I (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)

COMPLETE THE FOLLOWING COURSES:

- CHEM 2212 Principles of Chemistry II (4 credits)
- CHEM 3100 Journal Club (1 credit)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 3507 Analytical Chemistry (3 credits)
- CHEM 3570 Analytical Chemistry Laboratory (1 credit)
- CHEM 4510 Instrumental Methods of Analysis (3 credits)
- CHEM 4571 Instrumental Analysis Laboratory I (1 credit)
- CHEM 4572 Instrumental Analysis Laboratory II (1 credit)
- MATH 2471 Calculus I (5 credits)
- PHYS 2101 Physics I (4 credits)

II REQUIRED EMPHASIS

COMPLETE THE FOLLOWING COURSES:

- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4711 Physical Chemistry I (3 credits)
- CHEM 4712 Physical Chemistry II (3 credits)
- CHEM 4771 Physical Chemistry Laboratory I (1 credit)
- CHEM 4772 Physical Chemistry Laboratory II (1 credit)
- CHEM 4811 Advanced Inorganic Chemistry I (3 credits)
- CHEM 4871 Inorganic Chemistry Laboratory I (1 credit)
- MATH 2472 Calculus II (5 credits)
- PHYS 2102 Physics II (4 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- CHEM 4412 Biochemistry II (3 credits)
- CHEM 4812 Advanced Inorganic Chemistry II (3 credits)

II REQUIRED EMPHASIS

SELECT 9 SEMESTER CREDITS FROM CHEM 3100 OR ABOVE
AND/OR THE FOLLOWING COURSES. (7 CREDITS MUST COME
FROM 3000-LEVEL COURSES OR ABOVE). CHEM 3100 MAY BE
REPEATED WITH 1 SEMESTER CREDIT APPLYING TO THIS AREA.

- PHYS 3300 Thermal and Statistical Physics (3 credits)
- PHYS 3103 Physics III (4 credits)

- MATH 2210 Discrete Mathematics (4 credits)
- MATH 2480 Multivariable Calculus (4 credits)
- MATH 2490 Differential Equations (4 credits)
- STAT 2610 Applied Statistics (4 credits)

Science Education, B.S. *major*

Chemistry Specialty (Teacher Licensure)

Required Credits: 78
Required GPA: 2.50

Core Courses for Science Teaching in Grades 5-8

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
or BIOL 1110 Human Biology (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
or BIOL 1120 General Biology: Evolution And Ecology (3 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
or CHEM 1111 General Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
or CHEM 1112 General Chemistry II (4 credits)
- GEOL 1110 Physical Geology (4 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)
or ED 3410 Secondary Science Methods (4 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

CHEMISTRY SPECIALTY

COMPLETE THE FOLLOWING COURSES:

- CHEM 3110 Laboratory Management and Safety (2 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 3507 Analytical Chemistry (3 credits)
- CHEM 3570 Analytical Chemistry Laboratory (1 credit)
- CHEM 3980 Research (1 credit)

SELECT 1 OF THE FOLLOWING COURSES:

- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4811 Advanced Inorganic Chemistry I (3 credits)

Chemistry *minor*

Required Credits: 23
Required GPA: 2.00

REQUIRED COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- CHEM 1111 General Chemistry I (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)

COMPLETE THE FOLLOWING COURSES:

- CHEM 2212 Principles of Chemistry II (4 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)

REQUIRED SPECIALIZATION

Select 1 of the following specializations: A, B OR C

A. ANALYTICAL CHEMISTRY

COMPLETE THE FOLLOWING COURSES:

- CHEM 3507 Analytical Chemistry (3 credits)
- CHEM 3570 Analytical Chemistry Laboratory (1 credit)
- CHEM 4510 Instrumental Methods of Analysis (3 credits)
- CHEM 4571 Instrumental Analysis Laboratory I (1 credit)

B. BIOCHEMISTRY /BIOTECHNOLOGY

COMPLETE THE FOLLOWING COURSES:

- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4412 Biochemistry II (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)

C. CRIMINALISTICS

COMPLETE THE FOLLOWING COURSES:

- CHEM 2210 Criminalistics (3 credits)
- CHEM 2270 Criminalistics Laboratory (1 credit)
- CHEM 3507 Analytical Chemistry (3 credits)
- CHEM 3570 Analytical Chemistry Laboratory (1 credit)
- CRJS 1120 Criminal Justice and Society (3 credits)

Chemistry Courses

CHEM 1100 Consumer Chemistry (3 credits)

Chemistry as viewed through illustrations taken from common substances, objects, and processes in the world around us. Topics range from table salt to perception-altering drugs, and from drinking water to nuclear power. Intended for nonscience majors. Liberal Education Goal Area 3.

CHEM 1110 Chemistry for Allied Health (3 credits)

Survey of concepts in general and organic chemistry and biochemistry. Laboratory component introduces techniques, methods, and instrumentation. Intended for students majoring in Nursing and other allied health disciplines.

CHEM 1111 General Chemistry I (4 credits)

A survey of chemistry covering basic concepts including inorganic, organic, and biochemistry. The laboratory component introduces techniques, methods, and instrumentation. Liberal Education Goal Area 3 (LC). If on-campus student must register for CHEM 1111 (Lecture) and CHEM 1171 (Lab).

CHEM 1112 General Chemistry II (4 credits)

A continuation of the survey begun in chemistry 1111 covering basic concepts of inorganic, organic, and biochemistry. The laboratory component introduces techniques, methods, and instrumentation. Prerequisite: CHEM 1111 or CHEM 2211. Liberal Education Goal Area (LC).

CHEM 1171 General Chemistry I Lab (0 credit)

A survey of chemistry covering basic concepts including inorganic, organic, and biochemistry. The laboratory component introduces techniques, methods, and instrumentation. Liberal Education Goal Area 3 (LC). If on-campus student must register for CHEM 1111 (Lecture) and CHEM 1171 (Lab).

CHEM 1172 General Chemistry II Lab (0 credit)

A continuation of the survey begun in chemistry 1111 covering basic concepts of inorganic, organic, and biochemistry. The laboratory component introduces techniques, methods, and instrumentation. Prerequisite: CHEM 1111 or CHEM 2211. Liberal Education Goal Area (LC).

CHEM 2130 Chemistry of Drugs (3 credits)

Introduction to the pharmacology of the more common drugs and toxic substances.

CHEM 2210 Criminalistics (3 credits)

Introduction to the theory and practice of physical evidence analysis. Topics include firearms, fingerprints, hairs and fibers, numbers restoration, shoeprints, arson, and paints. Prerequisites: CHEM 1111 or CHEM 2211.

CHEM 2211 Principles of Chemistry I (4 credits)

Principles of inorganic, physical, solution, and gas phase chemistry. The laboratory component introduces techniques, methods, and instrumentation. Intended for chemistry majors and minors, biology majors, preprofessional students, and open to any student meeting the prerequisites wishing to fulfill their Liberal Education requirement. Liberal Education Goal Area 3 (LC). If on-campus student must register for CHEM 2211 (Lecture) and CHEM 2271(Lab).

CHEM 2212 Principles of Chemistry II (4 credits)

Continuation of the development of principles of inorganic, physical, solution, and gas phase chemistry begun in CHEM 1211. The laboratory component introduces techniques, methods, and instrumentation. Intended for chemistry majors and minors, biology majors, preprofessional students, and open to any student meeting the prerequisites wishing to fulfill their Liberal Education requirement. Prerequisite: CHEM 1111 or CHEM 2211. Liberal Education Goal Area 3 (LC). Student must register for CHEM 2212 (Lecture) and CHEM 2272 (Lab).

CHEM 2270 Criminalistics Laboratory (1 credit)

Introduction to the analyses performed in forensic chemistry. Corequisite: CHEM 2210.

CHEM 2271 Principles of Chemistry I Lab (0 credit)

Principles of inorganic, physical, solution, and gas phase chemistry. The laboratory component introduces techniques, methods, and instrumentation. Intended for chemistry majors and minors, biology majors, preprofessional students, and open to any student meeting the prerequisites wishing to fulfill their Liberal Education requirement. Liberal Education Goal Area 3 (LC). If on-campus student must register for CHEM 2211 (Lecture) and CHEM 2271(Lab).

CHEM 2272 Principles of Chemistry II Lab (0 credit)

Continuation of the development of principles of inorganic, physical, solution, and gas phase chemistry begun in CHEM 1211. The laboratory component introduces techniques, methods, and instrumentation. Intended for chemistry majors and minors, biology majors, preprofessional students, and open to any student meeting the prerequisites wishing to fulfill their Liberal Education requirement. Prerequisite: CHEM 1111 or CHEM 2211. Liberal Education Goal Area 3 (LC). Student must register for CHEM 2212 (Lecture) and CHEM 2272 (Lab).

CHEM 2925 People of the Environment: Chemistry Perspective (3 credits)

A study of the chemical processes important in maintaining a clean environment. Liberal Education Goal Area 10.

CHEM 3076 Biochemical Techniques (2 credits)

This course is one of two options for completion of the techniques core requirement for the BCMB major. Includes some basic biochemical techniques, but introduces more advanced biochemical laboratory experiments. Prerequisite(s): CHEM 4471 or BCMB 3074 or BIOL 3074.

CHEM 3100 Journal Club (1 credit)

Oral and written presentations of special topics in chemistry. May be repeated with 2 semester credits allowed toward chemistry major. Prerequisite: CHEM 3312.

CHEM 3110 Laboratory Management and Safety (2 credits)

Laboratory management concepts, safety information concerning chemical substances. Prerequisite: Junior or Senior standing.

CHEM 3140 Chemical Toxicology (3 credits)

Chemical principles in toxicology. Design of environmentally safer chemicals; quantitative analysis of the toxicity of various molecules. Prerequisite: CHEM 3311.

CHEM 3150 Standard Methods of Water Analysis (3 credits)

Introduction to techniques of analysis of natural and effluent water samples using standard analytical techniques. Prerequisite: CHEM 1112 or CHEM 2212.

CHEM 3210 Interpretation of Spectral Data (2 credits)

Systematic identification of chemical structures utilizing data from mass spectrometry, infrared spectroscopy, and nuclear magnetic resonance spectroscopy. Prerequisites: CHEM 3312 or CHEM 3372 (may be co-requisite).

CHEM 3311 Organic Chemistry I (3 credits)

A study of the properties of aliphatic and aromatic compounds and the theories and mechanisms to account for those properties. Prerequisite: CHEM 1112 or CHEM 2212.

CHEM 3312 Organic Chemistry II (3 credits)

Continuation of study of the properties of functional groups and the theories and mechanisms to account for those properties. Prerequisite: CHEM 3311.

CHEM 3371 Organic Chemistry Laboratory I (1 credit)

Laboratory study of the reactions of organic compounds. Prerequisites: CHEM 1112 or CHEM 2212; Corequisite CHEM 3311.

CHEM 3372 Organic Chemistry Laboratory II (1 credit)

Laboratory study of the reactions of organic compounds. Prerequisite: CHEM 3371; Corequisite CHEM 3312.

CHEM 3507 Analytical Chemistry (3 credits)

A study of equilibrium processes and the experimental methods and instruments used for quantitative analysis of samples. Prerequisite: CHEM 1112 or CHEM 2212.

CHEM 3570 Analytical Chemistry Laboratory (1 credit)

Laboratory applications of analytical instrumentation to chemical analysis. Prerequisites: CHEM 1112 or CHEM 2212, CHEM 3507 (may be corequisite).

CHEM 3980 Research (1 credit)

Research carried out by the student that is based on appropriate methodology and scholarship.

CHEM 4110 Environmental Chemistry (3 credits)

Intensive study of biogeochemical cycles of natural and man-made pollutants including transformations, transport, fate and persistence mechanisms. Environmental effects, long-term impacts, and methods of treatment/prevention are discussed. Prerequisites: CHEM 1112 or CHEM 2212 or consent of instructor.

CHEM 4320 Special Topics in Organic Chemistry (1-3 credits)

Selected topics such as advanced synthesis, advanced reaction mechanisms, polymers, and natural products. May be repeated when topic is changed. Prerequisite: CHEM 3312. Might not be offered every year.

CHEM 4411 Biochemistry I (3 credits)

Chemical principles governing metabolic functions and genetics. Prerequisites: CHEM 3312 or consent of instructor.

CHEM 4412 Biochemistry II (3 credits)

Continuation of CHEM 3411. Chemical principles governing metabolic functions and genetic materials. Prerequisite: CHEM 4411.

CHEM 4420 Special Topics in Biochemistry (1-3 credits)

Selected topics such as carbohydrates, lipids, proteins, enzymology, nucleic acids, metabolism, toxicology, and biochemical lab techniques. May be repeated when topic is changed. Prerequisite: CHEM 3312. Might not be offered every year.

CHEM 4471 Biochemistry Laboratory I (1 credit)

Laboratory techniques pertaining to biochemistry. Prerequisites: CHEM 3312 and CHEM 3372, Corequisite: CHEM 4411.

CHEM 4472 Biochemistry Laboratory II (1 credit)

Continuation of laboratory techniques pertaining to biochemistry. Prerequisites: CHEM 4411; Corequisite: CHEM 4412.

CHEM 4510 Instrumental Methods of Analysis (3 credits)

Theory and applications of instrumental methods of chemical analysis. Prerequisite: CHEM 3507 and CHEM 3570.

CHEM 4520 Special Topics in Analytical Chemistry (1-3 credits)

Selected topics such as mass spectrometry, NMR, electrochemistry, chemical separations, and computerized instrument interfaces. Prerequisite: CHEM 3507. Might not be offered every year.

CHEM 4571 Instrumental Analysis Laboratory I (1 credit)

Experimental applications of instrumental methods of chemical analysis. Corequisite: CHEM 4510.

CHEM 4572 Instrumental Analysis Laboratory II (1 credit)

Continuation of CHEM 4571. Experimental applications of instrumental methods of chemical analysis. Prerequisite: CHEM 4510.

CHEM 4614 Medicinal Chemistry: Drug Design (3 credits)

This course focuses on drug design and development, as well as the absorption, distribution, metabolism and excretion of drug molecules. Organic chemistry principles vital to drug synthesis and case studies of clinically relevant drugs will be incorporated. Prerequisite(s): CHEM 3312.

CHEM 4615 Medicinal Chemistry: Drug Action (3 credits)

This course focuses on drug targets such as enzymes, receptors, and nucleic acids and the mechanisms by which pharmaceuticals alter the normal cellular activity. Common classes of pharmaceuticals (antibacterial, antiviral, anticancer, opioids, etc) will be explored. Progress in pharmaceutical development will be highlighted through the incorporation of current literature article and drugs undergoing clinical trials. Prerequisite(s): CHEM 4411.

CHEM 4711 Physical Chemistry I (3 credits)

Fundamental understanding of chemical and physical properties of atoms and molecules through quantum mechanical and classical approaches. Prerequisites: CHEM 2212 and PHYS 2101.

CHEM 4712 Physical Chemistry II (3 credits)

Fundamental understanding of chemical and physical properties of atoms and molecules through quantum mechanical and classical approaches. Prerequisites: CHEM 4711 or consent of instructor.

CHEM 4720 Special Topics in Physical Chemistry (1-3 credits)

Selected topics such as kinetics, thermodynamics, quantum chemistry, and molecular modeling. Prerequisite: CHEM 3312. Might not be offered every year.

CHEM 4771 Physical Chemistry Laboratory I (1 credit)

Physical chemistry laboratory applications. Prerequisites: CHEM 3570; Corequisite: CHEM 4711.

CHEM 4772 Physical Chemistry Laboratory II (1 credit)

Physical chemistry laboratory applications. Continuation of 3771. Prerequisites: CHEM 3570; Corequisite: CHEM 4712.

CHEM 4811 Advanced Inorganic Chemistry I (3 credits)

Theoretical approach to the principles of inorganic chemistry. Integration of theory and descriptive chemistry. Corequisite: CHEM 3312.

CHEM 4812 Advanced Inorganic Chemistry II (3 credits)

Continuation of the study of the theoretical approaches to the principles of inorganic chemistry. Prerequisite: CHEM 4712 and CHEM 4811.

CHEM 4820 Special Topics in Inorganic Chemistry (1-3 credits)

Selected topics such as organometallics, catalysis, bioinorganic chemistry, and materials chemistry. Prerequisite: CHEM 3312. Might not be offered every year.

CHEM 4871 Inorganic Chemistry Laboratory I (1 credit)

Laboratory oriented approach emphasizing techniques and theories of preparative inorganic chemistry. Prerequisite: CHEM 4711.

CHEM 4872 Inorganic Chemistry Laboratory II (1 credit)

Laboratory oriented approach emphasizing techniques and theories of preparative inorganic chemistry. Prerequisite: CHEM 4871.

CHEM 4894 Research I (2 credits)

This research experience in chemistry will develop essential skills needed to be a chemist. Student researchers will formulate questions, utilize concepts and techniques learned in the classroom, and analyze arguments. Presentations and papers will communicate findings. Prerequisite(s): Junior status and consent of instructor.

CHEM 4895 Research II (2 credits)

This second course in a two course research sequence in chemistry will continue to develop essential skills needed to be a chemist. Student researchers will formulate questions, utilize concepts and techniques learned in the classroom, and analyze arguments. Presentations and papers will communicate findings. Prerequisite(s): CHEM 4894, Junior status and consent of instructor.

CHEM 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

CHEM 4970 Internship (3-4 credits)

Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

CHEM 4980 Research (3 credits)

Research carried out by the student that is based on appropriate methodology and scholarship.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
1940, 2940, 3940, 4940 IN-SERVICE COURSE
1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
1970, 2970, 3970, 4970 INTERNSHIP
1980, 2980, 3980, 4980 RESEARCH
1990, 2990, 3990, 4990 THESIS

Biochem, Cellular & Molecular Biology Courses

BCMB 1000 Biochemistry, Cell and Molecular Biology Careers (BCMB Careers) (1 credit)

An introduction to biochemistry, cell and molecular biology careers and curriculum planning for BCMB majors or students considering pursuing a BCMB degree.

BCMB 3000 Biochemistry, Cell and Molecular Biology Research (BCMB Research) (1 credit)

An introduction to biochemistry, cell and molecular biology research available at BSU and professionally. Covers the basics of research and medical ethics. Identifying a research mentor for senior research projects and preparing a preliminary research proposal. Prerequisite(s): BCMB 1000.

BCMB 3074 Molecular Techniques (2 credits)

This is a hybrid lecture and lab-based course and is an introduction to several common molecular-based techniques. Students will learn basic pipetting, protein assays, electrophoresis, PCR, and other molecular genetic techniques. Prerequisite(s): BIOL 1400, BIOL 2360, CHEM 2211, CHEM 2212; or consent of instructor.

BCMB 3075 Cellular Techniques (2 credits)

This course is the one of two options for completion of techniques core requirement for the BCMB major and for specific Biology majors. Includes an introduction to cell culture, cell imaging, cell-based assays, and stem cell biology. Prerequisite(s): BIOL 3074 or BCMB 3074.

BCMB 3076 Biochemical Techniques (2 credits)

This course is one of two options for completion of the techniques core requirement for the BCMB major. Includes some basic biochemical techniques, but introduces more advanced biochemical laboratory experiments. Prerequisite(s): CHEM 4471 or BCMB 3074 or BIOL 3074.

BCMB 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
1940, 2940, 3940, 4940 IN-SERVICE COURSE
1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
1970, 2970, 3970, 4970 INTERNSHIP
1980, 2980, 3980, 4980 RESEARCH
1990, 2990, 3990, 4990 THESIS

Communication Studies

Programs

- Communication Studies, B.A. *major*
- Communication Studies *minor*

Communication Studies, B.A. *major*

Required Credits: 36
Required GPA: 2.50

I REQUIRED COURSES

Complete the following courses:

- COMM 1100 Public Speaking (3 credits)
or COMM 2100 Career and Professional Communication (3 credits)
or COMM 3100 Interviewing (3 credits)
- COMM 2000 Applied Communication Theory (3 credits)
- COMM 3000 Applied Research Methods (3 credits)
- COMM 3120 Communication in a Diverse Society (3 credits)
- COMM 4000 Capstone in Communication and Community Connections (3 credits)

II REQUIRED ELECTIVES

Select 21 credits (not used above) from the following in consultation with your advisor:

- COMM 1090 Interpersonal Communication (3 credits)
- COMM 1100 Public Speaking (3 credits)
- COMM 2100 Career and Professional Communication (3 credits)
- COMM 3100 Interviewing (3 credits)
- COMM 3110 Organizational Communication (3 credits)
- COMM 3120 Communication in a Diverse Society (3 credits)
or SOWK 2110 Intercultural Communication (3 credits)
- COMM 3130 Family Communication (3 credits)
- COMM 3150 Gender Communication (3 credits)
- COMM 3170 Health Communication (3 credits)
- COMM 3400 Environmental Communication (3 credits)
- COMM 3500 Communication and Conflict (3 credits)
- COMM 3600 Small Group Communication (3 credits)
or PSY 3337 Group Processes (3 credits)
- COMM 3700 Persuasion and Communication (3 credits)
- COMM 4100 Advanced Public Presentation (3 credits)
- COMM 4160 Business Communication (3 credits)
- COMM 4200 Special Topics in Communication Studies (3 credits)
- LEAD 3500 Theories and Contexts of Leadership (3 credits)

Communication Studies *minor*

Required Credits: 21
Required GPA: 2.00

I REQUIRED COURSES

Complete the following courses (9 credits):

- COMM 1100 Public Speaking (3 credits)

or COMM 2100 Career and Professional Communication (3 credits)
or COMM 3100 Interviewing (3 credits)

- COMM 2000 Applied Communication Theory (3 credits)
- COMM 4000 Capstone in Communication and Community Connections (3 credits)

II REQUIRED ELECTIVES

Select 12 credits (not used above) from the following:

- COMM 1090 Interpersonal Communication (3 credits)
- COMM 1100 Public Speaking (3 credits)
- COMM 2100 Career and Professional Communication (3 credits)
- COMM 3100 Interviewing (3 credits)
- COMM 3110 Organizational Communication (3 credits)
- COMM 3120 Communication in a Diverse Society (3 credits)
or SOWK 2110 Intercultural Communication (3 credits)
- COMM 3130 Family Communication (3 credits)
- COMM 3150 Gender Communication (3 credits)
- COMM 3170 Health Communication (3 credits)
- COMM 3400 Environmental Communication (3 credits)
- COMM 3500 Communication and Conflict (3 credits)
- COMM 3600 Small Group Communication (3 credits)
or PSY 3337 Group Processes (3 credits)
- COMM 3700 Persuasion and Communication (3 credits)
- COMM 4100 Advanced Public Presentation (3 credits)
- COMM 4160 Business Communication (3 credits)
- COMM 4200 Special Topics in Communication Studies (3 credits)
- LEAD 3500 Theories and Contexts of Leadership (3 credits)

Communication Studies Courses

COMM 1090 Interpersonal Communication (3 credits)

This course is designed to help students become aware of the processes and theories of interpersonal communication within and about relationships that impact our personal and professional lives. Through self-analysis, case studies, practical application, and critique of cultural practices, students will examine the influence of communicative behaviors on personal relationships, groups, and society. Concepts include perception, ethics, emotion, conflict, cultural awareness, power, technology, language, nonverbal communication, social media, and listening. Liberal Education Goal Areas 7 & 9.

COMM 1100 Public Speaking (3 credits)

This course emphasizes the preparation and delivery of individual and group presentations. Students will learn to research, construct, and deliver informed and ethical presentations for various audiences, as well as understand the fundamental principles of written and public communication. Liberal Education Goal Area 1.

COMM 2000 Applied Communication Theory (3 credits)

This course explores the historical and contemporary theories that examine communication behaviors in various contexts including intrapersonal, interpersonal, group, organizational, media, and cultural. Students will learn how theories can be useful for understanding and critiquing events in their personal, professional, and civic lives; provide a lens through which students can make informed decisions; and help students create alternative solutions to societal issues.

COMM 2100 Career and Professional Communication (3 credits)

This course emphasizes oral and written communication, as well as relational skills utilized in professional settings. Students will learn fundamental concepts and principles of communication used in the workplace, develop skills for individual and group business presentations, learn how to generate messages for a variety of diverse and professional audiences through appropriate electronic and face-to-face communication, develop critical listening and problem-solving skills, and engage in effective and ethical interpersonal communication in the workplace. This course is designed to help individuals learn how to work productively with others and present themselves professionally in any career. Liberal Education Goal Area 1.

COMM 2925 People of the Environment: Communication Perspective (3 credits)

This course provides students with an introduction to understanding the impact of communication messages related to environmental issues. Students will examine their own environmental practices, research environmental communication practices in organizations, and make recommendations for appropriately promoting environmental issues. Liberal Education Goal Area 10

COMM 3000 Applied Research Methods (3 credits)

This class frames research as a way of knowing and provides balanced treatment to both quantitative and qualitative traditions in communication inquiry. Conceptually, this class will provide in-depth discussion about the role of reasoning in the research enterprise and how this process 'plays out' in planning and writing a research proposal and report. Students will understand the differences (and utility) of three methodological frameworks (quantitative, interpretive/systems, and critical). Prerequisite: COMM 2000 or instructor consent.

COMM 3100 Interviewing (3 credits)

This course emphasizes oral and written communication related to interview settings such as employment, job performance, information gathering, health, persuasive, and counseling. Students will learn fundamental concepts and principles of interviewing, develop skills for researching and collecting data relevant to interviews, create interview question guides, practice skills as the interviewee and interviewer in simulated and real settings, deliver presentations related to the interview process, and develop critical listening skills in interview settings. This course is designed to prepare individuals for taking part in various interviews throughout their career. Liberal Education Goal Area 1.

COMM 3110 Organizational Communication (3 credits)

This course examines historical and contemporary organizational communication models, theories, and processes within organizational environments. Students will learn how and why organizations operate the way they do by focusing on communication processes and messages such as organizational change, decision-making, socialization, gendered identities, leadership, civility, emotion, technology, and conflict management. Implications of organizational messages on employees, employers, and external publics will be explored. Overall, this course prepares students to critique social practices and develop effective communication behaviors for being successful in their organizational lives. Liberal Education Goal Area 5.

COMM 3120 Communication in a Diverse Society (3 credits)

This course is designed to help you become aware of the processes and theories of intercultural communication within and about relationships that impact our personal and professional lives. Through self-analysis, case studies, practical application, and critique of cultural practices, you will examine the influence of communicative behaviors on intercultural relationships, groups, and society. Concepts include perception, ethics, conflict, cultural awareness, cultural bias, intercultural communication competence, power, nonverbal communication, and immigration. Liberal Education Goal Areas 7 & 8.

COMM 3130 Family Communication (3 credits)

This course examines how communication functions to develop, maintain, enrich, or limit family relationships. Topics covered include the meaning of narratives and stories, family roles and rules, decision-making, conflict resolution, exploration of family types, cultural implications of family functioning, societal influences on family functioning, and examining communication changes throughout the family life cycle. Overall, this course is designed to develop understanding of, and ability to, analyze communication within families. Liberal Education Goal Area 7.

COMM 3150 Gender Communication (3 credits)

This course is designed to explore the historical and contemporary theory, research, and practice of gender communication. Students will examine communication about, and between, women and men in terms of language used, media depictions of gendered identities, and how such language influences our understanding of biological sex and gender as a cultural construction. Contexts include the impact of gender communication in a variety of relationships such as friendships, romantic partners, family life, educational, political, and workplace settings. Overall, this course introduces students to various perspectives on gender and encourages an understanding of, and respect for, all of those perspectives. Liberal Education Goal Areas 5 & 7.

COMM 3170 Health Communication (3 credits)

The course examines health communication through theory, research, and experiential application of concepts in interpersonal, public, mediated, and organizational health care contexts. The course emphasizes issues of ethics and communication variables such as verbal, nonverbal, conflict, listening, and self-disclosure between individuals, health care providers, patients, and families. Overall, this course will help students understand how personal, societal, political, and culture factors impact health communication and healthcare. Liberal Education Goal Areas 7 & 9.

COMM 3400 Environmental Communication (3 credits)

This course examines the intersections between environmental issues, communication processes, and social change. Students will explore the unique contribution that communication theory and research can bring to the study of the environment in private and public contexts such as political, legal, organizational, educational, mediated, relational, and cultural. Students will learn how to appropriately advocate for environmental change in private and public spheres. Overall, this course helps students understand how communication creates, shapes, and maintains social realities as we make sense of our decisions about how to negotiate relationships between humans and Earth. Liberal Education Goal Area 10

COMM 3500 Communication and Conflict (3 credits)

This course provides an overview of how communication is used in everyday life to create, negotiate, and resolve interpersonal and organizational conflict. Specific topics include communication conflict management theories, conflict styles, impact of sex and gender on conflict communication, listening, bullying and difficult people, collaboration, mediation, and reconciliation. Contexts of conflict will include intimate relationships, family, social media, and workplace settings. Overall, this course prepares students to use communication choices to make conflict more productive in their personal and professional lives.

COMM 3600 Small Group Communication (3 credits)

This class allows students an opportunity to discover, through participation in small groups, how to negotiate membership, resolve conflict, and maintain order through a variety of means and in a variety of venues. The academic material will be accompanied by practical, prescriptive guidance to help students become more productive members and/or leaders of small groups.

COMM 3700 Persuasion and Communication (3 credits)

This course examines historical and contemporary theories, principles, and communicative practices of persuasive messages. As persuasion is a part of our personal, organizational, and public lives, students will understand the process of persuasion, practice strategies of ethical and effective persuasion, and analyze persuasive discourse in various oral, written, and mediated contexts. Students will learn how to become responsible citizens by examining persuasive messages in our society and providing recommendations for ethical communication. Liberal Education Goal Areas 5 & 9.

COMM 4000 Capstone in Communication and Community Connections (3 credits)

As a capstone, this course provides students an opportunity to reflect and act upon their communication and academic experiences through critical thinking and experiential opportunities. Communication choices have the power to influence social reality, which impacts the communities in which we live. As communication scholars and engaged citizens, students will examine perspectives of difference in gender, race, social class, ability, sexuality, and age to uncover and challenge social injustices. Overall, the goal of this course is to embrace differences and use communication for framing public discourse toward the betterment of our communities. Prerequisite(s): COMM 2000.

COMM 4100 Advanced Public Presentation (3 credits)

The advanced course in public presentation provides students with an opportunity to enhance understanding and application of public speaking techniques, theories, and perspectives. Additionally, the primary goal of this class is to improve practical communication skills through in-class activities and ongoing assignments. Advanced Public Speaking will help students gain experience in formal speaking situations. Prerequisite: COMM 1100 or instructor consent.

COMM 4160 Business Communication (3 credits)

This course is intended to provide students with increased knowledge and communication competencies in a business setting. The course is divided into three sections, which allows students to analyze data and present recommendations to a simulated investing business committee. Students will execute higher-level excel functions, produce professional business correspondence based on excel data, and prepare and deliver individual and group presentations applicable to their findings. Overall, this course emphasizes the importance of professional communication used in business settings.

COMM 4200 Special Topics in Communication Studies (3 credits)

In-depth study of communication topics that reflect relational, organizational, societal, or cultural issues. May be retaken multiple times with different topic subtitles. Might not be offered every year. Prerequisite(s): Junior standing or instructor consent.

COMM 4910 Directed Independent Study (3 credits)

Arranged Individual Study.

COMM 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

COMM 4970 Internship (1-6 credits)

Designed to provide students an opportunity to gain valuable direct organizational experience in a wide range of communication-related fields. Students will apply principles and theories learned in the classroom; develop communication skills appropriate to their chosen profession; and experience organizational dynamics, practices, and realities in a professional environment. Position can be in a public or nonprofit organization or agency appropriate to the degree objective. Students will be required to report on their experience throughout the semester (reflective journals, final comprehensive paper, and presentation). Supervision is provided on site and on campus. The internship must be arranged at least one semester prior to registering for it and approved by the Communication Studies Coordinator. No more than 3 hours of credit may be earned at any individual internship site; internships may be repeated for up to 6 credits. Prerequisite: Senior standing and Communication Studies Major. Graded Satisfactory/Unsatisfactory only.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
 1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
 1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
 1940, 2940, 3940, 4940 IN-SERVICE COURSE
 1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
 1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
 1970, 2970, 3970, 4970 INTERNSHIP
 1980, 2980, 3980, 4980 RESEARCH
 1990, 2990, 3990, 4990 THESIS

Computer Science

The study of computer science involves becoming a top-notch problem solver. The solutions computer scientists focus on are processes for solving problems. These processes are expressed using the language of algorithms. Ultimately, the solution is programmed into a computer.

Because of their flexibility, computers are integral to most research and are indispensable in most professional careers. In education they are used for instruction, for learning, and for efficiency. In industry they are revolutionizing businesses, and in science they allow us to simulate a Jupiter fly-by, to design the next generation air-bus, and to investigate the effects of pollutants on the environment.

Computer Science majors learn to look at complex situations, identify patterns, and develop processes that take advantage of those patterns in order to solve a problem or improve an approach to a problem. Computer Science majors learn how to solve problems from a wide variety of domains. Working in teams, students learn to transform their solutions into algorithms and implement programs for a broad range of software systems. Majors in Computer Information Systems, a program offered jointly with Business Administration, study problem solving and software development for automating business processes.

Programs

- Computer Information Systems, B.S. *major*
- Computer Science, B.S. *major*
- Computer Science *minor*

Career Directions

Computer Science

3D Graphics Programmer
Analyst
Application Developer
Artificial Intelligence Engineer
Automation Engineer
Consultant
Design Engineer
Documentation Tools Specialist
Game Programmer
Interface Designer
Issue Associate
IT Development Program Associate
Patent Examiner
Quantum Computing Researcher
Research Assistant
Software Developer
Software Engineer
Usability Consultant
User Interface Coordinator
Web Developer
Web Experience Developer
Also: Graduate Study

Computer Information Systems

Application Programmer
Business Consultant
Business Development Associate
Computer Operations Manager
Database Administrator
Finance Analyst
Information Center Specialist
Programmer/Analyst
Software Engineer
Systems Analyst
Also: Graduate Study

Preparation

Recommended High School Courses

Algebra
Geometry
Trigonometry
Calculus
Computer Science
Physical Sciences
Public Speaking
Interpersonal Communication

Computer Information Systems, B.S. *major*

Required Credits: 76

Required GPA: 2.25

I REQUIRED BASIC CORE COURSES

Complete the following courses:

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- BUAD 2220 Legal Environment (3 credits)
- BUAD 2231 Business Statistics I (3 credits)
or STAT 2610 Applied Statistics (4 credits)
- BUAD 2280 Computer Business Applications (3 credits)
- BUAD 3223 Operations Management (3 credits)
- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3381 Management Information Systems (3 credits)

- BUAD 3771 Financial Management (3 credits)
- BUAD 4559 Strategic Management (3 credits)
- BUAD 4600 Senior Seminar: Business Administration (1 credit)
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)
- MATH 2210 Discrete Mathematics (4 credits)

II ADDITIONAL REQUIRED COURSES

Complete the following courses:

- BUAD 3382 Business Application Development (3 credits)
- BUAD 3384 Systems Analysis and Design (3 credits)
- BUAD 4385 Data Modeling and Design (3 credits)
- CS 1309 Problem Solving and Computation (3 credits)
- CS 2321 Computer Science I (4 credits)
- CS 2322 Computer Science II (4 credits)
- CS 4390 Social, Ethical, and Professional Issues in Computing (3 credits)

III REQUIRED ELECTIVES

Select three of the following: At least TWO courses must be from Group B

GROUP A.

- BUAD 3281 Decision Support Systems (3 credits)
- BUAD 3283 E-Commerce Web Development (3 credits)
- BUAD 3383 Data Communications (3 credits)
- BUAD 4386 Applied Software Development Project (3 credits)
- BUAD 4387 Strategic Information Management (3 credits)
May include 3 credits of
- BUAD 4970 Internship (1-12 credits)

GROUP B.

- CS 2270 Introduction to Web Programming (3 credits)
- CS 3270 Advanced Web Programming (3 credits)
- CS 3350 Event-Driven Programming in a Windows Environment (3 credits)
- CS 3360 Object-Oriented Software Development (3 credits)
- CS 3370 Mobile Application Development (3 credits)
- CS 3380 Game Development (3 credits)
- CS 3507 Introduction to Databases (3 credits)
- CS 3528 Data Structures and Algorithms (4 credits)
- CS 3560 Data Communications and Networks (3 credits)
- CS 4360 Software Engineering (3 credits)
- CS 4970 Internship (3 credits)

Program Learning Outcomes | Computer Information Systems, B.S.

1. Graduates will demonstrate a foundational knowledge in the field of business.

Students will be able to analyze information systems solutions professionally and ethically.

2. Graduates will demonstrate information literacy.

Student will be able to evaluate the management of data through computer technology.

3. Graduates will demonstrate professional communication skills.

Students will be able to apply information systems (IS) solutions within

industry settings.

4. Graduates will demonstrate the ability to work effectively as part of a team.

Students will be able to apply algorithmically multiple problem solving techniques.

5. Graduates will demonstrate the ability to analyze complex business situations and ethical obligations in a realistic business environment.

Students will be able to develop software in at least one higher-level programming language using an object-oriented approach.

Computer Science, B.S. *major*

Required Credits: 61

Required GPA: 2.25

I REQUIRED CORE COURSES

Additional requirement: Successful completion of the degree requires students to earn 15 credits from areas I and II at the 3000/4000 level while in residence at BSU.

Complete the following courses:

- CS 1309 Problem Solving and Computation (3 credits)
- CS 2321 Computer Science I (4 credits)
- CS 2322 Computer Science II (4 credits)
- CS 2810 Computer Organization and Assembly Language Programming (3 credits)
- CS 3528 Data Structures and Algorithms (4 credits)
- CS 4390 Social, Ethical, and Professional Issues in Computing (3 credits)

II REQUIRED ELECTIVES

Select 21 credits from among the following courses, with at least 3 courses from Section A and 3 courses from Section B. Note: Courses may have prerequisites either not included or not required in this major.

A. Core Computer Science

- CS 3507 Introduction to Databases (3 credits)
- CS 3560 Data Communications and Networks (3 credits)
- CS 3752 Data Mining (3 credits)
- CS 4298 Compiler Construction (3 credits)
- CS 4410 Digital Image Processing (3 credits)
- CS 4627 Theory of Computation (3 credits)
- CS 4840 Operating Systems (3 credits)
- MATH 3720 Numerical Methods (3 credits)

B. Application Development Techniques

- CS 3270 Advanced Web Programming (3 credits)
- CS 3350 Event-Driven Programming in a Windows Environment (3 credits)
- CS 3360 Object-Oriented Software Development (3 credits)
- CS 3370 Mobile Application Development (3 credits)
- CS 3380 Game Development (3 credits)
- CS 4360 Software Engineering (3 credits)

III REQUIRED OUTSIDE COURSES

- COMM 1100 Public Speaking (3 credits)
or COMM 2100 Career and Professional Communication (3 credits)

- MATH 1470 Precalculus (5 credits)
or MATH 2471 Calculus I (5 credits)
- MATH 2210 Discrete Mathematics (4 credits)
- MATH 3310 Linear Algebra (4 credits)
or STAT 2610 Applied Statistics (4 credits)
or STAT 3631 Probability and Statistics I (4 credits)

Select one of the following courses:

- ENGL 2150 Technical Writing (3 credits)
- ENGL 3150 Writing In The Disciplines (3 credits)
- ENGL 3155 Professional Writing (3 credits)

SUGGESTED SEMESTER SCHEDULE FOR COMPUTER SCIENCE B.S. MAJOR

The following schedule identifies only courses that apply to the Computer Science major. Students should expect to complete most liberal education requirements in their first three years. To complete requirements for graduation in four years (8 semesters), a Computer Science major must take CS 1309 in one of the first two semesters.

Freshman

- CS 1309 Problem Solving and Computation (3 credits)
- CS 2321 Computer Science I (4 credits)
- #MATH 1170 College Algebra (4 credits)
- MATH 1470 Precalculus (5 credits)
or MATH 2471 Calculus I (5 credits)
- COMM 1100 Public Speaking (3 credits)

Sophomore

- CS 2322 Computer Science II (4 credits)
- CS 2810 Computer Organization and Assembly Language Programming (3 credits)
- MATH 2210 Discrete Mathematics (4 credits)
- MATH 3310 Linear Algebra (4 credits)
or STAT 2610 Applied Statistics (4 credits)
or STAT 3631 Probability and Statistics I (4 credits)
- +ENGL 2150 Technical Writing (3 credits)

Junior

- CS 3528 Data Structures and Algorithms (4 credits)
- Computer Science electives

Senior

- CS 4390 Social, Ethical, and Professional Issues in Computing (3 credits)
- Computer Science electives

Mathematics requirements for the Computer Science major begin with MATH 1470 Precalculus, but some students will be initially placed into MATH 1170 College Algebra.

+ May be any of the following courses: ENGL 2150, ENGL 3150, ENGL 3155.

Computer Science *minor*

Required Credits: 15-20

Required GPA: 2.00

COMPUTER SCIENCE MINOR REQUIREMENTS WEB EMPHASIS:MUST COMPLETE ALL AREAS WITH A TOTAL OF AT LEAST 15 SEMESTER CREDITS AND A 2.00 GPA

Additional requirement: Successful completion of the minor requires at least one Computer Science course at the 3000/4000 level taken while in residence at BSU.

I REQUIRED COURSES

Complete the following course:

- CS 1309 Problem Solving and Computation (3 credits)

II REQUIRED EMPHASIS-WEB EMPHASIS

Complete the following courses:

- CS 2270 Introduction to Web Programming (3 credits)
- CS 3270 Advanced Web Programming (3 credits)

Select 6 semester credits from the following courses:

- CS 2321 Computer Science I (4 credits)
- CS 2322 Computer Science II (4 credits)
- CS 2810 Computer Organization and Assembly Language Programming (3 credits)
- CS 3370 Mobile Application Development (3 credits)
- CS 4390 Social, Ethical, and Professional Issues in Computing (3 credits)

MAY INCLUDE 1:

- GEOG 4275 Advanced Geographic Information Systems (3 credits)
or ENGL 3179 Elements of Digital Rhetoric (3 credits)

COMPUTER SCIENCE MINOR REQUIREMENTS PROFESSIONAL EMPHASIS:MUST COMPLETE ALL AREAS WITH A TOTAL OF AT LEAST 20 SEMESTER CREDITS AND A 2.00 GPA

Additional requirement: Successful completion of the minor requires at least one Computer Science course at the 3000/4000 level taken while in residence at BSU.

I REQUIRED COURSES

Complete the following course:

- CS 1309 Problem Solving and Computation (3 credits)

II REQUIRED EMPHASIS-PROFESSIONAL EMPHASIS

Complete the following courses:

- CS 2321 Computer Science I (4 credits)
- CS 2322 Computer Science II (4 credits)

Select 9 semester credits from the following courses:

- CS 2810 Computer Organization and Assembly Language Programming (3 credits)
- PHYS 2500 Electronics (4 credits)
- Computer Science courses at the 3000 and 4000 levels

Computer Science Courses

CS 1107 Introduction to Computers (3 credits)

An examination of the development of computing devices, modern computing practices, components of a computing system, common application software, and uses of computers in society. No previous experience with computers is assumed. Note: This course is not intended for Computer Science majors or minors. Liberal Education Goal Area 9.

CS 1309 Problem Solving and Computation (3 credits)

Introduction to general problem-solving techniques applicable to solving problems in computing, including elementary computational problems. Other techniques include using systematic lists, using diagrams, and looking for patterns. Includes fundamental computational concepts in information representation, computer organization, and social and ethical issues in computing. The two-hour lab introduces the use of software to solve a variety of problems. The prospective student should have a general understanding of computers and their operation. Prerequisite: Successful completion of MATH 0800 with a grade of B or better, or three years of high school mathematics (including two years of algebra) and a score on the Mathematics Placement Test appropriate for placement into MATH 1170. Liberal Education Goal Area 4

CS 2270 Introduction to Web Programming (3 credits)

This course expands on basic knowledge of markup languages and web programming languages. Students learn how to use current web markup languages, aspects of various transfer protocols, and client-side scripting languages. All of these topics support the development of both web pages and web sites. Prerequisite: CS 1309.

CS 2321 Computer Science I (4 credits)

Introduction to the basic principles of software development using a modern high-level language, including using selection, looping, function calls, and recursion, along with simple data structures such as arrays and objects, to solve problems. Includes an introduction to software engineering techniques such as interactive debugging, software testing, and methods of software validation. Includes a two-hour lab. Prerequisite: CS 1309; MATH 1170 or MATH 1470 or higher.

CS 2322 Computer Science II (4 credits)

Topics include recursion and the study of object-oriented concepts including encapsulation, inheritance and polymorphism. It includes the study of fundamental data structures including strings, lists, stacks, queues, containers classes, binary trees, and hash tables. Also includes a group-oriented software design and implementation project. Includes a two-hour lab. Prerequisite: CS 2321.

CS 2750 Introduction to Data Analysis (3 credits)

This course provides an introduction to the basic concepts of data analysis and machine learning models, methods, and techniques pioneered within the fields of Artificial Intelligence and Statistical Modeling. Topics covered can include any/all of the following: statistics for data analysis, knowledge representation, data clustering, categorization and regression methods, decision trees, perceptions, and neural networks. Some student facility with mathematics and Excel is assumed. Prerequisite(s): CS 1309, or Instructor permission.

CS 2810 Computer Organization and Assembly Language Programming (3 credits)

An introduction to the register level architecture of a modern computer and programming with an assembly language for that processor. Includes a two-hour lab. Prerequisite or Corequisite: CS 2322.

CS 3270 Advanced Web Programming (3 credits)

This course builds on topics from CS 2270. Students learn server-side scripting, database connectivity, and dynamic web-page updating. Web development frameworks are also studied. Prerequisite: CS 2270.

CS 3350 Event-Driven Programming in a Windows Environment (3 credits)

Uses a language suitable for creating event-driven programs while focusing on methodology suitable for developing event handlers in windows-oriented programs. Prerequisite: CS 2322 or equivalent.

CS 3360 Object-Oriented Software Development (3 credits)

Techniques used in object-oriented software development. Key components of these techniques include design patterns, abstraction, encapsulation, modularity, message passing, polymorphism, inheritance, and incremental software development. Students translate a design into software using an object-oriented programming language. Additional topics may include applets, markup languages, multi-threaded programming, and rudimentary network programming. Prerequisite: CS 2322 or equivalent. May not be offered every year.

CS 3370 Mobile Application Development (3 credits)

A study of development techniques to address issues that arise in the development of interactive applications for mobile devices using a popular mobile application development platforms such as the iPhone and Android SDKs. Examines the specific requirements for mobile systems. Emphasizes how the requirements in mobile application development link to other core areas in computing. May not be offered every year. Prerequisites: CS 2270 and (CS 2321 or CS 3270).

CS 3380 Game Development (3 credits)

An overview of how to develop interactive games. Essential aspects of interactive fiction, sprites, animation, audio, graphics, physics, threading, scripting, and event handling in the context of game development. Students develop a game in a group. Prerequisite: CS 2322. Might not be offered every year.

CS 3507 Introduction to Databases (3 credits)

Provides an introduction to the theory and use of modern database systems, with particular focus on SQL, the relational data model, and relational database design. Prerequisite: CS 2322. May not be offered every year.

CS 3528 Data Structures and Algorithms (4 credits)

Study of advanced abstract information storage structures, including priority queues, binary trees, generalized trees, and graphs. Study of algorithm development techniques, including divide and conquer, greedy algorithms, and dynamic programming. Includes learning a programming language not used in CS 2321 and CS 2322. Prerequisites: CS 2322 and MATH 2210 or consent of the instructor.

CS 3560 Data Communications and Networks (3 credits)

Principles of data communications as applied to modern computer networks. Prerequisite: CS 2810. May not be offered every year.

CS 3752 Data Mining (3 credits)

This course will provide an investigation into common Data Mining models, methods and techniques pioneered within the field of Artificial Intelligence. Topics covered may include any/all of the following: knowledge representation, clustering schema, decision trees and neural networks. Some student facility with mathematics and basic statistics is assumed. Prerequisites: CS 3528. May not be offered every year.

CS 3931 Experimental Course (3 credits)

This course introduces students to different case studies in Software Engineering through research. For example, applying Software Engineering to Cybersecurity applications and Bioinformatics. Prerequisite(s): CS 1309 and CS 2321.

CS 4298 Compiler Construction (3 credits)

The theory, design, and construction of a compiler. Prerequisite(s): CS 2810 and CS 3528. May not be offered every year.

CS 4360 Software Engineering (3 credits)

Software Engineering (SE) provides students with a capstone experience that integrates the theory and practice of SE. SE investigates a variety of SE models and guidelines used in industry, culminating in the design, specification and implementation of a software project of real-world import. Includes a two-hour lab. Prerequisites: CS 2810 and CS 3528.

CS 4390 Social, Ethical, and Professional Issues in Computing (3 credits)

Features strategies for analyzing the social, ethical, and professional implications of issues and decisions that computing professionals might encounter. Those strategies are practiced and refined in a variety of areas of concern for computing. Prerequisite(s): At least one CS course numbered 3000 or higher.

CS 4410 Digital Image Processing (3 credits)

This course covers techniques for image acquisition, transformation, enhancement, restoration, compression, segmentation and recognition. A brief introduction to advanced topics such as motion detection, optical flow, etc., is also included. Prerequisite(s): CS2322 and either Math 1470 or MATH 2471

CS 4627 Theory of Computation (3 credits)

Explores the theoretic roots and limits of computing. Prerequisites: CS 2322 and MATH 2210.

CS 4840 Operating Systems (3 credits)

Fundamentals of operating system design with emphasis on at least one modern operating system. Topics include scheduling, memory management, paging, file management, and mutual exclusion. Required work will include programming investigations. Prerequisites: CS 2322 and CS 2810.

CS 4910 Directed Independent Study (3 credits)

Arranged individual study.

CS 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

CS 4970 Internship (3 credits)

Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Criminal Justice

The Criminal Justice major provides students with knowledge about the nature and causes of crime and delinquency, law and the legal system for juveniles and adults in American society, and the decision-making processes of criminal justice agencies. The purpose of a Criminal Justice major within a liberal arts framework is to develop the knowledge, values, and ethical consciousness that are essential for becoming successful managers and leaders in criminal justice and related human service vocations.

The Bachelor of Science degree in Criminal Justice is a generalist degree preparing students for careers in law enforcement, corrections, and other public and private agencies concerned with the prevention and investigation of crime. The program allows majors to choose one of four areas of specialization within the discipline that best prepares them for their career choice. This preparation includes a combination of course work, internships, and special research projects. Students considering this major are encouraged to develop a proficiency in writing. The degree is also appropriate for students who choose to pursue advanced study in criminal justice or law.

Completion of the Criminal Justice degree at Bemidji State University satisfies the Minnesota Peace Officer Standards and Training Board (POST) academic requirements.

Programs

- Criminal Justice, B.S. (Victimology Emphasis) *major*
- Criminal Justice, B.S. (Tribal Justice Emphasis) *major*
- Criminal Justice, B.S. (Law Enforcement Emphasis) *major*
- Criminal Justice, B.S. (Corrections Emphasis) *major*
- Criminal Justice *minor*

Career Directions

Asset Protection
Corrections
Court Administration
Customs Inspection
Federal Bureau of Investigation (FBI)
Law Enforcement
Lawyer
Parole Officer
Private Security Services
Probation Officer
Also: Graduate Study

Criminal Justice, B.S. *major* Victimology Emphasis

For questions regarding the Criminal Justice B.S. major Victimology emphasis please email the Sociology and Communications Studies Department or call (218) 755.2487.

Required Credits: 48
Required GPA: 2.25

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- CRJS 1120 Criminal Justice and Society (3 credits)
- CRJS 3201 Research Methods and Statistics for Criminal Justice (3 credits)
- CRJS 3305 Judicial Process (3 credits)
- CRJS 3315 Criminology and Delinquency (3 credits)
- CRJS 3358 Criminal Law (3 credits)

COMPLETE 3 SEMESTER CREDITS FROM THE FOLLOWING COURSE:

- CRJS 4920 Directed Group Study (3 credits)

II EMPHASIS SPECIFIC COURSES

COMPLETE THE FOLLOWING COURSES:

- CRJS 3307 Victimological Theory and Practice (3 credits)
- CRJS 3377 Forensic Victimology (3 credits)
- CRJS 4407 Global Perspectives in Victimology (3 credits)
- CRJS 4477 Restorative Justice (3 credits)

REQUIRED EXTERNAL ELECTIVES

COMPLETE 9 SEMESTER CREDITS:

- INST 4900 Social Justice (3 credits)
- PSY 2217 Abnormal Psychology (4 credits)
- PSY 3332 Counseling and Crisis Interventions (4 credits)
- PSY 3367 Social Psychology (3 credits)
- SOC 1104 Society and Social Issues (3 credits)
- SOC 2230 Race and Ethnic Relations (3 credits)
- SOC 2240 Men, Women, and Society: A Sociological Interpretation (3 credits)
- SOC 3210 Social Movements and Change (3 credits)
- SOC 3300 Family and Society (3 credits)

REQUIRED ELECTIVES

COMPLETE 9 SEMESTER CREDITS:

- BIOL 3400 Fish & Wildlife Law and Administration (3 credits)

- CHEM 2210 Criminalistics (3 credits)
 - CHEM 2270 Criminalistics Laboratory (1 credit)
 - CRJS 2221 Comparative Justice (3 credits)
 - CRJS 2225 Criminal Justice and Juveniles (3 credits)
 - CRJS 3304 Police Process (3 credits)
 - CRJS 3306 Corrections and Penology (3 credits)
 - CRJS 3310 Introduction to Emergency Management (3 credits)
 - CRJS 3319 Topics In Criminal Justice (1-2 credits)
 - CRJS 3344 Criminal Justice and Domestic Violence (3 credits)
 - CRJS 3355 Drugs and Criminal Justice (3 credits)
 - CRJS 3356 Introduction to Homeland Security (3 credits)
 - CRJS 3359 Criminal Investigation (3 credits)
 - CRJS 3360 Criminal Procedure and Evidence (3 credits)
 - CRJS 3380 Community Corrections (3 credits)
 - CRJS 4103 Criminal Justice Diversity and Ethics (3 credits)
 - CRJS 4480 Police and Community Relations (3 credits)
 - CRJS 4487 Principles of Criminal Justice Supervision (3 credits)
 - CRJS 4970 Internship (12 credits)
- Note: CRJS 4970 must be taken for 9 or 12 credits only
- ENVR 4210 Environmental Law and Policy (3 credits)
 - GWS 3850 Sex, Gender and Power: Theories and Practice (3 credits)
 - INST 1107 Introduction to Turtle Island (3 credits)
 - INST 4000 Nation Building and Leadership (3 credits)
 - INST 4418 Federal Indian Law (3 credits)
 - INST 4900 Social Justice (3 credits)
 - PSY 2217 Abnormal Psychology (4 credits)
 - PSY 3332 Counseling and Crisis Interventions (4 credits)
 - SOC 2230 Race and Ethnic Relations (3 credits)
 - SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)

Criminal Justice, B.S. *major* Tribal Justice Emphasis

Required Credits: 48
Required GPA: 2.25

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- CRJS 1120 Criminal Justice and Society (3 credits)
- CRJS 3201 Research Methods and Statistics for Criminal Justice (3 credits)
- CRJS 3305 Judicial Process (3 credits)
- CRJS 3315 Criminology and Delinquency (3 credits)
- CRJS 3358 Criminal Law (3 credits)

COMPLETE 3 SEMESTER CREDITS FROM THE FOLLOWING COURSE:

- CRJS 4920 Directed Group Study (3 credits)

II EMPHASIS SPECIFIC COURSES

COMPLETE THE FOLLOWING COURSES:

- CRJS 3304 Police Process (3 credits)
- CRJS 3306 Corrections and Penology (3 credits)
- INST 1107 Introduction to Turtle Island (3 credits)
- INST 4000 Nation Building and Leadership (3 credits)
- INST 4418 Federal Indian Law (3 credits)
- INST 4900 Social Justice (3 credits)

REQUIRED ELECTIVES

COMPLETE 12 SEMESTER CREDITS:

- BIOL 3400 Fish & Wildlife Law and Administration (3 credits)
 - CHEM 2210 Criminalistics (3 credits)
 - CHEM 2270 Criminalistics Laboratory (1 credit)
 - CRJS 2221 Comparative Justice (3 credits)
 - CRJS 2225 Criminal Justice and Juveniles (3 credits)
 - CRJS 3307 Victimological Theory and Practice (3 credits)
 - CRJS 3310 Introduction to Emergency Management (3 credits)
 - CRJS 3319 Topics In Criminal Justice (1-2 credits)
 - CRJS 3344 Criminal Justice and Domestic Violence (3 credits)
 - CRJS 3355 Drugs and Criminal Justice (3 credits)
 - CRJS 3356 Introduction to Homeland Security (3 credits)
 - CRJS 3359 Criminal Investigation (3 credits)
 - CRJS 3360 Criminal Procedure and Evidence (3 credits)
 - CRJS 3377 Forensic Victimology (3 credits)
 - CRJS 3380 Community Corrections (3 credits)
 - CRJS 4103 Criminal Justice Diversity and Ethics (3 credits)
 - CRJS 4407 Global Perspectives in Victimology (3 credits)
 - CRJS 4477 Restorative Justice (3 credits)
 - CRJS 4480 Police and Community Relations (3 credits)
 - CRJS 4487 Principles of Criminal Justice Supervision (3 credits)
 - CRJS 4970 Internship (12 credits)
- Note: CRJS 4970 must be taken for 9 or 12 credits only
- ENVR 4210 Environmental Law and Policy (3 credits)
 - GWS 3850 Sex, Gender and Power: Theories and Practice (3 credits)
 - PSY 2217 Abnormal Psychology (4 credits)
 - PSY 3332 Counseling and Crisis Interventions (4 credits)
 - SOC 2230 Race and Ethnic Relations (3 credits)
 - SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)

Criminal Justice, B.S. *major* Law Enforcement Emphasis

Required Credits: 48
Required GPA: 2.25

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- CRJS 1120 Criminal Justice and Society (3 credits)
- CRJS 3201 Research Methods and Statistics for Criminal Justice (3 credits)
- CRJS 3305 Judicial Process (3 credits)
- CRJS 3315 Criminology and Delinquency (3 credits)
- CRJS 3358 Criminal Law (3 credits)

COMPLETE 3 SEMESTER CREDITS FROM THE FOLLOWING COURSE:

- CRJS 4920 Directed Group Study (3 credits)

II EMPHASIS SPECIFIC COURSES

COMPLETE THE FOLLOWING COURSES:

- CRJS 3304 Police Process (3 credits)
- CRJS 3310 Introduction to Emergency Management (3 credits)
- CRJS 3359 Criminal Investigation (3 credits)
- CRJS 3360 Criminal Procedure and Evidence (3 credits)

- CRJS 3377 Forensic Victimology (3 credits)
- CRJS 4103 Criminal Justice Diversity and Ethics (3 credits)
- CRJS 4480 Police and Community Relations (3 credits)

REQUIRED ELECTIVES

COMPLETE 9 SEMESTER CREDITS:

- BIOL 3400 Fish & Wildlife Law and Administration (3 credits)
- CHEM 2210 Criminalistics (3 credits)
- CHEM 2270 Criminalistics Laboratory (1 credit)
- CRJS 2221 Comparative Justice (3 credits)
- CRJS 2225 Criminal Justice and Juveniles (3 credits)
- CRJS 3306 Corrections and Penology (3 credits)
- CRJS 3307 Victimological Theory and Practice (3 credits)
- CRJS 3319 Topics In Criminal Justice (1-2 credits)
- CRJS 3344 Criminal Justice and Domestic Violence (3 credits)
- CRJS 3355 Drugs and Criminal Justice (3 credits)
- CRJS 3356 Introduction to Homeland Security (3 credits)
- CRJS 3380 Community Corrections (3 credits)
- CRJS 4407 Global Perspectives in Victimology (3 credits)
- CRJS 4477 Restorative Justice (3 credits)
- CRJS 4487 Principles of Criminal Justice Supervision (3 credits)
- CRJS 4970 Internship (12 credits)
Note: CRJS 4970 must be taken for 9 or 12 credits only
- ENVR 4210 Environmental Law and Policy (3 credits)
- GWS 3850 Sex, Gender and Power: Theories and Practice (3 credits)
- INST 1107 Introduction to Turtle Island (3 credits)
- INST 4000 Nation Building and Leadership (3 credits)
- INST 4418 Federal Indian Law (3 credits)
- INST 4900 Social Justice (3 credits)
- PSY 2217 Abnormal Psychology (4 credits)
- PSY 3332 Counseling and Crisis Interventions (4 credits)
- SOC 2230 Race and Ethnic Relations (3 credits)
- SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)
- SOWK 2110 Intercultural Communication (3 credits)

Criminal Justice, B.S. *major* Corrections Emphasis

Required Credits: 48

Required GPA: 2.25

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- CRJS 1120 Criminal Justice and Society (3 credits)
- CRJS 3201 Research Methods and Statistics for Criminal Justice (3 credits)
- CRJS 3305 Judicial Process (3 credits)
- CRJS 3315 Criminology and Delinquency (3 credits)
- CRJS 3358 Criminal Law (3 credits)

COMPLETE 3 SEMESTER CREDITS FROM THE FOLLOWING COURSE:

- CRJS 4920 Directed Group Study (3 credits)

II EMPHASIS SPECIFIC COURSES

COMPLETE THE FOLLOWING COURSES:

- CRJS 3306 Corrections and Penology (3 credits)
- CRJS 3380 Community Corrections (3 credits)
- CRJS 4487 Principles of Criminal Justice Supervision (3 credits)
- PSY 3367 Social Psychology (3 credits)
- PSY 4588 Multicultural Psychology (4 credits)
or SOC 2230 Race and Ethnic Relations (3 credits)
or SOWK 2110 Intercultural Communication (3 credits)

REQUIRED ELECTIVES

COMPLETE 15 SEMESTER CREDITS:

- BIOL 3400 Fish & Wildlife Law and Administration (3 credits)
- CHEM 2210 Criminalistics (3 credits)
- CHEM 2270 Criminalistics Laboratory (1 credit)
- CRJS 2221 Comparative Justice (3 credits)
- CRJS 2225 Criminal Justice and Juveniles (3 credits)
- CRJS 3304 Police Process (3 credits)
- CRJS 3307 Victimological Theory and Practice (3 credits)
- CRJS 3310 Introduction to Emergency Management (3 credits)
- CRJS 3319 Topics In Criminal Justice (1-2 credits)
- CRJS 3344 Criminal Justice and Domestic Violence (3 credits)
- CRJS 3355 Drugs and Criminal Justice (3 credits)
- CRJS 3356 Introduction to Homeland Security (3 credits)
- CRJS 3359 Criminal Investigation (3 credits)
- CRJS 3360 Criminal Procedure and Evidence (3 credits)
- CRJS 3377 Forensic Victimology (3 credits)
- CRJS 4103 Criminal Justice Diversity and Ethics (3 credits)
- CRJS 4407 Global Perspectives in Victimology (3 credits)
- CRJS 4477 Restorative Justice (3 credits)
- CRJS 4480 Police and Community Relations (3 credits)
- CRJS 4970 Internship (12 credits)
Note: CRJS 4970 Internship (12 credits) must be taken for 9 or 12 credits only
- ENVR 4210 Environmental Law and Policy (3 credits)
- GWS 3850 Sex, Gender and Power: Theories and Practice (3 credits)
- INST 1107 Introduction to Turtle Island (3 credits)
- INST 4000 Nation Building and Leadership (3 credits)
- INST 4418 Federal Indian Law (3 credits)
- INST 4900 Social Justice (3 credits)
- PSY 2217 Abnormal Psychology (4 credits)
- PSY 3332 Counseling and Crisis Interventions (4 credits)
- SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)

Criminal Justice *minor*

Required Credits: 21

Required GPA: 2.00

REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- CRJS 1120 Criminal Justice and Society (3 credits)
- CRJS 3304 Police Process (3 credits)
- CRJS 3305 Judicial Process (3 credits)
- CRJS 3306 Corrections and Penology (3 credits)

REQUIRED ELECTIVES

SELECT 9 ADDITIONAL ELECTIVE CREDITS IN CRJS COURSES AT THE 3000 LEVEL OR HIGHER

Criminal Justice Courses

CRJS 1120 Criminal Justice and Society (3 credits)

A general introduction to the philosophies, principles, and social aspects which underlie the formulation of law and administration of justice in the United States. Provides an overview of the institutions and relationships of those agencies composing the criminal justice system. Liberal Education Goal Area 9.

CRJS 2221 Comparative Justice (3 credits)

Introduction to a variety of international systems of justice. Students critically examine international legal traditions, study the criminal justice institutions that make up the systems of justice, and explore the cultural, social, and political contexts that contribute to the maintenance of the justice systems. Explores attempts to develop an international criminal justice system. Liberal Education Goal Area 8.

CRJS 2225 Criminal Justice and Juveniles (3 credits)

This course explores historical responses to delinquents, the definition of delinquency, theories of correction, and an examination of the juvenile justice system. The learning objective is to understand the principles, assumptions, and processes that pertain to juvenile delinquency and criminal justice system responses to delinquency. Prerequisites: CRJS 1120.

CRJS 2925 People of the Environment: Criminal Justice Perspective (3 credits)

Offers students various perspectives on environment in relation to crime, criminality, and criminal justice. Liberal Education Goal Area 10.

CRJS 3201 Research Methods and Statistics for Criminal Justice (3 credits)

An introduction to the framing and addressing of research questions within a criminal justice context. Students will be exposed to descriptive, explanatory, and exploratory research designs and the application of appropriate quantitative analytic techniques to those research designs. Prerequisites: CRJS 1120 or consent of instructor.

CRJS 3304 Police Process (3 credits)

An introduction to the police component of the criminal justice system. Based on both classical readings and current issues in the police field, this course covers police history, the police role and functions in modern society, and the evolving nature of police work. Special emphasis given to the evolving nature in police work after the events of September 11th, 2001. Prerequisite: CRJS 1120 or consent of instructor.

CRJS 3305 Judicial Process (3 credits)

Examines the criminal justice and civil law judicial process. Covers judicial involvement from pre-arrest warrant issuance to appellate court review. Focuses on the role, function, and behavior of prosecutors, defense attorneys, and judges. Prerequisites: CRJS 1120 or consent of instructor.

CRJS 3306 Corrections and Penology (3 credits)

Provides the student with an understanding of corrections as a major part of the criminal justice system. Focuses on principles, assumptions, and processes pertaining to achieving correctional goals and objectives. Emphasis on justifications, philosophy of punishment. Prerequisites: CRJS 1120 or consent of instructor.

CRJS 3307 Victimological Theory and Practice (3 credits)

This course focuses on victimological theories and the philosophic study of victims and victimity. Short- and long-term impacts of victimization, as well as victim-centered practices and services, are explored. Additional topics may include advocative movements for the recognition and enhancement of victims' rights in the United States, including increased involvement and influence throughout the judicial processing of a criminal case. Prerequisites: (CRJS 1120 and Junior status) or consent of instructor.

CRJS 3310 Introduction to Emergency Management (3 credits)

This course explores the needs of public safety officials who have responsibility for emergency preparedness planning and response. Includes contexts for emergency planning -legal and jurisdictional; responsibility for planning and responding to emergencies; different types of emergencies, and an approach to planning that can be applied to emergency situations. Addresses specific issues associated with the planning process, including the role of the manager, the necessity for multi-agency involvement, various analytical techniques employed in planning, different levels of emergency planning, and different elements of the plan. This course examines the history and perspectives of emergency management, hazards, concepts and taxonomies, all-hazards approach, phases of emergency management, risk assessment, risk communication and emergency management functions. Prerequisite(s): CRJS 1120 or consent of instructor.

CRJS 3315 Criminology and Delinquency (3 credits)

Significant theoretical traditions, subsequent research, and policy related to crime and delinquency. Students will be exposed to the following crime data sources: official statistics, victimization reports, and self-reports. Prerequisites: CRJS 1120 and CRJS 3201, or consent of instructor.

CRJS 3319 Topics In Criminal Justice (1-2 credits)

Designed to present special topics, problems or areas of current interest to the field of Criminal Justice.

CRJS 3344 Criminal Justice and Domestic Violence (3 credits)

The historical roots of domestic and sexual violence, and the continuing prevalence and magnitude of the problem. This course focuses on coordinated community efforts in the United States to keep families and others safe from relationship violence; thoroughly examines methods used by the criminal justice system to prevent and treat domestic violence; emphasizes the changing response of police, social agencies, the courts, and our lawmakers to domestic violence cases; and investigates ways in which the legal system treats victims of abuse who fight back and sometimes kill abusers.

CRJS 3355 Drugs and Criminal Justice (3 credits)

Focuses on the historical and contemporary patterns of psychoactive drug use in the United States and on the development and evaluation of criminal justice policies intended to reduce or eliminate drug use and/or drug problems. Topics include major types of psychoactive drugs, the War on Drugs, the international context of drug production and distribution, and personal and social problems resulting from drug use.

CRJS 3356 Introduction to Homeland Security (3 credits)

Addresses the role of state and local law enforcement in national defense. Also addresses critical issues such as civil liberties, privacy rights, police organization and structure, as well as the relationship between federal and local law enforcement. Introduces students to emergency management and the critical importance of managing risk. Prerequisite: CRJS 1120.

CRJS 3358 Criminal Law (3 credits)

This course encompasses the basic concepts of the criminal law and the elements of criminal offenses in Minnesota in particular. Crimes against persons, crimes against property, crimes against the administration of justice and others are reviewed. The case method is used to define the contours of judicial interpretation of the criminal law. Prerequisites: CRJS 1120 or consent of instructor.

CRJS 3359 Criminal Investigation (3 credits)

The concepts and principles related to criminal investigation. This course addresses those techniques and methods of evidentiary collection, processing, and testimony commonly employed by police investigators and crime scene technicians conducting a lawful inquiry, from arrival at a crime scene to laboratory analysis to closing the investigation by making an arrest. Also includes a section devoted to police report writing as well as a laboratory section where various evidence collection and crime scene processing techniques are conducted. Prerequisite: CRJS 3358 or consent of instructor.

CRJS 3360 Criminal Procedure and Evidence (3 credits)

This course focuses on the rights of the criminally accused, primarily those involved in the pre-trial stages of the criminal process. The Bill of Rights as it pertains to the criminally accused will be examined. The rules of evidence defining the types and use of criminal evidence allowed in court will also be addressed in this course. Prerequisites: CRJS 1120 or consent of instructor.

CRJS 3377 Forensic Victimology (3 credits)

This course focuses on the forensic and scientific study of victims, emphasizing the response of police, medical professionals, and social agencies during the investigative and judicial processes. Accentuates methods used to collect, preserve, and analyze evidence relative to victims and victimizations. Examines controversial yet critical considerations in an objective investigative process, such as victim precipitation, victim characteristics and profiles, lifestyle and situational exposures, false allegations, and false confessions. Prerequisites: (CRJS 1120 and Junior status) or consent of instructor.

CRJS 3380 Community Corrections (3 credits)

An in-depth examination of community corrections programs including: program planning, implementation and evaluation, client's rights, intake, contracting, release, use of community resources, and use of various treatment modalities. Prerequisite: CRJS 1120 and CRJS 3306 or consent of instructor.

CRJS 4103 Criminal Justice Diversity and Ethics (3 credits)

A course in applied human relations and ethics that examines the dynamics of class, race, gender and ethics as they intersect with the social realities of crime and justice in the U.S. today. How diverse populations and ethics operate both separately and in combination to influence the criminal justice system. The facts and theoretical foundations are presented so that students can formulate their own informed decisions about discrimination and ethics in the criminal justice system. Students will identify, apply, analyze and validate the core ethical principles and the potential consequences related to ethical decision-making. This course includes Minnesota Peace Officers Standards and Training (POST) learning objectives. Prerequisites: Junior status or consent of Instructor.

CRJS 4407 Global Perspectives in Victimology (3 credits)

This course examines the diverse and complex nature of victim-related concerns in global and/or comparative context. Explores the variable nature of the definition, involvement, treatment, and/or restoration of victims across governmental, social, and cultural confines. Describes theoretical developments and emerging practices in victimology from a global perspective. Probes ethnocentric perceptions and promotes critical thinking regarding victims' roles and needs within justice systems. Prerequisites: (CRJS 1120, CRJS 3307 and Junior status) or consent of instructor.

CRJS 4477 Restorative Justice (3 credits)

This course explores core principles and implementation of restorative justice programs, including a review of benefits and potential challenges of such an approach. Examines how the approach encourages effective problem solving and conflict resolution, with the potential for reconciliation and healing of all stakeholders. It examines the unique roles, needs, and desired restorations of victims, offenders, and the community. Prerequisites: (CRJS 1120, CRJS 3307 and Junior status) or consent of instructor.

CRJS 4480 Police and Community Relations (3 credits)

Primarily intended for those entering the police profession, this course covers the rules that govern peace officer behavior under the Minnesota Peace Officer Standards and Training Board; addresses a number of Minnesota Board of Police Officer Standards and Training learning objectives, including victimization, ethical behavior, media relations, and response to and coping with stress; and examines police and community relations. Prerequisites: CRJS 1120 and CRJS 3304 or consent of instructor.

CRJS 4487 Principles of Criminal Justice Supervision (3 credits)

Examines historical and current justifications and approaches to offender supervision. Correctional outcomes, rehabilitation methods, evidence based practices, and risk measurement are covered for both institutional and community correctional contexts. Basic motivational interviewing and various correctional counseling techniques are covered. Prerequisite: CRJS 1120 and CRJS 3306.

CRJS 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

CRJS 4920 Directed Group Study (3 credits)

When taken as a requirement the following description may apply: Course entails advanced study in theories, philosophies, and practices in criminal justice. Requires extensive review of writings with emphasis on recent developments in the practice of criminal justice. Prerequisite: Senior status or consent of instructor.

CRJS 4970 Internship (12 credits)

When taken as a requirement the following description may apply: A full time supervised field instruction in a public or private criminal justice agency. The student is expected to demonstrate his/her acquired knowledge and skills to the criminal justice practice. Students should arrange for this class at least one quarter in advance of the quarter of enrollment. Graded Satisfactory/Unsatisfactory. Prerequisites: Completion of major required courses; major GPA of 2.25; overall GPA of 2.00 and consent of instructor.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
 1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
 1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
 1940, 2940, 3940, 4940 IN-SERVICE COURSE
 1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
 1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
 1970, 2970, 3970, 4970 INTERNSHIP
 1980, 2980, 3980, 4980 RESEARCH
 1990, 2990, 3990, 4990 THESIS

Developmental Electives

Developmental Electives promote student success by improving academic, personal and social skills. Some of the courses may be applied toward the fulfillment of graduation requirements. The University maintains a comprehensive listing of all Developmental Electives in the Office of Admissions and in the Records and Registration Office.

Note: Courses numbered 0900 through 0999 are considered Developmental Elective courses. A maximum of four semester credits satisfactorily completed are permitted to be included in the total credits for graduation. Courses taken in excess of the first four semester credits in this category shall appear on the transcript and be included in the cumulative grade point average (GPA) but will not count toward total credits required for graduation.

Developmental Electives Courses

DEVL 0911 Academic American English I (3 credits)

A remedial course in listening, speaking, reading, and writing English. Use of Reading Week Seminar for pronunciation improvement. Prerequisite: International student with a score between 475 and 500 on the TOEFL (Test of English as a Foreign Language) and a score below 70 on the Michigan Test of College English.

DEVL 0912 Academic American English II (3 credits)

Review and advancement of listening, speaking, reading, and writing of English. Focuses on perfecting English pronunciation through the use of Reading Week Seminar and improving English proficiency in the four basic skills areas. Extensive vocabulary development, understanding of American culture, accurate composition, and further practice in discussion and individual oral presentations. Prerequisite: International student with a score below 80 and above 70 on the Michigan College English Test or DEVL 0911 with a grade of A or B.

DEVL 0913 Academic American English III (2 credits)

Review and advancement of listening, speaking, reading, and writing of English. Extensive vocabulary development and more emphasis on composition accuracy. Prerequisite: International student with a score below 90 and above 80 on the Michigan College English Test or DEVL 0912 with a grade of A or B.

DEVL 0931 Scholastic Written English (5 credits)

This course is designed to help students develop skills in reading and writing for academic preparation.

DEVL 0932 Scholastic Spoken English (5 credits)

This course is designed to help students develop skills in speaking and listening for academic preparation.

DEVL 0933 Academic Study Skills (2 credits)

This course is designed to help students develop academic study skills for academic preparation.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
1970, 2970, 3970, 4970 INTERNSHIP
1980, 2980, 3980, 4980 RESEARCH
1990, 2990, 3990, 4990 THESIS

Earth Science

The study of Earth Science draws primarily on geology and meteorology with additional attention to the fields of oceanography and life history. The traditional background for Earth Science focuses on mathematics and the quantitative aspects of science. The contemporary study and practice of Earth Science includes the qualitative evaluation and understanding of earth processes.

Both the quantitative and qualitative factors are applied in decision-making processes that range from plans for worldwide concerns, such as global warming, and for natural disasters, such as earthquakes and floods, to evaluation of a building site for a home. Earth Science is also a companion field of study for hydrologists and environmental scientists and for related careers in government, business, and industry.

Programs

- Geography, B.S. (Earth Science Emphasis) *major*
- Science Education, B.S. (Earth and Space Science Specialty (Teacher Licensure)) *major*
- Earth Science *minor*

Career Directions

Federal/State Agent
Industry/Business Consultant
Park Naturalist
Science Curriculum Coordinator
Also: Graduate Study

Preparation

Recommended High School Courses

Algebra
Biology
Chemistry
Physics
Trigonometry

Geography, B.S. *major* Earth Science Emphasis

Required Credits: 48

Required GPA: 2.25

I REQUIRED CORE COURSES

Complete the following courses:

- BUAD 2231 Business Statistics I (3 credits)
or PSY 3401 Basic Statistics for Research (4 credits)
or STAT 2610 Applied Statistics (4 credits)
- ENGL 2150 Technical Writing (3 credits)
or ENGL 3150 Writing In The Disciplines (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3410 Geography of North America (3 credits)
or GEOG 3800 Regional Geography (1-3 credits)
or GEOG 3810 Geography of Europe (3 credits)
or GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
or GEOG 3840 Geography of Africa (3 credits)
or GEOG 3850 Geography of the Middle East (3 credits)
or GEOG 3860 Geography of Latin America and the Caribbean (3 credits)

or GEOG 3870 Planning for Sustainable Cities (3 credits)
- GEOG 4265 Spatial Analysis (3 credits)

II EARTH SCIENCE EMPHASIS

REQUIRED EMPHASIS CORE

Complete the following courses:

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 4130 Biogeography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)
- GEOG 4910 Directed Independent Study (3 credits)

or GEOG 4970 Internship (3 credits)

or GEOG 4990 Thesis (3 credits)

- GEOL 1110 Physical Geology (4 credits)
- GEOL 2110 Mineralogy and Petrology (4 credits)

EARTH SCIENCE ELECTIVES

Select 3 courses from the following, or related upper division courses as approved in advance by advisor:

- BIOL 3120 Soils (4 credits)
or GEOL 3120 Soils (4 credits)
- BIOL 3361 Limnology (4 credits)
- BIOL 3730 Plant Diversity (4 credits)
- BIOL 3840 Wetlands Ecology (3 credits)
- BIOL 4623 Forest Ecology (4 credits)
- ENVR 3040 Environmental Economics (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- GEOG 3125 Weather and Climate (3 credits)
- GEOG 3630 Conservation Biology (3 credits)
or BIOL 3630 Conservation Biology (3 credits)
- GEOL 1120 Historical Geology (4 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
- GEOL 3212 Hydrogeology (3 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)
- GEOL 3500 Topics in Paleontology (3 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)
- GEOL 3700 Environmental Geophysics (3 credits)
- GEOL 4300 Global Environmental Change (3 credits)

III SPATIAL METHODS ELECTIVES

Select 1 of the following courses:

- GEOG 3226 Cartography (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 4190 Qualitative Methods in Geographic Research (3 credits)
- GEOG 4275 Advanced Geographic Information Systems (3 credits)
- STAT 3610 Time Series Analysis (3 credits)

Program Learning Outcomes | Geography, B.S.

1. Geographic Understanding: Students will have an understanding of the nature of Geography as an academic discipline, including familiarity with its history and principal sub-fields, concepts are introduced in Geog 1400, and core courses.

2. Thematic Geographic Knowledge: Students will demonstrate understanding of Geography as a spatial science within its various sub-disciplines.

2.1. Competence in the Basic Concepts of Human Geography: Students will show proficiency in this area by meeting specific performance metrics in Geog 2200 and another upper division Human Geography Elective.

2.2. Competence in the Basic Concepts of Physical Geography: Students will show proficiency in this area by meeting performance metrics in Geog 2100 and another upper division Physical Geography Elective.

2.3. Competence in the Basic Concepts of Economic Geography: Students will show proficiency in this area by meeting performance metrics in Geog 2300.

2.4. Competence in the Basic Concepts of Planning: Students will show proficiency in this area by meeting performance metrics in Geog 2400 and another upper division Planning Courses.

3. Understanding the Basic Concepts of Geospatial Analysis: Students will show proficiency in this area by meeting performance metrics all classes requiring both quantitative and qualitative analysis.

3.1. Demonstrate confidence with GIS Software: Demonstrate a competency in selected geographic techniques and/or methods: Relevant Courses: Geog3231, Geog3232, Geog 4275.

3.2. Apply GIS skills in a related Geography Course: Demonstrate the ability to use and integrate GIS into research and project development non-GIS classes.

4. Basic Understanding of Regional Concepts: Students will appreciate how Geography's unique spatial perspective is essential for understanding historical, cultural, and demographic patterns in different world regions. Upper Division Regional courses, Geog3810, 3820, 3830, 3850.

5. Effective Communication: Students will display competency in written expression with respect to clarity, logical expression, and effective argument.

6. General Geographic Research Skills: Students will apply basic research skills, including the ability to {a} critically evaluate the research of others and {b} develop a coherent, thoughtful analysis of these findings. (Typically applies to shorter paper projects, not full term projects for the assessment criteria)

6.1. Competence in Geographic Research: Conceive, develop and produce a term project that involves a précis or abstract, an annotated bibliography and a review of academic literature presented in a coherent, well-developed articulate thesis or independent study project. (Assessments suited to full term projects).

7. Practical Experience - Internship: Students will acquire knowledge and skills sufficient to allow one to pursue advanced study in Geography or find employment in Geography-related fields, including but not limited to those involving urban and regional planning.

Science Education, B.S. *major*

Earth and Space Science Specialty (Teacher Licensure)

Required Credits: 86

Required GPA: 2.50

Core Courses for Science Teaching in Grades 5-8

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
or BIOL 1110 Human Biology (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
or BIOL 1120 General Biology: Evolution And Ecology (3 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
or CHEM 1111 General Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
or CHEM 1112 General Chemistry II (4 credits)
- GEOL 1110 Physical Geology (4 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)
or ED 3410 Secondary Science Methods (4 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

EARTH AND SPACE SCIENCE SPECIALTY

COMPLETE THE FOLLOWING COURSES:

- ENVR 2000 Introduction to Environmental Science (3 credits)
- GEOL 1120 Historical Geology (4 credits)
- GEOL 2110 Mineralogy and Petrology (4 credits)
- GEOL 3500 Topics in Paleontology (3 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)
- SCI 2100 Astronomy (3 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- GEOL 3211 Environmental Hydrology (3 credits)
- ENVR 4050 Geochemistry (3 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- GEOL 4970 Internship (3 credits)
- GEOL 4980 Research (3 credits)

Earth Science *minor*

The Earth Science minor is designed to support other fields such as geography,

biology, and chemistry. The program will complement and enhance many majors, but does not in and by itself lead to a career choice.

Required Credits: 23

Required GPA: 2.00

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- BIOL 3630 Conservation Biology (3 credits)
- GEOL 1110 Physical Geology (4 credits)
- GEOL 1120 Historical Geology (4 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
- SCI 2200 Meteorology (3 credits)

II REQUIRED ELECTIVES

SELECT 2 OF THE FOLLOWING COURSES:

- GEOL 2110 Mineralogy and Petrology (4 credits)
- GEOL 2730 Introduction to Planetary Science (4 credits)
- GEOL 3212 Hydrogeology (3 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)
- GEOL 3500 Topics in Paleontology (3 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)
- GEOL 3700 Environmental Geophysics (3 credits)
- GEOL 3120 Soils (4 credits)
- *or* BIOL 3120 Soils (4 credits)

Economics

Economics is the social science that explores the problem of relative scarcity and its implications for problems of resource allocation, economic stability, growth and distribution. Applied fields, including labor relations, financial economics, international economics, and environmental economics, focus on specific aspects of these broad concerns. In the applied areas, students become cognizant of the interaction between economics and related disciplines.

The objectives of the Economics program are to (a) provide the theoretic and quantitative tools necessary to understand the development, structure, and operation of the contemporary economy; (b) develop skill in using those tools to analyze economic problems and to critically assess proposed solutions; and (c) provide information and guidance as students explore career opportunities in economics and develop their own post-graduate plans.

Note: Career options include staff and training positions in the financial sector, other service industries, and manufacturing. Graduate study opportunities include economics, law, business, and related fields.

Programs

- Economics, B.S. *major*
- Social Studies, B.A. (Economics Emphasis) *major*
- Economics *minor*

Career Directions

See note in program description.

Economist
Also: Graduate Study

Economics, B.S. *major*

Required Credits: 46
Required GPA: 2.25

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)
- ECON 4000 Microeconomic Decisions (3 credits)
- ECON 4100 Macroeconomic Growth and Fluctuations (3 credits)
- ECON 4880 Economics Capstone (3 credits)
- MATH 1170 College Algebra (4 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- BUAD 2231 Business Statistics I (3 credits)
- STAT 2610 Applied Statistics (4 credits)

II REQUIRED ELECTIVES

Select 24 semester credits of electives, 12 of which must be in Economics or advisor approval. Select from:

- ECON 3010 Public Economics (3 credits)
- ECON 3040 Environmental Economics (3 credits)
or ENVR 3040 Environmental Economics (3 credits)
- ECON 3070 Labor Economics (3 credits)
- ECON 3200 Economics of the Financial Sector (3 credits)
- ECON 3230 Benefit/Cost Analysis (3 credits)
- ECON 3400 International Trade and Finance (3 credits)
- ECON 3700 Current Economic Topics (1-3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)

- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3400 Economic Geography (3 credits)
- GEOG 3870 Planning for Sustainable Cities (3 credits)
- GEOG 4265 Spatial Analysis (3 credits)
- MATH 2471 Calculus I (5 credits)
- STAT 3610 Time Series Analysis (3 credits)

SUGGESTED SEMESTER SCHEDULE FOR ECONOMICS MAJOR, B.S.

The following is a tentative schedule for economics majors. It is meant only as a rough guide. In particular, it is possible for a motivated student to finish the rest of the program requirements in less than three years.

Freshman

- Liberal Education courses

Sophomore

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)
- BUAD 2231 Business Statistics I (3 credits)
or STAT 2610 Applied Statistics (4 credits)
- Electives

Junior

- ECON 4000 Microeconomic Decisions (3 credits)
- ECON 4100 Macroeconomic Growth and Fluctuations (3 credits)
- Electives

Senior

- GEOG 4265 Spatial Analysis (3 credits)
- STAT 3610 Time Series Analysis (3 credits)

- ECON 4880 Economics Capstone (3 credits)
- Remaining electives

Social Studies, B.A. *major*

Economics Emphasis

Required Credits: 48
Required GPA: 2.50

Note: A minimum of 22 semester credits used to meet course requirements in I and II must be completed at Bemidji State University. No course grade below a C may be used to meet these requirements and a minimum GPA of 2.50 in this major is required for graduation. Students who desire a second field of emphasis are to consider a completion of a minor or a second major in that field. Such action may complement and increase the marketability of this major.

I REQUIRED CORE CURRICULUM

CAPSTONE COURSE
COMPLETE THE FOLLOWING COURSE:

- POL 4500 Thesis and Career Preparation (3 credits)

ECONOMICS COURSES
SELECT 1 OF THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

GEOGRAPHY COURSES
SELECT 1 OF THE FOLLOWING COURSES

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)

GEOGRAPHY COURSES
SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)

WORLD HISTORY
SELECT 1 OF THE FOLLOWING COURSES

- HST 2218 Medieval Europe (3 credits)
- HST 2219 Medieval European Culture (3 credits)
- HST 2228 Renaissance and Reformation Europe (3 credits)
- HST 2580 Russia (3 credits)
- HST 2600 Topics in History (3 credits)
- HST 2660 Women and History (3 credits)
- HST 2700 The History of World Religions (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)
- HST 3277 Readings and Research in European History (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)

- HST 3459 Latin America (3 credits)

U.S. HISTORY
SELECT 1 OF THE FOLLOWING COURSES

- HST 2600 Topics in History (3 credits)
- HST 2610 Minnesota History (3 credits)
- HST 2667 Men and Women: Gender in America (3 credits)
- HST 3117 American Revolutionary Era, 1763-1800 (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- HST 3137 The American Civil War (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3187 American West (3 credits)

POLITICAL SCIENCE COURSES
SELECT 1 OF THE FOLLOWING COURSES

- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)

POLITICAL SCIENCE COURSES
SELECT 1 OF THE FOLLOWING COURSES

- POL 3100 American Foreign Policy (3 credits)
- POL 3130 Asian Political Development (3 credits)
- POL 3150 Topics in Political Science (1-3 credits)
- POL 3160 Comparative European Politics (3 credits)
- POL 3170 International Relations (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3190 International Political Economy (3 credits)
- POL 3200 Minnesota Politics (3 credits)
- POL 3210 Public Administration (3 credits)
- POL 3230 Environmental Politics (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- POL 3420 Campaigns and Elections (3 credits)
- POL 4200 Constitutional Law (3 credits)

SOCIOLOGY COURSES
COMPLETE THE FOLLOWING COURSES:

- SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)
- SOC 3210 Social Movements and Change (3 credits)

II REQUIRED FIELD OF EMPHASIS

SELECT 1 OF THE FOLLOWING COURSES
Note: Select the course not taken in the core.

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

SELECT 15 SEMESTER CREDITS OF ELECTIVES FROM ECONOMICS

Economics *minor*

Required Credits: 18
Required GPA: 2.00

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

II REQUIRED ELECTIVES

Select 12 semester credits of electives in Economics,
3 of which must be at the 4000 level.

Economics Courses

ECON 1500 Historical Development of the Mixed Economy (3 credits)

Examines the origins and developments of the mixed economy, identifying its key institutions and their evolution. Differences in the historical experiences of different regions/nations are explored, as is the availability of alternative economic systems. Liberal Education Goal Area 8.

ECON 2000 Markets and Resource Allocation (3 credits)

Develops microeconomic principles to explain and evaluate markets as mechanisms to signal buyers preferences and induce suppliers' response. Considers the origin and historical development of market economies as well as theory. Liberal Education Goal Areas 5 and 9.

ECON 2100 Macroeconomics and the Business Cycle (3 credits)

Develops macroeconomic concepts to explore the determination of aggregate output, employment, and the price level in modern mixed economies. The interaction between the financial sector and commodity markets and the potential of monetary and fiscal policy to guide the course of the macro economy are also explored. Prerequisite: ECON 2000 or consent of instructor. Liberal Education Goal Area 5.

ECON 2150 Interdependence of the Hawaiian Economy and the Environment: Field Projects (1-3 credits)

Economic concepts and techniques in environmental valuation, sustainable development, and green accounting based on the report "Environmental Valuation and the Hawaiian Economy." Interconnection of the Hawaiian economy and environment through investigation of major environmental issues such as the role of forests, water quality and quantity, coral reef ecosystems, extractive activities versus eco-tourism, and invasive species. Direct observation of investment efforts toward achieving sustainability. Liberal Education Goal Area 5.

ECON 2925 People of the Environment: Economic Perspective (3 credits)

This course is a module linked to the interdisciplinary environmental issues course, People and the Environment. It is an integrative study of the natural, social, value-based, and citizen-action contexts for environmental awareness. The disciplinary component surveys economic approaches to and institutional settings for environmental decision making, including our behaviors as consumers and producers. Interdisciplinary perspectives are evaluated in light of different concepts of social well being, including economic efficiency, equity, and sustainability. Liberal Education Goal Area 10.

ECON 3010 Public Economics (3 credits)

Examines the rationale of public provision of selected goods and services and compares alternative tax structures in terms of their effects on the rest of the economy and their capacity for financing government expenditures. The effects of the political process on taxes and spending and selected topics in intergovernmental fiscal relations are also considered. Prerequisites: ECON 2000 and ECON 2100.

ECON 3040 Environmental Economics (3 credits)

Examines environmental problems as consequence of market's failure to accurately value environmental resources. Alternative private and public policies are examined in terms of their effectiveness in improving the efficiency and equity with which water, air and other resources are allocated. Prerequisite: ECON 2000 or consent of instructor. (Also offered under ENVR 3040.)

ECON 3070 Labor Economics (3 credits)

Analyzes structure and operation of labor markets as a background to exploring issues and topics related to collective bargaining and public policy. The impact of technological and institutional change on labor markets is considered. Prerequisite: ECON 2000 or consent of instructor.

ECON 3200 Economics of the Financial Sector (3 credits)

Looks at the operation of intermediaries and securities markets to allocate financial capital and price financial assets. The role of the central bank and related agencies in guiding the financial sector and influencing the macroeconomy are considered. Prerequisites: ECON 2000 and ECON 2100 or consent of instructor.

ECON 3230 Benefit/Cost Analysis (3 credits)

Develops the theoretical base of benefit/cost analysis in reviewing public investment projects and examines the application of this tool by specific agencies. Emphasis on the meaning and treatment of risk in policy analysis. Prerequisite: ECON 2000 or consent of instructor.

ECON 3400 International Trade and Finance (3 credits)

The origins and effects of trade and capital flows. The role of international financial markets in influencing trade flows and international investment. Prerequisite: ECON 2000.

ECON 3700 Current Economic Topics (1-3 credits)

Customized course providing in-depth investigation of a current issue of theory or policy. Content and credits may vary. Prerequisites: ECON 2000 and ECON 2100.

ECON 4000 Microeconomic Decisions (3 credits)

Individual decision making of households and firms. Resource allocation via market exchange in alternative market structures. Prerequisites: ECON 2000 or consent of instructor.

ECON 4100 Macroeconomic Growth and Fluctuations (3 credits)

Examines the sources of economic growth and cyclical fluctuations in a market economy, techniques for forecasting economic activity, and the potential for policy to improve performance. Prerequisites: ECON 2000 and ECON 2100 or consent of instructor.

ECON 4880 Economics Capstone (3 credits)

Investigates advanced topics in micro and macro alternating years. Students are responsible for considerable out-of-class research and in-class presentations. Note: An appropriate internship may substitute for ECON 4880 in the major with department's permission. Prerequisites: ECON 4000 and ECON 4100, or consent of instructor.

ECON 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
1940, 2940, 3940, 4940 IN-SERVICE COURSE
1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
1970, 2970, 3970, 4970 INTERNSHIP
1980, 2980, 3980, 4980 RESEARCH
1990, 2990, 3990, 4990 THESIS

English

The English Department offers programs and courses in literature and writing.

English Department Vision

To foster the relevance and urgency of expression in forms such as literature, film, scholarship, creative writing, and rhetoric.

English Department Mission

To foster the ability to appreciate, evaluate, and create the myriad forms of practical and aesthetic communication.

Students intending to major in English, whether in literature, teaching, or writing, should declare their intentions no later than the beginning of their junior year. English majors are encouraged to study an additional language and to participate in a junior year study abroad program such as Eurospring. All University students are introduced to college-level writing through first-year writing and are encouraged to take other English courses.

Note: Transfer students planning to major in English must take a minimum of 11 semester credits of courses from the Bemidji State University English major, including at least two 3000- or 4000-level courses. All requirements for the major must be met. In addition, the Department of English strongly recommends that one writing course beyond the College Writing sequence be taken at Bemidji State.

Programs

- Creative and Professional Writing, B.F.A. *major*
- Elementary Education, B.S. (Communication Arts & Literature Endorsement (Teacher Licensure)) *major*
- English Education, B.S. ((Teacher Licensure)) *major*
- English, B.A. *major*
- Digital Writing *minor*
- English *minor*
- Writing Emphasis *emph*

Career Directions

Writer/Editor/Copy Editor for magazines, newspapers, publishers, corporations, industry, institutions, and government agencies

Writer/Editor for commercial and government news media and Web production

Public Information Specialist/Publicist/Communications Specialist for corporations, industry, institutions, and government agencies

Related career positions requiring skills in critical thinking and writing

English teacher in secondary education

Graduate study should also be considered

Preparation

Recommended High School Courses

Literature
Speaking
Writing

Creative and Professional Writing, B.F.A. *major*

Required Credits: 42

Required GPA: 2.25

I REQUIRED WRITING COMPONENT (PART I)

SELECT 15 SEMESTER CREDITS FROM THE FOLLOWING:

NOTE: SOME COURSES EITHER HAVE PRE-REQUISITES NOT REQUIRED IN THIS MAJOR OR REQUIRE CONSENT OF INSTRUCTOR

FICTION:

- ENGL 3115 Writing Fiction I (3 credits)
- ENGL 4116 Writing Fiction II (3 credits)
- ENGL 4157 Topics in Writing, Editing and Publishing (3 credits)

POETRY:

- ENGL 3125 Writing Poetry I (3 credits)
- ENGL 4126 Writing Poetry II (3 credits)
- ENGL 4157 Topics in Writing, Editing and Publishing (3 credits)

CREATIVE NON:

- ENGL 3145 Writing Creative Nonfiction I (3 credits)
- ENGL 4146 Writing Creative Nonfiction II (3 credits)
- ENGL 4157 Topics in Writing, Editing and Publishing (3 credits)

PR WRT/TECH CM:

- ENGL 2150 Technical Writing (3 credits)
- ENGL 3155 Professional Writing (3 credits)
- ENGL 4157 Topics in Writing, Editing and Publishing (3 credits)

DIG WRT&PUBL:

- ENGL 3177 Rhetoric of Social Media (3 credits)
- ENGL 3179 Elements of Digital Rhetoric (3 credits)
- ENGL 3183 Topics in Writing or Rhetoric (3 credits)
- ENGL 4183 Advanced Topics in Writing or Rhetoric (3 credits)

INTERNSHIPS:

- ENGL 4860 Internship in Writing, Editing or Publishing (3 credits)

REQUIRED WRITING COMPONENT (PART II)

SELECT 6 ADDITIONAL CREDITS FROM THE ABOVE AREAS

AND/OR FROM THE FOLLOWING COURSES FOR A TOTAL OF 21 CREDITS OF REQUIRED WRITING COMPONENT:

- MASC 3720 Media Writing II (3 credits)
- MASC 3790 Screenwriting (3 credits)

II REQUIRED LITERATURE COMPONENT

A. SELECT 9 SEMESTER CREDITS FROM THE FOLLOWING:

- ENGL 2330 American Literature to 1865 (3 credits)
- ENGL 2337 American Literature from 1865 to Present (3 credits)
- ENGL 2357 British Literature to 1800 (3 credits)
- ENGL 2358 British Literature from 1800 to Present (3 credits)
- ENGL 2370 World Literature to 1600 (3 credits)
- ENGL 2377 World Literature from 1600 to Present (3 credits)

B. SELECT 12 ADDITIONAL CREDITS FROM THE FOLLOWING COURSES; THOSE COURSES WITH "TOPICS" IN THE TITLE MAY BE TAKEN MULTIPLE TIMES WITH DIFFERENT TOPIC SUBTITLES:

- ENGL 2340 The American Film (3 credits)
- ENGL 3540 Literature for Young Adults (3 credits)
- ENGL 3580 The English Language (3 credits)
- ENGL 3600 Author Topics (3 credits)
- ENGL 3606 Culture Topics (3 credits)
- ENGL 3607 Film Topics (3 credits)
- ENGL 3608 Genre Topics (3 credits)
- ENGL 3609 Period Topics (3 credits)
- ENGL 4420 Shakespeare and His Age (3 credits)
- ENGL 4429 Shakespeare for Teachers (3 credits)
- ENGL 4455 Seminar: Literary Criticism and Theory (3 credits)
- ENGL 4700 Advanced Author Topics (3 credits)
- ENGL 4706 Advanced Culture Topics (3 credits)
- ENGL 4707 Advanced Film Topics (3 credits)
- ENGL 4708 Advanced Genre Topics (3 credits)
- ENGL 4709 Advanced Period Topics (3 credits)
- PHIL 2240 Aesthetics (3 credits)

Program Learning Outcomes | Creative and Professional Writing, B.F.A.

1. Create & evaluate original prose or poetry: Students will create and evaluate the formal features of original prose or poetry.
2. Critical thinking, reading, writing: Students will demonstrate skills in critical thinking, reading, and writing.
3. Texts in contexts: Students will demonstrate understanding of diverse texts in diverse contexts.
4. World literatures: Students will demonstrate knowledge of world literatures.
5. Writing for a variety of purposes and audiences: Students will demonstrate effective writing for a variety of purposes and audiences.
6. Writing for professional purposes: Students will demonstrate understanding of the uses of writing for a variety of professional purposes.

Elementary Education, B.S. *major* Communication Arts & Literature Endorsement (Teacher Licensure)

Required Credits: 86

Required GPA: 2.50

I ELEMENTARY EDUCATION FOUNDATION COURSES

Complete the following courses:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

Complete the following course, up to 12 credits:

- ED 4820 Student Teaching - Elementary (1-16 credits)

II ELEMENTARY EDUCATION MAJOR COURSES

Complete the following courses:

- ED 3201 Language Arts I (3 credits)
- ED 3202 Language Arts II (3 credits)
- ED 3203 Language Arts III (3 credits)
- ED 3221 Elementary Math Methods (3 credits)
- ED 3222 Elementary Science Methods (3 credits)
- ED 3240 Social Studies in the Elementary School (3 credits)
- ED 3301 Creative Expressions (3 credits)
- ED 3302 Creative Process Foundations: Patterns (3 credits)
- HLTH 4100 Teaching Elementary School Health (2 credits)
- PHED 4200 Methods of Teaching Elementary Physical Education to Classroom Teachers (1 credit)

Complete the following course:

- MATH 1011 Mathematics for Elementary School Teachers I (3 credits)

Complete the following course:

- MATH 1013 Mathematics for Elementary School Teachers II (3 credits)

COMMUNICATION ARTS AND LITERATURE ENDORSEMENT

COMPLETE THE FOLLOWING COURSES:

- ED 3208 Developmental Reading in Middle School (3 credits)
- ED 3417 Teaching and Learning in the Middle School (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ENGL 2337 American Literature from 1865 to Present (3 credits)
- ENGL 3540 Literature for Young Adults (3 credits)

COMPLETE THE FOLLOWING COURSE (5 CREDITS):

- ED 4840 Student Teaching - Special Fields (1-12 credits)

COMMUNICATION ARTS AND LITERATURE ENDORSEMENT

SELECT 1 OF THE FOLLOWING COURSES:

- ENGL 2357 British Literature to 1800 (3 credits)
- ENGL 2358 British Literature from 1800 to Present (3 credits)
- ENGL 2370 World Literature to 1600 (3 credits)
- ENGL 2377 World Literature from 1600 to Present (3 credits)

+++++

English Education, B.S. *major*
(Teacher Licensure)

Required Credits: 82
Required GPA: 2.50

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- ENGL 2330 American Literature to 1865 (3 credits)
- ENGL 2337 American Literature from 1865 to Present (3 credits)
- ENGL 3540 Literature for Young Adults (3 credits)
- ENGL 3580 The English Language (3 credits)
or ML 3430 Linguistics (3 credits)
- ENGL 4420 Shakespeare and His Age (3 credits)
or ENGL 4429 Shakespeare for Teachers (3 credits)
- ENGL 4455 Seminar: Literary Criticism and Theory (3 credits)

SELECT 2 OF THE FOLLOWING COURSES:

- ENGL 2357 British Literature to 1800 (3 credits)
- ENGL 2358 British Literature from 1800 to Present (3 credits)
- ENGL 2370 World Literature to 1600 (3 credits)
- ENGL 2377 World Literature from 1600 to Present (3 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- ENGL 2150 Technical Writing (3 credits)
- ENGL 3155 Professional Writing (3 credits)
- ENGL 3177 Rhetoric of Social Media (3 credits)
- ENGL 3179 Elements of Digital Rhetoric (3 credits)

II REQUIRED ELECTIVES

Select 12 semester credits from the following courses;
at least three credits must be at the 4000 level.
The courses may be taken multiple times with different
topic subtitles.

- ENGL 3183 Topics in Writing or Rhetoric (3 credits)
- ENGL 3600 Author Topics (3 credits)
- ENGL 3606 Culture Topics (3 credits)
- ENGL 3607 Film Topics (3 credits)
- ENGL 3608 Genre Topics (3 credits)
- ENGL 3609 Period Topics (3 credits)

SELECT ONE OF THE FOLLOWING:

- ENGL 4183 Advanced Topics in Writing or Rhetoric (3 credits)
- ENGL 4700 Advanced Author Topics (3 credits)
- ENGL 4706 Advanced Culture Topics (3 credits)
- ENGL 4707 Advanced Film Topics (3 credits)
- ENGL 4708 Advanced Genre Topics (3 credits)

- ENGL 4709 Advanced Period Topics (3 credits)

III REQUIRED FOR LICENSURE

COMPLETE THE FOLLOWING COURSES:

NOTE:
ED 4737 is required for licensure and is listed under
the secondary education core requirement.

ED 3208 has a prerequisite not included in this major,
ED 3201 Language Arts I; but the prerequisite is
enforced only for elementary education students.

- ED 3208 Developmental Reading in Middle School (3 credits)
- ENGL 3520 Writing for the Secondary School Teacher (3 credits)
- ENGL 3550 Methods of Teaching English and Communication (4 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

English, B.A. *major*

Required Credits: 42
Required GPA: 2.25

I REQUIRED COURSES

Complete 5 of the following 6 courses:

- ENGL 2330 American Literature to 1865 (3 credits)
- ENGL 2337 American Literature from 1865 to Present (3 credits)
- ENGL 2357 British Literature to 1800 (3 credits)
- ENGL 2358 British Literature from 1800 to Present (3 credits)
- ENGL 2370 World Literature to 1600 (3 credits)
- ENGL 2377 World Literature from 1600 to Present (3 credits)

Complete the following courses:

- ENGL 4420 Shakespeare and His Age (3 credits)
or ENGL 4429 Shakespeare for Teachers (3 credits)
- ENGL 4455 Seminar: Literary Criticism and Theory (3 credits)

II REQUIRED ELECTIVES

LITERATURE/FILM ELECTIVES

Select 18 credits from the following courses; those courses with "Topics" in the title may be taken multiple times with different topic subtitles:

- ENGL 2340 The American Film (3 credits)
- ENGL 3540 Literature for Young Adults (3 credits)
- ENGL 3580 The English Language (3 credits)
- ENGL 3600 Author Topics (3 credits)
- ENGL 3606 Culture Topics (3 credits)
- ENGL 3607 Film Topics (3 credits)
- ENGL 3608 Genre Topics (3 credits)
- ENGL 3609 Period Topics (3 credits)
- ENGL 4429 Shakespeare for Teachers (3 credits)
- ENGL 4700 Advanced Author Topics (3 credits)
- ENGL 4706 Advanced Culture Topics (3 credits)
- ENGL 4707 Advanced Film Topics (3 credits)
- ENGL 4708 Advanced Genre Topics (3 credits)
- ENGL 4709 Advanced Period Topics (3 credits)
- PHIL 2240 Aesthetics (3 credits)

WRITING ELECTIVES

Select 3 credits from the following courses:

- ENGL 3115 Writing Fiction I (3 credits)
- ENGL 3125 Writing Poetry I (3 credits)
- ENGL 3145 Writing Creative Nonfiction I (3 credits)
- ENGL 3155 Professional Writing (3 credits)
- ENGL 3177 Rhetoric of Social Media (3 credits)
- ENGL 3179 Elements of Digital Rhetoric (3 credits)
- ENGL 3183 Topics in Writing or Rhetoric (3 credits)
- ENGL 4183 Advanced Topics in Writing or Rhetoric (3 credits)

SUGGESTED SEMESTER SCHEDULE FOR ENGLISH MAJOR, B.A.

The following is a list of suggested English Major, B.A. courses arranged by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible.

Freshman

- Liberal Education requirements

Sophomore

- ENGL 2330 American Literature to 1865 (3 credits)
- ENGL 2337 American Literature from 1865 to Present (3 credits)
- ENGL 2357 British Literature to 1800 (3 credits)
- ENGL 2358 British Literature from 1800 to Present (3 credits)
- ENGL 2370 World Literature to 1600 (3 credits)
or ENGL 2377 World Literature from 1600 to Present (3 credits)
- Complete Liberal Education requirements

Junior

- ENGL 4420 Shakespeare and His Age (3 credits)
or ENGL 4429 Shakespeare for Teachers (3 credits)
- English electives

Senior

- ENGL 4455 Seminar: Literary Criticism and Theory (3 credits)
- English electives

Digital Writing *minor*

Required Credits: 15

Required GPA: 2.00

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- ENGL 2150 Technical Writing (3 credits)
- ENGL 3177 Rhetoric of Social Media (3 credits)
- ENGL 3179 Elements of Digital Rhetoric (3 credits)

TAKE ONE ADDITIONAL DIGITAL WRITING/DIGITAL HUMANITIES ENGLISH COURSE AT THE 3000 OR 4000 LEVEL:

II PROJECT

COMPLETE THE FOLLOWING COURSE:

- ENGL 4180 Digital Writing and Rhetoric Capstone Project (3 credits)

English *minor*

Required Credits: 24

Required GPA: 2.00

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- ENGL 2150 Technical Writing (3 credits)
or ENGL 2152 Argument and Exposition (3 credits)
- ENGL 2330 American Literature to 1865 (3 credits)
- ENGL 2337 American Literature from 1865 to Present (3 credits)
- ENGL 4420 Shakespeare and His Age (3 credits)

SELECT 2 OF THE FOLLOWING COURSES:

- ENGL 2357 British Literature to 1800 (3 credits)
- ENGL 2358 British Literature from 1800 to Present (3 credits)
- ENGL 2370 World Literature to 1600 (3 credits)
- ENGL 2377 World Literature from 1600 to Present (3 credits)

II REQUIRED ELECTIVES

SELECT 6 SEMESTER CREDITS OF ENGLISH COURSES AT THE 2000 LEVEL OR ABOVE

Writing Emphasis *emph*

Required Credits: 18

Required GPA: 2.25

I REQUIRED CORE

COMPLETE THE FOLLOWING COURSES:

- ENGL 2152 Argument and Exposition (3 credits)
- Take one additional 3000 or 4000 level writing course

II REQUIRED ELECTIVE SPECIALIZATION

SELECT 12 SEMESTER CREDITS FROM THE FOLLOWING COURSES;

Courses may be selected from both areas.

A:CREATIVE WRTG

- ENGL 2190 Introduction to Creative Writing (3 credits)
- ENGL 3115 Writing Fiction I (3 credits)
- ENGL 3125 Writing Poetry I (3 credits)
- ENGL 3145 Writing Creative Nonfiction I (3 credits)
- ENGL 4116 Writing Fiction II (3 credits)
- ENGL 4126 Writing Poetry II (3 credits)
- ENGL 4146 Writing Creative Nonfiction II (3 credits)
- MASC 3790 Screenwriting (3 credits)

B:PROF. WRTG

- ENGL 2150 Technical Writing (3 credits)
- ENGL 3150 Writing In The Disciplines (3 credits)
- ENGL 3155 Professional Writing (3 credits)
- ENGL 3177 Rhetoric of Social Media (3 credits)
- ENGL 3179 Elements of Digital Rhetoric (3 credits)
- ENGL 4860 Internship in Writing, Editing or Publishing (3 credits)
- MASC 2850 Media Writing I (3 credits)
- MASC 3720 Media Writing II (3 credits)

English Courses

ENGL 0830 Experimental Course (1-4 credits)

A course proposed for inclusion in the University curriculum. May not be offered more than two times as an experimental course.

ENGL 1151 Composition (3 credits)

Instruction and practice aimed at improving the quality and efficiency of writing processes, with emphasis on fluency, voice, style, and versatility. Includes adaptation of nonfiction prose to various general audiences, introduction to academic research and citation, and a component on oral presentation. Liberal Education Goal Area 1.

ENGL 2150 Technical Writing (3 credits)

Instruction and practice in writing about technical materials and subjects. Liberal Education Goal Area 11.

ENGL 2152 Argument and Exposition (3 credits)

Instruction and practice in writing for various academic and similar contexts, with particular focus on formal and informal argument for specific rather than general audiences. Includes seeking out, selecting, using, and documenting written sources, and a component on oral presentation. Prerequisite: ENGL 1151. Liberal Education Goal Area 1.

ENGL 2190 Introduction to Creative Writing (3 credits)

Introduction to the study of the forms and styles of poetry, fiction, creative nonfiction, and other genres, with practice in a workshop format. Liberal Education Goal Area 6.

ENGL 2250 Understanding Literature (3 credits)

Reading and critical appreciation of various types of literature, such as autobiography, drama, film, novel, poetry, and specialized genres such as "Women in Literature," Bible as Literature," "Science Fiction & Fantasy." Liberal Education Goal Area 6.

ENGL 2330 American Literature to 1865 (3 credits)

A study of the development of American letters from a historical perspective. The ideas, social, and cultural relationships that shape the emerging American literature are examined through the study of the works and the literary characteristics of representative writers. Liberal Education Goal Areas 6 and 7.

ENGL 2337 American Literature from 1865 to Present (3 credits)

A study of representative American writers and their works, covering the period from 1900 to the present. The course considers the development of American literature as a significant force on the literary scene. Liberal Education Goal Area 6 & 7.

ENGL 2340 The American Film (3 credits)

A study of various aspects of American movies. Liberal Education Goal Area 6.

ENGL 2357 British Literature to 1800 (3 credits)

Survey of British literature from the Anglo-Saxon and Medieval periods to 1800. Liberal Education Goal Areas 6 & 8.

ENGL 2358 British Literature from 1800 to Present (3 credits)

Survey of British literature from 1800 to the present. Liberal Education Goal Areas 6 & 8.

ENGL 2370 World Literature to 1600 (3 credits)

Survey of world literature to 1600. Liberal Education Goal Areas 6 & 8. May not be offered every year.

ENGL 2377 World Literature from 1600 to Present (3 credits)

Survey of world literature from 1600 to the present. Liberal Education Goal Areas 6 & 8. May not be offered every year.

ENGL 2410 Myth (3 credits)

Study of sacred stories that emerge from pre-literate stages of culture through early literary works. Mythic traditions studied include Greek and may include one or more others (such as Norse, Irish, Ojibwe). Liberal Education Goal Areas 6 & 8.

ENGL 2925 People of the Environment: American Nature Writers Perspective (3 credits)

A course in the classics of nature writing designed to acquaint the student with great outdoor writers, especially those who stress conservation and ecology. Liberal Education Goal Area 10.

ENGL 2926 People of the Environment: Writing and Nature Perspective (3 credits)

This course leads students to examine, in writing, their own individual perceptions of and response to natural environments and to consider how those perceptions and responses are culturally influence. Liberal Education Goal Area 10.

ENGL 2953 Study-Travel, English (1-6 credits)

Study Travel course in Political Science for Liberal Education Goal Area 5.

ENGL 2954 Study-Travel Humanities and the Arts (1-6 credits)

Study Travel course in English for Liberal Education Goal Area 6.

ENGL 2956 Study-Travel Humanities and the Arts (1-6 credits)

Study Travel course in English for Lib Ed Goal Area 8.

ENGL 3115 Writing Fiction I (3 credits)

An introduction to the study of the form and style of fiction, with practice, study, and writing in a workshop format. Prerequisite: Sophomore status or consent of instructor.

ENGL 3125 Writing Poetry I (3 credits)

An introduction to the study of form and style of poetry, with practice, study, and writing in a workshop format. Prerequisite: Sophomore status or consent of instructor.

ENGL 3145 Writing Creative Nonfiction I (3 credits)

Introduction to the study of the form and style of creative nonfiction, with practice in a workshop format. Prerequisite: Sophomore status or consent of instructor.

ENGL 3150 Writing In The Disciplines (3 credits)

Examine and practice argument and researched writing as conducted in the various academic disciplines. Prerequisites: ENGL 1151 and completion of 64 semester credits. Liberal Education Goal Area 1. Might not be offered every year.

ENGL 3155 Professional Writing (3 credits)

Written communication in professional settings. Gathering information, analyzing audiences, and assessing conventional formats of professional writing. Drafting, testing, and revising documents. Development of a portfolio project.

ENGL 3177 Rhetoric of Social Media (3 credits)

This course, which is theory-grounded, gives students the opportunity to explore new forms of online publishing, study, and written expression, including social media. Computer-intensive. Prerequisites: ENGL 1151, and ENGL 2152 or ENGL 3150, or consent of instructor.

ENGL 3179 Elements of Digital Rhetoric (3 credits)

Introduction to the principles of applied rhetoric integrated with continued digital writing experience. Also introduces fundamentals of hypertext. Students investigate email, Web page and site design, social media, wikis, and weblogs, and create and analyze online texts and exchanges. Computer-intensive. Prerequisites: ENGL 1151, and ENGL 2152 or ENGL 3150, or consent of instructor.

ENGL 3183 Topics in Writing or Rhetoric (3 credits)

This course fills a gap in the department's Topics series at the 3000 level allowing faculty to shape specific courses under the rubric that address professional, genre, and rhetorical types of writing courses not currently addressed in the department's curriculum. This course is repeatable for up to 9 credits.

ENGL 3510 Writing Center Practicum (1-3 credits)

In-class instruction on writing center-specific theoretical and practical applications and supervised field experience by consulting in the Writing Resource Center. Prerequisite(s): sophomore status and consent of instructor.

ENGL 3520 Writing for the Secondary School Teacher (3 credits)

A study of the problems and principles of composition; designed to provide techniques for the teaching of composition in secondary schools.

ENGL 3540 Literature for Young Adults (3 credits)

A study of a variety of literature appropriate for adolescents, including criteria for evaluating literary merit; criteria for evaluating classroom usefulness; and effective ways to manage book challenges and censorship issues.

ENGL 3550 Methods of Teaching English and Communication (4 credits)

Basic aims, materials, and methods with a practicum experience.

ENGL 3580 The English Language (3 credits)

A linguistically-based study of the structure, grammar, and historical development of the English language. Might not be offered every year.

ENGL 3600 Author Topics (3 credits)

In-depth study of the work of one or more authors (e.g., Chaucer, Emily Dickinson), including application of critical theory. May be retaken multiple times with different topic subtitles. Might not be offered every year.

ENGL 3606 Culture Topics (3 credits)

In-depth study of the literature of a culture (e.g., American Indian Literature, Ethnic Literature), including application of critical theory. May be retaken multiple times with different topic subtitles. Might not be offered every year.

ENGL 3607 Film Topics (3 credits)

In-depth study of film (e.g., Women in Film, International Film), including application of critical theory. May be retaken multiple times with different topic subtitles. Might not be offered every year.

ENGL 3608 Genre Topics (3 credits)

In-depth study of a literary genre (e.g., The American Novel, Dramatic Literature), including application of critical theory. May be retaken multiple times with different topic subtitles. Might not be offered every year.

ENGL 3609 Period Topics (3 credits)

In-depth study of the literature of a specific period (e.g., Medieval Literature, Modern Literature), including application of critical theory. May be retaken multiple times with different topic subtitles. Might not be offered every year.

ENGL 4116 Writing Fiction II (3 credits)

A workshop course designed to offer the student further practice, analysis, and theoretical study in the composition of fiction. May be repeated one time. Prerequisite: ENGL 3115 with grade of B or better, or consent of instructor.

ENGL 4126 Writing Poetry II (3 credits)

A workshop course designed to offer the student further practice, analysis, and theoretical study in the composition of poetry. May be repeated one time. Prerequisite: ENGL 3125 with grade B or better, or consent of instructor.

ENGL 4146 Writing Creative Nonfiction II (3 credits)

Workshop offering further practice, analysis, and theoretical study in the composition of creative nonfiction. May be repeated one time. Prerequisite: ENGL 3145 with grade of B or better, or consent of instructor.

ENGL 4157 Topics in Writing, Editing and Publishing (3 credits)

Advanced study of and practice in a literary genre or subgenre, editing or publishing. May be retaken multiple times with different topic subtitles. Prerequisites: ENGL 3115, ENGL 3125, ENGL 3145 or ENGL 3155 Might not be offered every year.

ENGL 4180 Digital Writing and Rhetoric Capstone Project (3 credits)

A teacher- and student-designed capstone project building on learning in prerequisite courses in the Digital Writing minor. In consultation with a qualified faculty member, students design and complete a capstone project in digital rhetoric or digital writing that is professional and publishable in nature and quality, or that can serve as documentary evidence appropriate to the field. Prerequisites: Completion of required courses in the Electronic Writing Minor: ENGL 2150, ENGL 3177, ENGL 3179, and one additional digital writing, rhetoric or humanities course at the 3000 or 4000 level.

ENGL 4183 Advanced Topics in Writing or Rhetoric (3 credits)

This course fills a gap in the department's Topics series at the 4000 level allowing faculty to shape specific courses under the rubric that address professional, genre, and rhetorical types of writing courses not currently addressed in the department's curriculum. This course is repeatable for up to 9 credits.

ENGL 4420 Shakespeare and His Age (3 credits)

A study of Shakespeare's works in the context of his times and of the work of his major contemporaries. Might not be offered every year.

ENGL 4429 Shakespeare for Teachers (3 credits)

A study of Shakespeare's plays and poems in contexts appropriate for high school and community college teachers. Might not be offered every year.

ENGL 4455 Seminar: Literary Criticism and Theory (3 credits)

Theory, history, and methods of literary criticism from Plato to the present.

ENGL 4700 Advanced Author Topics (3 credits)

In-depth study of the work of one or more authors (e.g., Chaucer, Emily Dickinson), including application of multiple critical theories. May be retaken multiple times with different topic subtitles. Might not be offered every year.

ENGL 4706 Advanced Culture Topics (3 credits)

In-depth study of the literature of a culture (e.g., American Indian Literature, Ethnic Literature), including application of multiple critical theories. May be retaken multiple times with different topic subtitles. Might not be offered every year.

ENGL 4707 Advanced Film Topics (3 credits)

In-depth study of film (e.g., Women in Film, International Film), including application of multiple critical theories. May be retaken multiple times with different topic subtitles. Might not be offered every year.

ENGL 4708 Advanced Genre Topics (3 credits)

In-depth study of a literary genre (e.g., The American Novel, Dramatic Literature), including application of multiple critical theories. May be retaken multiple times with different topic subtitles. Might not be offered every year.

ENGL 4709 Advanced Period Topics (3 credits)

In-depth study of the literature of a specific period (e.g., Medieval Literature, Modern Literature), including application of multiple critical theories. May be retaken multiple times with different topic subtitles. Might not be offered every year.

ENGL 4860 Internship in Writing, Editing or Publishing (3 credits)

Introduction to the practices of creative and/or professional writing, editing, and/or publishing. Students work on specific projects or internships to gain experience in editing, writing, submitting work for publication, gain an understanding of standard practices and issues in creative and professional writing markets and gain knowledge of careers in creative and professional editing and publishing. Course may be taken as an arranged course for university and off-campus internships. Prerequisite(s): ENGL 1151 or ENGL 2352 and two of the following ENGL 3115, ENGL 3125, ENGL 3145, ENGL 4116, ENGL 4126, ENGL 4146, MASC 3720, MASC 3790 or instructor permission.

ENGL 4862 Internship in Literary Publishing II (3 credits)

Students who have taken ENGL 4861 continue their studies in the practices of literary publishing. They serve as managing editors for the literary anthologies edited in the class, and present to the class and lead discussions on submitting work for publication, standard practice and issues in literary publishing, and careers in literary publishing.

ENGL 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Environmental Studies

Environmental scientists work toward defining and solving environmental problems caused by the actions of human beings. Their interdisciplinary training is broad-based and encompasses the natural sciences, mathematics, economics, and the social sciences. Their primary ethical concern is human stewardship of the earth.

Students in the Environmental Studies program are concerned with both the technological problems and social aspects of environmental issues. Working in cooperation with the Center for Environmental, Earth and Space Studies, Economics, and Sociology, they may participate in applied research. Their interdisciplinary course work includes the study of scientific principles used in environmental problem solving, and the study of the impact of economics, politics, and other social systems on environmental policies and practices.

Because of the breadth of study necessary to prepare for upper division Environmental Studies courses, students are urged to declare in the major during their freshman or sophomore year.

At least 50 percent of credits in the major should be at 3000/4000 levels.

Programs

- Environmental Communication, B.S. *major*
- Environmental Studies, B.S. (Geohydrology Emphasis) *major*
- Environmental Studies, B.S. (Ecosystem Emphasis) *major*
- Environmental Studies, B.S. (Environmental Health and Toxicology Emphasis) *major*
- Indigenous Sustainability Studies, B.S. *major*
- Policy and Planning, B.S. (Natural Resources Planning Emphasis) *major*
- Sustainability and Resource Management, B.A.S. *major*
- Environmental Communication *minor*
- Environmental Science *minor*
- Indigenous Sustainability Studies *minor*
- Sustainability *minor*
- Water Science *minor*

Career Directions

Chemist
Ecologist
Engineering Technician
Environmental Chemist
Environmental Consultant
Environmental Economist
Environmental Engineer
Environmental Engineering Scientist
Environmental Manager
Environmental Outdoor Educator
Environmental Policy Maker and Planner
Environmental Scientist
Environmental Sociologist
Environmental Specialist
Environmental Technologist
Environmental Toxicologist
Geohydrologist
Hydrogeologist
Natural Resources Specialist
Pollution Control Specialist
Research Lab Technician
Researcher
Teacher
Wastewater Monitor
Wastewater Treatment Operator
Water Quality Specialist
Water Treatment Operator
Also: Graduate Study

Preparation

Recommended High School Courses

Biology
Chemistry
Government
Math
Physics
Political Science
Social Science

Environmental Communication, B.S. *major*

Required Credits: 62
Required GPA: 2.50

I REQUIRED CORE COURSES

Complete the following courses:

- COMM 3400 Environmental Communication (3 credits)
- ENVR 2000 Introduction to Environmental Science (3 credits)
- ENVR 3880 Environmental Controversies (2 credits)
- MASC 2243 Video Editing (3 credits)
- MASC 2460 Digital Photography (3 credits)
- MASC 2850 Media Writing I (3 credits)
- MASC 3260 Public Relations (3 credits)
- MASC 3270 Media and Social Change (3 credits)
- MASC 3450 Advanced Field Production (3 credits)

- MASC 3500 Media Design (3 credits)
- MASC 3720 Media Writing II (3 credits)
- MASC 4303 Final Media Showcase (3 credits)
- MASC 4840 Portfolio (3 credits)

Choose one of the following:

- COMM 3120 Communication in a Diverse Society (3 credits)
- SOWK 2110 Intercultural Communication (3 credits)

Choose one of the following:

- ENVR 3800 Environmental Data Analysis (3 credits)
- ENVR 4220 Sampling and Analysis (4 credits)
- GEOL 3120 Soils (4 credits)

Choose one of the following:

- ENVR 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)

credits)

or INST 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)

- ENVR 3720 Food Sovereignty, Health & Indigenous Environments (3 credits)
or INST 3720 Food Sovereignty, Health & Indigenous Environments (3 credits)
- ENVR 3730 Sustainable Communities: Local Indigenous Perspective (3 credits)
or INST 3730 Sustainable Communities: Local Indigenous Perspective (3 credits)
- ENVR 3740 Environment, Wellness & the Sacred Connection to Place (3 credits)
or INST 3740 Environment, Wellness & the Sacred Connection to Place (3 credits)
- ENVR 3750 Sustainable Communities: Global Indigenous Perspective (3 credits)
or INST 3750 Sustainable Communities: Global Indigenous Perspective (3 credits)

Choose one of the following:

- ENVR 3040 Environmental Economics (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)
- ENVR 4610 Sustainability: Theory and Practice (4 credits)
- ENVR 4260 Risk, Resilience and Sustainable Community Development (3 credits)
- GEOG 3532 Political Ecology (3 credits)
- POL 3230 Environmental Politics (3 credits)

Select one of the following courses (3 credits):

- ENVR 4970 Internship (3 credits)
- MASC 4970 Internship (1-12 credits)

II REQUIRED ELECTIVES

Select 9 credits of electives from the following courses:

Electives chosen must meet departmental approval.

- ENVR 2925 People of the Environment: Global Pollution Perspective (3 credits)
- ENVR 3700 Natural Resource Management (3 credits)
- ENVR 3840 Wetlands Ecology (3 credits)
- ENVR 4050 Geochemistry (3 credits)
- ENVR 4110 Environmental Chemistry (3 credits)
- ENVR 4200 Wastewater Treatment (3 credits)
- ENVR 4240 Waste Management (4 credits)
- ENVR 4400 Environmental Microbiology (3 credits)
- ENVR 4500 Environmental Toxicology (4 credits)
- GEOG 3125 Weather and Climate (3 credits)
- GEOG 3226 Cartography (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 3400 Economic Geography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
- GEOL 3212 Hydrogeology (3 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)
- GEOL 3500 Topics in Paleontology (3 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)
- GEOL 3700 Environmental Geophysics (3 credits)

Required Communication Elective (choose 1 course from):

- BIOL 3337 Science Communication (3 credits)
- COMM 1090 Interpersonal Communication (3 credits)
- COMM 1100 Public Speaking (3 credits)
- COMM 2100 Career and Professional Communication (3 credits)
- COMM 3500 Communication and Conflict (3 credits)
- COMM 3700 Persuasion and Communication (3 credits)
- MASC 3150 Photojournalism (3 credits)
- MASC 3600 Social Media Marketing (3 credits)
- MASC 3900 Topics in Mass Communication (1-3 credits)
- MASC 4220 Multimedia Marketing (3 credits)

Environmental Studies, B.S. *major* Geohydrology Emphasis

Required Credits: 65

Required GPA: 2.25

I REQUIRED CORE COURSES

Complete the following courses:

- ENVR 2000 Introduction to Environmental Science (3 credits)
- ENVR 3880 Environmental Controversies (2 credits)
- ENVR 4880 Senior Seminar I (1 credit)

Select 1 of the following courses for 3 credits:

- ENVR 4970 Internship (3 credits)
- ENVR 4990 Thesis (3 credits)

Select 1 of the following courses:

- ENVR 3800 Environmental Data Analysis (3 credits)
- PSY 3401 Basic Statistics for Research (4 credits)
- SOC 3001 Social Statistics (3 credits)
- STAT 2610 Applied Statistics (4 credits)

Select 1 of the following courses:

- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)
- ENVR 4610 Sustainability: Theory and Practice (4 credits)

Select 1 of the following courses:

- GEOL 3120 Soils (4 credits)
or BIOL 3120 Soils (4 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)

GEOHYDROLOGY EMPHASIS

Complete the following courses:

- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOL 1110 Physical Geology (4 credits)
- GEOL 2110 Mineralogy and Petrology (4 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
- GEOL 3212 Hydrogeology (3 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)
- GEOL 3700 Environmental Geophysics (3 credits)

Select 1 of the following courses:

- MATH 1470 Precalculus (5 credits)
- MATH 2471 Calculus I (5 credits)

Select 1 of the following courses:

- PHYS 1101 General Physics I (4 credits)
- PHYS 2101 Physics I (4 credits)

Select 15 semester credits from the following courses that have not been completed in the core above, or any other related courses (3000/4000) approved in advance by a Center for Sustainability Studies advisor:

- ENVR 3040 Environmental Economics (3 credits)
or ECON 3040 Environmental Economics (3 credits)
- ENVR 3300 Environmental Management and Safety (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 3840 Wetlands Ecology (3 credits)
or BIOL 3840 Wetlands Ecology (3 credits)
- ENVR 4050 Geochemistry (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)
- ENVR 4220 Sampling and Analysis (4 credits)
- ENVR 4400 Environmental Microbiology (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 4130 Biogeography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)
- GEOG 4265 Spatial Analysis (3 credits)
- GEOG 4275 Advanced Geographic Information Systems (3 credits)
- GEOL 3120 Soils (4 credits)
or BIOL 3120 Soils (4 credits)
- GEOL 4300 Global Environmental Change (3 credits)

SUGGESTED SEMESTER SCHEDULE FOR ENVIRONMENTAL STUDIES MAJOR, B.S. GEOHYDROLOGY EMPHASIS

The following is a list of Environmental Studies Major Courses arranged by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible.

Freshman

- ENVR 2000 Introduction to Environmental Science (3 credits)
- MATH 1470 Precalculus (5 credits)
or MATH 2471 Calculus I (5 credits)
- PHYS 1101 General Physics I (4 credits)
or PHYS 2101 Physics I (4 credits)
- Liberal Education Requirements
- Emphasis Electives

Sophomore (with the emphasis already selected)

- ENVR 3600 Environmental Justice and Sustainability (3 credits)
or ENVR 4210 Environmental Law and Policy (3 credits)
or ENVR 4610 Sustainability: Theory and Practice (4 credits)
- ENVR 3880 Environmental Controversies (2 credits)
- GEOL 1110 Physical Geology (4 credits)
- GEOL 2110 Mineralogy and Petrology (4 credits)
- ENVR 3800 Environmental Data Analysis (3 credits)
or SOC 3001 Social Statistics (3 credits)
or STAT 2610 Applied Statistics (4 credits)
or PSY 3401 Basic Statistics for Research (4 credits)
- Liberal Education Requirements
- Emphasis Electives

Junior

- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
- GEOL 3700 Environmental Geophysics (3 credits)
- Liberal Education Requirements
- Emphasis Electives

Senior

- ENVR 4880 Senior Seminar I (1 credit)
- ENVR 4970 Internship (3 credits)
or ENVR 4990 Thesis (3 credits)
- GEOL 3212 Hydrogeology (3 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)
or GEOL 3120 Soils (4 credits)
or BIOL 3120 Soils (4 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)
- Liberal Education Requirements
- Emphasis Electives

Environmental Studies, B.S. *major* Ecosystem Emphasis

Required Credits: 59

Required GPA: 2.25

I REQUIRED CORE COURSES

Complete the following courses:

- ENVR 2000 Introduction to Environmental Science (3 credits)
- ENVR 3880 Environmental Controversies (2 credits)
- ENVR 4880 Senior Seminar I (1 credit)

Select 1 of the following courses for 3 credits:

- ENVR 4970 Internship (3 credits)
- ENVR 4990 Thesis (3 credits)

Select 1 of the following courses:

- ENVR 3800 Environmental Data Analysis (3 credits)
- PSY 3401 Basic Statistics for Research (4 credits)
- SOC 3001 Social Statistics (3 credits)
- STAT 2610 Applied Statistics (4 credits)

Select 1 of the following courses:

- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)
- ENVR 4610 Sustainability: Theory and Practice (4 credits)

Select 1 of the following courses:

- GEOL 3120 Soils (4 credits)
or BIOL 3120 Soils (4 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)

ECOSYSTEM STUDIES EMPHASIS

Select 2 of the following courses:

- BIOL 1120 General Biology: Evolution And Ecology (3 credits)
- BIOL 1400 Cellular Principles (4 credits)

- BIOL 1500 Diversity of Life (4 credits)
- CHEM 1111 General Chemistry I (4 credits)
or CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 1112 General Chemistry II (4 credits)
or CHEM 2212 Principles of Chemistry II (4 credits)
- GEOL 1110 Physical Geology (4 credits)
- GEOL 1120 Historical Geology (4 credits)
- PHYS 1101 General Physics I (4 credits)
or PHYS 2101 Physics I (4 credits)
- PHYS 1102 General Physics II (4 credits)
or PHYS 2102 Physics II (4 credits)

Select 34 credits from the following courses that have not been completed in the core above, or any other related courses (3000/4000) approved in advance by a Center for Sustainability Studies advisor:

- ENVR 3040 Environmental Economics (3 credits)
or ECON 3040 Environmental Economics (3 credits)
- ENVR 3300 Environmental Management and Safety (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 3700 Natural Resource Management (3 credits)
- ENVR 3840 Wetlands Ecology (3 credits)
or BIOL 3840 Wetlands Ecology (3 credits)
- ENVR 4110 Environmental Chemistry (3 credits)
- ENVR 4200 Wastewater Treatment (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)
- ENVR 4400 Environmental Microbiology (3 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 3630 Conservation Biology (3 credits)
or BIOL 3630 Conservation Biology (3 credits)
- GEOG 4130 Biogeography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)
- GEOG 4265 Spatial Analysis (3 credits)
- GEOG 4275 Advanced Geographic Information Systems (3 credits)
- GEOL 3120 Soils (4 credits)
or BIOL 3120 Soils (4 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
- GEOL 3212 Hydrogeology (3 credits)
- GEOL 3700 Environmental Geophysics (3 credits)
- GEOL 4300 Global Environmental Change (3 credits)

SUGGESTED SEMESTER SCHEDULE FOR ENVIRONMENTAL STUDIES MAJOR, B.S. ECOSYSTEMS EMPHASIS

The following is a list of Environmental Studies Major Courses arranged by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible.

Freshman

- CHEM 1111 General Chemistry I (4 credits)
or CHEM 2211 Principles of Chemistry I (4 credits)
- ENVR 2000 Introduction to Environmental Science (3 credits)
- GEOL 1110 Physical Geology (4 credits)
- Liberal Education Requirements
- Emphasis Electives

Sophomore (with the emphasis already selected)

- ENVR 3880 Environmental Controversies (2 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)

- or GEOL 3120 Soils (4 credits)
or BIOL 3120
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
or ENVR 4210 Environmental Law and Policy (3 credits)
or ENVR 4610 Sustainability: Theory and Practice (4 credits)
- ENVR 3800 Environmental Data Analysis (3 credits)
or SOC 3001 Social Statistics (3 credits)
or STAT 2610 Applied Statistics (4 credits)
or PSY 3401 Basic Statistics for Research (4 credits)
- Liberal Education Requirements
- Emphasis Electives

Junior

- Liberal Education Requirements
- Emphasis Electives

Senior

- ENVR 4880 Senior Seminar I (1 credit)
- ENVR 4970 Internship (3 credits)
or ENVR 4990 Thesis (3 credits)
- Liberal Education Requirements
- Emphasis Electives

Environmental Studies, B.S. *major* Environmental Health and Toxicology Emphasis

Required Credits: 66

Required GPA: 2.25

I REQUIRED CORE COURSES

Complete the following courses:

- ENVR 2000 Introduction to Environmental Science (3 credits)
- ENVR 3880 Environmental Controversies (2 credits)
- ENVR 4880 Senior Seminar I (1 credit)

Select 1 of the following courses for 3 credits:

- ENVR 4970 Internship (3 credits)
- ENVR 4990 Thesis (3 credits)

Select 1 of the following courses:

- ENVR 3800 Environmental Data Analysis (3 credits)
- PSY 3401 Basic Statistics for Research (4 credits)
- SOC 3001 Social Statistics (3 credits)
- STAT 2610 Applied Statistics (4 credits)

Select 1 of the following courses:

- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)
- ENVR 4610 Sustainability: Theory and Practice (4 credits)

Select 1 of the following courses:

- GEOL 3120 Soils (4 credits)
or BIOL 3120 Soils (4 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)

ENVIRONMENTAL HEALTH AND TOXICOLOGY EMPHASIS

Select 2 of the following:

- BIOL 1120 General Biology: Evolution And Ecology (3 credits)
- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
- CHEM 1111 General Chemistry I (4 credits)
or CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 1112 General Chemistry II (4 credits)
or CHEM 2212 Principles of Chemistry II (4 credits)
- GEOL 1110 Physical Geology (4 credits)
- GEOL 1120 Historical Geology (4 credits)

Complete the following courses:

- ENVR 4110 Environmental Chemistry (3 credits)
- ENVR 4220 Sampling and Analysis (3 credits)
- ENVR 4500 Environmental Toxicology (4 credits)
- GEOL 3211 Environmental Hydrology (3 credits)

Select 1 of the following courses:

- MATH 1470 Precalculus (5 credits)
- MATH 2471 Calculus I (5 credits)

Select 22 credits from the following courses or any other related courses (3000/4000) approved in advance by a Center for Sustainability Studies Advisor:

- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 3507 Analytical Chemistry (3 credits)
- CHEM 3570 Analytical Chemistry Laboratory (1 credit)
- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4412 Biochemistry II (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)
- CHEM 4472 Biochemistry Laboratory II (1 credit)
- ENVR 3040 Environmental Economics (3 credits)
- ECON 3040 Environmental Economics (3 credits)
- ENVR 3300 Environmental Management and Safety (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 3840 Wetlands Ecology (3 credits)
or BIOL 3840 Wetlands Ecology (3 credits)
- ENVR 4200 Wastewater Treatment (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)
- ENVR 4400 Environmental Microbiology (3 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3630 Conservation Biology (3 credits)
or BIOL 3630 Conservation Biology (3 credits)
- GEOG 4130 Biogeography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)
- GEOL 3120 Soils (4 credits)
or BIOL 3120 Soils (4 credits)
- GEOL 3700 Environmental Geophysics (3 credits)
- GEOL 4300 Global Environmental Change (3 credits)

SUGGESTED SEMESTER SCHEDULE FOR ENVIRONMENTAL STUDIES MAJOR, B.S. ENVIRONMENTAL HEALTH AND TOXICOLOGY EMPHASIS

The following is a list of Environmental Studies Major Courses arranged by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible.

Freshman

- CHEM 1111 General Chemistry I (4 credits)
or CHEM 2211 Principles of Chemistry I (4 credits)
- ENVR 2000 Introduction to Environmental Science (3 credits)
- GEOL 1110 Physical Geology (4 credits)
- MATH 1470 Precalculus (5 credits)
or MATH 2471 Calculus I (5 credits)
- Liberal Education Requirements
- Emphasis Electives

Sophomore (with the emphasis already selected)

- ENVR 3880 Environmental Controversies (2 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)
or GEOL 3120 Soils (4 credits)
or BIOL 3120 Soils (4 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
or ENVR 4210 Environmental Law and Policy (3 credits)
or ENVR 4610 Sustainability: Theory and Practice (4 credits)
- ENVR 3800 Environmental Data Analysis (3 credits)
or SOC 3001 Social Statistics (3 credits)
or STAT 2610 Applied Statistics (4 credits)
or PSY 3401 Basic Statistics for Research (4 credits)
- Liberal Education Requirements
- Emphasis Electives

Junior

- ENVR 4110 Environmental Chemistry (3 credits)
- ENVR 4220 Sampling and Analysis (4 credits)
- Liberal Education Requirements
- Emphasis Electives

Senior

- ENVR 4500 Environmental Toxicology (4 credits)
- ENVR 4880 Senior Seminar I (1 credit)
- ENVR 4970 Internship (3 credits)
or ENVR 4990 Thesis (3 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
- Liberal Education Requirements
- Emphasis Electives

Indigenous Sustainability Studies, B.S. *major*

Required Credits: 48

Required GPA: 2.25

I REQUIRED CORE COURSES

Complete the following courses:

- ENVR 2000 Introduction to Environmental Science (3 credits)
- ENVR 3880 Environmental Controversies (2 credits)
- ENVR 4880 Senior Seminar I (1 credit)
- INST 1107 Introduction to Turtle Island (3 credits)
- INST 2201 Creation to Contact (3 credits)
or INST 2202 Survivance Since Contact (3 credits)
- INST 3170 Indigenous Education (3 credits)
- INST 4418 Federal Indian Law (3 credits)

- ENVR 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
or INST 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)

Select 3 of the following courses:

- ENVR 3720 Food Sovereignty, Health & Indigenous Environments (3 credits)
or INST 3720 Food Sovereignty, Health & Indigenous Environments (3 credits)
- ENVR 3730 Sustainable Communities: Local Indigenous Perspective (3 credits)
or INST 3730 Sustainable Communities: Local Indigenous Perspective (3 credits)
- ENVR 3740 Environment, Wellness & the Sacred Connection to Place (3 credits)
or INST 3740 Environment, Wellness & the Sacred Connection to Place (3 credits)
- ENVR 3750 Sustainable Communities: Global Indigenous Perspective (3 credits)
or INST 3750 Sustainable Communities: Global Indigenous Perspective (3 credits)

Select 1 of the following courses:

- ENVR 4970 Internship (3 credits)
- ENVR 4990 Thesis (3 credits)

II REQUIRED ELECTIVES

Select 15 credits of electives from the following courses:

- BIOL 2339 Ethics of Fish and Wildlife Management (3 credits)
- BIOL 2610 General Ecology (3 credits)
- BIOL 3361 Limnology (4 credits)
- BIOL 3400 Fish & Wildlife Law and Administration (3 credits)
- BIOL 3420 Human Dimensions of Wildlife and Fisheries Management (3 credits)
- BIOL 3610 Principles of Wildlife Management (3 credits)
- BIOL 3630 Conservation Biology (3 credits)
or GEOG 3630 Conservation Biology (3 credits)
- BIOL 3730 Plant Diversity (4 credits)
- BIOL 4623 Forest Ecology (4 credits)
- CHEM 3110 Laboratory Management and Safety (2 credits)
- CRJS 4477 Restorative Justice (3 credits)
- ENVR 3040 Environmental Economics (3 credits)
or ECON 3040 Environmental Economics (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 3700 Natural Resource Management (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)
- ENVR 4220 Sampling and Analysis (4 credits)
- ENVR 4610 Sustainability: Theory and Practice (4 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3410 Geography of North America (3 credits)
- GEOL 1110 Physical Geology (4 credits)
or GEOL 1120 Historical Geology (4 credits)
- GEOL 3120 Soils (4 credits)
or BIOL 3120 Soils (4 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
or GEOL 3212 Hydrogeology (3 credits)
- HLTH 2800 Multicultural Health in America (2 credits)
- HLTH 3500 Community Health (3 credits)
- INST 1202 Indigenous Environmental Current Events (3 credits)
- INST 2925 People of the Environment: Indigenous Knowledge

Perspective (3 credits)

- INST 3317 Tribal Government and Leadership (3 credits)
- INST 3888 Indigenous Women Writers (3 credits)
- INST 4900 Social Justice (3 credits)
- LEAD 3500 Theories and Contexts of Leadership (3 credits)
- MASC 3270 Media and Social Change (3 credits)
- MATH 1120 Environmental Mathematics (3 credits)
- OJIB 1100 Ojibwe Culture (4 credits)
- OJIB 1111 Elementary Ojibwe I (4 credits)
- OJIB 1112 Elementary Ojibwe II (4 credits)
- OJIB 2211 Intermediate Ojibwe I (4 credits)
- OJIB 2212 Intermediate Ojibwe II (4 credits)
- OJIB 3311 Advanced Ojibwe I (4 credits)
- OJIB 3312 Advanced Ojibwe II (4 credits)
- PHIL 2250 Human Nature (3 credits)
- POL 3230 Environmental Politics (3 credits)
- PSY 3367 Social Psychology (3 credits)
- PSY 4588 Multicultural Psychology (4 credits)
- SOC 3050 Environmental Sociology (3 credits)
- SOWK 2110 Intercultural Communication (3 credits)
- TADT 1111 Introduction to Project Management (3 credits)
- TADT 2100 Impact Of Technology, Art & Design (2 credits)
- TADT 3267 Economic and Cost Analysis (3 credits)
- TADT 4385 Sustainability and Emerging Technologies (3 credits)
- TADT 4878 Quality Assurance (3 credits)

Or any other relevant course(s) approved in advance by an Advisor from the Center for Sustainability Studies or Indigenous Studies department. (Please note that you must complete 40 credits at the 3000-level or higher to graduate)

Policy and Planning, B.S. *major* Natural Resources Planning Emphasis

Required Credits: 48

Required GPA: 2.25

I REQUIRED CORE

Complete the following courses:

- GEOG 2400 Introduction to Planning (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3550 Site and Resource Analysis in Planning (3 credits)
- GEOG 3580 Regional Development Planning (3 credits)

II REQUIRED ELECTIVES

Complete one of the following courses:

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- ENVR 2000 Introduction to Environmental Science (3 credits)
- GEOL 1110 Physical Geology (4 credits)

Complete one of the following courses:

- ECON 3040 Environmental Economics (3 credits)
or ENVR 3040 Environmental Economics (3 credits)
- GEOG 3400 Economic Geography (3 credits)

Complete one of the following courses:

- ECON 3010 Public Economics (3 credits)
- ECON 3230 Benefit/Cost Analysis (3 credits)

Complete one of the following courses:

- GEOG 3226 Cartography (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)

Complete one of the following courses:

- BIOL 3630 Conservation Biology (3 credits)
or GEOG 3630 Conservation Biology (3 credits)
- GEOG 3125 Weather and Climate (3 credits)
- GEOG 4130 Biogeography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)

Complete one of the following courses:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)
- GEOG 3850 Geography of the Middle East (3 credits)
- GEOG 3860 Geography of Latin America and the Caribbean (3 credits)

Complete one of the following courses:

- ENGL 2150 Technical Writing (3 credits)
- ENGL 3150 Writing In The Disciplines (3 credits)

III REQUIRED CAPSTONE

Complete the following courses:

- ENVR 3880 Environmental Controversies (2 credits)
- ENVR 4880 Senior Seminar I (1 credit)

Complete one of the following courses for 3 credits:

- ENVR 4970 Internship (3 credits)
- GEOG 4970 Internship (3 credits)
- ENVR 4990 Thesis (3 credits)
- GEOG 4990 Thesis (3 credits)

IV REQUIRED EMPHASIS

Complete the following courses:

- GEOG 3532 Political Ecology (3 credits)
- GEOG 3570 Public Lands Planning (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)

SUGGESTED SCHEDULE FOR GEOGRAPHY Policy and Planning, B.S.

The following is a list of Geography Policy and Planning major courses arranged by year. This suggested schedule is intended to help students plan their courses in an orderly fashion. Some courses or course sequences may appear more than once. Geography majors and minors are strongly encouraged to meet with advisors in the Geography program prior to selecting courses as all courses are not offered each year.

Freshman

- GEOG 2100 Introduction to Physical Geography (3 credits)

- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 2400 Introduction to Planning (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3400 Economic Geography (3 credits)
- ENVR 2000 Introduction to Environmental Science (3 credits)
- GEOL 1110 Physical Geology (4 credits)
- Liberal Education requirements

Sophomore

- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- Regional Courses (select 4)
 - GEOG 3410 Geography of North America (3 credits)
 - GEOG 3800 Regional Geography (1-3 credits)
 - GEOG 3810 Geography of Europe (3 credits)
 - GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
 - GEOG 3840 Geography of Africa (3 credits)
 - GEOG 3850 Geography of the Middle East (3 credits)
 - GEOG 3860 Geography of Latin America and the Caribbean (3 credits)
- GEOG 3550 Site and Resource Analysis in Planning (3 credits)
- ECON 3010 Public Economics (3 credits)
- ECON 3230 Benefit/Cost Analysis (3 credits)
- ENGL 2150 Technical Writing (3 credits)
- ENGL 3150 Writing In The Disciplines (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 3880 Environmental Controversies (2 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)
- Complete Liberal Education requirements

Junior

- GEOG 3125 Weather and Climate (3 credits)
- GEOG 3226 Cartography (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 3532 Political Ecology (3 credits)
- GEOG 3560 Metropolitan Land Use Planning (3 credits)
- GEOG 3570 Public Lands Planning (3 credits)
- GEOG 3630 Conservation Biology (3 credits)
or BIOL 3630
- GEOG3XXX Any Remaining Regional Geography Course
- ECON 3010 Public Economics (3 credits)
- ECON 3230 Benefit/Cost Analysis (3 credits)
- ECON 3040 Environmental Economics (3 credits)
or ENVR 3040 Environmental Economics (3 credits)

Senior

- GEOG 3XXX Any Remaining Regional Geography Course
- GEOG 3580 Regional Development Planning (3 credits)
- GEOG 3870 Planning for Sustainable Cities (3 credits)
- GEOG 4130 Biogeography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)
- GEOG 4970 Internship (3 credits)
or ENVR 4970 Internship (3 credits)
or GEOG 4990 Thesis (3 credits)
or ENVR 4990 Thesis (3 credits)
- ECON 3010 Public Economics (3 credits)
- ECON 3230 Benefit/Cost Analysis (3 credits)
- ENVR 4880 Senior Seminar I (1 credit)

Sustainability and Resource Management, B.A.S.

major

Required Credits: 54

Required GPA: 2.25

I REQUIRED CORE COURSES

Complete the following courses:

- BUAD 2231 Business Statistics I (3 credits)
or PSY 3401 Basic Statistics for Research (4 credits)
or STAT 2610 Applied Statistics (4 credits)
- ENGL 2150 Technical Writing (3 credits)
or ENGL 3150 Writing In The Disciplines (3 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- ENVR 2000 Introduction to Environmental Science (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 3880 Environmental Controversies (2 credits)

II SUSTAINABILITY AND RESOURCE MANAGEMENT

Select 27 credits from the following courses. Other related courses may be selected with prior approval of department.

- ENVR 3040 Environmental Economics (3 credits)
or ECON 3040 Environmental Economics (3 credits)
- GEOG 3125 Weather and Climate (3 credits)
- GEOG 3226 Cartography (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 3532 Political Ecology (3 credits)
- GEOG 3550 Site and Resource Analysis in Planning (3 credits)
- GEOG 3570 Public Lands Planning (3 credits)
- GEOG 3630 Conservation Biology (3 credits)
or BIOL 3630 Conservation Biology (3 credits)
- GEOG 4130 Biogeography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)
- GEOG 4190 Qualitative Methods in Geographic Research (3 credits)
- GEOG 4265 Spatial Analysis (3 credits)
- GEOG 4275 Advanced Geographic Information Systems (3 credits)
- GEOL 3120 Soils (4 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
- GEOL 3212 Hydrogeology (3 credits)
- GEOL 3700 Environmental Geophysics (3 credits)

REGIONAL GEOGRAPHY ELECTIVES

Select 1 of the following courses:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)
- GEOG 3850 Geography of the Middle East (3 credits)
- GEOG 3860 Geography of Latin America and the Caribbean (3 credits)

III CAPSTONE PROJECT

Select 1 of the following courses:

- GEOG 4910 Directed Independent Study (3 credits)

- GEOG 4970 Internship (3 credits)
- GEOG 4990 Thesis (3 credits)

Environmental Communication *minor*

Required Credits: 20

Required GPA: 2.25

I REQUIRED COURSES

Complete the following courses:

- ENVR 2000 Introduction to Environmental Science (3 credits)
- ENVR 3880 Environmental Controversies (2 credits)
- MASC 2460 Digital Photography (3 credits)
- MASC 2850 Media Writing I (3 credits)

II REQUIRED ELECTIVES

Choose two 3 credit courses from the following:

- BIOL 3337 Science Communication (3 credits)
- COMM 1100 Public Speaking (3 credits)
- COMM 2100 Career and Professional Communication (3 credits)
- COMM 3400 Environmental Communication (3 credits)
- MASC 2243 Video Editing (3 credits)
- MASC 3150 Photojournalism (3 credits)
- MASC 3260 Public Relations (3 credits)
- MASC 3270 Media and Social Change (3 credits)
- MASC 3450 Advanced Field Production (3 credits)
- MASC 3500 Media Design (3 credits)
- MASC 3600 Social Media Marketing (3 credits)
- MASC 3720 Media Writing II (3 credits)
- MASC 3900 Topics in Mass Communication (1-3 credits)
- MASC 4220 Multimedia Marketing (3 credits)

Choose one course from the following:

- ENVR 2925 People of the Environment: Global Pollution Perspective (3 credits)
- ENVR 3040 Environmental Economics (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 3700 Natural Resource Management (3 credits)
- ENVR 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
or INST 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
- ENVR 3720 Food Sovereignty, Health & Indigenous Environments (3 credits)
or INST 3720 Food Sovereignty, Health & Indigenous Environments (3 credits)
- ENVR 3730 Sustainable Communities: Local Indigenous Perspective (3 credits)
or INST 3730 Sustainable Communities: Local Indigenous Perspective (3 credits)
- ENVR 3740 Environment, Wellness & the Sacred Connection to Place (3 credits)
or INST 3740 Environment, Wellness & the Sacred Connection to Place (3 credits)
- ENVR 3750 Sustainable Communities: Global Indigenous Perspective (3 credits)
or INST 3750 Sustainable Communities: Global Indigenous Perspective (3 credits)
- ENVR 3800 Environmental Data Analysis (3 credits)
- ENVR 3840 Wetlands Ecology (3 credits)

- ENVR 4050 Geochemistry (3 credits)
- ENVR 4110 Environmental Chemistry (3 credits)
- ENVR 4200 Wastewater Treatment (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)
- ENVR 4220 Sampling and Analysis (4 credits)
- ENVR 4240 Waste Management (4 credits)
- ENVR 4260 Risk, Resilience and Sustainable Community Development (3 credits)
- ENVR 4400 Environmental Microbiology (3 credits)
- ENVR 4500 Environmental Toxicology (4 credits)
- ENVR 4610 Sustainability: Theory and Practice (4 credits)
- GEOG 3125 Weather and Climate (3 credits)
- GEOG 3226 Cartography (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 3400 Economic Geography (3 credits)
- GEOG 3532 Political Ecology (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)
- GEOL 3120 Soils (4 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
- GEOL 3212 Hydrogeology (3 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)
- GEOL 3500 Topics in Paleontology (3 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)
- GEOL 3700 Environmental Geophysics (3 credits)

Environmental Science *minor*

Required Credits: 18

Required GPA: 2.00

I REQUIRED COURSES

Complete the following courses:

- BIOL 1120 General Biology: Evolution And Ecology (3 credits)
- ENVR 2000 Introduction to Environmental Science (3 credits)
- GEOL 1110 Physical Geology (4 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)

II REQUIRED ELECTIVES

Select at least 5 elective credits from the following:

- BIOL1150
- BIOL 2339 Ethics of Fish and Wildlife Management (3 credits)
- BIOL 2610 General Ecology (3 credits)
- BIOL 3610 Principles of Wildlife Management (3 credits)
- BIOL 3120 Soils (4 credits)
or GEOL 3120 Soils (4 credits)
- BIOL 3361 Limnology (4 credits)
- BIOL 3630 Conservation Biology (3 credits)
or GEOG 3630 Conservation Biology (3 credits)
- BIOL 3723 Ecosystem Ecology (3 credits)
- BIOL 3730 Plant Diversity (4 credits)
- BIOL 4623 Forest Ecology (4 credits)
- ENVR 3700 Natural Resource Management (3 credits)
- ENVR 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
or INST 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
- ENVR 3720 Food Sovereignty, Health & Indigenous Environments (3 credits)

- or INST 3720 Food Sovereignty, Health & Indigenous Environments (3 credits)
- ENVR 3740 Environment, Wellness & the Sacred Connection to Place (3 credits)
or INST 3740 Environment, Wellness & the Sacred Connection to Place (3 credits)
- ENVR 3800 Environmental Data Analysis (3 credits)
- ENVR 3840 Wetlands Ecology (3 credits)
or BIOL 3840 Wetlands Ecology (3 credits)
- ENVR 4110 Environmental Chemistry (3 credits)
- ENVR 4200 Wastewater Treatment (3 credits)
- ENVR 4220 Sampling and Analysis (4 credits)
- ENVR 4500 Environmental Toxicology (4 credits)
- GEOG 3125 Weather and Climate (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 4130 Biogeography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)
- GEOL 1120 Historical Geology (4 credits)
- GEOL 2110 Mineralogy and Petrology (4 credits)
- GEOL 2730 Introduction to Planetary Science (4 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
- GEOL 3212 Hydrogeology (3 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)
- GEOL 3500 Topics in Paleontology (3 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)
- GEOL 3700 Environmental Geophysics (3 credits)
- GEOL 4300 Global Environmental Change (3 credits)
- GEOL 4910 Directed Independent Study (3 credits)
- GEOL 4970 Internship (3 credits)
- GEOL 4980 Research (3 credits)
- SCI 2200 Meteorology (3 credits)

Indigenous Sustainability Studies *minor*

Required Credits: 17

Required GPA: 2.25

I REQUIRED CORE COURSES

Complete the following courses:

- ENVR 2000 Introduction to Environmental Science (3 credits)
- ENVR 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
or INST 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
- ENVR 3880 Environmental Controversies (2 credits)
- INST 1107 Introduction to Turtle Island (3 credits)

II REQUIRED ELECTIVES

Select 6 credits from Indigenous Studies or Environmental Studies or any other relevant course(s) approved in advance by an Advisor from the Center for Sustainability Studies or Indigenous Studies department.

Sustainability *minor*

Required Credits: 18

Required GPA: 2.00

I REQUIRED COURSES

Note: The Sustainability Minor is not available to students pursuing the Indigenous Sustainability Studies major or the Indigenous Sustainability Studies minor.

Complete the following courses:

- ENVR 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
or INST 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
- ENVR 4610 Sustainability: Theory and Practice (4 credits)

II REQUIRED ELECTIVES

A. Physical Systems

Choose one of the following courses:

- BIOL 2610 General Ecology (3 credits)
- BIOL 2925 People of the Environment: Biological Perspectives (3 credits)
- ENVR 2000 Introduction to Environmental Science (3 credits)
- ENVR 2925 People of the Environment: Global Pollution Perspective (3 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOL 2925 People of the Environment: Earth Science Perspective (3 credits)
- GEOL 4300 Global Environmental Change (3 credits)

B. Political-Economic Systems

Choose one of the following courses:

- BUAD 2925 People of the Environment: Business Perspective (3 credits)
- ED 2925 People of the Environment: Education Perspective (3 credits)
- ECON 3040 Environmental Economics (3 credits)
or ENVR 3040 Environmental Economics (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)
or POL 3230 Environmental Politics (3 credits)
- ENVR 4260 Risk, Resilience and Sustainable Community Development (3 credits)
- GEOG 2400 Introduction to Planning (3 credits)
- GEOG 3531 Political Geography (3 credits)
- GEOG 3532 Political Ecology (3 credits)
- GEOG 3570 Public Lands Planning (3 credits)
- GEOG 3870 Planning for Sustainable Cities (3 credits)
- TADT 4385 Sustainability and Emerging Technologies (3 credits)

C. Sociocultural Systems

Choose one of the following courses:

- BIOL 3339 Bioethics (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 3720 Food Sovereignty, Health & Indigenous Environments (3 credits)
or INST 3720 Food Sovereignty, Health & Indigenous Environments (3 credits)
- ENVR 3880 Environmental Controversies (2 credits)
- ENVR 3730 Sustainable Communities: Local Indigenous Perspective (3 credits)
or INST 3730 Sustainable Communities: Local Indigenous Perspective (3 credits)
- ENVR 3740 Environment, Wellness & the Sacred Connection to Place (3 credits)
or INST 3740 Environment, Wellness & the Sacred Connection to Place (3 credits)
- ENVR 3750 Sustainable Communities: Global Indigenous Perspective (3 credits)
or INST 3750 Sustainable Communities: Global Indigenous Perspective (3 credits)
- HST 3650 Environmental History (3 credits)
- INST 1107 Introduction to Turtle Island (3 credits)
- PHIL 2925 People of the Environment: Environmental Ethics Perspective (3 credits)
- PSY 2925 People of the Environment: Psychology Perspective (3 credits)

D. Additional elective credits

Choose a second course from those listed in A, B, and C above, OR one of the following:

Students can also complete a Teaching associate for People and the Environment in any discipline (1-2 credits). See advisor for more information.

- BUAD 3361 Marketing (3 credits)
- BUAD 3450 Indigenous Business (3 credits)
- BUAD 3520 Business Ethics (3 credits)
- BUAD 3567 Consumer Behavior (3 credits)
- BUAD 4354 Organizational Behavior (3 credits)
- BUAD 4509 Diversity and Inclusion (3 credits)
- BUAD 4550 Indigenous Entrepreneurship (3 credits)
- CRJS 1120 Criminal Justice and Society (3 credits)
- CRJS 3310 Introduction to Emergency Management (3 credits)
- CRJS 4477 Restorative Justice (3 credits)
- ED 3257 Introduction to Environmental Education and Interpretation (3 credits)
- ED 3258 Environmental Interpretation (3 credits)
- ED 4777 Field Experiences in Environmental Education and Interpretation (3 credits)
- ENVR 4970 Internship (3 credits)
- NRSG 3150 Integrative and Cultural Nursing (3 credits)
- NRSG 3400 American Indian Health Issues & Nursing (3 credits)
- NRSG 4110 Community Health Nursing (3 credits)
- NRSG 4116 Family and Population Health Nursing (4 credits)
- PHIL 2220 Ethics (3 credits)
- PHIL 2330 Philosophies of Non-Violence (3 credits)
- PSY 3367 Social Psychology (3 credits)
- SOC 3210 Social Movements and Change (3 credits)
- SOC 3310 Community Organizing for Social Change (3 credits)
- SOWK 2110 Intercultural Communication (3 credits)

Water Science *minor*

Required Credits: 18

Required GPA: 2.00

I REQUIRED COURSES

Note: The Water Science minor is not available to students pursuing the Environmental Studies major with the Geohydrology or Environmental Health and Toxicology emphasis.

Choose one of the following courses:

- GEOL 3211 Environmental Hydrology (3 credits)
- GEOL 3212 Hydrogeology (3 credits)

Choose one of the following courses:

- ENVR 4110 Environmental Chemistry (3 credits)
- ENVR 4220 Sampling and Analysis (4 credits)
- ENVR 4500 Environmental Toxicology (4 credits)

II REQUIRED ELECTIVES

Complete additional credits from the following courses not taken above for an overall total of 18 credits:

- BIOL 3361 Limnology (4 credits)
- BIOL 3362 Streams and Rivers (4 credits)
- ENVR 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
or INST 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
- BIOL 3840 Wetlands Ecology (3 credits)
or ENVR 3840 Wetlands Ecology (3 credits)
- BIOL 3844 Wetlands Ecology Lab (1 credit)
- ENVR 4110 Environmental Chemistry (3 credits)
- ENVR 4200 Wastewater Treatment (3 credits)
- ENVR 4220 Sampling and Analysis (4 credits)
- ENVR 4500 Environmental Toxicology (4 credits)
- GEOG 3125 Weather and Climate (3 credits)
- GEOL 1110 Physical Geology (4 credits)
- GEOL 1120 Historical Geology (4 credits)
- GEOL 3120 Soils (4 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
- GEOL 3212 Hydrogeology (3 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)
- GEOL 3700 Environmental Geophysics (3 credits)
- GEOL 4300 Global Environmental Change (3 credits)
- GEOL 4910 Directed Independent Study (3 credits)
- GEOL 4970 Internship (3 credits)
or ENVR 4970 Internship (3 credits)

Environmental Studies Courses

ENVR 2000 Introduction to Environmental Science (3 credits)

An introduction to environmental science emphasizing biological, physical-chemical and cross-cultural environmental social principles underlying major world environmental, political and economic issues; examination of the impacts of human activities and technology on global environmental and socio-economic stability; application of critical thinking and working with graphic skills and lab-like data analysis related to global environmental, biological, physical-chemical, cultural, and socio-economic topics. Liberal Education Goal Areas 3 & 10.

ENVR 2150 Wilderness Ethics: Projects for Environmental Field Programs (1-3 credits)

Major schools of thought on the meaning of wilderness, its importance to modern society, and implications for responsible citizenship. Notions of wilderness and wilderness ethics advanced by major authors, past and present. Wilderness policy in the United States and recommendations for revisions to the Wilderness Act. Relation of sustainability to wilderness protection and the benefits provided to society. Experiential learning by visiting key areas that meet certain criteria for wilderness and relation of these experiences to personal values, including ethical behavior in "wilderness" settings. Liberal Education Goal Area 9.

ENVR 2925 People of the Environment: Global Pollution Perspective (3 credits)

This course is a section of the interdisciplinary environmental issues course, People of the Environment. The focus of this course is to explore the scientific aspects of global pollution, including causes, effects, and solutions. Liberal Education Goal Area 10.

ENVR 3040 Environmental Economics (3 credits)

Examines environmental problems as consequence of market's failure to accurately value environmental resources. Alternative private and public policies are examined in terms of their effectiveness in improving the efficiency and equity with which water, air, and other resources are allocated. Prerequisite: ECON 2000 or consent of instructor. (Also offered under ECON 3040.)

ENVR 3300 Environmental Management and Safety (3 credits)

Helps students pursuing environmental studies to develop environmental management skills required in both manufacturing and non-manufacturing businesses. Safe handling, transport, and storage of hazardous materials with respect to their physical and chemical nature, and application of regulatory requirements relevant to specific business and hazardous materials involved. Prerequisites: CHEM 1112 or CHEM 2212 or ENVR 2000 or GEOL 1110 or consent of instructor. May not be offered every year.

ENVR 3600 Environmental Justice and Sustainability (3 credits)

The ethical and moral dimensions of environmental choices. The legal, philosophical, political, and economic underpinnings of various theories of justice. A major focus is the inequitable distribution of environmental risks and the implications of policies that attempt to combat these risks. Prerequisite: ENVR 2000 or consent of instructor.

ENVR 3700 Natural Resource Management (3 credits)

This class offers an interdisciplinary introduction to the principles of natural resource management highlighting the biological and physical science aspects of natural resource management at local, national, and global scales. Topics covered may include resource management of soil, water, forests, rangelands, wetlands, waterways, and wildlife. This is an intermediate-level course designed to introduce key concepts and topical areas in natural resource management. A specific focus for the course will be the application of adaptive natural resource management to key Minnesota resources at multiple levels of government (local, county, state, federal, and tribal) over time. Prerequisite(s): ENVR 2000 or consent of instructor.

ENVR 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)

Indigenous cultures refer to pre-colonial societies who today represent a minority, non-dominant group in the societies presently residing in territories these cultures once developed. Throughout their history, Indigenous people have developed their own body of environmental knowledge that they have passed on, generation to generation. This course will provide students with a global perspective of Indigenous environmental knowledge and how this knowledge has affected the relationship of the Indigenous peoples with the natural world and its resources. Students will also investigate present-day political, economic, social, and technological issues related to incorporating Indigenous environmental knowledge into sustainability efforts. Liberal Education Goal Areas 7 & 8. (Also offered under INST 3710)

ENVR 3720 Food Sovereignty, Health & Indigenous Environments (3 credits)

This course is designed to help students understand the interconnections of food sovereignty, health and environmental sustainability. Students will explore why it is not only important for people to control the way their food is produced, distributed, and consumed but why the food should be appropriate to the cultural background of the people consuming it. Students will learn the critical connections between food and health with an exploration of those influences within the context of Indigenous worldviews and ways of knowing. This is an experiential learning course -- learning through interaction, projects, and reflection. This course may be suitable as an elective in Indigenous Studies and Environmental Studies, Health and Nursing degree programs. Liberal Education Goal Areas 7 & 8. (Also offered under INST 3720)

ENVR 3730 Sustainable Communities: Local Indigenous Perspective (3 credits)

Human societies all across the globe have developed rich sets of experiences and explanations relating to the sustainable communities they live, work and play in. This course is designed to introduce students to the basic concepts of these sustainable communities. Students will learn how these communities function, their challenges, and the critical networks that exist with the environment. This class will explore the role of Indigenous knowledge and traditional ways of learning, as well as scientific knowledge in maintaining the sustainability of a community. This is an experiential learning course -- learning through interaction, projects, and reflection. Liberal Education Goal Areas 5 & 7. (Also offered under INST 3730)

ENVR 3740 Environment, Wellness & the Sacred Connection to Place (3 credits)

In Indigenous communities, there is a deep and lasting connection to place. Today, there exists overwhelming evidence that connection to place offers important elements for overall individual wellness. However, many communities face challenges in their environments that are detrimental to their health and well-being. To support these communities, there is a need to reconnect them with ways to restore the sustainability of their environment and connection to place. In this course, students will learn the critical connections between the environment and health and will explore the influences of connection to place within the context of Indigenous worldviews and ways of knowing. This is an experiential learning course -- learning through interaction, projects, and reflection. Liberal Education Goal Areas 5 & 7. (Also offered under INST 3740)

ENVR 3750 Sustainable Communities: Global Indigenous Perspective (3 credits)

Throughout their history, Indigenous people have developed their own body of knowledge on global sustainability that they have passed on, generation to generation. This course will provide students with a large picture perspective of global Indigenous sustainability knowledge and viewpoints and how this perspective continues to affect the relationship of the Indigenous peoples with the natural world and its resources. Students will also investigate present-day global political, economic, social, and technological issues related to incorporating Indigenous views into sustainability efforts across the continents. Liberal Education Goal Areas 7 & 8. (Also offered under INST 3750)

ENVR 3800 Environmental Data Analysis (3 credits)

The aim of this course is to expose students to both introductory and advanced analytical methods for environmental applications. The class will provide a primer on introductory inferential statistics (sampling, probability, central tendencies, spread, t- tests and ANOVA) and work towards more advanced analytical applications which are geared towards research questions in Environmental Studies, Geology, and Geography. These techniques include multiple regression, logistic regression, multi-dimensional scaling, regression trees, cluster analysis, survival analysis and basic time series analysis. This class will focus on learning both the theoretical background and application of these methods and discuss the ethical and contextual issues that surround the use of statistical analysis in environmental research.

ENVR 3840 Wetlands Ecology (3 credits)

Survey course develops a basic understanding of the terminology, classification, ecology, values, and conservation of wetlands. Covers wetland systems from around the world, with emphasis on wetlands in North America. Prerequisites: BIOL 1400 and BIOL 1500, or consent of instructor.

ENVR 3880 Environmental Controversies (2 credits)

Faculty and student presentations followed by group discussion of classic and current problems, and governmental policies/regulations. Prerequisite: ENVR 2000 or consent of instructor.

ENVR 4050 Geochemistry (3 credits)

Study of processes in the lithosphere, hydrosphere, and atmosphere; cycling of the elements; weathering; microbe-mineral interactions; nanoparticles; microscopic imaging. Prerequisites: CHEM 1112 or CHEM 2212 or ENVR 2000 or GEOL 1110 or consent of instructor.

ENVR 4110 Environmental Chemistry (3 credits)

Intensive study of biogeochemical cycles of natural and man-made pollutants including transformations, transport, fate and persistence mechanisms. Environmental effects, long-term impacts, and methods of treatment/prevention are discussed. Prerequisites: CHEM 1112 or CHEM 2212 or consent of instructor.

ENVR 4200 Wastewater Treatment (3 credits)

Introduction to the operation of the principal methods and treatment processes of municipal and industrial wastewaters, and for the disposal of treated effluent and sludges, and other solid materials. Integration of fundamental principles of science with different aspects of sanitary technology. Prerequisites: BIOL 1500, CHEM 1112 or CHEM 2212, MATH 1170, or consent of instructor. BIOL 1500 is not required for Chemistry majors.

ENVR 4210 Environmental Law and Policy (3 credits)

Overview of environmental laws, regulations, and policies. Prerequisite: Consent of instructor.

ENVR 4220 Sampling and Analysis (4 credits)

Methods of sampling and analysis of air, water, soil and other environmental compartments will be described in lecture and experienced in laboratory session. The focus is on regulations and prescribed protocols for environmental field and lab work. Lecture and laboratory. Prerequisites: CHEM 1112 or CHEM 2212 or ENVR 2000 or GEOL 1110 or consent of instructor.

ENVR 4240 Waste Management (4 credits)

An overview of the solid and hazardous waste situation at the local, state, national and international levels. The focus on management will include a systems approach to prevention, and remediation of wastes. Prerequisites: CHEM 1112 or CHEM 2212 or ENVR 2000 or GEOL 1110 or consent of instructor.

ENVR 4260 Risk, Resilience and Sustainable Community Development (3 credits)

We are experiencing dramatic, rapid, unexpected environmental changes due to human caused global climate change, stresses on natural resources as well as our ability to manage our waste generation. In this course, we will explore risk and resilience from a community development perspective. How can we work together in community to survive disruption and anticipate, adapt, and flourish in the face of change. Using Bemidji State University and the greater Bemidji area as a case study we will explore key quantitative as well as qualitative indicators of resilience such as energy, housing, transportation, water, materials & waste, health & wellness, and economic opportunity. Students will be asked to produce quantitative and qualitative assessments of the resilience in our BSU-Bemidji community and actively engage with citizens and working professionals to advance suggestions on how to strengthen our campus and community's resilience. Prerequisite(s): ENVR 2000 or consent of instructor

ENVR 4400 Environmental Microbiology (3 credits)

Fundamental aspects of microbiology as related to land production, environmental pollution and water quality control processes. The role of major groups of microbes as pollutants, as purifying agents, and as agents of biochemical changes, and ecological functions and importance of each group in the environment. Prerequisites: BIOL 1110 or BIOL 1120 or CHEM 1112 or CHEM 2212 or consent of instructor.

ENVR 4500 Environmental Toxicology (4 credits)

An overview of major environmental pollutants, their transport, fate and toxicology. Pollutant effects studied from practical and theoretical focus on stress at various levels of biological organization. Prerequisites: BIOL 1500, BIOL 2610, and CHEM 1112 or CHEM 2212, or consent of instructor.

ENVR 4610 Sustainability: Theory and Practice (4 credits)

Becoming agents of positive change in our communities requires building many different skill sets. This course will build core competencies of community leadership and focus on sustainability issues in our community. We will integrate theories, principles and practices of sustainability throughout the course and explore how various entities such as the University, the City of Bemidji, local tribes, companies, non-profits and individuals approach sustainability actions and choices. We will explore issues such as energy, water, waste, food and transportation as well as diversity, equity and inclusion in decision making. Students will be asked to identify a specific problem facing our community and utilize Problem and Project Based Learning (PBL) techniques to directly engage with these local issues, connect with the stakeholders involved and work together to propose potential solutions. Prerequisite(s): ENVR 2000 or consent of instructor.

ENVR 4880 Senior Seminar I (1 credit)

Senior level seminar in which students explore the environmental job market and graduate school opportunities. Prerequisites: Senior status and ENVR 3880.

ENVR 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

ENVR 4970 Internship (3 credits)

Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

ENVR 4990 Thesis (3 credits)

A thesis written by the student that reports extensive original research carried out by the student and demonstrates appropriate methodology and scholarship.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Equity Studies

Programs

- Equity *cert*

Equity *cert*

Required Credits: 15

Required GPA: 2.00

I REQUIRED COURSES

Complete the following courses:

Note: EQTY 2500 and EQTY 4500 must be taken at BSU.

- EQTY 2500 Introduction to Equity (3 credits)
- EQTY 4500 Applications of Equity (3 credits)

II REQUIRED ELECTIVES

Select three courses from the following list:

Courses should be selected in consultation with the Equity Certificate Director, based upon a student's professional goals/experience. Student must have already met the pre-requisites of these courses with prior coursework. Enrollment in the Equity Certificate program will not allow students to bypass pre-requisites.

- ANTH 2610 Women around the World (3 credits)
- COMM 3120 Communication in a Diverse Society (3 credits)
- COMM 3150 Gender Communication (3 credits)
- COMM 3500 Communication and Conflict (3 credits)
- GER 4467 Studies in the German Language and Culture (1-3 credits)
- HST 2500 Native Americans and the United States, 1600s-Present (3 credits)
- HST 2600 Topics in History (3 credits)
- HST 2660 Women and History (3 credits)
- HST 2667 Men and Women: Gender in America (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)
- INST 2201 Creation to Contact (3 credits)
- INST 2202 Survivance Since Contact (3 credits)
- INST 3170 Indigenous Education (3 credits)
- INST 3307 Ojibwe History (3 credits)
- INST 3317 Tribal Government and Leadership (3 credits)
- INST 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
- INST 3720 Food Sovereignty, Health & Indigenous Environments (3 credits)
- INST 3730 Sustainable Communities: Local Indigenous Perspective (3 credits)
- INST 3740 Environment, Wellness & the Sacred Connection to Place (3 credits)
- INST 3750 Sustainable Communities: Global Indigenous Perspective (3

credits)

- INST 3888 Indigenous Women Writers (3 credits)
- INST 4000 Nation Building and Leadership (3 credits)
- INST 4207 Indigenous Lifeways (3 credits)
- INST 4418 Federal Indian Law (3 credits)
- INST 4900 Social Justice (3 credits)
- OJIB 1100 Ojibwe Culture (4 credits)
- PSY 2200 Human Sexuality (4 credits)
- PSY 3210 Death and Culture (3 credits)
- PSY 3387 Topics in Psychology (1-4 credits)
- PSY 3490 Disability and Ableism (3 credits)
- PSY 3500 Psychology of Aging (4 credits)
- PSY 4242 Psychology of Women and Gender (3 credits)
- PSY 4490 Stereotyping, Prejudice, and Discrimination (3 credits)
- PSY 4587 Advanced Topics in Psychology (2-4 credits)
- PSY 4588 Multicultural Psychology (4 credits)
- SOC 2230 Race and Ethnic Relations (3 credits)
- SOC 2240 Men, Women, and Society: A Sociological Interpretation (3 credits)
- SOC 3210 Social Movements and Change (3 credits)
- SOC 3320 Social Class and Inequality (3 credits)
- SOC 4270 Intersectionality (3 credits)
- SPAN 1100 Hispanic Culture And Spanish Language (1-3 credits)
- SPAN 3317 Topics in Latin America (3 credits)
- SPAN 3317 Topics in Latin America (3 credits)
- SPAN 3320 Latin America and Spain Through Cinema (1-3 credits)
- SPAN 3830 Voices of Women in the Spanish-speaking World (3 credits)
- SPAN 3850 Art and Conflict in Spain and Latin America (3 credits)
- SPAN 4421 Women in Hispanic Literature and Culture (3 credits)
- SPAN 4422 Hispanic Literature and Culture in the United States (3 credits)

Equity Studies Courses

EQTY 2500 Introduction to Equity (3 credits)

We will critically examine issues such as race, gender, sexuality, social class, political and religious affiliation, dis/ability, geographical location, etc., in order to better understand the changing nature of society in the United States and begin to chart a trajectory that not only identifies opportunities and barriers for ourselves but allows us to develop empathetic understanding of how these factors affect others in society. As the introductory course in the Equity Certificate, 'Intro to Equity' will introduce students to concepts that will clarify important theoretical concepts in understanding Equity and begin to apply these ideas to the analysis of their own experiences, and in their own professional fields. Liberal Education Goal Area(s) 5 & 7.

EQTY 4500 Applications of Equity (3 credits)

As a "Capstone" course in BSU's Equity Certificate program, Applications of Equity will focus on the individual explorations of equity each student has undertaken. We will continue to critically examine issues such as race, gender, sexuality, social class, political and religious affiliation, dis/ability, and geographical location in greater depth, to deepen our understanding of the changing nature of society in the United States. Students will relate the insights they have gained through their experiences in the program, so the specific topics covered will vary with the focus areas of participants. Prerequisite(s): EQTY 2500.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Exercise Science

The vision of the Department of Human Performance, Sport, and Health is “preparing and empowering future professionals to promote physical activity, health, and sport.”

The mission of the Department of Human Performance, Sport, and Health is “to provide students with opportunities to excel through purposeful experiences resulting in skills, including leadership, communication, use of technology, and appreciation of individual differences. Through our programs, students develop an appreciation of the contributions of physical activity, wellness, and sport to society.”

The Exercise Science program prepares students for graduate work in exercise science–related areas, as well as in areas such as physical therapy, occupational therapy, medicine, chiropractic, and other allied health fields. Students entering the job market with an undergraduate degree in exercise science generally work with corporate and community fitness programs, health clubs, and similar fitness-related industries. The program may also be chosen by students who are interested in coaching but do not wish to teach in public elementary or secondary schools.

The Department of Human Performance, Sport, and Health offers minors and a coaching specialist program that provide students with the skills and expertise to work in health clubs, coach teams, or teach special needs students. Also, in addition to offering a variety of activities classes that enhance students’ liberal education, the department works with Campus Recreation and Athletics to offer a broad range of learning experiences.

Programs

- Exercise Science, B.S. (Fitness Leadership and Promotion Emphasis) *major*
- Exercise Science, B.S. (Medical Fitness Emphasis) *major*
- Human Performance Minor *minor*

Career Directions

Aquatic Specialist
Athletic Coaching
Industrial Fitness
Personal Trainer
Strength and Conditioning Specialist
Also: Graduate Study and Professional Programs

Preparation

Recommended High School Courses

Biology
Chemistry
Coaching
Exercise Science
Health
Life Sciences
Physical Education
Sports
Wellness

Exercise Science, B.S. *major* Fitness Leadership and Promotion Emphasis

Required Credits: 67
Required GPA: 2.25

I REQUIRED COURSES

Complete the following courses:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 3250 Human Anatomy (4 credits)
- HLTH 2100 First Aid and CPR/AED (1 credit)
- HLTH 3300 Nutrition (3 credits)
- PHED 1240 Skills for Life: Techniques of Neuromuscular Relaxation (1 credit)
- PHED 2100 Foundations of Physical Education, Exercise Science, and Sport (3 credits)
- PHED 3100 Motor Development (2 credits)
- PHED 3110 Motor Learning (2 credits)
- PHED 3120 Psychology of Sport (2 credits)
- PHED 3190 Athletic Training (2 credits)
- PHED 3200 Introduction to Sport Biomechanics (3 credits)
- PHED 3300 Physiology of Exercise and Nutrition (3 credits)
- PHED 4160 Advanced Fitness Assessment & Prescription-Aerobic (3

credits)

- PHED 4170 Advanced Principles for Strength and Speed Training Exercise (3 credits)
- PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)
- PHED 4920 DGS: (1 credit)

Select 1 course:

- CHEM 1111 General Chemistry I (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)

Select 1 course:

- PHYS 1101 General Physics I (4 credits)
- PHYS 2101 Physics I (4 credits)

II REQUIRED EMPHASIS

B. Fitness Leadership and Promotion Emphasis

- BUAD 3361 Marketing (3 credits)
or PHED 3600 Sport Marketing (3 credits)
- HLTH 3400 Health and Drugs in Society (2 credits)
- HLTH 4410 Health Programming (3 credits)
- PHED 3449 Socio-Culture and Ethical Issues in Sport (3 credits)

Select 1 course:

- PHED 4409 Sport Business Management (3 credits)
- PHED 3509 Sport Event Management (2 credits)
- PHED 3519 Sport Facility Management (2 credits)

III EMPHASIS ELECTIVES

Select 2 courses (4-10 credits) from the following with consultation with your advisor.

- BIOL 1300 Medical Terminology (2 credits)
- BIOL 1500 Diversity of Life (4 credits)
- BIOL 3260 Human Physiology (4 credits)
- CHEM 1112 General Chemistry II (4 credits)
or CHEM 2212 Principles of Chemistry II (4 credits)
- HLTH 3500 Community Health (3 credits)
- HLTH 3710 Disease Prevention and Epidemiology (3 credits)
- PHYS 1102 General Physics II (4 credits)
or PHYS 2102 Physics II (4 credits)
- PSY 1100 Introductory Psychology (4 credits)
- PSY 2217 Abnormal Psychology (4 credits)
- PSY 3237 Lifespan Development (4 credits)
- SOWK3830
- NRSRG 3000 or higher (2-6 credits):

IV REQUIRED PRACTICAL EXPERIENCE

Complete 2-6 credits of the following course:

- PHED 4972 Internship: Exercise Science (2-6 credits)

SUGGESTED SEMESTER SCHEDULE FOR EXERCISE SCIENCE MAJOR, B.S.

Students are encouraged to take the required Exercise Science, B.S. courses in approximate numerical order. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions. Students are encouraged to consult the course descriptions for prerequisites.

The following Liberal Education courses are recommended for students majoring in Exercise Science: PSY 1100 Introductory Psychology, SOC 1104 Introduction to Sociology, and COMM 1090 Interpersonal Communication (or COMM 1100 Public Speaking).

Freshman

- BIOL 1400 Cellular Principles (4 credits)
- CHEM 1111 General Chemistry I (4 credits)
or CHEM 2211 Principles of Chemistry I (4 credits)
- PHED 2100 Foundations of Physical Education, Exercise Science, and Sport (3 credits)
- PSY 1100 Introductory Psychology (4 credits)
- SOC 1104 Society and Social Issues (3 credits)
- COMM 1090 Interpersonal Communication (3 credits)
or COMM 1100 Public Speaking (3 credits)
- Liberal Education requirements

Sophomore

- BIOL 3250 Human Anatomy (4 credits)
- HLTH 2100 First Aid and CPR/AED (1 credit)
- PHED 1240 Skills for Life: Techniques of Neuromuscular Relaxation (1 credit)
- PHED 3100 Motor Development (2 credits)
- PHED 3110 Motor Learning (2 credits)

- PHED 3190 Athletic Training (2 credits)
- PHYS 1101 General Physics I (4 credits)
or PHYS 2101 Physics I (4 credits)
- Liberal Education requirements

Junior

- HLTH 3300 Nutrition (3 credits)
- PHED 3120 Psychology of Sport (2 credits)
- PHED 3200 Introduction to Sport Biomechanics (3 credits)
- PHED 3300 Physiology of Exercise and Nutrition (3 credits)
- PHED 4160 Advanced Fitness Assessment & Prescription-Aerobic (3 credits)
- PHED 4170 Advanced Principles for Strength and Speed Training Exercise (3 credits)
- Exercise Science Courses in Emphasis
- Exercise Science Electives

Senior

- PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)
- PHED 4920 DGS: (1 credit)
- PHED 4972 Internship: Exercise Science (2-6 credits)
- Exercise Science Courses in Emphasis
- Exercise Science Electives

Exercise Science, B.S. *major* Medical Fitness Emphasis

Required Credits: 67

Required GPA: 2.25

I REQUIRED COURSES

Complete the following courses:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 3250 Human Anatomy (4 credits)
- HLTH 2100 First Aid and CPR/AED (1 credit)
- HLTH 3300 Nutrition (3 credits)
- PHED 1240 Skills for Life: Techniques of Neuromuscular Relaxation (1 credit)
- PHED 2100 Foundations of Physical Education, Exercise Science, and Sport (3 credits)
- PHED 3100 Motor Development (2 credits)
- PHED 3110 Motor Learning (2 credits)
- PHED 3120 Psychology of Sport (2 credits)
- PHED 3190 Athletic Training (2 credits)
- PHED 3200 Introduction to Sport Biomechanics (3 credits)
- PHED 3300 Physiology of Exercise and Nutrition (3 credits)
- PHED 4160 Advanced Fitness Assessment & Prescription-Aerobic (3 credits)
- PHED 4170 Advanced Principles for Strength and Speed Training Exercise (3 credits)
- PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)
- PHED 4920 DGS: (1 credit)

Select 1 course:

- CHEM 1111 General Chemistry I (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)

Select 1 course:

- PHYS 1101 General Physics I (4 credits)
- PHYS 2101 Physics I (4 credits)

II REQUIRED EMPHASIS

A. Medical Fitness Emphasis

- BIOL 3260 Human Physiology (4 credits)
- HLTH 3710 Disease Prevention and Epidemiology (3 credits)
- PSY 3401 Basic Statistics for Research (4 credits)
or STAT 3660 Statistics for the Health Sciences (3 credits)

III EMPHASIS ELECTIVES

Select 3 courses (7-15 credits) from the following with consultation with your advisor:

Note: BIOL 3260 and HLTH 3710 may not be used as an elective with the Medical Fitness emphasis.

- BIOL 1300 Medical Terminology (2 credits)
- BIOL 1500 Diversity of Life (4 credits)
- CHEM 1112 General Chemistry II (4 credits)
or CHEM 2212 Principles of Chemistry II (4 credits)
- HLTH 3500 Community Health (3 credits)
- PHYS 1102 General Physics II (4 credits)
or PHYS 2102 Physics II (4 credits)
- PSY 1100 Introductory Psychology (4 credits)
- PSY 2217 Abnormal Psychology (4 credits)
- PSY 3237 Lifespan Development (4 credits)
- SOWK3830
- Nursing 3000 or higher (2-6 credits):

IV REQUIRED PRACTICAL EXPERIENCE

Complete 2-6 credits of the following course:

- PHED 4972 Internship: Exercise Science (2-6 credits)

Program Learning Outcomes | Exercise Science, B.S.

1. Demonstrates Scientific Knowledge:

Students will demonstrate a basic knowledge of:

1. human anatomy and physiology
2. exercise physiology
3. biomechanics
4. nutrition
5. motor learning and development
6. injury care and prevention
7. first aid and emergency procedures

2. Demonstrate ability to prescribe exercise:

Students will demonstrate:

1. skills for physiological testing including evaluation and interpretation of results

2. the ability to prescribe individual exercise programs with modifications in type, intensity, duration, frequency, and progression for special populations

3. the ability to lead exercises in aerobic exercise, strength conditioning and joint flexibility

3. Demonstrate knowledge of behavior modification/change, educational resources, and healthy lifestyle behaviors:

Students will demonstrate knowledge of:

1. counseling techniques to facilitate behavior change and motivation
2. mental health's role in exercise and rehabilitation
3. client/patient/athlete education

4. Demonstrate Knowledge of Administrative Tasks:

Students will demonstrate:

1. knowledge of trends in fitness programming and health promotion
2. the ability to use common fitness assessment equipment and demonstrate knowledge of risk management
3. knowledge of how to organize records and provide a safe environment for exercise

5. Demonstrate Professional Working Skills:

Students will demonstrate:

1. the ability to communicate in writing and speaking
2. knowledge of techniques for motivating, improving program adherence and retention
3. the ability to understand and conduct scientific research

6. Identifies Professional Development:

Students will:

1. demonstrate knowledge of leading professional organizations in exercise science, wellness, sport and sports medicine and relevant publications and continuing education opportunities
2. identify a professional development strategy, including certifications to improve employability
3. have at least 60 hours of practical experience in research or at a worksite

Human Performance Minor *minor*

Required Credits: 21

Required GPA: 2.00

I REQUIRED COURSES

Complete the following courses:

- BIOL 1110 Human Biology (4 credits)

or BIOL 1400 Cellular Principles (4 credits)

- HLTH 2100 First Aid and CPR/AED (1 credit)
- PHED 2100 Foundations of Physical Education, Exercise Science, and Sport (3 credits)
- PHED 3300 Physiology of Exercise and Nutrition (3 credits)
- PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)

Complete 1-3 credits of the following course:

- PHED 4975 Internship: Human Performance (1-3 credits)

REQUIRED OPTION

Select one of the following options (Physical Education and Exercise Science majors may not double count courses in either option.)

II REQUIRED OPTION

Option A. Pedagogy

Select 3 of the following courses:

- PHED 2640 Water Safety Instructor (3 credits)
- PHED 3100 Motor Development (2 credits)
- PHED 3110 Motor Learning (2 credits)
- PHED 3504 Teaching Rhythms and Dance (2 credits)
- PHED 3505 Teaching Elementary Physical Education (2 credits)
- PHED 3604 Teaching Team Sports (2 credits)
- PHED 3605 Teaching Individual Sports (2 credits)
- PHED 3607 Teaching Fitness (2 credits)

Option B. Fitness and Training

Select 1 of the following:

- PHED 4160 Advanced Fitness Assessment & Prescription-Aerobic (3 credits)
- PHED 4170 Advanced Principles for Strength and Speed Training Exercise (3 credits)

Select an additional 2 of the following courses:

Note: PHED 4160 and PHED 4170 cannot be double counted under Option B.

- HLTH 3300 Nutrition (3 credits)
- PHED 1240 Skills for Life: Techniques of Neuromuscular Relaxation (1 credit)
- PHED 3100 Motor Development (2 credits)
- PHED 3200 Introduction to Sport Biomechanics (3 credits)
- PHED 3504 Teaching Rhythms and Dance (2 credits)
- PHED 4160 Advanced Fitness Assessment & Prescription-Aerobic (3 credits)
- PHED 4170 Advanced Principles for Strength and Speed Training Exercise (3 credits)

Health Courses

HLTH 2100 First Aid and CPR/AED (1 credit)

An introduction to emergency action principles, first aid, and CPR/AED (automated external defibrillation) for lay responders. American Red Cross Adult and Pediatric First Aid/CPR/AED (valid 2-years) certificate may be earned. Recommended as a basic course for professional educators.

HLTH 2200 First Aid and CPR/AED Instructor (1 credit)

Designed to prepare First Aid and CPR/AED students to become instructors for Lay Responder First Aid and CPR/AED. American Red Cross Instructors Certificate may be earned. Recommended as an advanced course for professional educators. Law enforcement personnel are also encouraged to consider the course. Prerequisite: HLTH 2100 or equivalent.

HLTH 2800 Multicultural Health in America (2 credits)

Examines the health issues and problems faced by ethnic minority populations in America, specifically by African Americans, American Indians, Hispanic Americans, and Americans of Asian and Pacific Island descent. Since a disproportionate number of health problems confront these minority groups, this course (a) examines specific health problems, (b) evaluates what is known and unknown about these specific problems, and (c) re-evaluates the current health care system in America to resolve these special problems in health care delivery. Liberal Education Goal Area 7.

HLTH 2925 People of the Environment: A Health Perspective (3 credits)

This course builds upon the principles discussed in the large group, focusing greater attention on health issues related to the environment, including the food supply, water quality, air quality, and other environmental health risks. These are discussed in the context of common diseases such as cancers, asthma, communicable diseases, and other health problems associated with the environment. Liberal Education Goal Area 10.

HLTH 3150 Theoretical and Ethical Foundations of Health (3 credits)

Provides entry level health education and community health students with the theoretical and ethical foundations of health. Also examines health's history, philosophy, settings, literature, and credentialing.

HLTH 3200 Personal and Consumer Health (3 credits)

A comprehensive study of personal health identifying ill-advised health behaviors and recommending strategies for positive behavioral change. From an opportunity cost perspective, personal health care options, products and services in the marketplace will be examined. Opportunities to network with local, state and federal consumer health agencies will be provided. Prerequisite or Co-requisite: For Community Health and Health Education majors and Health Promotion and Education minors: HLTH 3150; Non-majors/minor may select this class with consent of instructor.

HLTH 3300 Nutrition (3 credits)

Fundamentals of food utilization in the body and diet planning including discussion of the relationship between dietary habits and disease. Also included are discussions of current trends in nutrition, dietary changes for special conditions such as pregnancy, infancy, teenagers, aging, athletes, and cultural differences in dietary practices.

HLTH 3400 Health and Drugs in Society (2 credits)

A study of chemical use and abuse as related to personal and community health. Various drugs and drug-taking behaviors will be defined and discussed. Historical, cultural, educational, and legal perspectives will be examined. Multi-faceted prevention and rehabilitation strategies promoting wellness will be discussed. Prerequisites: Sophomore status and a declared major area of study that requires this course.

HLTH 3500 Community Health (3 credits)

Comprehensive study of the community health challenges confronting the citizenry of the United States of America. Examines the roles of federal, state, and local governments, as well as private agencies, in individual and aggregate health care. Provides opportunities for community health networking. Prerequisites: For health majors/minors: HLTH 3150 and HLTH 3200; For non-majors/minors: Consent of instructor.

HLTH 3600 Emergency Response (3 credits)

Designed to provide advanced students the knowledge, skills and training to administer initial first aid in emergencies. American Red Cross advanced certificate may be earned. Ideal course for law enforcement personnel, athletic trainers, and juvenile officers. Prerequisite: HLTH 2100 or equivalent.

HLTH 3710 Disease Prevention and Epidemiology (3 credits)

An introduction to disease prevention, pathophysiology, and treatment of the most common communicable and chronic diseases in human populations. Focuses on the history and principles of disease occurrence in the context of environment and lifestyle choice. Students specifically examine risk factor management and the epidemiological data supporting the influence of physical activity in chronic disease prevention and management. Additionally, learners gain an introductory knowledge of epidemiology and biostatistics enabling them to successfully critique the scientific and educational literature. Prerequisites: For Community Health and Health Education majors: BIOL 1110, HLTH 3150, HLTH 3200, and HLTH 3500; For non-majors and the Health Promotion and Education minor: Consent of instructor.

HLTH 3970 Internship: Field Experience in Community Health (1-3 credits)

When taken as Field Experience in Community Health the following description applies: Community health majors will gain a 30-90-hour experience in a local health facility in preparation for the application of previous course work. Prerequisites: HLTH 3150 and HLTH 3200.

HLTH 4100 Teaching Elementary School Health (2 credits)

An integrated approach to the organization, content, goals, objectives, curriculum, methods and techniques of teaching health at the elementary level. Coordinating services and establishing collaboration will be incorporated. Elementary school state and national guidelines and mandates will be discussed. Teaching opportunities will be provided. Prerequisite: entrance into the teacher education program.

HLTH 4206 Secondary School Health (2 credits)

An integrated approach to the organization, content, goals, objectives, curriculum, methods, and techniques of teaching health at the secondary school level. Incorporates coordinating services and establishing collaboration. Secondary school state and national guidelines and mandates are discussed. Prerequisite: Entrance into the teacher education program or consent of instructor.

HLTH 4410 Health Programming (3 credits)

A comprehensive study of the process of identifying health problems, establishing health programming, and promoting, implementing, and evaluating the program. Also examines vision and mission statements, along with goals, objectives, timetables, and interpretation of results. This course parallels CHES criteria and utilizes a local community health organization to integrate student involvement. Prerequisites: For health majors/minors: HLTH 3150, HLTH 3200, HLTH 3500, HLTH 3710; For non-majors/minors: Consent of instructor.

HLTH 4870 Practicum in Health Teaching (1 credit)

A 30-hour practicum in which students have the opportunity to teach health lessons, assist health teachers deliver health instruction, observe health teachers deliver health instruction, read to students, listen to students read, tutor students, and perform other duties as required by the Professional Educator Licensing and Standards Board (PELSB) and requested by the health teacher. Prerequisite(s): Entrance into the teacher education program, or consent of instructor.

HLTH 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

HLTH 4920 Directed Group Study: Health Seminar (1 credit)

When taken as Health Seminar the following description applies: Intended as a capstone course to prepare the health major for employment, internship/job procurement, or continuing education in a graduate program. This course integrates discussion of strategies for professional development, as well as providing quality written composition on employment/graduate program goals and objectives. Prerequisite: Senior status or consent of instructor.

HLTH 4970 Internship (1-12 credits)

When taken for the Community Health major the following description applies: Students will gain field experience in a health-related facility relevant to specific career goals. Opportunities will exist for the student to apply the different concepts and theories from course work directly in the work setting through observation, planning, decision-making, committee participation, leadership, operation management, and individual and group projects. Required: A minimum of 30 practicum hours per credit. Prerequisite: completion of all health course work and degree requirements.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
 1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
 1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
 1940, 2940, 3940, 4940 IN-SERVICE COURSE
 1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
 1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
 1970, 2970, 3970, 4970 INTERNSHIP
 1980, 2980, 3980, 4980 RESEARCH
 1990, 2990, 3990, 4990 THESIS

Physical Education Courses**PHED 1114 Skills For Life: Beginning Swimming (1 credit)**

An activity course for non-swimmers. Emphasis will be on personal adjustment to the water, basic strokes, and fundamentals of water safety. Liberal Education Goal Area 11.

PHED 1115 Intermediate Swimming (1 credit)

An activity course for swimmers who have the ability to jump into deep water, swim a front stroke 25 yards, and swim on the back 25 yards. Emphasis will be on five basic strokes, elementary diving, and related aquatic skills. Course may lead to American Red Cross Learn to Swim Certification Level 4 or 5. May not be offered every year.

PHED 1116 Advanced Swimming (1 credit)

An activity course for swimmers who can swim in satisfactory form 25 yards of each of the five basic strokes (back crawl, breaststroke, front crawl, elementary backstroke, sidestroke). Emphasis will be on developing and refining thirteen strokes, diving and other advanced aquatic skills. Course leads to American Red Cross Learn to Swim Certification Level 6 - Fitness Swimmer. This course is preparatory for the Water Safety Instructor course.

PHED 1120 Introduction to Sea Kayaking (1 credit)

An activity course that introduces the basics of kayak history, design, skills, and equipment. Taught through lecture, demonstration, and both on- and off-the-water skills practice.

PHED 1139 Beginning Scuba Diving (1 credit)

Upon completion of this course, students will understand and be able to demonstrate the safe scuba diving practices of the Professional Association of Dive Instructors (PADI) curriculum. Focuses on classroom knowledge development and confined-water skill development. Equipment and supplies are provided. This course is phase 1 of the PADI certification course. Students wishing to complete the certification as an Open Water Diver will need to take additional instruction. Liberal Education Goal Area 11.

PHED 1180 Canoeing (1 credit)

An activity course that introduces the fundamental skills of canoeing. Emphasis is on safety and on tandem and solo paddling techniques. Prerequisite: swimming test or consent of instructor. Liberal Education Goal Area 11.

PHED 1190 Skills for Life: Sailing (1 credit)

An activity course that introduces the fundamental skills of sailing. Development of skills and knowledge of safety, nomenclature, designs, rigging, handling, maintaining, and racing for sailboats. Prerequisite: swimming test or consent of instructor. Liberal Education Goal Area 11.

PHED 1200 Introduction To Rock Climbing (1 credit)

Introduction to the basics of Top Rope Rock Climbing and Rappelling through practice at the BSU Climbing Wall and/or other sites. Also includes climbing communication, "leave no trace" climbing techniques, techniques for setting anchors, and discussion of environmental values. Liberal Education Goal Area 11.

PHED 1230 Yoga (1 credit)

This course introduces students to basic yoga techniques and allows practice and development of the physical skills needed to perform approximately 40 basic exercises and postures. Liberal Education Goal Area 11.

PHED 1240 Skills for Life: Techniques of Neuromuscular Relaxation (1 credit)

An introduction to skill development in Jacobson's techniques to improve awareness of muscular tension and procedures for enhanced neuromuscular relaxation. Origins of stress and the body's responses to stress and stress management techniques will be included. Liberal Education Goal Area 11.

PHED 1260 Skills for Life: Cycling (1 credit)

Introduction to and practice in bicycling either off-road or road riding. Basic maintenance skills such as adjusting derailleurs, brakes and changing tires will be presented. Information on cycling for fitness, racing and bicycle touring will be presented. Liberal Education Goal Area 11.

PHED 1300 Skills for Life: Weight Training (1 credit)

An activity course that consists of an individualized or group weight program dealing with the fundamentals and practice of resistance exercise techniques for the development of the human body. Liberal Education Goal Area 11.

PHED 1380 Skills for Life: Self Defense (1 credit)

An activity course that examines and applies preventative and precautionary measures, assault awareness information, and most commonly needed personal self-defense skills and techniques. Liberal Education Goal Area 11.

PHED 1430 Skills for Life: Archery (1 credit)

An activity course that examines and applies the fundamentals and skills of archery. Selection and care of equipment, instruction and practice of shooting skills and scoring in target archery will be included. Liberal Education Goal Area 11.

PHED 1454 Skills for Life: Golf (1 credit)

An activity course that examines and applies the fundamentals and skills of golf. Selection and care of equipment, history and rules of the game, safety, etiquette, instruction and practice will be included. Liberal Education Goal Area 11.

PHED 1474 Skills for Life: Bowling (1 credit)

An activity course that examines and applies the fundamentals and skills of bowling. Students will demonstrate a knowledge of bowling history, scoring, handicapping and skills in bowling and etiquette. Liberal Education Goal Area 11.

PHED 1490 Skills for Life: Badminton (1 credit)

An activity course that examines and applies the fundamentals and skills of badminton. Students will demonstrate a knowledge of badminton history, scoring, and rules and regulations in singles and doubles play. Racket grips, strokes, footwork and tactics will be discussed and practiced. Liberal Education Goal Area 11.

PHED 1500 Skills for Life: Ice Skating (1 credit)

An activity course that examines and applies the fundamentals and skills of ice skating. Forward and backward stroking, crossovers and stops will be part of the evaluation. Liberal Education Goal Area 11.

PHED 1520 Downhill Skiing (1 credit)

An activity course that introduces the basic skills of beginning downhill skiing. Technique and skill development in traversing, turning, speed control and stopping will be included. The language of ski safety will also be discussed. (May not be offered every year.)

PHED 1530 Snowboarding (1 credit)

An activity course that introduces the basic skills of snowboarding, including toe turns, heel turns, carving, skating, stopping, and various forms of "riding." Includes an overview of snowboard equipment and how to select appropriate equipment. Liberal Education Goal Area 11.

PHED 1540 Skills for Life: Curling (1 credit)

An activity course that introduces the skills of curling, including techniques of throwing rocks and sweeping as well as strategies, rules, and scoring. (May not be offered every year) Liberal Education Goal Area 11.

PHED 1554 Skills for Life: Cross Country Skiing (1 credit)

An activity course that introduces the basic skills of cross country skiing including downhill turns and stopping. The student may choose to learn either skate skiing skills or the traditional skills of diagonal stride skiing. Some trail skiing will be included. Liberal Education Goal Area 11.

PHED 1574 Skills for Life: Tennis (1 credit)

An activity course that introduces the basic skills of tennis including techniques of basic grips, strokes and footwork. Entry level strategies for singles and doubles, history and rules of the game, etiquette, and scoring will be taught. Liberal Education Goal Area 11.

PHED 1604 Skills for Life: Social Dance I (1 credit)

This beginner-level activity course examines and applies the fundamentals and skills of contemporary, popular, and club style partner dances not typically included in a classic ballroom syllabus. Liberal Education Goal Area 11.

PHED 1605 Social Dance II (1 credit)

This intermediate- to advanced-level activity course examines and applies the fundamentals and skills of contemporary, popular, and club style partner dances not typically included in a classic ballroom syllabus. Prerequisite: PHED 1604 or consent of instructor. (Might not be offered every year.)

PHED 1606 Skills for Life: American Style Ballroom Dance I (1 credit)

An activity course that examines and applies the fundamentals and skills of classic ballroom dance. The steps taught are from the Dance Vision International Dance Association (DVIDA) American Bronze syllabus. Liberal Education Goal Area(s): 11.

PHED 1607 Skills for Life: American Style Ballroom Dance II (1 credit)

An activity course that examines and applies the fundamentals and skills of classic ballroom dance at an intermediate to advanced level. The steps taught are from the Dance Vision International Dance Association (DVIDA) American Bronze syllabus. Prerequisite: PHED 1606 or consent of instructor.

PHED 1608 Skills for Life: International Style Ballroom Dance (1 credit)

An activity course that examines and applies the fundamentals and skills of classic international style ballroom dance. The steps taught are from the Dance Vision International Dance Association (DVIDA) International Bronze syllabus. Liberal Education Goal Area 11.

PHED 1764 Skills for Life: Basketball (1 credit)

An activity course that examines and applies the fundamentals and skills of basketball. History and rules of the game, safety, drills, entry level strategies, conditioning, individual and group instruction and practice will be included. Liberal Education Goal Area 11.

PHED 1784 Skills for Life: Volleyball (1 credit)

An activity course that examines and applies the fundamentals and skills of volleyball. History and development, basic team systems, rules and strategies of the game will be included. Liberal Education Goal Area 11.

PHED 1814 Skills for Life: Softball (1 credit)

An activity course that examines and applies the fundamentals and skills of slow and fast pitch softball. History and rules of the game, terminology, score keeping, safety, field playing areas, drills, and entry level game strategies will be included. Liberal Education Goal Area 11.

PHED 1840 Skills for Life: Racquetball (1 credit)

An activity course that examines and applies the fundamentals and skills of racquetball. Components such as safety, serving and volleying will be emphasized. Singles, cutthroat, and doubles play will be introduced. Liberal Education Goal Area 11.

PHED 1854 Skills for Life: Soccer (1 credit)

An activity course that examines and applies the fundamentals and skills of soccer. The history of the game, rules and regulations and entry level drill and game strategies will be examined. Liberal Education Goal Area 11.

PHED 1890 Lifetime Fitness (2 credits)

This personal fitness class will allow students to develop their own aerobic and possibly strengthening program. They will receive some instruction in the development of fitness, use of equipment, etc., but the focus will be active participation in walking, jogging, rowing, stepping, etc. Liberal Education Goal Area 11.

PHED 2100 Foundations of Physical Education, Exercise Science, and Sport (3 credits)

A critical examination of the history, people, events, programs and philosophical positions that have led to the current status of physical education, fitness and sport in the United States. Students will be provided with up-to-date information about physical education and its diverse sub-fields as well as an introduction to career roles and preparation for professional service in all areas of physical education, kinesiology and exercise science.

PHED 2109 Introduction to Sport Management (3 credits)

This course will help and assist the prospective sport management major to discover specialized training personnel positions in the rapidly growing sport management field. Concentration will be on the duties and tasks performed, and the competencies needed for a career in sport management.

PHED 2200 A Lifestyle for Wellness (2 credits)

An examination of the social, emotional, mental, spiritual and physical dimensions of wellness. Students will examine their own lifestyles and learn how to make behavioral changes. Emphasis on self-esteem, nutritional habits, exercise habits and the importance of self-responsibility. Liberal Education Goal Area 9.

PHED 2630 Lifeguard Training (3 credits)

A lecture course with laboratory activity that examines and applies the fundamentals and skills of supervising swimming pool and water front activities. American Red Cross Certification may be earned for: Lifeguard Training and First Aid, CPR/AED for the Professional Rescuer, and Waterfront Lifeguarding. Good swimming skills are needed to succeed in this course.

PHED 2640 Water Safety Instructor (3 credits)

A lecture course with laboratory activity that constitutes all the aspects for the training of American Red Cross Water Safety Instructors. American Red Cross Water Safety Instructor Certification may be earned. Contact professor for further details. (May not be offered every year.)

PHED 2925 People of the Environment: Outdoor Ethics/Recreational Activity Perspective (3 credits)

This class will explore the concepts of wilderness and recreation and how these relate to practices that protect or enhance the environment. May not be offered every year. Liberal Education Goal Area 10.

PHED 2970 Internship: Sport Management Practicum (2 credits)

When taken as Sport Management Practices, the following description applies: A study of various skills, roles, and functions of sport managers in managing people, the workplace, and day-to-day operations. Topics include definitions; management theories; functions of management; time management skills; effective decision making and problem solving; motivational theories, morale, and strategies; leadership theories; personal styles of leadership; and skills and competencies of sport leaders. Also includes practical experience in the organization and administration of sporting events or related areas. Prerequisite: PHED 2109 or consent of instructor.

PHED 3090 Sport Physiology (2 credits)

Emphasis on conditioning athletes including body composition, nutrition, cardiovascular fitness, flexibility, strength and other conditioning issues as related to sport training and participation. This course is designed primarily for non-PE majors who are interested in the coaching specialist program.

PHED 3100 Motor Development (2 credits)

An introduction to motor development and related motor theories. Application of these basic motor principles to the teaching of physical education and activity at all levels.

PHED 3110 Motor Learning (2 credits)

An introductory class in motor control and learning that gives an overview of the processes and mechanisms involved in generating, acquiring, and refining motor skills and of factors that foster or hinder the acquisition and refinement of these skills.

PHED 3120 Psychology of Sport (2 credits)

Study of the general relationship between individuals and sports behavior. Covers competitiveness, goal setting, peak performance, psychosocial influences, and rehabilitation. Also includes guides to show how teaching and learning may be applied to the coaching of sport and to bring out the relationship of meaningful learning to successful athletic coaching.

PHED 3190 Athletic Training (2 credits)

A lecture course with laboratory activity introducing the five practice domains of athletic training that include: prevention, recognition and evaluation, rehabilitation, reconditioning of athletic injuries, administration and professional development. Other topics include the theory and practice of athletic taping and risk management.

PHED 3200 Introduction to Sport Biomechanics (3 credits)

Introduction to biomechanical concepts and principles. Application of these principles to evaluating and improving performance in physical activities. Introduction to methods for qualitative movement analysis. Prerequisite(s): BIOL 1111 (or BIOL 3250) and PHED 3100 or consent of instructor.

PHED 3219 Sport Economics (2 credits)

This course will provide the student an understanding of theories and concepts related to economics of sport. Topics covered: economic growth of the sport industry, concepts of competitive strategy, economic impact principles, economic theory applied to various levels of sport, labor relations, stadium and arenas, venues and events, manufacturing, and service industries. Prerequisite: ECON 2000 or consent of instructor.

PHED 3300 Physiology of Exercise and Nutrition (3 credits)

An examination of the effects of exercise on the systems of the body as they relate to health and performance. Nutritional concepts of weight control, ergogenic aids and fluid replacement will be discussed. Techniques for developing, prescribing, and assessing fitness components will be presented. Prerequisite(s): BIOL 1111 or BIOL 3250 or consent of instructor.

PHED 3449 Socio-Culture and Ethical Issues in Sport (3 credits)

Study of the general relationship between individuals and sport, and sport and society. Examine the ways sport is linked to other spheres of social life, the organization and behavior patterns of both individuals and groups within sport settings, and the cultural, structural, and situational factors affecting sport and sport experiences.

PHED 3504 Teaching Rhythms and Dance (2 credits)

Methods and materials for teaching various forms of rhythms and dance. Components include effective individual and group instruction; cultural and historical implications; dance steps, fundamentals, and a variety of traditional, creative and contemporary dance forms applicable to the K-12 setting. Prerequisite: entrance into the teacher education program or consent of instructor.

PHED 3505 Teaching Elementary Physical Education (2 credits)

An introduction to the developmental physical education program at the elementary school level. Components include learner characteristics, program content and organization and methods of teaching physical education. Prerequisite: PHED 3504 and entrance into the teacher education program or consent of instructor.

PHED 3509 Sport Event Management (2 credits)

This course will provide the student with an understanding of the responsibilities in managing sport facilities, administering, organizing and producing sporting events. The topics will range from personnel issues, facility protocol and procedures, and emergency plans. Prerequisite: BUAD 2280 or consent of instructor.

PHED 3519 Sport Facility Management (2 credits)

This course provides an understanding of sport facility management, facility planning, site and design development, systems and operations, and facility administration. Prerequisite: BUAD 2280 or consent of instructor.

PHED 3600 Sport Marketing (3 credits)

Study of fundamental marketing principles utilized in sport. Topics include definitions, marketing planning process, goals and objectives of marketing, marketing mix, target markets, consumer behavior, sponsorship, endorsement, merchandising, fundraising, and mass communication. Prerequisite(s): BUAD 2280 or consent of instructor.

PHED 3604 Teaching Team Sports (2 credits)

Activities and teaching methods for team sport activities included in current physical education programs at all levels. Prerequisite: entrance into the teacher education program or consent of instructor.

PHED 3605 Teaching Individual Sports (2 credits)

Methods of teaching and the practice of the skills such sports as tennis, golf, pickleball, archery, badminton, bowling, and racquetball are the focus. Development of lesson plan, unit plans and application of teaching methods is emphasized. Prerequisite: entrance into the teacher education program or consent of instructor.

PHED 3607 Teaching Fitness (2 credits)

Methods of teaching and the practice in the development of physical fitness, including development of the health related fitness components of strength, cardiovascular endurance, muscular endurance, and flexibility with activities such as cross country skiing, exercise walking, orienteering, cycling, yoga, and weight training. Prerequisite: Entrance into the Teacher Education program or consent of instructor.

PHED 3690 Coaching Principles (2 credits)

The fundamental concepts and basic trends in the field of coaching. The history, present philosophies, psychology, pedagogy, physiology, sports medicine and objectives will be analyzed and examined. Topics that are universal to all coaching disciplines like scheduling, risk management, sport law, dealing with media, parents, peer pressure, and academic requirements will be covered.

PHED 3710 Basketball Coaching (2 credits)

The study of the game of basketball and the instructional techniques of individual and team play. Organizational procedures, practice preparation, scouting, rules and regulations, skill sequence and development, offensive, defensive and transitional systems, coaching philosophies and public relations will be examined.

PHED 3720 Football Coaching (2 credits)

A comprehensive study of developing a successful football team with an emphasis on teaching appropriate techniques and skills of the game. Practice and game organization, delegation of staff responsibilities and public relations will also be examined.

PHED 3740 Ice Hockey Coaching (2 credits)

In depth lectures and discussion concerning offensive and defensive skills and tactics, power play and penalty killing. Skilled positional play of goalies, defensemen, centers, and wings (forwards). Coaching techniques, motivational and leadership development, theory, rules, and regulations. Additional assignments involve planning and evaluating practices, games and athletic talent. Rules, budgets, and equipment repair will be discussed. (May not be offered every year.)

PHED 3750 Soccer Coaching (2 credits)

Organization and preparation for interscholastic competition. Emphasis will be on teaching specific soccer skills, individual player structures, practice preparation, and management. Strategies, conditioning and psychology of coaching issues will be examined. (May not be offered every year.)

PHED 3770 Swimming Coaching (2 credits)

Emphasis will be on developing knowledge and understanding of the applications of various laws of motion, leverage and flotation in the teaching of advanced swimming and diving skills. Emphasis on pool operation, swimming meet organization and swimming meet rules is included. Class participation includes classroom and laboratory experiences. (May not be offered every year.)

PHED 3790 Track and Field Coaching (2 credits)

Discussion and application of fundamental concepts required for effective teaching of the events in track and field. Event enrollment and management along with the aspects of practice and event coaching will be discussed.

PHED 3800 Volleyball Coaching (2 credits)

Provides information and training for teaching and coaching volleyball with an emphasis on the high school level. Class lecture and application activities on the court included. (May not be offered every year.)

PHED 4160 Advanced Fitness Assessment & Prescription-Aerobic (3 credits)

Theory and practice of physical fitness assessment for the purpose of prescribing aerobic exercise to adults, both healthy populations and those with special conditions, such as obesity, diabetes, osteoporosis, asthma, hypertension, and heart disease. Prepares students for American College of Sports Medicine (ACSM) Health Fitness Specialist exam as well as other personal trainer certifications. Prerequisite: PHED 3300 or consent of instructor.

PHED 4170 Advanced Principles for Strength and Speed Training Exercise (3 credits)

Theory and practice of strength and speed training with emphasis on technique analysis and instructional methods for strength training. Includes facility design and equipment purchasing and maintenance. Prepares students for National Strength and Conditioning Association Certified Strength and Conditioning Specialist (CSCS). Prerequisite: PHED 3300 or consent of instructor.

PHED 4200 Methods of Teaching Elementary Physical Education to Classroom Teachers (1 credit)

Organization and conduct of the physical education program in the elementary school.

PHED 4209 Sport Finance (3 credits)

This course will provide the student an understanding of theories and concepts used in financial resource management for the operation of programs in both public and private sectors of sport. Topics include ethical concerns, decision making, principles of budgeting, budget development, financial statements, spread sheet utilization, and sources of revenue for financing sport. Prerequisites: ACCT 2101 or consent of instructor.

PHED 4250 Teaching Secondary Physical Education (2 credits)

An online methods course designed specifically for physical education teacher licensure candidates in the FasTrack program. Students utilize national physical education standards, appropriate management protocols and pedagogical best practice to plan and deliver physical education lessons for students in grades 6-12. Students design learning and assessment activities that align with current national standards and learning outcomes.

PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)

An overview of the field of sports law, with applications to amateur sport, professional sport, recreation, health, healthcare, and fitness settings. Key areas of the law are identified, and applications within the sport, health and fitness industries are studied. Provides information about legal issues that may help professionals avoid litigation by foreseeing and preventing problems. Prerequisite: Junior or Senior status.

PHED 4360 Adventure Programming (3 credits)

Nuts and bolts of planning educational outdoor adventure experiences. Also reviews theory, literature, and program types.

PHED 4400 Curriculum and Assessment in Physical Education (3 credits)

Focus on the curricular process and its evaluation to determine if the curriculum is meeting community and individual student needs. A second focus will be on assessment goals, objectives and outcomes of the cognitive, affective and motor aspects of physical education. Prerequisites: PHED 2100, PHED 3200, and PHED 3300 or consent of instructor.

PHED 4409 Sport Business Management (3 credits)

Study of the structures and processes of sport organizations, as well as examine principles and concepts as they apply to sport businesses. Topics include definitions; and internal processes such as social responsibility and ethics, organizational behavior and structure, organizational philosophy, mission statements, goals and objectives, chain of command, strategic plans, adapting to change, and so on. Prerequisite(s): PHED 2970 or consent of instructor.

PHED 4500 Inclusive Physical Education (3 credits)

An introduction to the study and practice of teaching physical education to children with disabilities in the public schools. Prerequisites: PHED 3100, PHED 3110, PHED 3200, PHED 3504, PHED 3505, PHED 3604, PHED 3605, PHED 3607, or consent of instructor.

PHED 4514 DAPE Program Planning (3 credits)

First in a series of three courses, DAPE Program Planning provides knowledge necessary to develop, organize, and administer DAPE programs supported by DAPE historical and philosophical foundations, legal bases, the IEP process, resources, and an understanding of health-related physical and motor fitness, assistive technology, and adapted equipment. Students assess fitness, motor and behavioral skills of three K-12 students with identified disabilities at a local school. Using assessment information, students develop DAPE programs for elementary, middle, and secondary school levels. Programs reflect individual student goals and objectives. The course includes 15 hours of required field experience. Prerequisites: SPED 3600, SPED 3650, co-requisite SPED 3655.

PHED 4515 DAPE Teaching Strategies (3 credits)

Second in a series of three courses, DAPE Teaching Strategies provides knowledge and practical experiences necessary for future teachers to develop individual DAPE lessons based on typical and atypical motor development patterns, to deliver lesson plan content using best practice instructional strategies, behavioral interventions, safe learning environments and methods of communicating with nonverbal students. Students will teach the lesson plans to K-12 DAPE students. The course includes 30 hours of required field experience. Prerequisites: SPED 3600, SPED 3650, SPED 3655; PHED 4514.

PHED 4516 The DAPE Professional (3 credits)

Third in a series of three courses, The DAPE Professional: provides students with opportunities to combine content, theory and research with practical experiences in DAPE programming and teaching strategies. This capstone course allows students to cultivate and maintain positive, collaborative relationships with students, families, and other professional, and the community to support student development and educational process. This course includes 20 hours of required field experience. Prerequisites: SPED 3600, SPED 3650, SPED 3655; PHED 4514, PHED 4515.

PHED 4870 Practicum in Physical Education Teaching (1 credit)

A supervised experience in teaching K-12 students in physical education. Emphasis is on meeting the requirements for physical education majors by the Minnesota Professional Education Licensing and Standards Board (PELSB). Required: A minimum of 30 practicum hours per credit. Prerequisite(s): PHED 3505 and PHED 3604.

PHED 4879 Athletic Coaching Practicum (1 credit)

Application of the principles and practices in athletic coaching. A 30-hour practical coaching experience under the guidance and supervision of a licensed coach. This practicum must be conducted at the high school level. Appropriate forms must be filed with the department chairperson. Prerequisite(s): Completion of at least 70 percent of Physical Education Major or Coaching Specialist Program or consent of instructor.

PHED 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

PHED 4920 DGS: (1 credit)

When taken as Exercise Science Seminar the following description applies: Intended as a capstone course to prepare the Exercise Science major for employment, internship/job procurement, or continuing education in a graduate program. This course integrates discussion of strategies for professional development, as well as providing quality written composition on employment/graduate program goals and objectives. Prerequisite: Senior status or consent of instructor. When taken as Physical Education Seminar the following description applies: Intended as a capstone course to prepare the physical education major for employment, student teaching/job procurement, or continuing education in a graduate program. This course integrates discussion of strategies for professional development, as well as providing quality written composition on employment/graduate program goals and objectives. Prerequisite: Senior status or consent of instructor. When taken as Sport Management Seminar the following description applies: Intended as a capstone course to prepare the sport management major for employment; internship/job procurement, or continuing education in a graduate program. This course integrates discussion of strategies for professional development, as well as providing quality written composition on employment/graduate program goals and objectives. Prerequisite: Senior status or consent of instructor.

PHED 4921 Varsity Sport: (1 credit)

Varsity Sport - Participation credit, may be taken once per year of eligibility.

PHED 4970 Internship (1-12 credits)

Internship

PHED 4971 Internship: Sport Management (1-12 credits)

Sport management majors are required to complete a field experience that is relevant to their career goals. The internship needs to provide an opportunity for the student to apply the different theories and concepts learned from class in a practical setting through: observation, planning, decision-making, committee work, leadership, operation management, individual projects, and group projects. Required: 400 hours for 12-credit internship to meet accreditation guidelines. Prerequisite(s): consent of instructor

PHED 4972 Internship: Exercise Science (2-6 credits)

This course is for the purpose of providing a supervised field internship experience in an exercise, fitness, and/or wellness-related setting, including hospitals, corporations, private fitness-facilities, and governmental agencies. Or, the internship may take the form of a special project or research on a topic relevant to exercise science. Prior approval must be obtained from the student's internship advisor. A journal, written paper, and/or oral presentation is to be presented following the learning experience. The student is expected to complete 30 hours per credit. Prerequisite(s): PHED 4160 and PHED 4170 or consent of instructor.

PHED 4975 Internship: Human Performance (1-3 credits)

This course is for the purpose of providing a supervised field internship experience in an exercise, fitness, and/or wellness-related setting, including university or high school athletics, corporations, private fitness-facilities, governmental agencies. Internship setting is dependent on coursework taken within selected Required Option. Prior approval must be obtained from the student's internship advisor. A journal, written paper and/or oral presentation is to be presented following the learning experience. The student is expected to complete 30 hours per credit. Prerequisite(s): senior status or consent of instructor.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Gender and Women's Studies

Gender and Women's Studies examines the gendered diversity of human experience. It uses the lens of gender to explore stratification, colonization, power relationships and cultural stereotypes, and it encourages a sense of empowerment through an examination of commonality and diversity. Through an interdisciplinary program of courses, students will explore the role of gender and its practical implications for their basic life experiences. Students will extend their learning beyond the classroom through community and university engagement and social action.

Note: The Gender and Women's Studies minor is especially complementary to majors in Social Work, Psychology, Sociology, English, Humanities, Criminal Justice, Health, and Political Science. It is also useful in preparation for diverse professional environments such as business, education, law, and medicine and for graduate study in gender and women's studies.

Programs

- Gender and Women's Studies *minor*

Career Directions

See "Note" in description.

Preparation

Recommended High School Courses

Women's Studies
Gender Studies

Areas of Interest

Anti-Discrimination
Community Service
Ending Gender Violence
Ending Poverty
Environmental Concerns
Gender Equity
Grassroots Activism
Peace and Justice
Politics and Social Change

Gender and Women's Studies *minor*

Note: No course grade below a C may be used to meet these requirements and a minimum GPA of 2.25 in this minor is required for graduation. At least 12 of the credits have to be taken at Bemidji State University.

Required Credits: 18

Required GPA: 2.25

I REQUIRED CORE COURSES

Complete the following courses:

- COMM 3150 Gender Communication (3 credits)
- GWS 1110 Introduction to Gender Studies (3 credits)
- GWS 3850 Sex, Gender and Power: Theories and Practice (3 credits)
- SOC 4270 Intersectionality (3 credits)

II REQUIRED ELECTIVES

Select 2 of the following 2000 level courses:

- ANTH 2610 Women around the World (3 credits)
- PSY 2200 Human Sexuality (4 credits)
- SOC 2240 Men, Women, and Society: A Sociological Interpretation (3 credits)

Gender and Women's Studies Courses

GWS 1110 Introduction to Gender Studies (3 credits)

This course offers an introduction to Gender Studies, an interdisciplinary academic field that explores critical questions about the meaning of gender in society. The primary goal of this course is to familiarize students with key issues, questions and debates in Gender Studies scholarship, from a historical and contemporary perspective. Gender scholarship critically analyzes themes of gendered performance and power in a range of social spheres, such as philosophy, economics, history, religion, politics and health. Liberal Education Goal Area 7.

GWS 3850 Sex, Gender and Power: Theories and Practice (3 credits)

How, and from where, does gender emerge? What are the implications when the workings of power are played out in existing societal systems and relational understandings of gender? Students will examine feminist theories, liberal, socialist, radical, multicultural, postcolonial, ecofeminist; as well as Queer theory. This exploration of theory will introduce students to one of the most exciting and dynamic areas of contemporary inquiry, while preparing them for engagement in social movement, community and social transformation, and social justice.

GWS 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
1940, 2940, 3940, 4940 IN-SERVICE COURSE
1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
1970, 2970, 3970, 4970 INTERNSHIP
1980, 2980, 3980, 4980 RESEARCH
1990, 2990, 3990, 4990 THESIS

Geography

Geography is the study of phenomena and events on the earth's surface, including the activities of human beings. Technical skills in remote sensing, mapping, computer applications, GIS, survey research, and writing are the geographer's tools.

All terrestrial activities are subject to geographic analysis. Students in the program learn specific geographic techniques and their application on regional, national, and global levels. Studies in the field, and in effective communication and higher level problem-solving, further prepare students for immediate employment in entry level jobs and for graduate study.

Language study and a strong minor (such as computer science, applied public policy, international studies, space science, biology) enhance employment options for students with bachelor's degrees. Graduate study broadens employment opportunities.

Programs

- Geography, B.S. (Giscience Emphasis) *major*
- Geography, B.S. (Earth Science Emphasis) *major*
- Global Studies, B.A. *major*
- Policy and Planning, B.S. (Urban Resources Planning Emphasis) *major*
- Policy and Planning, B.S. (Natural Resources Planning Emphasis) *major*
- Social Studies, B.A. (Geography Emphasis) *major*
- Sustainability and Resource Management, B.A.S. *major*
- Geography *minor*
- GIS *minor*
- Geographic Information Science *cert*

Career Directions

Aerial Photo Interpreter
Cartographer
Digital Mapper
Geographic Consultant
Geographic Information Systems (GIS) Practitioner
Land Use/Recreation Planner
Market Analyst
Park Ranger/Planner
Park/Recreation Planner
Teacher
Urban/Regional Planner
Also: Graduate Study

Preparation

Recommended High School Courses

Algebra
Computer Science
English
Geography
Social Studies
Speech Communication

Geography, B.S. *major* Giscience Emphasis

Required Credits: 49

Required GPA: 2.25

I REQUIRED CORE COURSES

Complete the following courses:

- BUAD 2231 Business Statistics I (3 credits)
or PSY 3401 Basic Statistics for Research (4 credits)
or STAT 2610 Applied Statistics (4 credits)
- ENGL 2150 Technical Writing (3 credits)
or ENGL 3150 Writing In The Disciplines (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3410 Geography of North America (3 credits)
or GEOG 3800 Regional Geography (1-3 credits)
or GEOG 3810 Geography of Europe (3 credits)
or GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
or GEOG 3840 Geography of Africa (3 credits)
or GEOG 3850 Geography of the Middle East (3 credits)
or GEOG 3860 Geography of Latin America and the Caribbean (3 credits)

or GEOG 3870 Planning for Sustainable Cities (3 credits)
- GEOG 4265 Spatial Analysis (3 credits)

II GIScience EMPHASIS

REQUIRED EMPHASIS CORE

Complete the following courses:

- CS 1309 Problem Solving and Computation (3 credits)
- CS 2270 Introduction to Web Programming (3 credits)
- CS 2321 Computer Science I (4 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
or GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 3226 Cartography (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 4275 Advanced Geographic Information Systems (3 credits)
- GEOG 4970 Internship (3 credits)

Select 2 of the following courses:

- GEOG 2400 Introduction to Planning (3 credits)
- GEOG 3125 Weather and Climate (3 credits)
- GEOG 3400 Economic Geography (3 credits)
- GEOG 3560 Metropolitan Land Use Planning (3 credits)
- GEOG 3580 Regional Development Planning (3 credits)
- GEOG 3630 Conservation Biology (3 credits)
or BIOL 3630 Conservation Biology (3 credits)
- GEOG 3870 Planning for Sustainable Cities (3 credits)
- GEOG 4130 Biogeography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)
- GEOG 4190 Qualitative Methods in Geographic Research (3 credits)
- BUAD 4385 Data Modeling and Design (3 credits)
- CS 2322 Computer Science II (4 credits)
- CS 3270 Advanced Web Programming (3 credits)

- CS 3507 Introduction to Databases (3 credits)
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 3040 Environmental Economics (3 credits)
or ENVR 3040 Environmental Economics (3 credits)
- ENVR 2000 Introduction to Environmental Science (3 credits)
- GEOL 3120 Soils (4 credits)
or BIOL 3120 Soils (4 credits)
- GEOL 4300 Global Environmental Change (3 credits)
- STAT 3610 Time Series Analysis (3 credits)
- TADT 1460 2D Graphics And Laser Etching (3 credits)

Program Learning Outcomes | Geography, B.S.

1. Geographic Understanding: Students will have an understanding of the nature of Geography as an academic discipline, including familiarity with its history and principal sub-fields, concepts are introduced in Geog 1400, and core courses.

2. Thematic Geographic Knowledge: Students will demonstrate understanding of Geography as a spatial science within its various sub-disciplines.

2.1. Competence in the Basic Concepts of Human Geography: Students will show proficiency in this area by meeting specific performance metrics in Geog 2200 and another upper division Human Geography Elective.

2.2. Competence in the Basic Concepts of Physical Geography: Students will show proficiency in this area by meeting performance metrics in Geog 2100 and another upper division Physical Geography Elective.

2.3. Competence in the Basic Concepts of Economic Geography: Students will show proficiency in this area by meeting performance metrics in Geog 2300.

2.4. Competence in the Basic Concepts of Planning: Students will show proficiency in this area by meeting performance metrics in Geog 2400 and another upper division Planning Courses.

3. Understanding the Basic Concepts of Geospatial Analysis: Students will show proficiency in this area by meeting performance metrics all classes requiring both quantitative and qualitative analysis.

3.1. Demonstrate confidence with GIS Software: Demonstrate a competency in selected geographic techniques and/or methods: Relevant Courses: Geog3231, Geog3232, Geog 4275.

3.2. Apply GIS skills in a related Geography Course: Demonstrate the ability to use and integrate GIS into research and project development non-GIS classes.

4. Basic Understanding of Regional Concepts: Students will appreciate how Geography's unique spatial perspective is essential for understanding historical, cultural, and demographic patterns in different world regions. Upper Division Regional courses, Geog3810, 3820, 3830, 3850.

5. Effective Communication: Students will display competency in written expression with respect to clarity, logical expression, and effective argument.

6. General Geographic Research Skills: Students will apply basic research skills, including the ability to {a} critically evaluate the research of others and {b} develop a coherent, thoughtful analysis of these findings. (Typically applies to shorter paper projects, not full term projects for the assessment criteria)

6.1. Competence in Geographic Research: Conceive, develop and produce a term project that involves a précis or abstract, an annotated bibliography and a review of academic literature presented in a coherent, well-developed articulate thesis or independent study project. (Assessments suited to full term projects).

7. Practical Experience - Internship: Students will acquire knowledge and skills

sufficient to allow one to pursue advanced study in Geography or find employment in Geography-related fields, including but not limited to those involving urban and regional planning.

Geography, B.S. *major* Earth Science Emphasis

Required Credits: 48

Required GPA: 2.25

I REQUIRED CORE COURSES

Complete the following courses:

- BUAD 2231 Business Statistics I (3 credits)
or PSY 3401 Basic Statistics for Research (4 credits)
or STAT 2610 Applied Statistics (4 credits)
- ENGL 2150 Technical Writing (3 credits)
or ENGL 3150 Writing In The Disciplines (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3410 Geography of North America (3 credits)
or GEOG 3800 Regional Geography (1-3 credits)
or GEOG 3810 Geography of Europe (3 credits)
or GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
or GEOG 3840 Geography of Africa (3 credits)
or GEOG 3850 Geography of the Middle East (3 credits)
or GEOG 3860 Geography of Latin America and the Caribbean (3 credits)
- or GEOG 3870 Planning for Sustainable Cities (3 credits)
- GEOG 4265 Spatial Analysis (3 credits)

II EARTH SCIENCE EMPHASIS

REQUIRED EMPHASIS CORE

Complete the following courses:

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 4130 Biogeography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)
- GEOG 4910 Directed Independent Study (3 credits)
or GEOG 4970 Internship (3 credits)
or GEOG 4990 Thesis (3 credits)
- GEOL 1110 Physical Geology (4 credits)
- GEOL 2110 Mineralogy and Petrology (4 credits)

EARTH SCIENCE ELECTIVES

Select 3 courses from the following, or related upper division courses as approved in advance by advisor:

- BIOL 3120 Soils (4 credits)
or GEOL 3120 Soils (4 credits)
- BIOL 3361 Limnology (4 credits)
- BIOL 3730 Plant Diversity (4 credits)
- BIOL 3840 Wetlands Ecology (3 credits)
- BIOL 4623 Forest Ecology (4 credits)
- ENVR 3040 Environmental Economics (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- GEOG 3125 Weather and Climate (3 credits)
- GEOG 3630 Conservation Biology (3 credits)
or BIOL 3630 Conservation Biology (3 credits)
- GEOL 1120 Historical Geology (4 credits)
- GEOL 3211 Environmental Hydrology (3 credits)

- GEOL 3212 Hydrogeology (3 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)
- GEOL 3500 Topics in Paleontology (3 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)
- GEOL 3700 Environmental Geophysics (3 credits)
- GEOL 4300 Global Environmental Change (3 credits)

III SPATIAL METHODS ELECTIVES

Select 1 of the following courses:

- GEOG 3226 Cartography (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 4190 Qualitative Methods in Geographic Research (3 credits)
- GEOG 4275 Advanced Geographic Information Systems (3 credits)
- STAT 3610 Time Series Analysis (3 credits)

Program Learning Outcomes | Geography, B.S.

1. Geographic Understanding: Students will have an understanding of the nature of Geography as an academic discipline, including familiarity with its history and principal sub-fields, concepts are introduced in Geog 1400, and core courses.

2. Thematic Geographic Knowledge: Students will demonstrate understanding of Geography as a spatial science within its various sub-disciplines.

2.1. Competence in the Basic Concepts of Human Geography: Students will show proficiency in this area by meeting specific performance metrics in Geog 2200 and another upper division Human Geography Elective.

2.2. Competence in the Basic Concepts of Physical Geography: Students will show proficiency in this area by meeting performance metrics in Geog 2100 and another upper division Physical Geography Elective.

2.3. Competence in the Basic Concepts of Economic Geography: Students will show proficiency in this area by meeting performance metrics in Geog 2300.

2.4. Competence in the Basic Concepts of Planning: Students will show proficiency in this area by meeting performance metrics in Geog 2400 and another upper division Planning Courses.

3. Understanding the Basic Concepts of Geospatial Analysis: Students will show proficiency in this area by meeting performance metrics all classes requiring both quantitative and qualitative analysis.

3.1. Demonstrate confidence with GIS Software: Demonstrate a competency in selected geographic techniques and/or methods: Relevant Courses: Geog3231, Geog3232, Geog 4275.

3.2. Apply GIS skills in a related Geography Course: Demonstrate the ability to use and integrate GIS into research and project development non-GIS classes.

4. Basic Understanding of Regional Concepts: Students will appreciate how Geography's unique spatial perspective is essential for understanding historical, cultural, and demographic patterns in different world regions. Upper Division Regional courses, Geog3810, 3820, 3830, 3850.

5. Effective Communication: Students will display competency in written expression with respect to clarity, logical expression, and effective argument.

6. General Geographic Research Skills: Students will apply basic research skills, including the ability to {a} critically evaluate the research of others and {b} develop a coherent, thoughtful analysis of these findings. (Typically applies to shorter paper projects, not full term projects for the assessment criteria)

6.1. Competence in Geographic Research: Conceive, develop and produce a term project that involves a précis or abstract, an annotated bibliography and a review of academic literature presented in a coherent, well-developed articulate thesis or independent study project. (Assessments suited to full term projects).

7. Practical Experience - Internship: Students will acquire knowledge and skills sufficient to allow one to pursue advanced study in Geography or find employment in Geography-related fields, including but not limited to those involving urban and regional planning.

Global Studies, B.A. *major*

Required Credits: 57

Required GPA: 2.25

I REQUIRED CORE

Complete the following courses:

- GEOG 1400 World Regional Geography (3 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3400 Economic Geography (3 credits)
- GEOG 3531 Political Geography (3 credits)
- GEOG 3532 Political Ecology (3 credits)
- GEOG 3870 Planning for Sustainable Cities (3 credits)

II REGIONAL GEOGRAPHY ELECTIVES

Select 4 of the following courses:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)
- GEOG 3850 Geography of the Middle East (3 credits)
- GEOG 3860 Geography of Latin America and the Caribbean (3 credits)

III SPATIAL METHODS ELECTIVES

Select 2 of the following courses:

- GEOG 3226 Cartography (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 4190 Qualitative Methods in Geographic Research (3 credits)
- GEOG 4265 Spatial Analysis (3 credits)
- GEOG 4275 Advanced Geographic Information Systems (3 credits)

IV PHYSICAL GEOGRAPHY ELECTIVES

Select 2 of the following courses:

- GEOG 3125 Weather and Climate (3 credits)
- GEOG 3630 Conservation Biology (3 credits)
or BIOL 3630 Conservation Biology (3 credits)
- GEOG 4130 Biogeography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)

V GEOGRAPHY ELECTIVES

Select 6 semester credits in Geography courses at the 3000-4000 level

VI THESIS REQUIREMENT

Complete the following course:

- GEOG 4990 Thesis (3 credits)

SUGGESTED SEMESTER SCHEDULE FOR GLOBAL STUDIES MAJOR, B.A.

The following is a list of major courses arranged by year. This suggested schedule is intended to help students plan their courses in an orderly fashion. Some courses

or course sequences may appear more than once. Global Studies majors and Geography minors are strongly encouraged to meet with advisors in the program

prior to selecting courses as all courses are not offered each year.

Freshman

- GEOG 1400 World Regional Geography (3 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3400 Economic Geography (3 credits)
- Liberal Education requirements

Sophomore

- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- Regional Courses (select 4)
 - GEOG 3410 Geography of North America (3 credits)
 - GEOG 3800 Regional Geography (1-3 credits)
 - GEOG 3810 Geography of Europe (3 credits)
 - GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
 - GEOG 3840 Geography of Africa (3 credits)
 - GEOG 3850 Geography of the Middle East (3 credits)
 - GEOG 3860 Geography of Latin America and the Caribbean (3 credits)
 - GEOG 3870 Planning for Sustainable Cities (3 credits)
- ENGL 3150 Writing In The Disciplines (3 credits)(recommended)
- Complete Liberal Education requirements

Junior

- GEOG 3531 Political Geography (3 credits)
- GEOG 3532 Political Ecology (3 credits)
- GEOG 3XXX Any Remaining Regional Geography Courses
- Spatial Methods electives (select 2)
 - GEOG 3226 Cartography (3 credits)
 - GEOG 3255 Introduction to Remote Sensing (3 credits)
 - GEOG 4190 Qualitative Methods in Geographic Research (3 credits)
 - GEOG 4265 Spatial Analysis (3 credits)
 - GEOG 4275 Advanced Geographic Information Systems (3 credits)
- Physical Geography electives (select 2)
 - GEOG 3125 Weather and Climate (3 credits)
 - GEOG 3630 Conservation Biology (3 credits)
 - BIOL 3630 Conservation Biology (3 credits)
 - GEOG 4130 Biogeography (3 credits)
 - GEOG 4140 Landscape Ecology (3 credits)
- GEOG 3XXX/4XXX Geography elective (3 credits)
- GEOG 4265 Spatial Analysis (3 credits)

Senior

- GEOG 3XXX Any Remaining Regional Geography Courses

- GEOG 3XXX/4XXX Any remaining Spatial Methods electives
- GEOG 3XXX/4XXX Any remaining Physical Geography electives
- GEOG 3XXX/4XXX Geography elective (3 credits)
- GEOG 3870 Planning for Sustainable Cities (3 credits)
- GEOG 4190 Qualitative Methods in Geographic Research (3 credits)
- GEOG 4275 Advanced Geographic Information Systems (3 credits)
- GEOG 4990 Thesis (3 credits)

Policy and Planning, B.S. *major* Urban Resources Planning Emphasis

Required Credits: 48

Required GPA: 2.25

I REQUIRED CORE

Complete the following courses:

- GEOG 2400 Introduction to Planning (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3550 Site and Resource Analysis in Planning (3 credits)
- GEOG 3580 Regional Development Planning (3 credits)

II REQUIRED ELECTIVES

Complete one of the following courses:

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- ENVR 2000 Introduction to Environmental Science (3 credits)
- GEOL 1110 Physical Geology (4 credits)

Complete one of the following courses:

- ECON 3040 Environmental Economics (3 credits)
or ENVR 3040 Environmental Economics (3 credits)
- GEOG 3400 Economic Geography (3 credits)

Complete one of the following courses:

- ECON 3010 Public Economics (3 credits)
- ECON 3230 Benefit/Cost Analysis (3 credits)

Complete one of the following courses:

- GEOG 3226 Cartography (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)

Complete one of the following courses:

- BIOL 3630 Conservation Biology (3 credits)
or GEOG 3630 Conservation Biology (3 credits)
- GEOG 3125 Weather and Climate (3 credits)
- GEOG 4130 Biogeography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)

Complete one of the following courses:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)
- GEOG 3850 Geography of the Middle East (3 credits)
- GEOG 3860 Geography of Latin America and the Caribbean (3 credits)

Complete one of the following courses:

- ENGL 2150 Technical Writing (3 credits)
- ENGL 3150 Writing In The Disciplines (3 credits)

III REQUIRED CAPSTONE

Complete the following courses:

- ENVR 3880 Environmental Controversies (2 credits)
- ENVR 4880 Senior Seminar I (1 credit)

Complete one of the following courses for 3 credits:

- ENVR 4970 Internship (3 credits)
- GEOG 4970 Internship (3 credits)
- ENVR 4990 Thesis (3 credits)
- GEOG 4990 Thesis (3 credits)

IV REQUIRED EMPHASIS

Complete the following courses:

- GEOG 3560 Metropolitan Land Use Planning (3 credits)
- GEOG 3870 Planning for Sustainable Cities (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)

SUGGESTED SCHEDULE FOR GEOGRAPHY Policy and Planning, B.S.

The following is a list of Geography Policy and Planning major courses arranged by year. This suggested schedule is intended to help students plan their courses in an orderly fashion. Some courses or course sequences may appear more than once. Geography majors and minors are strongly encouraged to meet with advisors in the Geography program prior to selecting courses as all courses are not offered each year.

Freshman

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 2400 Introduction to Planning (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3400 Economic Geography (3 credits)
- ENVR 2000 Introduction to Environmental Science (3 credits)
- GEOL 1110 Physical Geology (4 credits)
- Liberal Education requirements

Sophomore

- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- Regional Courses (select 4)
 - GEOG 3410 Geography of North America (3 credits)
 - GEOG 3800 Regional Geography (1-3 credits)
 - GEOG 3810 Geography of Europe (3 credits)
 - GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
 - GEOG 3840 Geography of Africa (3 credits)
 - GEOG 3850 Geography of the Middle East (3 credits)
 - GEOG 3860 Geography of Latin America and the Caribbean (3 credits)
- GEOG 3550 Site and Resource Analysis in Planning (3 credits)
- ECON 3010 Public Economics (3 credits)
- ECON 3230 Benefit/Cost Analysis (3 credits)
- ENGL 2150 Technical Writing (3 credits)
- ENGL 3150 Writing In The Disciplines (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)

- ENVR 3880 Environmental Controversies (2 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)
- Complete Liberal Education requirements

Junior

- GEOG 3125 Weather and Climate (3 credits)
- GEOG 3226 Cartography (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 3532 Political Ecology (3 credits)
- GEOG 3560 Metropolitan Land Use Planning (3 credits)
- GEOG 3570 Public Lands Planning (3 credits)
- GEOG 3630 Conservation Biology (3 credits)
or BIOL 3630
- GEOG3XXX Any Remaining Regional Geography Course
- ECON 3010 Public Economics (3 credits)
- ECON 3230 Benefit/Cost Analysis (3 credits)
- ECON 3040 Environmental Economics (3 credits)
or ENVR 3040 Environmental Economics (3 credits)

Senior

- GEOG 3XXX Any Remaining Regional Geography Course
- GEOG 3580 Regional Development Planning (3 credits)
- GEOG 3870 Planning for Sustainable Cities (3 credits)
- GEOG 4130 Biogeography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)
- GEOG 4970 Internship (3 credits)
or ENVR 4970 Internship (3 credits)
or GEOG 4990 Thesis (3 credits)
or ENVR 4990 Thesis (3 credits)
- ECON 3010 Public Economics (3 credits)
- ECON 3230 Benefit/Cost Analysis (3 credits)
- ENVR 4880 Senior Seminar I (1 credit)

Policy and Planning, B.S. *major* Natural Resources Planning Emphasis

Required Credits: 48

Required GPA: 2.25

I REQUIRED CORE

Complete the following courses:

- GEOG 2400 Introduction to Planning (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3550 Site and Resource Analysis in Planning (3 credits)
- GEOG 3580 Regional Development Planning (3 credits)

II REQUIRED ELECTIVES

Complete one of the following courses:

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- ENVR 2000 Introduction to Environmental Science (3 credits)
- GEOL 1110 Physical Geology (4 credits)

Complete one of the following courses:

- ECON 3040 Environmental Economics (3 credits)
or ENVR 3040 Environmental Economics (3 credits)
- GEOG 3400 Economic Geography (3 credits)

Complete one of the following courses:

- ECON 3010 Public Economics (3 credits)
- ECON 3230 Benefit/Cost Analysis (3 credits)

Complete one of the following courses:

- GEOG 3226 Cartography (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)

Complete one of the following courses:

- BIOL 3630 Conservation Biology (3 credits)
or GEOG 3630 Conservation Biology (3 credits)
- GEOG 3125 Weather and Climate (3 credits)
- GEOG 4130 Biogeography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)

Complete one of the following courses:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)
- GEOG 3850 Geography of the Middle East (3 credits)
- GEOG 3860 Geography of Latin America and the Caribbean (3 credits)

Complete one of the following courses:

- ENGL 2150 Technical Writing (3 credits)
- ENGL 3150 Writing In The Disciplines (3 credits)

III REQUIRED CAPSTONE

Complete the following courses:

- ENVR 3880 Environmental Controversies (2 credits)
- ENVR 4880 Senior Seminar I (1 credit)

Complete one of the following courses for 3 credits:

- ENVR 4970 Internship (3 credits)
- GEOG 4970 Internship (3 credits)
- ENVR 4990 Thesis (3 credits)
- GEOG 4990 Thesis (3 credits)

IV REQUIRED EMPHASIS

Complete the following courses:

- GEOG 3532 Political Ecology (3 credits)
- GEOG 3570 Public Lands Planning (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)

SUGGESTED SCHEDULE FOR GEOGRAPHY Policy and Planning, B.S.

The following is a list of Geography Policy and Planning major courses arranged by year. This suggested schedule is intended to help students plan their courses in an orderly fashion. Some courses or course sequences may appear more than once. Geography majors and minors are strongly encouraged to meet with advisors in the Geography program prior to selecting courses as all courses are not offered each year.

Freshman

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 2400 Introduction to Planning (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3400 Economic Geography (3 credits)
- ENVR 2000 Introduction to Environmental Science (3 credits)
- GEOL 1110 Physical Geology (4 credits)
- Liberal Education requirements

Sophomore

- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- Regional Courses (select 4)
 - GEOG 3410 Geography of North America (3 credits)
 - GEOG 3800 Regional Geography (1-3 credits)
 - GEOG 3810 Geography of Europe (3 credits)
 - GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
 - GEOG 3840 Geography of Africa (3 credits)
 - GEOG 3850 Geography of the Middle East (3 credits)
 - GEOG 3860 Geography of Latin America and the Caribbean (3 credits)
- GEOG 3550 Site and Resource Analysis in Planning (3 credits)
- ECON 3010 Public Economics (3 credits)
- ECON 3230 Benefit/Cost Analysis (3 credits)
- ENGL 2150 Technical Writing (3 credits)
- ENGL 3150 Writing In The Disciplines (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 3880 Environmental Controversies (2 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)
- Complete Liberal Education requirements

Junior

- GEOG 3125 Weather and Climate (3 credits)
- GEOG 3226 Cartography (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 3532 Political Ecology (3 credits)
- GEOG 3560 Metropolitan Land Use Planning (3 credits)
- GEOG 3570 Public Lands Planning (3 credits)
- GEOG 3630 Conservation Biology (3 credits)
or BIOL 3630
- GEOG3XXX Any Remaining Regional Geography Course
- ECON 3010 Public Economics (3 credits)
- ECON 3230 Benefit/Cost Analysis (3 credits)
- ECON 3040 Environmental Economics (3 credits)
or ENVR 3040 Environmental Economics (3 credits)

Senior

- GEOG 3XXX Any Remaining Regional Geography Course
- GEOG 3580 Regional Development Planning (3 credits)
- GEOG 3870 Planning for Sustainable Cities (3 credits)
- GEOG 4130 Biogeography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)
- GEOG 4970 Internship (3 credits)
or ENVR 4970 Internship (3 credits)
or GEOG 4990 Thesis (3 credits)
or ENVR 4990 Thesis (3 credits)
- ECON 3010 Public Economics (3 credits)
- ECON 3230 Benefit/Cost Analysis (3 credits)
- ENVR 4880 Senior Seminar I (1 credit)

Social Studies, B.A. *major*

Geography Emphasis

Required Credits: 48

Required GPA: 2.50

Note: A minimum of 22 semester credits used to meet course requirements in I and II must be completed at Bemidji State University. No course grade below a C may be used to meet these requirements and a minimum GPA of 2.50 in this major is required for graduation. Students who desire a second field of emphasis are to consider a completion of a minor or a second major in that field. Such action may complement and increase the marketability of this major.

I REQUIRED CORE CURRICULUM

CAPSTONE COURSE

COMPLETE THE FOLLOWING COURSE:

- POL 4500 Thesis and Career Preparation (3 credits)

ECONOMICS COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)

WORLD HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2218 Medieval Europe (3 credits)
- HST 2219 Medieval European Culture (3 credits)
- HST 2228 Renaissance and Reformation Europe (3 credits)
- HST 2580 Russia (3 credits)
- HST 2600 Topics in History (3 credits)
- HST 2660 Women and History (3 credits)
- HST 2700 The History of World Religions (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)
- HST 3277 Readings and Research in European History (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)

U.S. HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2600 Topics in History (3 credits)

- HST 2610 Minnesota History (3 credits)
- HST 2667 Men and Women: Gender in America (3 credits)
- HST 3117 American Revolutionary Era, 1763-1800 (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- HST 3137 The American Civil War (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3187 American West (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 3100 American Foreign Policy (3 credits)
- POL 3130 Asian Political Development (3 credits)
- POL 3150 Topics in Political Science (1-3 credits)
- POL 3160 Comparative European Politics (3 credits)
- POL 3170 International Relations (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3190 International Political Economy (3 credits)
- POL 3200 Minnesota Politics (3 credits)
- POL 3210 Public Administration (3 credits)
- POL 3230 Environmental Politics (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- POL 3420 Campaigns and Elections (3 credits)
- POL 4200 Constitutional Law (3 credits)

SOCIOLOGY COURSES

COMPLETE THE FOLLOWING COURSES:

- SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)
- SOC 3210 Social Movements and Change (3 credits)

II REQUIRED FIELD OF EMPHASIS

SELECT 18 SEMESTER CREDITS OF ELECTIVES FROM GEOGRAPHY

Sustainability and Resource Management, B.A.S.

major

Required Credits: 54

Required GPA: 2.25

I REQUIRED CORE COURSES

Complete the following courses:

- BUAD 2231 Business Statistics I (3 credits)
or PSY 3401 Basic Statistics for Research (4 credits)
or STAT 2610 Applied Statistics (4 credits)
- ENGL 2150 Technical Writing (3 credits)
or ENGL 3150 Writing In The Disciplines (3 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)

- ENVR 2000 Introduction to Environmental Science (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 3880 Environmental Controversies (2 credits)

II SUSTAINABILITY AND RESOURCE MANAGEMENT

Select 27 credits from the following courses. Other related courses may be selected with prior approval of department.

- ENVR 3040 Environmental Economics (3 credits)
or ECON 3040 Environmental Economics (3 credits)
- GEOG 3125 Weather and Climate (3 credits)
- GEOG 3226 Cartography (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 3532 Political Ecology (3 credits)
- GEOG 3550 Site and Resource Analysis in Planning (3 credits)
- GEOG 3570 Public Lands Planning (3 credits)
- GEOG 3630 Conservation Biology (3 credits)
or BIOL 3630 Conservation Biology (3 credits)
- GEOG 4130 Biogeography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)
- GEOG 4190 Qualitative Methods in Geographic Research (3 credits)
- GEOG 4265 Spatial Analysis (3 credits)
- GEOG 4275 Advanced Geographic Information Systems (3 credits)
- GEOL 3120 Soils (4 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
- GEOL 3212 Hydrogeology (3 credits)
- GEOL 3700 Environmental Geophysics (3 credits)

REGIONAL GEOGRAPHY ELECTIVES

Select 1 of the following courses:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)
- GEOG 3850 Geography of the Middle East (3 credits)
- GEOG 3860 Geography of Latin America and the Caribbean (3 credits)

III CAPSTONE PROJECT

Select 1 of the following courses:

- GEOG 4910 Directed Independent Study (3 credits)
- GEOG 4970 Internship (3 credits)
- GEOG 4990 Thesis (3 credits)

Geography *minor*

Required Credits: 18
Required GPA: 2.00

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 2400 Introduction to Planning (3 credits)

II GEOGRAPHY ELECTIVES

SELECT 3 ADDITIONAL GEOGRAPHY COURSES, AT LEAST

ONE OF WHICH MUST BE AT THE 3,000 OR 4,000 LEVEL
(9 CREDITS)

GIS *minor*

Required Credits: 18
Required GPA: 2.00

I. REQUIRED COURSES

Complete the following courses:

- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- ECON3800
or ENVR 3800 Environmental Data Analysis (3 credits)

II REQUIRED GIS COURSES

Complete 9 credits from the following courses:

- GEOG 3226 Cartography (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 4265 Spatial Analysis (3 credits)
- GEOG 4275 Advanced Geographic Information Systems (3 credits)
- GEOG 4980 Research (3 credits)
- CS 2270 Introduction to Web Programming (3 credits)
- CS 2321 Computer Science I (4 credits)
- CS 3270 Advanced Web Programming (3 credits)

Geographic Information Science *cert*

Required Credits: 12
Required GPA: 2.25

I REQUIRED COURSES

Note: The Geographic Information Science certificate is not available to students pursuing the Geography, BS major GIScience emphasis or to students pursuing the GIScience minor.

It is advised that students not having previously taken a GIS course include GEOG 3231, Introduction to Geographic Information Systems, as one of their courses.

Select 4 courses from the following list:

- GEOG 3226 Cartography (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 4150 Machine Learning for Environmental Modeling (3 credits)
- GEOG 4265 Spatial Analysis (3 credits)
- GEOG 4275 Advanced Geographic Information Systems (3 credits)

Geography Courses

GEOG 1224 Introduction to Map Use (3 credits)

This course is designed for the liberal education program and provides an introduction to common characteristics and use of map media. Topographic maps will be used for physical analysis as well as to discern cultural and economic features of landscapes. Thematic maps, their use and applications will be presented. Includes some study out-of-doors with map and compass. Liberal Education Goal Areas 5 & 11.

GEOG 1400 World Regional Geography (3 credits)

A survey of physical, cultural, and economic aspects of world regions. An introduction to how constituent parts of the world differ from one another in their associated resources, cultures and economics. Attention is given to the interrelationships, interdependencies, and associations that bind together the diverse communities of the world. Liberal Education Goal Areas 7 & 8.

GEOG 2100 Introduction to Physical Geography (3 credits)

This course is designed for the liberal education program and provides an introduction to spatial patterns derived from earth system processes. The course provides a systematic survey of land forms, weather and climate, soils and vegetation. This course utilizes a combination of in class discussion and laboratory-like exercises to investigate these topics. Liberal Education Goal Area 3.

GEOG 2200 Introduction to Human Geography (3 credits)

Emphasizes the study of geographical relationships and interactions of cultural, social, economic, ethnic, and political phenomena. Topical approach to population subgroups, religions, languages, urban and rural settlements, and other attributes of the cultural landscape. Liberal Education Goal Areas 7 & 8.

GEOG 2400 Introduction to Planning (3 credits)

This course is designed for the liberal education program and provides information on the background and fundamentals of the community planning process. Includes discussion of contemporary issues in physical, environmental and social planning. Emphasis is on the local and subregional levels. Liberal Education Goal Areas 5 & 9.

GEOG 2925 People of the Environment: Geography Perspective (3 credits)

An integrative study of the natural, social, value-based, and citizen-action contexts for environmental awareness. The disciplinary component surveys geographic approaches to and institutional settings for environmental problems and decision making, including our spatial behaviors as either sources or recipients of environmental impacts. Interdisciplinary perspectives are evaluated in light of different geographic concepts of spatial distributions, physical geography, and regional planning. Liberal Education Goal Area 10.

GEOG 3125 Weather and Climate (3 credits)

Weather is the study of the atmosphere over short time scales, while climate is the study of long-term weather trends. The study of weather is commonly termed meteorology, which is actually a branch of physics associated with fluid dynamics. Climate is associated with statistical procedures and analyses. This course examines the geographic patterns and processes of global climate and weather, as well as topics such as global climate change, global climate models, and extreme weather events. Students learn about the Earth's atmosphere; energy budgets and astronomical controls on weather processes; oceanic and atmospheric circulation; the basic atmospheric parameters; atmospheric hazards such as tornadoes, hurricanes, hail, and lightning; and global climate change issues. Prerequisite: GEOG 2100 or consent of instructor.

GEOG 3226 Cartography (3 credits)

This course provides a more integrated, practical link between cartographic theory and practice for users of GIS. This course blends theoretical discussion of GIS as a science and GIS as a software application and addresses through lecture and laboratory work map productions for a variety of audiences. A particular focus of this course is on quality communication through maps. Experience with GIS software is essential. Prerequisite: GEOG 3231.

GEOG 3231 Introduction to Geographic Information Systems (3 credits)

This course develops a proficiency in basic GIS skills for those new to GIS. The premise of the course revolves around analytical problem solving using spatial data and techniques. The course also focuses on graphic communication of quantitative data including cartographic mapping concepts and data classification. This course concentrates on learning to navigate the current version of ArcGIS software at a beginner's level and developing and creating maps as communication tools. Liberal Education Goal Area 4.

GEOG 3232 Intermediate Geographic Information Systems (3 credits)

An intermediate course on the theories and application of GIS for spatial data management and analysis, thematic mapping, environmental modeling. This course expands on the concepts and methods presented in Introduction to GIS and guides students through a more comprehensive overview of principles and techniques used in GIS. Course objectives include (1) enhance and build knowledge of GIS as a system and science, (2) improve skills at GIS analysis, and (3) develop and improve problem solving skills. Prerequisite: GEOG 3231 or consent of instructor.

GEOG 3255 Introduction to Remote Sensing (3 credits)

Analysis of a special class of pictures that provide an overhead perspective. These images have unique properties that provide a distinct advantage to assessing spatial changes and patterns of change on the Earth's surface. Students develop an understanding and the skills necessary for interpreting air photos, satellite, and remotely sensed images. Prerequisite: GEOG 3231 or consent of instructor.

GEOG 3400 Economic Geography (3 credits)

This course helps students understand the world's increasingly complex economic interdependence by examining issues confronting the Global Economy today. This course looks at countries' economic and social well-being, their relationships to other countries and internal and global economic patterns of productivity, wealth and development. Liberal Education Goal Area 5.

GEOG 3410 Geography of North America (3 credits)

A regional analysis of the physical, demographic, economic and cultural characteristics of the nations in North America. Liberal Education Goal Areas 5 & 7.

GEOG 3531 Political Geography (3 credits)

This course utilizes "World Systems Theory" to investigate 1) theories of State formation and organization; 2) historical processes of imperialism, colonialism, and decolonization; 3) major issues of the emerging political economy; 4) historical and contemporary geopolitics; and 5) the political geography of everyday life.

GEOG 3532 Political Ecology (3 credits)

Political ecology utilizes a necessary geographical perspective to understand and analyze the biophysical processes that shape issues otherwise inadequately conceptualized as political, economic or social. This spatial understanding developed by political geographers reveals relationships of the ecological and the political that are simultaneously mutually reinforcing and, often, mutually antagonistic. Prerequisite: GEOG 3531 or consent of instructor.

GEOG 3550 Site and Resource Analysis in Planning (3 credits)

This course emphasizes techniques and methods in the location, analysis, evaluation, and design of sites, focusing on identifying use potentials and impact limitations for planning and management. Prerequisite: GEOG 2400 or consent of instructor.

GEOG 3560 Metropolitan Land Use Planning (3 credits)

An examination of the identification and inventory methods of land use analysis including the designing of land use models which are compatible with environmental, social, and economic goals. Prerequisites: GEOG 2100, GEOG 2400, or consent of instructor. Prior completion of or concurrent enrollment in either GEOG 3550 or GEOG 3570 is recommended.

GEOG 3570 Public Lands Planning (3 credits)

Comparison and evaluation of natural resource management policies and analytical techniques of the U.S. Forest Service, Bureau of Land Management, National Park Service and U.S. Fish and Wildlife Service. Attention is paid to the historical and contemporary land management approaches used to protect, exploit, manage, and/or use public lands in the United States. Especially relevant are jurisdictional issues over public land, federal agencies involved in land management, state and local issues and land management, and contemporary issues associated with land management in the 21st Century. Prerequisites: GEOG 2400 and GEOG 3550, or consent of instructor.

GEOG 3580 Regional Development Planning (3 credits)

An examination of methods and processes emphasizing contemporary relationships between planners and governments, the private sector, and nongovernmental organizations regarding relationships between regions nationally and internationally, with special attention to environmental sustainability. Prerequisite(s): GEOG 2400 or consent of instructor.

GEOG 3630 Conservation Biology (3 credits)

Principles and theories of conservation biology. Topics include biodiversity, threats to biodiversity, extinctions, management of threatened and endangered species, managing habitats for conservation, and methods to mitigate biodiversity loss. Prerequisites: BIOL 1400 and BIOL 1500, or consent of instructor. Also BIOL 3630.

GEOG 3800 Regional Geography (1-3 credits)

A regional and topical analysis of the cultural and physical features of a continent or major region of the earth. May be repeated provided different regions are involved. Note: Recommended for students in international studies, foreign languages, and for prospective teachers in the humanities or social studies.

GEOG 3810 Geography of Europe (3 credits)

A regional analysis of the cultural, economic, physical and landscape patterns of the European cultural region. NOTE: Recommended for students in Euro-Spring, International Studies, foreign languages, and prospective teachers. Liberal Education Goal Areas 5 & 8.

GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)

This course is designed to provide a more in depth look at Asian sub regions of South, East and Southeast Asia. Geographically, we will examine and analyze activities in this part of the world through cultural, demographic, political, economic, urban and geopolitical lenses. Liberal Education Goal Area 8. Might not be offered every year. Prerequisite: GEOG 1400 or GEOG 2200.

GEOG 3840 Geography of Africa (3 credits)

Despite persistent bias about it, Africa's cultural complexity, social dynamism, and political/economic struggle have tremendous relevance for the study of global trends at the start of the twenty-first century. The central purpose of this course is to demonstrate that relevance by investigating the cultural, historical, economic, and political dimensions of change in Africa.

GEOG 3850 Geography of the Middle East (3 credits)

This course is designed to provide a more in depth look at the region we routinely describe as the Middle East. Geographically, we will examine activities in SW Asia and the nations of North Africa. We may extend our discussion to the countries of Afghanistan, the Sudan, South Sudan and Turkey to provide a more comprehensive analysis of a particular topic or subtopic. This is a highly complex region and may be looked at from numerous perspectives. Our objective thus is to examine the region through economic, cultural, environmental, urban and geopolitical lenses. Prerequisite: GEOG 1400 or GEOG 2200.

GEOG 3860 Geography of Latin America and the Caribbean (3 credits)

This course is designed to provide a more in depth look at the region of Latin America and the Caribbean. We recognize at the outset that this is a broad subject and may be looked at from numerous perspectives. Our objective thus is to examine this geographic region through economic, cultural, environmental, urban and political lenses. The text book provides the basis for our study which is further complemented by each students (1) research into an issue or event that had a far reaching impact on this region or within its sub-regions, (2) reading of works of fiction set in Latin America and (3) viewing feature films with Latin American themes. Prerequisite: GEOG 1400 or GEOG 2200.

GEOG 3870 Planning for Sustainable Cities (3 credits)

Using a World Regional Geography approach, this course examines the dynamics of urban development across the globe, with particular reference to sustainable urban design and urban biodiversity. Political, cultural, environmental and economic influences on the city are examined in both the developed and the developing world. Liberal Education Goal Area 5.

GEOG 4130 Biogeography (3 credits)

This course examines the distribution and diversity of flora and fauna across multiple scales. It will focus on the factors that shape and influence these patterns and investigate the role of disturbance in this process. It will also incorporate both field and lab experiences to further examine the key concepts of biogeography. Prerequisites: GEOG 2100 and GEOG 3231.

GEOG 4140 Landscape Ecology (3 credits)

This course examines the connection of pattern and process at the scale of the landscape. Students will utilize several analytical methods to examine and explain how humans, disturbance and natural process work in concert to create landscape-level dynamics and change. The course will also cover how landscape ecology is applied to assist in conservation efforts. Prerequisites: GEOG 2100 and GEOG 3231.

GEOG 4150 Machine Learning for Environmental Modeling (3 credits)

The uses of machine learning, data science and artificial intelligence are everywhere today. Much of the data we create through our daily activities gets processed and used to customize services, offer better health care, or target you for specific advertising. Although there are many benefits of using data in these ways, there can be pitfalls and caution is always warranted when employing these tools. As such this class attempts to teach you the basic foundations of machine learning with particular emphasis to its application in environmental and spatial analysis. To this end, we will use the python development environment and we will emphasize the most commonly used tools including supervised learning algorithms (logistic regression, linear regression, neural networks), unsupervised learning algorithms (k- means, principal component analysis). In addition, we also cover anomaly detection, natural language processing and building recommender systems. A central focus will be building this foundation so students can successfully participate in a Kaggle competition which is a premier venue for testing your machine learning skillset.

GEOG 4190 Qualitative Methods in Geographic Research (3 credits)

As a geographic perspective becomes increasingly important in analysis of critical issues at multiple scales from the local to the global, this course demonstrates how research grounded in qualitative methodologies encourages innovative approaches and yields significant insights. Prerequisite: GEOG 2200. While not required, it is highly recommended that GEOG 4210 and GEOG 4265 be taken previously or concurrently.

GEOG 4210 The History and Development of Geographic Thought (3 credits)

Development of the discipline of Geography with emphasis on both the historical and recent developments in the field. Includes a critical analysis of writing of representative geographers.

GEOG 4265 Spatial Analysis (3 credits)

An examination in the concepts and application of advance spatial statistical methodologies. These include, kriging, spatial autocorrelation, spatial regression models, and cluster analysis. Prerequisites: STAT 2610 or PSY 3401 or BUAD 2231 and GEOG 3231.

GEOG 4275 Advanced Geographic Information Systems (3 credits)

This course will give students hands on experience working with advanced geodatabases, the basic automation and scripting of geospatial processes, web mapping, and server side application in GIS. Prerequisites: GEOG 3231 and GEOG 3232.

GEOG 4910 Directed Independent Study (3 credits)

Arranged individual study.

GEOG 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

GEOG 4930 Experimental Course (3 credits)

A course proposed for inclusion in the University curriculum. May not be offered more than two times as an experimental course.

GEOG 4970 Internship (3 credits)

Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

GEOG 4980 Research (3 credits)

Research carried out by the student that is based on appropriate methodology and scholarship.

GEOG 4990 Thesis (3 credits)

Working individually with a thesis advisor, the student produces a Geography thesis. The thesis must be a scholarly piece of work, based on empirical or archival research of a geographical issue (physical, demographic, economic, cultural, and/or political) of present or future relevance. The end product is a documented essay of at least minimally required length and format that must be approved by the advisor and at least one other member of the Geography Department after a brief oral defense.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Geology

Geology is the study of the rocks and minerals that make up earth and the physical and biological processes that shape earth, both at and below the surface. These processes include plate tectonics, volcanism, earthquakes, mountain building, and erosion. Traditionally, geologists have been concerned with industrial application of their skills in such areas as the search for oil and minerals. Today, geologists find that their insight and assistance is also valued in rapidly expanding fields such as geography, environmental studies, engineering, and hydrogeology and in such diverse fields as paleontology and oceanography.

The minor in Geology, coupled with a strong science major, is valuable as preparation for graduate study in geology and related areas. A graduate degree is usually required for career advancement beyond entry-level positions.

Programs

- Geology *minor*

Career Directions

Consultant
Geochemist
Geologist
Geophysicist
Hydrologist
Mineralogist
Paleontologist
Petrologist
Planetary Geologist
Science Writer
Stratigrapher
Teacher
Also: Graduate Study

Preparation

Recommended High School Courses

Algebra
Biology
Chemistry
Physics
Trigonometry

Geology *minor*

Required Credits: 18

Required GPA: 2.00

I REQUIRED COURSES

Complete the following courses:

- GEOL 1110 Physical Geology (4 credits)
or GEOL 1120 Historical Geology (4 credits)
- GEOL 2110 Mineralogy and Petrology (4 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)

II REQUIRED ELECTIVES

Select 7-8 additional credits from the following:

- GEOL 2730 Introduction to Planetary Science (4 credits)
- GEOL 3120 Soils (4 credits)
or BIOL 3120 Soils (4 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
- GEOL 3212 Hydrogeology (3 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)
- GEOL 3500 Topics in Paleontology (3 credits)
- GEOL 3700 Environmental Geophysics (3 credits)
- GEOL 4300 Global Environmental Change (3 credits)
- GEOL 4910 Directed Independent Study (3 credits)
- GEOG 3226 Cartography (3 credits)

Geology Courses

GEOL 1110 Physical Geology (4 credits)

Introduction to modern geology. Study of rocks and minerals and the processes operating on Earth. Lecture and laboratory. Liberal Education Goal Areas 3 (LC) & 10.

GEOL 1120 Historical Geology (4 credits)

Introduction to the history of Earth. Includes study of major fossil groups and significant geologic events with an emphasis on North America. Lecture and laboratory. Liberal Education Goal Area 3 (LC).

GEOL 2110 Mineralogy and Petrology (4 credits)

Identification and occurrence of minerals and igneous, metamorphic and sedimentary rocks. Introduction to diagnostic tests including spectrometer and polarizing microscope. Lecture and laboratory. Prerequisites: GEOL 1110 or GEOL 1120 or consent of instructor.

GEOL 2730 Introduction to Planetary Science (4 credits)

An introduction and examination of the solar system, planets, satellites, asteroids, comets, and meteorites. Atmospheric phenomena, magnetic fields, cosmic particles and the human presence in Space are included. Includes laboratory-like activities and exercises. Liberal Education Goal Area 3.

GEOL 2925 People of the Environment: Earth Science Perspective (3 credits)

Application of the Earth Sciences in understanding the causes of, and solutions to, environmental problems. Environmental perspectives on geologic hazards. Liberal Education Goal Area 10.

GEOL 3120 Soils (4 credits)

Introduction to principles of soil genesis, classification, physical and chemical properties, and biological significance. Lecture and laboratory. Prerequisites: (BIOL 1400 or BIOL 1120) and (GEOL 1110 or BIOL 1500) or consent of instructor. May not be offered every year.

GEOL 3211 Environmental Hydrology (3 credits)

The course provides a basic understanding of the principles and processes governing the movement of water through the hydrologic cycle, including atmospheric moisture flow, surface runoff, infiltration, and groundwater flow. Environmentally relevant applications based on case studies will be studied. The course includes coverage of contemporary global issues related to water resources, sustainable development, and climate change. Prerequisites: GEOL 1110 and MATH 1170 or equivalent, or consent of instructor.

GEOL 3212 Hydrogeology (3 credits)

Groundwater flow to wells, aquifer test analysis, groundwater exploration techniques, application of computer models in groundwater studies, hydrogeologic field methods, contaminant hydrogeology, vadose zone hydrology. Lecture and laboratory. Prerequisites: GEOL 3211 or consent of instructor. May not be offered every year.

GEOL 3400 Glacial and Pleistocene Geology (3 credits)

Modern concepts of glaciology and glacial geology. Interpretation of the phenomena and effects on the landscape. Lecture and laboratory. Prerequisite: GEOL 1110 or consent of instructor.

GEOL 3500 Topics in Paleontology (3 credits)

Introduction to major groups of organisms that are commonly preserved as fossils. Focus of class may vary between offerings; including invertebrate and vertebrate paleontology, introductory micropaleontology, palynology and pollen analysis. May be repeated as topics change. Lecture and laboratory. Prerequisite: GEOL 1120. (May not be offered every year.)

GEOL 3600 Stratigraphy and Sedimentation (3 credits)

Study of sedimentary rocks. Recognition of the physical and biologic factors affecting deposition. Introduction to stratigraphic principles. Lecture and laboratory. Prerequisites: GEOL 1110 or GEOL 1120, and GEOL 2110.

GEOL 3700 Environmental Geophysics (3 credits)

Introduction to geophysical processes and geophysical field methods commonly used in environmental evaluation. Interdisciplinary approach to an understanding of the physical environment. Lecture and laboratory. (Might not be offered every year.)

GEOL 4300 Global Environmental Change (3 credits)

This class offers an interdisciplinary introduction to the principles of climate, ecosystems, and biogeochemistry needed to understand human impacts on the natural environment. We will also discuss global change prediction and the scientific bases for global change assessments and policy measures. Key topics are the physical climate system and its variability, the carbon cycle and related biogeochemistry and ecosystem processes, land use issues, the interactions among climate, ecosystems, and biogeochemistry, and the impact of global change on societally relevant parameters. Common threads in all of these topics will pervade the whole semester; these include the use of observations and models, the consideration of multiple scales of change (temporal and spatial), the interaction of human behaviors and choices with natural systems, and the linkages among aspects of global change science (may not be offered every year). Prerequisites: ENVR 2000 or GEOG 2100 or Consent of Instructor.

GEOL 4910 Directed Independent Study (3 credits)

Arranged individual study.

GEOL 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

GEOL 4970 Internship (3 credits)

Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

GEOL 4980 Research (3 credits)

Research carried out by the student that is based on appropriate methodology and scholarship.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

German

Language is more than a mode of communication. It is the primary means of understanding a culture, a people, a way of life. Studying a second language gives us a perspective on our own language and culture, and prepares us to be knowledgeable and competent citizens of the world. In addition, those who undertake the study of languages experience the satisfaction and pleasure of learning what language is and how it works.

While Americans are traditionally viewed as monolingual, other countries routinely include language study as an essential part of a general education. In a world that is increasingly interconnected and interrelated, the development of a globally educated populace is crucial. Second language learning is a vital part of such an education.

Second language study can lead to career positions such as teacher, travel consultant, translator, and international entrepreneur. Languages also constitute an important second skill for many jobs in business, industry, government, and human services, and may be a key to increasing potential for personal growth and advancement.

German Courses

GER 1111 Elementary German I (4 credits)

An introductory course in listening, speaking, understanding, and writing German. The cultures of German-speaking countries are introduced. Liberal Education Goal Area 8

GER 1112 Elementary German II (4 credits)

An introductory course in listening, speaking, understanding, and writing German. The cultures of German-speaking countries are introduced. Prerequisite: GER 1111 or consent of instructor. Liberal Education Goal Area 8

GER 2211 Intermediate German I (3 credits)

Advancement of the four basic skills; understanding, speaking, reading, and writing, especially through expansion of vocabulary. Increased focus on accuracy. Deeper understanding of German culture. Selections from German literature, as well as other fields, are used as topics for discussion. Prerequisite: GER 1112 or consent of instructor. Liberal Education Goal Area 8

GER 2212 Intermediate German II (3 credits)

Advancement of the four basic skills; understanding, speaking, reading, and writing, especially through expansion of vocabulary. Increased focus on accuracy. Deeper understanding of German culture. Selections from German literature, as well as other fields, are used as topics for discussion. Prerequisites: GER 1112 or consent of instructor. Liberal Education Goal Area 8

GER 4430 German Grammar and Linguistics (1 credit)

Intensive grammar review and a focus on German linguistics as needed. Emphasis on aspects of the language that enhance communication and fluency. GER 2211 or GER 2212 or consent of the instructor (Might not be offered every year.)

GER 4467 Studies in the German Language and Culture (1-3 credits)

Possible topics: War and Language; the effect of political upheaval on language; Germanic beginnings and the German language; German literature and music. Consideration given to special problems and interests of the students. Prerequisite: GER 2211 or GER 2212 or consent of instructor. Might not be offered every year.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or

department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
1940, 2940, 3940, 4940 IN-SERVICE COURSE
1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
1970, 2970, 3970, 4970 INTERNSHIP
1980, 2980, 3980, 4980 RESEARCH
1990, 2990, 3990, 4990 THESIS

Health

The vision of the Department of Human Performance, Sport, and Health is “preparing and empowering future professionals to promote physical activity, health, and sport.”

The mission of the Department of Human Performance, Sport, and Health is to provide students with experiences to develop leadership, communication, and technological skills for learning, for citizenship, and for work. Our programs foster an appreciation of the contributions of physical activity, wellness, and sport to society.

Health is an ever-changing condition of well-being. It is influenced by intellectual, occupational, social, emotional, physical and spiritual factors. Health education combines learning experiences in all of these areas to encourage and facilitate the development of healthy behaviors and lifestyles.

Students majoring in health prepare to teach others about healthy living. The program in teacher licensure, leading to State of Minnesota teaching certification, and the Community Health program both offer an academic foundation, professional preparation, student teaching/internship experiences, and a learning environment conducive to personal application of health goals.

Both programs also provide sound academic preparation for entry into health-related master's degree programs. Graduate study is recommended for students pursuing careers beyond entry-level positions.

Programs

- Community Health, B.S. *major*
- Health Education. B.S. ((Teacher Licensure)) *major*
- Health Promotion and Education Minor *minor*
- Red Cross Community First Aid Certification *cert*
- Red Cross First Aid Responder Certification *cert*

Career Directions

Community Health Service
Community Teacher
Education
Primary and Secondary School Teaching
Private and Public Health Agencies
University/College Health Centers
Also: Graduate Study

Preparation

Recommended High School Courses

Biology
Chemistry
First Aid
Health
Psychology
Sociology

Community Health, B.S. *major*

Required Credits: 61
Required GPA: 2.25

I REQUIRED COURSES

Select 1 of the following courses:

- BIOL 1110 Human Biology (4 credits)
- BIOL 1400 Cellular Principles (4 credits)

Complete the following courses:

- BIOL 1111 Anatomy and Physiology for Allied Health I (4 credits)
- HLTH 2100 First Aid and CPR/AED (1 credit)
- HLTH 2800 Multicultural Health in America (2 credits)
or SOWK 2110 Intercultural Communication (3 credits)
- HLTH 3150 Theoretical and Ethical Foundations of Health (3 credits)
- HLTH 3200 Personal and Consumer Health (3 credits)
- HLTH 3300 Nutrition (3 credits)
- HLTH 3500 Community Health (3 credits)
- HLTH 3710 Disease Prevention and Epidemiology (3 credits)
- HLTH 4410 Health Programming (3 credits)
- PHED 1890 Lifetime Fitness (2 credits)
- PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)

- PSY 3401 Basic Statistics for Research (4 credits)
or STAT 3660 Statistics for the Health Sciences (3 credits)

Complete the following course:

- HLTH 3970 Internship: Field Experience in Community Health (1-3 credits)

Complete the following course:

- HLTH 4920 Directed Group Study: Health Seminar (1 credit)

Complete 10-12 credits of the following course:

- HLTH 4970 Internship (1-12 credits)

II ELECTIVES

Select 12 credits from the following courses:

- BIOL 1300 Medical Terminology (2 credits)
- HLTH 3400 Health and Drugs in Society (2 credits)
- LEAD 3500 Theories and Contexts of Leadership (3 credits)
- PHED 1240 Skills for Life: Techniques of Neuromuscular Relaxation (1 credit)
- PHED 2200 A Lifestyle for Wellness (2 credits)
- PHED 3300 Physiology of Exercise and Nutrition (3 credits)

- PHED 4160 Advanced Fitness Assessment & Prescription-Aerobic (3 credits)
- PHED 4170 Advanced Principles for Strength and Speed Training Exercise (3 credits)
- PSY 2200 Human Sexuality (4 credits)
- PSY 3387 Topics in Psychology (1-4 credits)
or PSY 4587 Advanced Topics in Psychology (2-4 credits)
- PSY 3500 Psychology of Aging (4 credits)
- PSY 3367 Social Psychology (3 credits)
- SOC3090

Up to 6 credits of Indigenous Studies courses accepted:

Up to 6 credits of Nursing courses accepted; note that most NRSG courses are for Nursing majors only

Alternative to completing the 12 credits of electives
*Successful completion of an accredited Community Health Worker Certificate curriculum (earning this credential also fulfills HLTH 3970 - Internship: Practicum in Health)

SUGGESTED SEMESTER SCHEDULE FOR COMMUNITY HEALTH MAJOR, B.S.

The following is a list of required Community Health Major, B.S. courses arranged by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible.

Freshman

- BIOL 1110 Human Biology (4 credits)
or BIOL 1400 Cellular Principles (4 credits)
- HLTH 2100 First Aid and CPR/AED (1 credit)
- Liberal Education requirements

Sophomore

- BIOL 1111 Anatomy and Physiology for Allied Health I (4 credits)
- PHED 1890 Lifetime Fitness (2 credits)
- HLTH 2800 Multicultural Health in America (2 credits)
or SOWK 2110 Intercultural Communication (3 credits)
- HLTH 3150 Theoretical and Ethical Foundations of Health (3 credits)
- HLTH 3200 Personal and Consumer Health (3 credits)
- Complete Liberal Education requirements

Junior

- HLTH 3300 Nutrition (3 credits)
- HLTH 3500 Community Health (3 credits)
- HLTH 3710 Disease Prevention and Epidemiology (3 credits)
- HLTH 3970 Internship: Field Experience in Community Health (1-3 credits)
- PSY 3401 Basic Statistics for Research (4 credits)
or STAT 3660 Statistics for the Health Sciences (3 credits)
- Major Electives

Senior

- HLTH 4410 Health Programming (3 credits)
- HLTH 4920 Directed Group Study: Health Seminar (1 credit)
- PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)
- HLTH 4970 Internship (1-12 credits)

- Major Electives

Health Education. B.S. *major* (Teacher Licensure)

Required Credits: 70

Required GPA: 2.50

I REQUIRED COURSES

Select 1 of the following courses:

- BIOL 1110 Human Biology (4 credits)
- BIOL 1400 Cellular Principles (4 credits)

Complete the following courses:

- BIOL 1111 Anatomy and Physiology for Allied Health I (4 credits)
- HLTH 2100 First Aid and CPR/AED (1 credit)
- HLTH 3150 Theoretical and Ethical Foundations of Health (3 credits)
- HLTH 3200 Personal and Consumer Health (3 credits)
- HLTH 3300 Nutrition (3 credits)
- HLTH 3500 Community Health (3 credits)
- HLTH 3710 Disease Prevention and Epidemiology (3 credits)
- HLTH 4206 Secondary School Health (2 credits)
- HLTH 4410 Health Programming (3 credits)
- PHED 3300 Physiology of Exercise and Nutrition (3 credits)
- PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)

Complete the following course:

- HLTH 4920 Directed Group Study: Health Seminar (1 credit)

Complete the following course:

- HLTH 4870 Practicum in Health Teaching (1 credit)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

SUGGESTED SEMESTER SCHEDULE FOR HEALTH EDUCATION MAJOR, B.S. (TEACHER LICENSURE)

The following is a list of required Health Education Major, B.S. courses arranged

by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible.

Freshman

- BIOL 1110 Human Biology (4 credits)
or BIOL 1400 Cellular Principles (4 credits)
- HLTH 2100 First Aid and CPR/AED (1 credit)
- Liberal Education requirements

Sophomore

- BIOL 1111 Anatomy and Physiology for Allied Health I (4 credits)
- HLTH 3150 Theoretical and Ethical Foundations of Health (3 credits)
- HLTH 3200 Personal and Consumer Health (3 credits)
- Complete Liberal Education requirements
- Take the Minnesota Teacher Licensure Exam (MTLE) Basic Skills test

Junior

- Begin Professional Education Standards of Effective Practice (SEP) courses
- HLTH 3300 Nutrition (3 credits)
- PHED 3300 Physiology of Exercise and Nutrition (3 credits)
- HLTH 3500 Community Health (3 credits)
- HLTH 3710 Disease Prevention and Epidemiology (3 credits)
- HLTH 4206 Secondary School Health (2 credits)
- HLTH 4970 Internship (1-12 credits)

Senior

- HLTH 4410 Health Programming (3 credits)
- HLTH 4920 Directed Group Study: Health Seminar (1 credit)
- PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)
- Complete Professional Education Standards of Effective Practice (SEP) courses
- Student teaching

Health Promotion and Education Minor *minor*

Required Credits: 21

Required GPA: 2.00

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- HLTH 3150 Theoretical and Ethical Foundations of Health (3 credits)
- HLTH 3200 Personal and Consumer Health (3 credits)
- HLTH 3300 Nutrition (3 credits)
- HLTH 3500 Community Health (3 credits)
- HLTH 3710 Disease Prevention and Epidemiology (3 credits)
- HLTH 4410 Health Programming (3 credits)

II REQUIRED OPTION

Select one of the following options (Community Health and Health Education majors may not double count courses in either option).

Option A: Promotion

Select 3 of the following courses:

- HLTH 2800 Multicultural Health in America (2 credits)
- HLTH 3400 Health and Drugs in Society (2 credits)
- PHED 1240 Skills for Life: Techniques of Neuromuscular Relaxation (1 credit)
- PHED 2200 A Lifestyle for Wellness (2 credits)
- PHED 3300 Physiology of Exercise and Nutrition (3 credits)
- PHED 4160 Advanced Fitness Assessment & Prescription-Aerobic (3 credits)

- PHED 4170 Advanced Principles for Strength and Speed Training Exercise (3 credits)
- PSY 2200 Human Sexuality (4 credits)
- PSY 2217 Abnormal Psychology (4 credits)
- PSY 3237 Lifespan Development (4 credits)
- PSY 3367 Social Psychology (3 credits)
- PSY 3387 Topics in Psychology (1-4 credits)
- INST 1107 or other INST courses up to 6 credits total in consultation with advisor.

Up to 6 credits of NRSG accepted; note that most NRSG courses are for Nursing majors only.

Option B: Pedagogy

Complete the following courses:

- HLTH 4206 Secondary School Health (2 credits)
- HLTH 4970 Internship (1-12 credits)

Red Cross Community First Aid Certification *cert*

REQUIRED COURSE

- HLTH 2100 First Aid and CPR/AED (1 credit)
or HLTH 2200 First Aid and CPR/AED Instructor (1 credit)

Red Cross First Aid Responder Certification *cert*

REQUIRED COURSE

- HLTH 3600 Emergency Response (3 credits)

Health Courses

HLTH 2100 First Aid and CPR/AED (1 credit)

An introduction to emergency action principles, first aid, and CPR/AED (automated external defibrillation) for lay responders. American Red Cross Adult and Pediatric First Aid/CPR/AED (valid 2-years) certificate may be earned. Recommended as a basic course for professional educators.

HLTH 2200 First Aid and CPR/AED Instructor (1 credit)

Designed to prepare First Aid and CPR/AED students to become instructors for Lay Responder First Aid and CPR/AED. American Red Cross Instructors Certificate may be earned. Recommended as an advanced course for professional educators. Law enforcement personnel are also encouraged to consider the course. Prerequisite: HLTH 2100 or equivalent.

HLTH 2800 Multicultural Health in America (2 credits)

Examines the health issues and problems faced by ethnic minority populations in America, specifically by African Americans, American Indians, Hispanic Americans, and Americans of Asian and Pacific Island descent. Since a disproportionate number of health problems confront these minority groups, this course (a) examines specific health problems, (b) evaluates what is known and unknown about these specific problems, and (c) re-evaluates the current health care system in America to resolve these special problems in health care delivery. Liberal Education Goal Area 7.

HLTH 2925 People of the Environment: A Health Perspective (3 credits)

This course builds upon the principles discussed in the large group, focusing greater attention on health issues related to the environment, including the food supply, water quality, air quality, and other environmental health risks. These are discussed in the context of common diseases such as cancers, asthma, communicable diseases, and other health problems associated with the environment. Liberal Education Goal Area 10.

HLTH 3150 Theoretical and Ethical Foundations of Health (3 credits)

Provides entry level health education and community health students with the theoretical and ethical foundations of health. Also examines health's history, philosophy, settings, literature, and credentialing.

HLTH 3200 Personal and Consumer Health (3 credits)

A comprehensive study of personal health identifying ill-advised health behaviors and recommending strategies for positive behavioral change. From an opportunity cost perspective, personal health care options, products and services in the marketplace will be examined. Opportunities to network with local, state and federal consumer health agencies will be provided. Prerequisite or Co-requisite: For Community Health and Health Education majors and Health Promotion and Education minors: HLTH 3150; Non-majors/minor may select this class with consent of instructor.

HLTH 3300 Nutrition (3 credits)

Fundamentals of food utilization in the body and diet planning including discussion of the relationship between dietary habits and disease. Also included are discussions of current trends in nutrition, dietary changes for special conditions such as pregnancy, infancy, teenagers, aging, athletes, and cultural differences in dietary practices.

HLTH 3400 Health and Drugs in Society (2 credits)

A study of chemical use and abuse as related to personal and community health. Various drugs and drug-taking behaviors will be defined and discussed. Historical, cultural, educational, and legal perspectives will be examined. Multi-faceted prevention and rehabilitation strategies promoting wellness will be discussed. Prerequisites: Sophomore status and a declared major area of study that requires this course.

HLTH 3500 Community Health (3 credits)

Comprehensive study of the community health challenges confronting the citizenry of the United States of America. Examines the roles of federal, state, and local governments, as well as private agencies, in individual and aggregate health care. Provides opportunities for community health networking. Prerequisites: For health majors/minors: HLTH 3150 and HLTH 3200; For non-majors/minors: Consent of instructor.

HLTH 3600 Emergency Response (3 credits)

Designed to provide advanced students the knowledge, skills and training to administer initial first aid in emergencies. American Red Cross advanced certificate may be earned. Ideal course for law enforcement personnel, athletic trainers, and juvenile officers. Prerequisite: HLTH 2100 or equivalent.

HLTH 3710 Disease Prevention and Epidemiology (3 credits)

An introduction to disease prevention, pathophysiology, and treatment of the most common communicable and chronic diseases in human populations. Focuses on the history and principles of disease occurrence in the context of environment and lifestyle choice. Students specifically examine risk factor management and the epidemiological data supporting the influence of physical activity in chronic disease prevention and management. Additionally, learners gain an introductory knowledge of epidemiology and biostatistics enabling them to successfully critique the scientific and educational literature. Prerequisites: For Community Health and Health Education majors: BIOL 1110, HLTH 3150, HLTH 3200, and HLTH 3500; For non-majors and the Health Promotion and Education minor: Consent of instructor.

HLTH 3970 Internship: Field Experience in Community Health (1-3 credits)

When taken as Field Experience in Community Health the following description applies: Community health majors will gain a 30-90-hour experience in a local health facility in preparation for the application of previous course work. Prerequisites: HLTH 3150 and HLTH 3200.

HLTH 4100 Teaching Elementary School Health (2 credits)

An integrated approach to the organization, content, goals, objectives, curriculum, methods and techniques of teaching health at the elementary level. Coordinating services and establishing collaboration will be incorporated. Elementary school state and national guidelines and mandates will be discussed. Teaching opportunities will be provided. Prerequisite: entrance into the teacher education program.

HLTH 4206 Secondary School Health (2 credits)

An integrated approach to the organization, content, goals, objectives, curriculum, methods, and techniques of teaching health at the secondary school level. Incorporates coordinating services and establishing collaboration. Secondary school state and national guidelines and mandates are discussed. Prerequisite: Entrance into the teacher education program or consent of instructor.

HLTH 4410 Health Programming (3 credits)

A comprehensive study of the process of identifying health problems, establishing health programming, and promoting, implementing, and evaluating the program. Also examines vision and mission statements, along with goals, objectives, timetables, and interpretation of results. This course parallels CHES criteria and utilizes a local community health organization to integrate student involvement. Prerequisites: For health majors/minors: HLTH 3150, HLTH 3200, HLTH 3500, HLTH 3710; For non-majors/minors: Consent of instructor.

HLTH 4870 Practicum in Health Teaching (1 credit)

A 30-hour practicum in which students have the opportunity to teach health lessons, assist health teachers deliver health instruction, observe health teachers deliver health instruction, read to students, listen to students read, tutor students, and perform other duties as required by the Professional Educator Licensing and Standards Board (PELSB) and requested by the health teacher. Prerequisite(s): Entrance into the teacher education program, or consent of instructor.

HLTH 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

HLTH 4920 Directed Group Study: Health Seminar (1 credit)

When taken as Health Seminar the following description applies: Intended as a capstone course to prepare the health major for employment, internship/job procurement, or continuing education in a graduate program. This course integrates discussion of strategies for professional development, as well as providing quality written composition on employment/graduate program goals and objectives. Prerequisite: Senior status or consent of instructor.

HLTH 4970 Internship (1-12 credits)

When taken for the Community Health major the following description applies: Students will gain field experience in a health-related facility relevant to specific career goals. Opportunities will exist for the student to apply the different concepts and theories from course work directly in the work setting through observation, planning, decision-making, committee participation, leadership, operation management, and individual and group projects. Required: A minimum of 30 practicum hours per credit. Prerequisite: completion of all health course work and degree requirements.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the

completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

History

History is the record of past events, including the stories of societies and individual people whose acts, whether noble, common, or foolish, altered the way people lived. Historians study and analyze history in order to appreciate and understand the past, to bring perspective to the present, and to plan for the future.

The History curriculum includes historical foundation courses in World and American history, and addresses national and international topics and issues through specialized courses from the ancient and medieval world to the present. Course offerings include a variety of courses in social, intellectual, and political history.

History majors are encouraged to study a second language and to travel and study either domestically or abroad. A bachelor's degree in history is excellent preparation for graduate study or further professional study (law, medicine, business, or seminary).

Note: The State of Minnesota does not grant a separate license for teaching history at the secondary level. Students wishing to teach history in secondary schools should complete the Social Studies major, B.S., teacher licensure and may choose a minor or a second major in History.

Programs

- History, B.A. *major*
- History, B.S. *major*
- Social Studies, B.A. (History Emphasis) *major*
- History Minor *minor*
- Equity *cert*

Career Directions

Archivist
Government Service
Historian
Historical Society Consultant/Director
Intelligence Data Analyst
International Service Officer
Journalist/Editor
Law, Medicine, and Other Professions
Legislative Researcher
Library Science
Museum Curator
Teacher
Also: Graduate Study

Preparation

Recommended High School Courses

Economics
English/Literature
Geography
Government
History
Psychology

History, B.A. *major*

Required Credits: 43
Required GPA: 2.50

Note: All History and non-history courses required for the major must reflect a letter grade of C- or better. In addition, HST 1898 and HST 1899 must reflect a letter grade of B- or better.

I REQUIRED COURSES

Complete the following courses with a B- or better:

*HST 1898 taken concurrently with either HST 1304 or HST 1305
*HST 1899 taken concurrently with either HST 1114 or HST 1115

- HST 1898 Introduction to Writing a World History Paper (1 credit)
- HST 1899 Introduction to Writing an American History Paper (1 credit)

II ADDITIONAL REQUIRED COURSES

Complete three of the following courses:

- HST 1114 United States History I, to 1877 (3 credits)
- HST 1115 United States History II, since 1877 (3 credits)
- HST 1304 World History I, Prehistory-1500 (3 credits)
- HST 1305 World History II, 1500-Present (3 credits)

Complete the following courses:

*HST 3500 must be taken with any 3 credit 3000 level topical History course taught by same instructor as HST 3500 or another appropriate course approved by instructor.

- HST 3500 History Research and Writing (1 credit)
- HST 4000 Historiography (3 credits)
- HST 4500 Historical Methods (3 credits)

Complete one of the following courses:

- HST 4600 History Portfolio (1 credit)
- HST 4783 Senior Thesis in History (3 credits)

III REQUIRED ELECTIVES

A. American/United States

Select 1 of the following courses:

- HST 2667 Men and Women: Gender in America (3 credits)
- HST 3117 American Revolutionary Era, 1763-1800 (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- HST 3137 The American Civil War (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3187 American West (3 credits)

B. European

Select 1 of the following courses:

- HST 2218 Medieval Europe (3 credits)

- HST 2219 Medieval European Culture (3 credits)
- HST 2228 Renaissance and Reformation Europe (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)
- HST 3799 Tudor and Stuart England, 1485-1714 (3 credits)
- HST 3800 Georgian Britain, 1688-1820 (3 credits)

C. Non-Western

Select 1 of the following courses:

- HST 2700 The History of World Religions (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)

III OTHER REQUIRED ELECTIVES

Select 15 credits of History or Allied courses as indicated:

- History courses numbered 3000 or above (minimum of 6 credits)
- History courses numbered 2000 or above
- Allied courses from the following list (maximum of 6 credits)

- ENGL 2340 The American Film (3 credits)
- ENGL 2330 American Literature to 1865 (3 credits)
- ENGL 2337 American Literature from 1865 to Present (3 credits)
- ENGL 2357 British Literature to 1800 (3 credits)
- ENGL 2358 British Literature from 1800 to Present (3 credits)
- INST 2201 Creation to Contact (3 credits)
- INST 2202 Survivance Since Contact (3 credits)
- INST 3307 Ojibwe History (3 credits)
- PHIL 3310 Ancient and Medieval Philosophy (3 credits)
- PHIL 3320 Modern Philosophy (3 credits)
- PHIL 3330 Nineteenth Century Philosophy (3 credits)
- PHIL 3340 Twentieth-Century Philosophy (3 credits)
- POL 3100 American Foreign Policy (3 credits)
- POL 3140 Canadian Politics (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3400 Political Theory (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- PSY 4487 History and Systems of Psychology (3 credits)
- SPAN 4426 Latin American Culture and Civilization (3 credits)
- SPAN 4427 Spanish Culture and Civilization (3 credits)

Program Learning Outcomes | History, B.A.

1. Introductory Level: Students will identify and explain major historical events, including their sequence and causes. In doing so, they will recognize the diversity and interconnectivity of human experiences across both geography and time.

2. Introductory Level: Students will narrate change over time, both orally and in writing. In doing so, they will accurately interpret both primary and secondary sources to substantiate their accounts of the past. They will also use prose styles and organizational structures in their essays that effectively convey their ideas.

3. Introductory Level: Students will recognize the value of historicization and identify its use in historical scholarship. In other words, they will recognize that historians interpret current issues by evaluating their relationships to past events.

4. Intermediate Level: Students will demonstrate intellectual empathy when assessing the values and choices of past peoples. Intellectual empathy is the recognition that although past peoples held cultural ideals with which we may disagree, the diversity of historical human perspectives is worthy of respect and of being studied.

5. Intermediate Level: Students will demonstrate the ability to think historically. They will evaluate causation, appraise historical significance, analyze contested interpretations of the past, and defend arguments using historical evidence.

6. Intermediate Level: Students will exhibit the ability to historicize. In other words, they will interpret present-day issues by evaluating their relationships to both past events and the choices of historical actors.

7. Advanced Level: Students will critically engage with historical discourse. Students will evaluate the evidence, theories, assumptions, and methods underlying historians' arguments. In doing so, students will recognize that historians' interpretations have changed over time because they were shaped by the cultures and societies in which the historians lived.

8. Advanced Level: Students will author original research, both by effectively investigating and interpreting primary and secondary-source evidence and by appropriately situating their work within pertinent historiographical debates.

9. Advanced Level: Students will analyze and investigate the applications of historical thinking to multiple careers located either within the field of history education and research or beyond it. Careers that utilize historical thinking include museum and archival curation, cultural resource management, creative writing, publication, law, public policy and advocacy, and other fields that are based on informational research, analysis, and synthesis.

History, B.S. *major*

Required Credits: 43

Required GPA: 2.50

I REQUIRED COURSES

Complete the following courses with a B- or better:

*HST 1898 taken concurrently with either HST 1304 or HST 1305

*HST 1899 taken concurrently with either HST 1114 or HST 1115

- HST 1898 Introduction to Writing a World History Paper (1 credit)
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- HST 1305 World History II, 1500-Present (3 credits)

Complete the following courses:

*HST 3500 must be taken with any 3 credit 3000 level topical History course taught by same instructor as HST 3500 or another appropriate course approved by instructor.

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- HST 4000 Historiography (3 credits)
- HST 4500 Historical Methods (3 credits)

Complete one of the following courses:

- HST 4600 History Portfolio (1 credit)
- HST 4783 Senior Thesis in History (3 credits)

II REQUIRED ELECTIVES

A. American/United States

Select 1 of the following courses:

- HST 2667 Men and Women: Gender in America (3 credits)
- HST 3117 American Revolutionary Era, 1763-1800 (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- HST 3137 The American Civil War (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3187 American West (3 credits)

B. European

Select 1 of the following courses:

- HST 2218 Medieval Europe (3 credits)
- HST 2219 Medieval European Culture (3 credits)
- HST 2228 Renaissance and Reformation Europe (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)
- HST 3799 Tudor and Stuart England, 1485-1714 (3 credits)
- HST 3800 Georgian Britain, 1688-1820 (3 credits)

C. Non-Western

Select 1 of the following courses:

- HST 2700 The History of World Religions (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)

III OTHER REQUIRED ELECTIVES

Select 15 credits of History or Allied courses as indicated:

- a. History courses numbered 3000 or above (minimum of 6 credits)
- b. History courses numbered 2000 or above
- c. Allied courses from the following list (maximum of 6 credits)

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- ENGL 2330 American Literature to 1865 (3 credits)
- ENGL 2337 American Literature from 1865 to Present (3 credits)
- ENGL 2357 British Literature to 1800 (3 credits)
- ENGL 2358 British Literature from 1800 to Present (3 credits)
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- INST 2202 Survivance Since Contact (3 credits)
- INST 3307 Ojibwe History (3 credits)
- PHIL 3310 Ancient and Medieval Philosophy (3 credits)
- PHIL 3320 Modern Philosophy (3 credits)
- PHIL 3330 Nineteenth Century Philosophy (3 credits)
- PHIL 3340 Twentieth-Century Philosophy (3 credits)
- POL 3100 American Foreign Policy (3 credits)
- POL 3140 Canadian Politics (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3400 Political Theory (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- PSY 4487 History and Systems of Psychology (3 credits)
- SPAN 4426 Latin American Culture and Civilization (3 credits)
- SPAN 4427 Spanish Culture and Civilization (3 credits)

Program Learning Outcomes | History, B.S.

1. Introductory Level: Students will identify and explain major historical events, including their sequence and causes. In doing so, they will recognize the diversity

and interconnectivity of human experiences across both geography and time.

2. Introductory Level: Students will narrate change over time, both orally and in writing. In doing so, they will accurately interpret both primary and secondary sources to substantiate their accounts of the past. They will also use prose styles and organizational structures in their essays that effectively convey their ideas.

3. Introductory Level: Students will recognize the value of historicization and identify its use in historical scholarship. In other words, they will recognize that historians interpret current issues by evaluating their relationships to past events.

4. Intermediate Level: Students will demonstrate intellectual empathy when assessing the values and choices of past peoples. Intellectual empathy is the recognition that although past peoples held cultural ideals with which we may disagree, the diversity of historical human perspectives is worthy of respect and of being studied.

5. Intermediate Level: Students will demonstrate the ability to think historically. They will evaluate causation, appraise historical significance, analyze contested interpretations of the past, and defend arguments using historical evidence.

6. Intermediate Level: Students will exhibit the ability to historicize. In other words, they will interpret present-day issues by evaluating their relationships to both past events and the choices of historical actors.

7. Advanced Level: Students will critically engage with historical discourse. Students will evaluate the evidence, theories, assumptions, and methods underlying historians' arguments. In doing so, students will recognize that historians' interpretations have changed over time because they were shaped by the cultures and societies in which the historians lived.

8. Advanced Level: Students will author original research, both by effectively investigating and interpreting primary and secondary-source evidence and by appropriately situating their work within pertinent historiographical debates.

9. Advanced Level: Students will analyze and investigate the applications of historical thinking to multiple careers located either within the field of history education and research or beyond it. Careers that utilize historical thinking include museum and archival curation, cultural resource management, creative writing, publication, law, public policy and advocacy, and other fields that are based on informational research, analysis, and synthesis.

Social Studies, B.A. *major* History Emphasis

Required Credits: 48

Required GPA: 2.50

Note: A minimum of 22 semester credits used to meet course requirements in I and II must be completed at Bemidji State University. No course grade below a C may be used to meet these requirements and a minimum GPA of 2.50 in this major is required for graduation. Students who desire a second field of emphasis are to consider a completion of a minor or a second major in that field. Such action may complement and increase the marketability of this major.

I REQUIRED CORE CURRICULUM

CAPSTONE COURSE

COMPLETE THE FOLLOWING COURSE:

- POL 4500 Thesis and Career Preparation (3 credits)

ECONOMICS COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)

WORLD HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2218 Medieval Europe (3 credits)
- HST 2219 Medieval European Culture (3 credits)
- HST 2228 Renaissance and Reformation Europe (3 credits)
- HST 2580 Russia (3 credits)
- HST 2600 Topics in History (3 credits)
- HST 2660 Women and History (3 credits)
- HST 2700 The History of World Religions (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)
- HST 3277 Readings and Research in European History (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)

U.S. HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2600 Topics in History (3 credits)
- HST 2610 Minnesota History (3 credits)
- HST 2667 Men and Women: Gender in America (3 credits)
- HST 3117 American Revolutionary Era, 1763-1800 (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- HST 3137 The American Civil War (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3187 American West (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 3100 American Foreign Policy (3 credits)
- POL 3130 Asian Political Development (3 credits)
- POL 3150 Topics in Political Science (1-3 credits)
- POL 3160 Comparative European Politics (3 credits)
- POL 3170 International Relations (3 credits)

- POL 3180 International Law and Organization (3 credits)
- POL 3190 International Political Economy (3 credits)
- POL 3200 Minnesota Politics (3 credits)
- POL 3210 Public Administration (3 credits)
- POL 3230 Environmental Politics (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- POL 3420 Campaigns and Elections (3 credits)
- POL 4200 Constitutional Law (3 credits)

SOCIOLOGY COURSES

COMPLETE THE FOLLOWING COURSES:

- SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)
- SOC 3210 Social Movements and Change (3 credits)

II REQUIRED FIELD OF EMPHASIS

SELECT 18 SEMESTER CREDITS OF ELECTIVES FROM HISTORY:

History Minor *minor*

Required Credits: 22

Required GPA: 2.25

I REQUIRED COURSES

Complete one of the following courses with a grade of B- or better:

*HST 1898 taken concurrently with either HST 1304 or HST 1305

*HST 1899 taken concurrently with either HST 1114 or HST 1115

- HST 1898 Introduction to Writing a World History Paper (1 credit)
- HST 1899 Introduction to Writing an American History Paper (1 credit)

I ADDITIONAL REQUIRED COURSES

Complete at least 3 of the following courses:

- HST 1114 United States History I, to 1877 (3 credits)
- HST 1115 United States History II, since 1877 (3 credits)
- HST 1304 World History I, Prehistory-1500 (3 credits)
- HST 1305 World History II, 1500-Present (3 credits)

Complete one of the following courses:

- HST 3117 American Revolutionary Era, 1763-1800 (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- HST 3137 The American Civil War (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3187 American West (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3799 Tudor and Stuart England, 1485-1714 (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)
- HST 3650 Environmental History (3 credits)
- HST 4000 Historiography (3 credits)

II REQUIRED ELECTIVES

Complete 9 credits as follows:

One United States History course numbered 2000 or above.

- HST 2500 Native Americans and the United States, 1600s-Present (3 credits)
- HST 2610 Minnesota History (3 credits)
- HST 2667 Men and Women: Gender in America (3 credits)
- HST 2799 Religion in America (3 credits)
- HST 3117 American Revolutionary Era, 1763-1800 (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- HST 3137 The American Civil War (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3187 American West (3 credits)

One non United States History course numbered 2000 or above

- HST 2218 Medieval Europe (3 credits)
- HST 2219 Medieval European Culture (3 credits)
- HST 2228 Renaissance and Reformation Europe (3 credits)
- HST 2580 Russia (3 credits)
- HST 2700 The History of World Religions (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)
- HST 3277 Readings and Research in European History (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)
- HST 3799 Tudor and Stuart England, 1485-1714 (3 credits)
- HST 3800 Georgian Britain, 1688-1820 (3 credits)

One additional 3 credit course from the following options:

- a. History course not taken above numbered 2000 or above
- b. HST 1114, HST 1115, HST 1304 OR HST 1305 not taken above
- c. One of the following allied discipline courses

- ENGL 2340 The American Film (3 credits)
- ENGL 2330 American Literature to 1865 (3 credits)
- ENGL 2337 American Literature from 1865 to Present (3 credits)
- ENGL 2357 British Literature to 1800 (3 credits)
- ENGL 2358 British Literature from 1800 to Present (3 credits)
- INST 2201 Creation to Contact (3 credits)
- INST 2202 Survivance Since Contact (3 credits)
- INST 3307 Ojibwe History (3 credits)
- PHIL 3310 Ancient and Medieval Philosophy (3 credits)
- PHIL 3320 Modern Philosophy (3 credits)
- PHIL 3330 Nineteenth Century Philosophy (3 credits)
- PHIL 3340 Twentieth-Century Philosophy (3 credits)
- POL 3100 American Foreign Policy (3 credits)
- POL 3140 Canadian Politics (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3400 Political Theory (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- PSY 4487 History and Systems of Psychology (3 credits)
- SPAN 4426 Latin American Culture and Civilization (3 credits)
- SPAN 4427 Spanish Culture and Civilization (3 credits)

Equity cert

Required Credits: 15

Required GPA: 2.00

I REQUIRED COURSES

Complete the following courses:

Note: EQTY 2500 and EQTY 4500 must be taken at BSU.

- EQTY 2500 Introduction to Equity (3 credits)
- EQTY 4500 Applications of Equity (3 credits)

II REQUIRED ELECTIVES

Select three courses from the following list:

Courses should be selected in consultation with the Equity Certificate Director, based upon a student's professional goals/experience. Student must have already met the pre-requisites of these courses with prior coursework. Enrollment in the Equity Certificate program will not allow students to bypass pre-requisites.

- ANTH 2610 Women around the World (3 credits)
- COMM 3120 Communication in a Diverse Society (3 credits)
- COMM 3150 Gender Communication (3 credits)
- COMM 3500 Communication and Conflict (3 credits)
- GER 4467 Studies in the German Language and Culture (1-3 credits)
- HST 2500 Native Americans and the United States, 1600s-Present (3 credits)
- HST 2600 Topics in History (3 credits)
- HST 2660 Women and History (3 credits)
- HST 2667 Men and Women: Gender in America (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)
- INST 2201 Creation to Contact (3 credits)
- INST 2202 Survivance Since Contact (3 credits)
- INST 3170 Indigenous Education (3 credits)
- INST 3307 Ojibwe History (3 credits)
- INST 3317 Tribal Government and Leadership (3 credits)
- INST 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
- INST 3720 Food Sovereignty, Health & Indigenous Environments (3 credits)
- INST 3730 Sustainable Communities: Local Indigenous Perspective (3 credits)
- INST 3740 Environment, Wellness & the Sacred Connection to Place (3 credits)
- INST 3750 Sustainable Communities: Global Indigenous Perspective (3 credits)
- INST 3888 Indigenous Women Writers (3 credits)
- INST 4000 Nation Building and Leadership (3 credits)
- INST 4207 Indigenous Lifeways (3 credits)
- INST 4418 Federal Indian Law (3 credits)
- INST 4900 Social Justice (3 credits)
- OJIB 1100 Ojibwe Culture (4 credits)
- PSY 2200 Human Sexuality (4 credits)
- PSY 3210 Death and Culture (3 credits)
- PSY 3387 Topics in Psychology (1-4 credits)
- PSY 3490 Disability and Ableism (3 credits)
- PSY 3500 Psychology of Aging (4 credits)
- PSY 4242 Psychology of Women and Gender (3 credits)
- PSY 4490 Stereotyping, Prejudice, and Discrimination (3 credits)
- PSY 4587 Advanced Topics in Psychology (2-4 credits)
- PSY 4588 Multicultural Psychology (4 credits)

- SOC 2230 Race and Ethnic Relations (3 credits)
- SOC 2240 Men, Women, and Society: A Sociological Interpretation (3 credits)
- SOC 3210 Social Movements and Change (3 credits)
- SOC 3320 Social Class and Inequality (3 credits)
- SOC 4270 Intersectionality (3 credits)
- SPAN 1100 Hispanic Culture And Spanish Language (1-3 credits)
- SPAN 3317 Topics in Latin America (3 credits)
- SPAN 3317 Topics in Latin America (3 credits)
- SPAN 3320 Latin America and Spain Through Cinema (1-3 credits)
- SPAN 3830 Voices of Women in the Spanish-speaking World (3 credits)
- SPAN 3850 Art and Conflict in Spain and Latin America (3 credits)
- SPAN 4421 Women in Hispanic Literature and Culture (3 credits)
- SPAN 4422 Hispanic Literature and Culture in the United States (3 credits)

History Courses

HST 1114 United States History I, to 1877 (3 credits)

A survey of American/United States history from the earliest period to 1877, including cultures in pre-contact America; the interaction of American, African, and European peoples during exploration and colonization; development of new blended cultures; growth of unfree labor; role of war in early America; founding of a new nation; early attempts to construct a national identity; and growth of cultural tensions leading to the Civil War and Reconstruction. Includes discussions of the increasingly diverse make up of the American population (male and female) and emphasizes the development of analytical skills focusing on reading, oral presentation, and writing. Liberal Education Goal Areas 5 & 7.

HST 1115 United States History II, since 1877 (3 credits)

A survey of United States history since Reconstruction, including social, economic, and cultural changes of the Gilded Age; Populism and Progressivism; internationalism and imperialism; 1920s Normalcy; 1929 Crash and 1930s Depression; New Deal; Cold War; conservative renaissance, Fair Deal; New Frontier and Great Society; and contemporary society and conditions. Includes discussions of the increasingly diverse make up of the American population (male and female) and emphasizes the development of analytical skills focusing on reading, oral presentation, and writing. Liberal Education Goal Areas 5 & 7.

HST 1304 World History I, Prehistory-1500 (3 credits)

A global and cross-cultural study of the early period of world history, including ancient civilizations and empires, classical China, India, Greece, and Rome, interaction of civilizations, influence of Buddhism, Christianity, and Islam as world religions, the Arab world and culture, Medieval Europe, African and American pre-contact cultures and civilizations. Liberal Education Goal Areas 5 & 8.

HST 1305 World History II, 1500-Present (3 credits)

A global and cross-cultural study of the modern period of world history, including the major cultural/continental areas which existed in 1500, the influence of European expansionism and colonialism, interaction of nations and peoples, reform and change in religious patterns, the French Revolution and Napoleon, the development and spread of the Industrial Revolution, Marxism and Communism, global rearrangements of the twentieth century, decline of European colonialism, and contemporary conditions. Liberal Education Goal Areas 5 & 8.

HST 1898 Introduction to Writing a World History Paper (1 credit)

The aim of this course is to introduce students to research in a humanities discipline and to have them develop those skills through researching and writing an essay of about 1500 words based on primary-source evidence, as well as some historical literature. Co-requisite(s): HST 1304 or HST 1305 or instructor consent.

HST 1899 Introduction to Writing an American History Paper (1 credit)

The aim of this course is to introduce students to research in a humanities discipline and to have them develop those skills through researching and writing an essay of about 1500 words based on primary-source evidence, as well as some historical literature. Co-requisite(s): HST 1114 or HST 1115 or instructor consent.

HST 2218 Medieval Europe (3 credits)

Survey of political and intellectual history in Europe from the collapse of Roman power in Western Europe to the fifteenth century. Topics include the rise and growth of the Christian Church and the Papal Monarchy; the Byzantine Empire; the Frankish Kingdom; the Investiture Contest; the Crusades; the twelfth-century Renaissance; the emergence of secular, regional monarchies; representative institutions; and the panoramic crises.

HST 2219 Medieval European Culture (3 credits)

A survey of aspects of the cultures of Medieval Europe (ca.400-1450), from the Christian Roman Empire to the Renaissance. The course will cover both the Latin West and the Byzantine East. Themes will include Religious life, Intellectual culture, Political thought, Literary expression, the Visual Arts, and Social History. Liberal Education Goal Area 6.

HST 2228 Renaissance and Reformation Europe (3 credits)

Survey of European history from ca. 1400 to 1648 with emphasis on the rise of humanist culture; the growth of stronger "national" governments in England, France, Spain, and Italy; the disintegration of Christian unity and the emergence of rival Christian churches; the emergence of the mercantile, pre-capitalist economic system, and the intensification of conflict made possible by greater resources and religious rivalries. (Might not be offered every year.)

HST 2500 Native Americans and the United States, 1600s-Present (3 credits)

This course will explore the history of American Indians' relations with Anglo Americans, dating from the 1600s to the present, in the region now covering the United States. In doing so, it will ask students to consider how this history shaped American society as a whole. This course will focus on the issues of contact, trade, Native opposition to colonization, intercultural understanding and misunderstanding, and assimilation. It will also analyze the effects of the US government's policies confronting Native Americans, as well as how Native people creatively resisted, accommodated, and adapted to their changing realities in order to preserve their autonomy and cultural identities. Students will study the causes and effects of the French and Indian War, the creation of pan-tribal alliances, the Indian Removal Act, boarding schools and allotment, the Red Power Movement, and other events that shaped Native American history. Given the tremendous diversity of Native experiences and cultures, this course will both focus on and differentiate the histories of selected groups, including the Iroquois, Shawnee, Cherokee, and Sioux. Liberal Education Goal Areas 5 & 7.

HST 2580 Russia (3 credits)

Survey of the development of the Russian peoples and nation, from the principality of Kiev through the rise and dominance of Muscovy, to the revolution of 1917 and the establishment of the Soviet Union, the collapse of the Soviet Communist federation, to the present, with stress upon political, dynastic, economic, social, and cultural patterns. Liberal Education Goal Area 8.

HST 2600 Topics in History (3 credits)

Study of a specific historical topic or development, person, or time period, with the specific title being announced in each semester's class schedule.

HST 2610 Minnesota History (3 credits)

An introductory survey of the Minnesota area over time--its environments, its people, and its cultures. Liberal Education Goal Areas 5 & 7.

HST 2660 Women and History (3 credits)

Introductory survey of the role of women in history, approached thematically and topically. Based on the feminist critique of history, a cross-cultural approach emphasizes a comparative critique and evaluation of women in various historical contexts. Liberal Education Goal Areas 5 & 8.

HST 2667 Men and Women: Gender in America (3 credits)

This course seeks a close-up view of American culture from the colonial era to the modern era through the stories of individuals. In order to better understand these stories, the class first develops an interpretive framework using gender as the central theme. All individuals are shaped by the conventions of gender in any given time period. Those expectations change over time, and students will explore those changes and how individuals respond to them. Individuals are looked at in a variety of historical settings, including urban areas, the frontier, and a variety of middle landscapes. (Might not be offered every year.)

HST 2700 The History of World Religions (3 credits)

A historical survey of Hinduism, Buddhism, Jainism, Confucianism, Taoism, Shinto, Judaism, Christianity, and Islam, from their origins to the present. Liberal Education Goal Areas 5 & 8.

HST 2799 Religion in America (3 credits)

This course explores the history of America's diverse religious traditions since the colonial era and their relationship to historical developments in society, politics, and culture. We will consider how religion has both acted as a conservative force in society by preserving the status quo AND been the motivation for radical democratic upheaval. We will investigate patterns of religious establishment, revivalism, the influence of science on religion, the rise of a national civil religion, changes in denominational structures and theology, secular accommodation, and cycles of denominational growth and change. While we will explore the history of American Christianity, we will also study the influence of other faith traditions. Lib Ed Goal Area 6.

HST 2925 People of the Environment: Environment and History (3 credits)

An examination of past interactions between human society and the natural world in what is now the United States. Issues to be discussed in the course include Native American resource management; the ecological effects of the arrival of Europeans, Africans, and Asians in North America; resource exploitation in the industrial era; the preservationist and conservationist movements; and the historical roots of current environmental problems. Liberal Education Goal Area 10.

HST 2953 Study-Travel, History and the Social and Behavioral Sciences (1-6 credits)

Study Travel course in History for Lib Ed Goal Area 5.

HST 3117 American Revolutionary Era, 1763-1800 (3 credits)

Consideration of the redefinition of the British Empire following the Great War for Empire in 1763, the rise and development of colonial rebel opposition, evolution of political philosophy and ideology culminating in the 1776 Declaration of Independence, the war for independence, the new nation under the Articles of Confederation, the writing and ratification of the new 1787 Constitution, and the contribution of the Federalists during the 1790s. (Might not be offered every year.)

HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)

This course will explore the grass roots movements that tried to expand the benefits that the founders originally guaranteed for elite white males. These powerful reform movements challenged established authorities, compelling them to either accommodate popular demands or coerce a restoration of the status quo. We will investigate the resulting clashes that characterized reform efforts during the early 1800s, including those centered on anti-slavery, women's legal rights, temperance, religious reform, and other causes. In doing so, we will examine both why many people were denied equality and how the gradual extension of toleration and equal opportunity developed. By understanding past tragedies, successes, and conflicts, students will be better citizens of the present.

HST 3137 The American Civil War (3 credits)

This course will explore the economic, political, and cultural causes of the Civil War. It will address how and why slavery ended during the Civil War, as well as the legacy of race and racism in America. It will analyze the development of national sectionalism beginning in the 1840s, the influence of Manifest Destiny and frontier expansionism, the growth of southern nationalism, southern secession and the establishment of the Confederate States of America, and the military and economic dimensions of the war. Finally, it will analyze whether violent conflict was necessary to resolve the nation's differences.

HST 3159 The World at War, 1931-1945 (3 credits)

This course covers the history of global war and its consequences. Beginning with the development of fascist and totalitarian states in Europe, nationalism in Asia, and the impact of economic depression, the course follows the war by considering issues on the home front and battlefield, debates over strategy and diplomacy, and decisions leading to the Holocaust and the development of atomic weaponry. (Might not be offered every year.)

HST 3187 American West (3 credits)

The American West is both an idea and a place, and although it is difficult to define, it is central to an understanding of how Americans see themselves and are viewed by people around the world. This course focuses on the trans-Mississippi West, but recognizes these are imposed boundaries and that the region is shaped by decisions and policies imposed by Easterners. This study moves across time, examining the lives and cultures of the earliest peoples, the effects of immigrants who competed for land and resources, and the legacy of this westward experience for modern society. The West, too, is real and imagined, and the course will consider its impact on American popular culture.

HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)

Survey of Ancient Greek and Roman civilization to the Fifth Century CE. Emphasizes political, intellectual, and cultural issues. (Might not be offered every year.) Liberal Education Goal Area(s) 5 & 8.

HST 3258 The Roman Civil Law Tradition (3 credits)

Study of the Roman Civil Law Tradition as it developed from Antiquity through the Middle Ages, the Early-Modern period and on into the nineteenth century. Prerequisites: Sophomore status and successful completion of at least 6 credits of History (HST) courses, or consent of instructor.

HST 3277 Readings and Research in European History (3 credits)

This is a junior/senior-level topics course on European history. The unifying principle of the course is that students are required to participate in a colloquium format in which they present, analyze, and discuss various readings over the semester and that they produce a research paper of 4000+ words on some specific aspect of the course subject. Prerequisite: HST 1304 or HST 2208 or HST 2218 or HST 2228 or HST 2510 or HST 2520 or consent of instructor. (Might not be offered every year.)

HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)

A survey of African, Asian, Latin American, and Middle Eastern civilizations featuring the impacts of modernization introduced through colonialism on the traditional societies of these civilizations. Liberal Education Goal Areas 5 & 8.

HST 3419 East Asia (3 credits)

Political, economic, social, and cultural institutions of Chinese, Japanese, Korean, and Vietnamese civilizations, from the ancient period to the present. Special consideration will be given to the spread of Chinese civilization and culture as the basis of East Asian "Confucian" cultures. Liberal Education Goal Areas 5 & 8. (Might not be offered every year.)

HST 3429 South and Southeast Asia (3 credits)

Historical, political, social, economic, and cultural developments from ancient civilizations to contemporary nations, including the influence of European colonial activities, including India, Pakistan, Bangladesh, Burma, Vietnam, Laos, Thailand, Kampuchea, Malaysia, Singapore, Indonesia, and Philippines. (Might not be offered every year.)

HST 3459 Latin America (3 credits)

Introductory survey of selected themes and problems in the historical, economic, social, and cultural development of Latin America. (Might not be offered every year.)

HST 3500 History Research and Writing (1 credit)

This course is principally for History-baccalaureate- major and History-minor students and others who wish to learn the methods of research and presentation in a humanities discipline to a high level. This course must be taken together with one of the 3000-level, topical History courses, such as HST 3128, HST 3208, HST 3459, etc. Students in this course will learn methods of research in History through planning, researching, writing, and presenting an essay of about 4000 words based on primary-source evidence and historical literature. Co-requisite(s): Any 3000 level topical History course taught by same instructor as HST 3500 or another appropriate course approved by instructor.

HST 3650 Environmental History (3 credits)

Environmental History is a relatively new historical discipline dedicated to understanding how our surroundings have influenced our choices and how we have affected our surroundings. Until very recently, history has treated the physical environment of continents, rivers, soils, and climates as a backdrop for political, social, or cultural action. Sometimes a colorful background, but not often a factor in the action taking place in the foreground. At its most basic, Environmental History makes three claims. First, we are influenced by our environments. Second, we change our environments. Third, our knowledge of and attitudes toward our environment change. In this course we'll look at American History using each of these ideas and see things we wouldn't have seen otherwise. Prerequisite(s): Junior/Senior status or consent of instructor.

HST 3799 Tudor and Stuart England, 1485-1714 (3 credits)

This course will analyze the history and legacy of the Tudor and Stuart dynasties that ruled from 1485 to 1714. It will explore the changes that rewrote England's political, social, and religious structures and turned a weak monarchy into a global power. It will consider the impact of the English Reformation under Henry VIII, the counter-Reformation under Mary, the rise of Puritanism, and the Elizabethan Settlement establishing the Church of England. It will also explore the English Civil War and execution of Charles I, the Restoration of the monarchy in 1660, and the coup d'etat in 1688 that opened the way to lasting parliamentary sovereignty and religious toleration in England.

HST 3800 Georgian Britain, 1688-1820 (3 credits)

This course will explore the changes that rewrote Great Britain's political, social, and economics structure and transformed Britain from a country still recovering from a political coup in 1688 into the world's most powerful empire by the early nineteenth century. It will consider the political impact of the eighteenth and nineteenth century wars with France, the cultural influence of the Enlightenment and Romanticism, the economic consequences of industrialization, the social implications of imperialism, and the cultural ramifications of the anti-slavery movement. It will also explore Britain's reaction to the American Revolution, its role in the Napoleonic Wars, and the consolidation of a British national identity.

HST 4000 Historiography (3 credits)

This course explores the history of writing history. It will examine how historians have interpreted the past and why their interpretations have changed over time. It will analyze postmodernism, Marxism, feminism, and other theories that have shaped how historians study history. Finally, this course will explore how historians use primary and secondary sources, as well as the procedures historians employ to write and research history. Prerequisite(s): Six credits earned in any two 3000-level HST-prefix courses or instructor permission.

HST 4500 Historical Methods (3 credits)

Historical Methods explores the work of historians and gives students an introduction to several subdisciplines of history and the tools, sources, and techniques they use, as well as practice in the processes of, research, analysis of sources, organization and citation, interpretation of primary and secondary materials, and presentation and historical writing. Students who are preparing to write a thesis will produce a prospectus. Other students may apply their learning in this course toward a research paper in another, 3000-level course. Prerequisite(s): Junior or Senior status.

HST 4600 History Portfolio (1 credit)

Students will prepare and submit portfolios of their graded assignments from History-courses demonstrating achievement of Learning Outcomes to fulfill requirements for the B.A./B.S. in History. Prerequisite(s): Senior Status and successful completion of at least 26 credits of courses that will count towards the 40 credits required for the B.A./B.S. in History.

HST 4783 Senior Thesis in History (3 credits)

Working with a faculty advisor, students complete research and write a scholarly thesis, then polish and present it in a public venue approved by the department. For students who produce, present, and have such a thesis accepted by the Department, the requirement to present a portfolio of graded assignments for the B.A./B.S. will be waived. Prerequisite(s): Senior status, successful completion of at least 31 credits of courses counting toward the History B.A./B.S., and at least a 3.25 GPA within the History major.

HST 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
 1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
 1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
 1940, 2940, 3940, 4940 IN-SERVICE COURSE
 1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
 1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
 1970, 2970, 3970, 4970 INTERNSHIP
 1980, 2980, 3980, 4980 RESEARCH
 1990, 2990, 3990, 4990 THESIS

Art History Courses**ARTH 2551 Art History Survey I (4 credits)**

An overview of the art and architecture of world cultures from pre-historic times to ca. 1400 C.E. (i.e., through the late Middle Ages in Europe). Liberal Education Goal Areas 6 & 8

ARTH 2552 Art History Survey II (4 credits)

The art and architecture of world cultures from ca 1400 C.E. to the present (i.e., from the Renaissance and Baroque eras in Europe onward). Liberal Education Goal Areas 6 & 8.

ARTH 2953 Study Travel History and the Social and Behavioral Sciences (1-6 credits)

Study Travel course in History and the Social and Behavioral Sciences for Lib Ed Goal Area 5

ARTH 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Honors Program

The Honors Program does not offer a major, a minor, or a degree. Successful completion of the Honors requirements is noted on students' permanent transcripts. Honors graduates are given special recognition at commencement and wear the Honors stole with their academic robes.

Some University students have the ability and desire to engage in academic challenges that extend beyond the Liberal Education requirements and their own majors. In the Honors Program, these students take interdisciplinary Honors courses in lieu of Liberal Education offerings and engage in an Honors thesis or project. As members of the Honors community, they collaborate with a faculty advisor and the Honors Council to plan their studies and to manage the responsibilities that correspond with the program's freedoms.

Eligibility

High school seniors with superior academic records or college students with a cumulative grade point average of 3.25 or above are invited to apply. A concise letter stating reasons for interest in becoming a member of the Honors Program should be included with the application form. Such letters should be addressed to the Director, Honors Program, Bemidji State University. Students enrolled at Bemidji State University may personally consult the Director for information.

The quota of Honors Scholars admitted each academic year is determined by the number of qualified applications received. Students are appointed to the program on a competitive basis by the Honors Council. Applicants are notified in writing of their selection as Honors Scholars.

Career Directions

Business/Leadership Government Service/Leadership Law Medicine
Also: Graduate Study

Honors Program Courses

HOPR 1190 Introduction to Honors (1 credit)

Designed to support students' transition into the Honors Program at BSU, this course establishes the core academic skills, social competencies, and values that enable students to excel within the university and Honors community. The seminar's goal is to enhance and enrich the student experience so that students may develop a sense of citizenry and derive the maximum benefit from the intellectual and social opportunities of college life. Students will learn to: create an annotated bibliography; find good resources; and identify bias and/or recognize subjectivity. Honors academic advising is highlighted. Required of first-semester Honors Program students.

HOPR 3700 Honors Seminar (3 credits)

Exploration of a single topic from a wide-variety of disciplinary and interdisciplinary perspectives in a seminar environment. Repeatable (with different topics) for 12 credits for Honor's Program students. Prerequisite(s): HOPR 1190 or permission of Honors Director.

HOPR 3899 Capstone (1 credit)

Each student plans an Honor's Capstone project, arranges to work with a faculty advisor, develops an annotated bibliography, generates a proposal, and engages in the work of creating and executing the Capstone Project. Proposals are reviewed for approval by the Honor's Council. While the timeline may vary depending on the needs of the student and the kind of Capstone Project, the suggested timeline is to enroll in HOPR 3899 within a year of expected graduation date. Prerequisite: Honors Program student, 6-credit hours of HOPR 3700 or permission of Director.

HOPR 4899 Capstone Presentation (1 credit)

Upon completion of the Honors Capstone Project, graduating students meet as a class to prepare and deliver formal presentations to the Honors and campus communities. Prerequisite: Honors Program student, HOPR 3899. Students generally enroll in HOPR 4899 in spring of the senior year.

HOPR 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
1940, 2940, 3940, 4940 IN-SERVICE COURSE
1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
1970, 2970, 3970, 4970 INTERNSHIP
1980, 2980, 3980, 4980 RESEARCH
1990, 2990, 3990, 4990 THESIS

Humanities

The family of disciplines known as the humanities explores the diversity of human experience through the study of cultural forms and expressions in particular social or historical contexts. These forms are diverse in themselves, ranging from literary works to historical documents, philosophical constructs to visual artifacts, religious practices to musical and dramatic performances. These often require the special approaches of their particular discipline. At the same time, the humanities disciplines are complementary and collaborative, sharing common goals, methods, and understandings.

The Humanities Program at Bemidji State is dedicated to collaboration. Within a flexible structure, it brings together courses from all the allied disciplines, as well as interdisciplinary courses of its own. Its objectives are threefold: 1) to provide multiple frames of reference for analysis and interpretation; 2) to foster increased awareness of the unique character of each of the humanities disciplines, together with an understanding of interrelationships among visual art, music, language, literature, and history; 3) to promote, through the cultivation of curiosity and multicultural sensibilities, the breadth of learning necessary for successful careers in government, business, or the professions.

Programs

- Humanities *minor*

Career Directions

See "Note" in program description.

Preparation

Recommended High School Courses

Art
Humanities
Literature
Philosophy

Humanities *minor*

Required Credits: 21
Required GPA: 2.00

I REQUIRED COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- HUM 1100 Human Culture and Ideas (3 credits)
- HUM 2107 Themes in Cultural History (3 credits)

II DIRECTED ELECTIVES

A. SECOND LANGUAGES

Complete a one year course sequence in one of the following languages: Ojibwe, Spanish, or any current offering (excluding ASL) Transfer courses from accredited programs are also encouraged (6-8 credits)
OR

A cluster of advanced expository (not creative) writing

B. PHILOSOPHY

Complete any PHIL course at the 2000 or 3000 level.

C. HISTORICAL STUDIES

Complete any HST or ARTH course at the 2000 or 3000 level.

D. LITERARY STUDIES

Complete any literature course offered in English, Modern Languages, or Theatre at the 3000 or 4000 level.

E. FINE AND PERFORMING ARTS

Complete any practice-based Art/Design,

Creative Writing or Music course at the 1000-3000 level. Transfer courses in Theater from accredited programs are also encouraged.

Humanities Courses

HUM 1100 Human Culture and Ideas (3 credits)

An examination of the different forms of cultural expression in diverse societies, and contemporary approaches to their contextual study and interpretation. Liberal Education Goal Areas 6 & 8.

HUM 1101 Acting and Performance studies: Creative Analysis, Listening, and Empathy (3 credits)

An introductory level course (for students of all majors) intended to engage students in the study of theatrical acting and social performance, alongside careful textual and written analysis, as a means to reach deeper understandings of the humanities and arts and the usefulness of these fields in today's technically-driven, information-based world. Liberal Education Goal Area 6.

HUM 2107 Themes in Cultural History (3 credits)

Study of a particular theme or central human issue in a variety of historical settings through the close analysis of various cultural documents and practices. May be repeated under distinct subtitles. (Might not be offered every year.)

HUM 3107 Topics in Cultural Studies (1-4 credits)

Interdisciplinary study of a particular historical or contemporary culture. Contact the Humanities Coordinator for current or expected topic areas. May be repeated under distinct subtitles. Prerequisite: Consent of instructor. (Might not be offered every year.)

HUM 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

HUM 4920 Directed Group Study (3 credits)

When taken as Senior Seminar the following description may apply: An integrative seminar involving readings, discussions, and student presentations centering on the study and articulation of relationships between disciplines. A problem, event, movement or concept will be used as the focus of the course. Designed for senior year.

HUM 4990 Thesis (3 credits)

A thesis written by the student that reports extensive original research carried out by the student and demonstrates appropriate methodology and scholarship.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Indigenous Studies

Indigenous Studies is a vibrant, dynamic academic discipline that provides insight into issues and perspectives of Indigenous Peoples. At its heart it embraces Indigenous Knowledge, and using that as a lens, examines all facets of Indigenous Peoples worldviews, thoughts, and realities.

The Indigenous Studies program and all of its course offerings are open to all students. No matter what one's background is, there is something for every academic interest. As an interdisciplinary program, linkages are made across many disciplines.

The Indigenous Studies major and minor is designed to provide students with critical thinking skills to better navigate the complex world around us. The foundations for the program can be found in Indigenous ways of knowing and thinking as a way of examining areas of study relating to culture, history, sovereignty, tribal government, education, philosophy and the environment to name but a few.

Being located in Anishinaabe (Ojibwe) lands and waters, the course of study is centered from an Anishinaabe (Ojibwe) perspective, with ascending circles encompassing the Indian Nations of what is called the United States, the First Nations, Inuit and Metis of Canada, and Indigenous Peoples throughout Central and South America and the Pacific.

The Indigenous Studies program is housed in the American Indian Resource Center (AIRC). The AIRC provides many services to American Indian students and all students taking Indigenous Studies courses, not to mention a number of community based initiatives. Learn, explore from an Indigenous lens, and welcome to Indigenous Studies.

Programs

- Indigenous Studies, B.A. *major*
- Indigenous Sustainability Studies, B.S. *major*
- Indigenous Studies *minor*
- Indigenous Sustainability Studies *minor*
- Ojibwe *minor*
- Indigenous Studies *cert*
- Ojibwe Language Instruction *cert*

Career Directions

Education
Law Enforcement
Social Services
Tribal Government
Also: Graduate Study

Indigenous Studies, B.A. *major*

Required Credits: 36
Required GPA: 2.25

I REQUIRED COURSES

Complete the following courses:

- INST 1107 Introduction to Turtle Island (3 credits)
- INST 1202 Indigenous Environmental Current Events (3 credits)
- INST 2201 Creation to Contact (3 credits)
- INST 2202 Survivance Since Contact (3 credits)
- INST 3307 Ojibwe History (3 credits)
or OJIB 1100 Ojibwe Culture (4 credits)
- INST 4000 Nation Building and Leadership (3 credits)
- OJIB 1111 Elementary Ojibwe I (4 credits)
- OJIB 1112 Elementary Ojibwe II (4 credits)

II REQUIRED GUIDED ELECTIVES

Select a minimum of 10 credits from the following courses:

- INST 2410 Ojibwe Crafts (2 credits)
- INST 3170 Indigenous Education (3 credits)
- INST 3888 Indigenous Women Writers (3 credits)
- INST 3890 Genealogy and Clan Systems (3 credits)
- INST 4207 Indigenous Lifeways (3 credits)
- INST 4418 Federal Indian Law (3 credits)
- INST 4900 Social Justice (3 credits)
- SOWK 3780 Family And Child Welfare (3 credits)

Program Learning Outcomes| Indigenous Studies, B.A.

1. Articulation of the multidisciplinary scope in Indigenous Studies: Science, law, literature, writing, sociology, psychology and philosophy as disciplines that

make up Indigenous Studies.

2. Cultural Genocide and Resistance: Students will identify and analyze the policies of assimilation and cultural genocide and Indigenous resistance to those policies.

3. Diversity: Students will learn about the diversity of American Indian cultures and histories throughout them Americas.

4. Pre-contact and Post-contact: Student will understand the consequences of contact by examining both pre- and post-contact Indigenous peoples.

5. Professional multidisciplinary skills: Students will be able to develop professional skills in punctuality, writing, communicating, presentation, research and critical thinking.

6. Social Justice Awareness: Students will be able to identify social justice strategies and apply them to individual social situations.

7. Sovereignty and Decolonization: Apply what they have learned towards the work of cultural and language revitalization.

Indigenous Sustainability Studies, B.S. *major*

Required Credits: 48

Required GPA: 2.25

I REQUIRED CORE COURSES

Complete the following courses:

- ENVR 2000 Introduction to Environmental Science (3 credits)
- ENVR 3880 Environmental Controversies (2 credits)
- ENVR 4880 Senior Seminar I (1 credit)
- INST 1107 Introduction to Turtle Island (3 credits)
- INST 2201 Creation to Contact (3 credits)
or INST 2202 Survivance Since Contact (3 credits)
- INST 3170 Indigenous Education (3 credits)
- INST 4418 Federal Indian Law (3 credits)
- ENVR 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
or INST 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)

Select 3 of the following courses:

- ENVR 3720 Food Sovereignty, Health & Indigenous Environments (3 credits)
or INST 3720 Food Sovereignty, Health & Indigenous Environments (3 credits)
- ENVR 3730 Sustainable Communities: Local Indigenous Perspective (3 credits)
or INST 3730 Sustainable Communities: Local Indigenous Perspective (3 credits)
- ENVR 3740 Environment, Wellness & the Sacred Connection to Place (3 credits)
or INST 3740 Environment, Wellness & the Sacred Connection to Place (3 credits)
- ENVR 3750 Sustainable Communities: Global Indigenous Perspective (3 credits)
or INST 3750 Sustainable Communities: Global Indigenous Perspective (3 credits)

Select 1 of the following courses:

- ENVR 4970 Internship (3 credits)
- ENVR 4990 Thesis (3 credits)

II REQUIRED ELECTIVES

Select 15 credits of electives from the following courses:

- BIOL 2339 Ethics of Fish and Wildlife Management (3 credits)
- BIOL 2610 General Ecology (3 credits)
- BIOL 3361 Limnology (4 credits)
- BIOL 3400 Fish & Wildlife Law and Administration (3 credits)
- BIOL 3420 Human Dimensions of Wildlife and Fisheries Management (3 credits)
- BIOL 3610 Principles of Wildlife Management (3 credits)
- BIOL 3630 Conservation Biology (3 credits)
or GEOG 3630 Conservation Biology (3 credits)
- BIOL 3730 Plant Diversity (4 credits)
- BIOL 4623 Forest Ecology (4 credits)
- CHEM 3110 Laboratory Management and Safety (2 credits)
- CRJS 4477 Restorative Justice (3 credits)
- ENVR 3040 Environmental Economics (3 credits)
or ECON 3040 Environmental Economics (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 3700 Natural Resource Management (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)
- ENVR 4220 Sampling and Analysis (4 credits)
- ENVR 4610 Sustainability: Theory and Practice (4 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3410 Geography of North America (3 credits)
- GEOL 1110 Physical Geology (4 credits)
or GEOL 1120 Historical Geology (4 credits)
- GEOL 3120 Soils (4 credits)
or BIOL 3120 Soils (4 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
or GEOL 3212 Hydrogeology (3 credits)
- HLTH 2800 Multicultural Health in America (2 credits)
- HLTH 3500 Community Health (3 credits)
- INST 1202 Indigenous Environmental Current Events (3 credits)
- INST 2925 People of the Environment: Indigenous Knowledge Perspective (3 credits)
- INST 3317 Tribal Government and Leadership (3 credits)
- INST 3888 Indigenous Women Writers (3 credits)
- INST 4900 Social Justice (3 credits)
- LEAD 3500 Theories and Contexts of Leadership (3 credits)
- MASC 3270 Media and Social Change (3 credits)
- MATH 1120 Environmental Mathematics (3 credits)
- OJIB 1100 Ojibwe Culture (4 credits)
- OJIB 1111 Elementary Ojibwe I (4 credits)
- OJIB 1112 Elementary Ojibwe II (4 credits)
- OJIB 2211 Intermediate Ojibwe I (4 credits)
- OJIB 2212 Intermediate Ojibwe II (4 credits)
- OJIB 3311 Advanced Ojibwe I (4 credits)
- OJIB 3312 Advanced Ojibwe II (4 credits)
- PHIL 2250 Human Nature (3 credits)
- POL 3230 Environmental Politics (3 credits)
- PSY 3367 Social Psychology (3 credits)
- PSY 4588 Multicultural Psychology (4 credits)
- SOC 3050 Environmental Sociology (3 credits)
- SOWK 2110 Intercultural Communication (3 credits)
- TADT 1111 Introduction to Project Management (3 credits)
- TADT 2100 Impact Of Technology, Art & Design (2 credits)
- TADT 3267 Economic and Cost Analysis (3 credits)
- TADT 4385 Sustainability and Emerging Technologies (3 credits)
- TADT 4878 Quality Assurance (3 credits)

Or any other relevant course(s) approved in advance by an Advisor from the Center for Sustainability Studies or Indigenous Studies department. (Please note that you must complete 40 credits at the 3000-level or higher to graduate)

Indigenous Studies *minor*

Required Credits: 15
Required GPA: 2.00

I REQUIRED COURSES

Complete the following courses:

- INST 1107 Introduction to Turtle Island (3 credits)
- INST 1202 Indigenous Environmental Current Events (3 credits)
- INST 2201 Creation to Contact (3 credits)

II REQUIRED ELECTIVES

Select at least 6 credits from the following courses:

- INST 2202 Survivance Since Contact (3 credits)
- INST 2410 Ojibwe Crafts (2 credits)
- INST 3170 Indigenous Education (3 credits)
- INST 3307 Ojibwe History (3 credits)
- INST 3888 Indigenous Women Writers (3 credits)
- INST 3890 Genealogy and Clan Systems (3 credits)
- INST 4000 Nation Building and Leadership (3 credits)
- INST 4207 Indigenous Lifeways (3 credits)
- INST 4418 Federal Indian Law (3 credits)
- INST 4900 Social Justice (3 credits)
- OJIB 1100 Ojibwe Culture (4 credits)
- OJIB 1111 Elementary Ojibwe I (4 credits)
- OJIB 1112 Elementary Ojibwe II (4 credits)
- SOWK 3780 Family And Child Welfare (3 credits)

Indigenous Sustainability Studies *minor*

Required Credits: 17
Required GPA: 2.25

I REQUIRED CORE COURSES

Complete the following courses:

- ENVR 2000 Introduction to Environmental Science (3 credits)
- ENVR 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
or INST 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
- ENVR 3880 Environmental Controversies (2 credits)
- INST 1107 Introduction to Turtle Island (3 credits)

II REQUIRED ELECTIVES

Select 6 credits from Indigenous Studies or Environmental Studies or any other relevant course(s) approved in advance by an Advisor from the Center for Sustainability Studies or Indigenous Studies department.

Ojibwe *minor*

Required Credits: 12
Required GPA: 2.00

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- OJIB 3311 Advanced Ojibwe I (4 credits)
- OJIB 3312 Advanced Ojibwe II (4 credits)

II REQUIRED STUDY

SELECT 1 OF THE FOLLOWING COURSES:

- OJIB 3213 Ojibwe Oral Literature (4 credits)
- OJIB 3300 Indigenous Language Field Program (4 credits)
- OJIB 3400 Instruction of Ojibwe Language (4 credits)

Indigenous Studies *cert*

Required Credits: 9
Required GPA: 2.00

REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- INST 1107 Introduction to Turtle Island (3 credits)
- INST 3170 Indigenous Education (3 credits)
- INST 4207 Indigenous Lifeways (3 credits)
or INST 4900 Social Justice (3 credits)

Ojibwe Language Instruction *cert*

Required Credits: 12
Required GPA: 2.00

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- OJIB 3311 Advanced Ojibwe I (4 credits)
- OJIB 3312 Advanced Ojibwe II (4 credits)

II REQUIRED STUDY

COMPLETE THE FOLLOWING COURSE:

- OJIB 3400 Instruction of Ojibwe Language (4 credits)

Indigenous Studies Courses

INST 1107 Introduction to Turtle Island (3 credits)

This course is designed to provide students with an introduction to the study of American Indians from a cultural and academic perspective. The academic overview will include considerations of breadth, method of research, terminology, and principles of various disciplines that include American Indians in their fields of study. Liberal Education Goal Areas 5 & 7.

INST 1202 Indigenous Environmental Current Events (3 credits)

This course is designed to provide students with the abilities to read and view various media sources critically. An in-depth focus on how current events have the potential to shape our lives requires "reading between the lines". Students will have the opportunity to identify the audience of various current event articles and the purpose of the articles, journalist and producer. Liberal Education Goal Area 5.

INST 2201 Creation to Contact (3 credits)

This course is designed to provide students with a literary experience and understanding of the philosophical and mythological mindset of individual and tribal people in the Americas. And in later times, empathize with the racism and challenges that American Indian cultures had in regard to the social, economic, political, and religious policies and practices of European and American societies in the United States. Liberal Education Goal Areas 5 & 7.

INST 2202 Survivance Since Contact (3 credits)

This course is designed to follow American Indians Post-contact 1887 by providing to students a literary experience and understanding of the philosophical and mythological mindset of individual and tribal people in the Americas. And in current times, empathize with the racism and challenges that American Indian cultures face in regard to the social, economic, political, and religious policies and practices of European and American societies in the United States. Liberal Education Goal Areas 5 & 7.

INST 2410 Ojibwe Crafts (2 credits)

An introduction to the Ojibwe crafts in relation to their culture. Demonstration, instruction and studio experience in basketmaking, hide tanning, the making of leather goods, beading, jewelry making and quilting.

INST 2925 People of the Environment: Indigenous Knowledge Perspective (3 credits)

This course is designed to provide students with the ability to integrate Indigenous Studies with Environmental Studies. An in-depth focus will cover how environmental practices affect Indigenous cultures. Students will have the opportunity to explore their own understanding of Indigenous and Environmental Studies and develop strategies that will enable them to view both disciplines interdependent of one another. Liberal Education Goal Area 10.

INST 3170 Indigenous Education (3 credits)

Inquiry and analysis of the complexities of multiple standards of education in the U. S. including race class, gender, ethnicity, disability, age, nationality and religion, how they shape and are shaped by social and cultural tribal and non-tribal life in the United States will be examined. The course emphasizes the development of indigenous knowledge, critical thinking, analytical skills, and interpersonal and inter group interactions necessary for living and working in a society characterized by tribal and western mainstream diversity. Through the mindful study of small, rural schools and traditional education practices students will find a greater understanding of (tribal) others, develop self-understanding of education in the U.S. and develop understanding in relation to others- in order to promote ethical behaviors and values in education that support a diverse world. Liberal Education Goal Areas 5 & 7.

INST 3307 Ojibwe History (3 credits)

The oral and written history of the People from origins to the early 20th century, analyzing the Ojibwe response to changes brought by European and American society. Liberal Education Goal Areas 5 & 7.

INST 3317 Tribal Government and Leadership (3 credits)

This course is designed to provide students with a deeper understanding of traditional, transitional, and contemporary tribal governments based on the experiences of the Anishinaabe (Ojibwe) in Minnesota and other tribes. Liberal Education Goal Areas 5 & 8.

INST 3410 Advanced Ojibwe Crafts (1-4 credits)

Advanced study of American Indian craft media techniques and concepts geared to meet the needs of individual students and to help them develop personal direction. May be repeated for a total of 6 credits. Prerequisite: INST/VSAR 2410.

INST 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)

Indigenous cultures refer to pre-colonial societies who today represent a minority, non-dominant group in the societies presently residing in territories these cultures once developed. Throughout their history, Indigenous people have developed their own body of environmental knowledge that they have passed on, generation to generation. This course will provide students with a global perspective of Indigenous environmental knowledge and how this knowledge has affected the relationship of the Indigenous peoples with the natural world and its resources. Students will also investigate present-day political, economic, social, and technological issues related to incorporating Indigenous environmental knowledge into sustainability efforts. Liberal Education Goal Areas 7 & 8. (Also offered under ENVR 3710)

INST 3720 Food Sovereignty, Health & Indigenous Environments (3 credits)

This course is designed to help students understand the interconnections of food sovereignty, health and environmental sustainability. Students will explore why it is not only important for people to control the way their food is produced, distributed, and consumed but why the food should be appropriate to the cultural background of the people consuming it. Students will learn the critical connections between food and health with an exploration of those influences within the context of Indigenous worldviews and ways of knowing. This is an experiential learning course -- learning through interaction, projects, and reflection. This course may be suitable as an elective in Indigenous Studies and Environmental Studies, Health and Nursing degree programs. Liberal Education Goal Areas 7 & 8. (Also offered under ENVR 3720)

INST 3730 Sustainable Communities: Local Indigenous Perspective (3 credits)

Human societies all across the globe have developed rich sets of experiences and explanations relating to the sustainable communities they live, work and play in. This course is designed to introduce students to the basic concepts of these sustainable communities. Students will learn how these communities function, their challenges, and the critical networks that exist with the environment. This class will explore the role of Indigenous knowledge and traditional ways of learning, as well as scientific knowledge in maintaining the sustainability of a community. This is an experiential learning course -- learning through interaction, projects, and reflection. Liberal Education Goal Areas 5 & 7. (Also offered under ENVR 3730)

INST 3740 Environment, Wellness & the Sacred Connection to Place (3 credits)

In Indigenous communities, there is a deep and lasting connection to place. Today, there exists overwhelming evidence that connection to place offers important elements for overall individual wellness. However, many communities face challenges in their environments that are detrimental to their health and well-being. To support these communities, there is a need to reconnect them with ways to restore the sustainability of their environment and connection to place. In this course, students will learn the critical connections between the environment and health and will explore the influences of connection to place within the context of Indigenous worldviews and ways of knowing. This is an experiential learning course -- learning through interaction, projects, and reflection. Liberal Education Goal Areas 5 & 7. (Also offered under ENVR 3740)

INST 3750 Sustainable Communities: Global Indigenous Perspective (3 credits)

Throughout their history, Indigenous people have developed their own body of knowledge on global sustainability that they have passed on, generation to generation. This course will provide students with a large picture perspective of global Indigenous sustainability knowledge and viewpoints and how this perspective continues to affect the relationship of the Indigenous peoples with the natural world and its resources. Students will also investigate present-day global political, economic, social, and technological issues related to incorporating Indigenous views into sustainability efforts across the continents. Liberal Education Goal Areas 7 & 8. (Also offered under ENVR 3750)

INST 3888 Indigenous Women Writers (3 credits)

This course is designed to provide students with a deeper understanding of traditional qualities found in contemporary woman writers who describe the experience of native women through the lens of several generations. This work comes to play an important role in contemporary thought as the values and cultures of indigenous people rapidly reflect change in their world and the world around them. Issues that are unique to native women in our contemporary time are paralleled to native women's experiences of the past. Liberal Education Goal Area 6.

INST 3890 Genealogy and Clan Systems (3 credits)

This course is designed to provide students with a hands-on experience with individual genealogical research and family tree development. In addition, the genealogical information may be used in conjunction with identifying specific tribal clans that are unique to each individual and their specific tribal history. An academic and cultural overview of how clan systems work is part of the course design. Liberal Education Goal Areas 5 & 7.

INST 4000 Nation Building and Leadership (3 credits)

This course provides students with an opportunity to analyze leadership and diverse strategies for Native nation building through the lens of development and sustainability. Prerequisites: INST 1107, and INST 2201 or INST 2202, and INST 3307 or INST 3317, or professor permission.

INST 4207 Indigenous Lifeways (3 credits)

This course is designed to provide students with an understanding and awareness of the native philosophical world views and the interface that occurs among indigenous peoples and western people. Part of this understanding is that of two worlds; one of those worlds is the native world and the other being the western world. At the heart of native existence is the spiritual ecology, natural environments, human geography, identity, Indian activism, Christian and native religious beliefs and contemporary life ways. Prerequisites: Junior or senior standing or by consent of instructor.

INST 4418 Federal Indian Law (3 credits)

This course is designed to provide students with an understanding and awareness of the modern complexities of American Indian federal law and policies regarding diverse tribal nations in the U.S. by exploring readings by experts in the field of Federal Indian Law. The multiple shapes and shaping theories of what constitutes the identity of tribal nations and individual Indians and their recognition, limited recognition or lack of recognition in relationship to federal law and policy will be explored. (Might not be offered every year.)

INST 4900 Social Justice (3 credits)

This course examines steps that individuals and societies must take to create a more just society. Students will learn how to identify and address unequal power relations, marginalization, and racism and engage in skillful interactions that enable them to maintain their integrity within society. Prerequisite: Junior or senior standing or by consent of instructor.

INST 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

INST 4931 Experimental Course (3 credits)

A course proposed for inclusion in the University curriculum. May not be offered more than two times as an experimental course.

INST 4990 Thesis (3 credits)

When taken as Senior Thesis in Indian Studies, the following description applies: The course requires students, in a seminar format, to review course materials from their academic program, to gauge their future academic or vocational goals, and to write a significant paper based on their academic and future interests.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the

completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
 1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
 1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
 1940, 2940, 3940, 4940 IN-SERVICE COURSE
 1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
 1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
 1970, 2970, 3970, 4970 INTERNSHIP
 1980, 2980, 3980, 4980 RESEARCH
 1990, 2990, 3990, 4990 THESIS

Individualized Studies

Individualized Studies is a degree program developed by the student in consultation with an advisor from their concentrated area(s) of study. The nature of this degree provides students with the flexibility to design a program of study, based on prior course work in a major and the selection of a sequence of elective courses. Students can choose a program of study that is focused on their specific interests of study and professional goals.

No more than 30 credits from the Individualized Studies degree program may be applied toward a double-major or second degree in the designated disciplines.

Individualized Studies Program Requirements

Students eligible to declare Individualized Studies as their bachelor's degree program of study must have completed a minimum of 72 semester credits.

The degree program requires completion of 44 semester credits in the student's choice of courses from the following disciplines at the 3000-4000 level, and a one-credit capstone course from one of the following disciplines excluding Psychology and Social Work, with a 2.25 minimum GPA. Students may complete a 6-12 credit internship or applicable work experience as a part of the 45 credits required at the 3000-4000 level in the following disciplines excluding Psychology and Social Work.

Accounting
Business Administration
Mass Communication
Technology, Art, and Design
Criminal Justice
Human Performance, Sport, and Health
Professional Education
Psychology
Social Work

Admission to the Program

Upon successful completion of 72 semester credits, students may apply for the B.S. in Individualized Studies degree program.

Following the initial inquiry, students are required to contact the **Advising Success Center** at advising@bemidjstate.edu to set up an appointment to discuss the requirements and admission process for this degree program.

Students who have successfully completed 72 semester credits and who have an interest in the Bachelor of Science in Individualized Studies degree program must submit an application through the Advising Success Center. The application must address the following points:

1. A statement of understanding about the freedom of choice associated with this degree;
2. A statement of future plans to use this degree for personal growth, further study, employment, or other purposes;
3. An outline of a projected course of study and date of graduation.

The application is reviewed by the Individualized Studies program admission committee which is made up of the department chairs from the departments of 1) Criminal Justice, 2) Human Performance, Sport, and Health, 3) Professional Education, 4) Psychology, and 5) Social Work in the College of Health Sciences and Human Ecology, or the department chairs from 1) Accounting, 2) Business Administration, 3) Mass Communication, and 4) Technology, Art, and Design from the College of Business, Technology, and

Communication.; dependent upon the college in which the majority of the courses of the proposed program are offered. When the application is approved, the student may declare the Individualized Studies degree program.

Individualized Studies Advising Worksheet

The credits for the Individualized Studies major may be distributed in various ways. For example:

- Broad distribution across the two colleges.
- Concentration in various areas of interest, including minors.
- Organization in a formal program of study of one or more major themes, such as critical thinking, career focus, science, and technology.

Programs

- Individualized Studies, B.S. *major*

Career Directions

Communication
Consulting
Education (private)
Government
Graduate School
Industry
Law
Nonprofit organizations
Professional School
Public Policy
Training

Individualized Studies, B.S. *major*

ADMISSION TO THE PROGRAM

Upon successful completion of 72 semester credits, students may apply for the B.S. in Individualized Studies degree program.

Following the initial inquiry, students are required to contact the Advising Success Center to set up an appointment to discuss the requirements and admission process for this degree program. For information on the steps all students in the B.S. in Individualized Studies degree program must complete, please click on this link (Individualized Studies Degree Program Process).

Students who have successfully completed 72 semester credits and who have an interest in the Bachelor of Science in Individualized Studies degree program must submit an application through the Advising Success Center. The application must address the following points:

1. A statement of understanding about the freedom of choice associated with this degree;
2. A statement of future plans to use this degree for personal growth, further study, employment, or other purposes;
3. An outline of a projected course of study and date of graduation.

The application is reviewed by the Individualized Studies program admission committee which is made up of the department chairs from the departments of 1) Criminal Justice, 2) Human Performance, Sport, and Health, 3) Professional Education, 4) Psychology, and 5) Social Work in the College of Health Sciences and Human Ecology, or the department chairs from 1) Accounting, 2) Business Administration, 3) Mass Communication, and 4) Technology, Art, and Design from the College of Business, Technology, and Communication.; dependent upon the college in which the majority of the courses of the proposed program are offered. When the application is approved, the student may declare the Individualized Studies degree program.

Individualized Studies Advising Worksheet

The credits for the Individualized Studies major may be distributed in various ways. For example:

- Broad distribution across the two colleges.
- Concentration in various areas of interest, including minors.
- Organization in a formal program of study of one or more major themes, such as critical thinking, career focus, science, and technology.

Required Credits: 45

Required GPA: 2.25

REQUIREMENTS FOR THE INDIVIDUALIZED STUDIES MAJOR

The degree program requires completion of 44 semester credits in the student's choice of courses from the following disciplines at the 3000-4000 level, and a one credit capstone course from one of the following disciplines excluding Psychology and Social Work, with a 2.25 minimum GPA.

Students may complete a 6-12 credit internship or applicable work experience as a part of the 45 credits required at the 3000-4000 level in the following disciplines excluding Psychology and Social Work.

Accounting
Business Administration
Mass Communication
Technology, Art and Design
Criminal Justice
Human Performance, Sport and Health
Professional Education
Psychology
Social Work

Students eligible to declare Individualized Studies as their bachelor's degree program of study must have completed a minimum of 72 semester credits.

SUGGESTED SEMESTER SCHEDULE FOR INDIVIDUALIZED STUDIES, B.S.

Freshman & Sophomore Years

- Liberal Education
- General Electives

Junior & Senior Years

- Individualized Studies
- General Electives

International Studies

Programs

- International Relations *minor*

International Relations *minor*

Required Credits: 18

Required GPA: 2.00

I REQUIRED COURSES

Complete the following courses:

- POL 1300 Introduction to International Relations (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)

II ELECTIVE CREDITS

Elective credits, you must complete 12 credits from groups A and B, with at least 3 coming from group B.

Group A: Political Science Electives (at least 6 credits)

- POL 3100 American Foreign Policy (3 credits)
- POL 3130 Asian Political Development (3 credits)
- POL 3140 Canadian Politics (3 credits)
- POL 3160 Comparative European Politics (3 credits)
- POL 3170 International Relations (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3190 International Political Economy (3 credits)

Group B: Other Electives (at least 3 credits)

- ANTH 1110 Cultural Anthropology (3 credits)
- BUAD 3751 International Marketing (3 credits)
- COMM 1090 Interpersonal Communication (3 credits)
- ECON 3400 International Trade and Finance (3 credits)
- ENGL 2357 British Literature to 1800 (3 credits)
- ENGL 2358 British Literature from 1800 to Present (3 credits)
- ENGL 2370 World Literature to 1600 (3 credits)
- ENGL 2377 World Literature from 1600 to Present (3 credits)
- GEOG 1400 World Regional Geography (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)
- GEOG 3850 Geography of the Middle East (3 credits)
- GEOG 3860 Geography of Latin America and the Caribbean (3 credits)
- GEOG 3870 Planning for Sustainable Cities (3 credits)
- HST 1304 World History I, Prehistory-1500 (3 credits)
- HST 1305 World History II, 1500-Present (3 credits)
- HST 2218 Medieval Europe (3 credits)
- HST 2219 Medieval European Culture (3 credits)
- HST 2228 Renaissance and Reformation Europe (3 credits)
- HST 2580 Russia (3 credits)
- HST 2660 Women and History (3 credits)
- HST 2700 The History of World Religions (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)

- HST 3277 Readings and Research in European History (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)
- HST 3799 Tudor and Stuart England, 1485-1714 (3 credits)
- INTL 1130 Education Abroad Basics (3 credits)
- INTL 2100 Instructed International Tour (1-3 credits)
- INTL 2200 International Study Experience - Humanities (1-3 credits)
- INTL 2300 Comparative International Study Project (1-3 credits)
- SOWK 2110 Intercultural Communication (3 credits)
- SPAN 1111 Elementary Spanish I (4 credits)
- SPAN 1112 Elementary Spanish II (4 credits)
- SPAN 2211 Intermediate Spanish I (3 credits)
- SPAN 2212 Intermediate Spanish II (4 credits)

International Studies Courses

INTL 1130 Education Abroad Basics (3 credits)

Required of all education abroad participants: This course is designed to assist students in their preparation for their planned education abroad experience.

INTL 1910 Directed Independent Study (3 credits)

Arranged individual study.

INTL 2100 Instructed International Tour (1-3 credits)

An educational tour under the guidance of a BSU faculty member. Course content may also include pre-tour preparation and in-and post-tour discussion and assignments. Credit for each offering to be determined by the International Studies program. Note: By arrangement only --- in conjunction with a BSU Education Abroad program. Prerequisite: INTL 1130. Liberal Education Goal Area 8.

INTL 2200 International Study Experience - Humanities (1-3 credits)

Focuses on such topics as the history, culture, politics, geography, economics, art, language, technology, and education of the host country of a BSU Education Abroad program. May incorporate lectures, discussions, and demonstrations by instructors of the hosting institution as well as by BSU faculty. Credit for each offering to be determined by the International Studies program. Note: By arrangement only --- in conjunction with a BSU Education Abroad program. Prerequisite: INTL 1130. Liberal Education Goal Areas 6 & 8.

INTL 2300 Comparative International Study Project (1-3 credits)

With prior approval of a sponsoring department, each student will arrange to pursue academic problems or projects using an international perspective as a basis for completing a comparative study between cultures and/or countries. Credit for each offering to be determined by the International Studies Program. Note: By arrangement only --- in conjunction with a BSU Education Abroad program. Prerequisite: INTL 1130. Liberal Education Goal Area 8.

INTL 2400 International Study Experience Social Science (1-3 credits)

Focuses on such topics as the history, culture, politics, geography, economics, art, language, technology, and education of the host country of a BSU Education Abroad program. May incorporate lectures, discussions, and demonstrations by instructors of the hosting institution as well as by BSU faculty. Credit for each offering to be determined by the International Studies program. Prerequisite: INTL 1130. Liberal Education Goal Area 8.

INTL 4970 Internship (3 credits)

Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Languages

Language is more than a mode of communication. It is the primary means of understanding a culture, a people, a way of life. Studying a second language gives us a perspective on our own language and culture, and prepares us to be knowledgeable and competent citizens of the world. In addition, those who undertake the study of languages experience the satisfaction and pleasure of learning what language is and how it works.

While Americans are traditionally viewed as monolingual, other countries routinely include language study as an essential part of a general education. In a world that is increasingly interconnected and interrelated, the development of a globally educated populace is crucial. Second language learning is a vital part of such an education.

Second language study can lead to career positions such as teacher, travel consultant, translator, and international entrepreneur. Languages also constitute an important second skill for many jobs in business, industry, government, and human services, and may be a key to increasing potential for personal growth and advancement.

Programs

- Spanish, B.A. *major*
- Ojibwe *minor*
- Spanish *minor*
- Ojibwe Language Instruction *cert*

Career Directions

Airline Consultant
Bank Consultant/Employee
Education
Export/Import Employee
International Business
Translator
Also: Graduate Study

Preparation

Recommended High School Courses

English
Foreign Languages

Spanish, B.A. *major*

Required Credits: 34
Required GPA: 2.25

I REQUIRED CORE COURSES

Complete the following courses:

- SPAN 2212 Intermediate Spanish II (4 credits)
- SPAN 3311 Composition and Communication Skills (3 credits)
- SPAN 3312 Advanced Readings and Communication Skills (3 credits)
- SPAN 3313 Spanish Oral Proficiency Skills Workshop I (1 credit)
- SPAN 4314 Advanced Spanish Grammar Review Through Film and Literature (3 credits)
- SPAN 4315 Spanish Oral Proficiency Skills Workshop II (1 credit)

II REQUIRED ELECTIVES

Select 19 semester credits with consent of advisor:

- SPAN 3300 Study Abroad (1-18 credits)
- SPAN 3317 Topics in Latin America (3 credits)
- SPAN 3319 Spanish for the Professions (3 credits)
- SPAN 3320 Latin America and Spain Through Cinema (1-3 credits)
- SPAN 3330 Traditional Folk Art of the Spanish-speaking World (2 credits)
- SPAN 3830 Voices of Women in the Spanish-speaking World (3 credits)
- SPAN 3840 Contemporary Issues in the Spanish-speaking World (3 credits)
- SPAN 3850 Art and Conflict in Spain and Latin America (3 credits)
- SPAN 3870 Intensive Immersion Practicum: Concordia Language Villages (4 credits)

- SPAN 3971 Intercultural Immersion Internship (1-4 credits)
- SPAN 4310 Advanced Spanish Composition (3 credits)
- SPAN 4413 Hispanic Short Fiction (3 credits)
- SPAN 4414 The Hispanic Novel (3 credits)
- SPAN 4415 Hispanic Drama (3 credits)
- SPAN 4416 Hispanic Poetry (3 credits)
- SPAN 4420 Twentieth Century Literature (3 credits)
- SPAN 4421 Women in Hispanic Literature and Culture (3 credits)
- SPAN 4422 Hispanic Literature and Culture in the United States (3 credits)
- SPAN 4423 From Text to Image: Hispanic Film and Literature (3 credits)
- SPAN 4426 Latin American Culture and Civilization (3 credits)
- SPAN 4427 Spanish Culture and Civilization (3 credits)
- SPAN 4430 Spanish Linguistics (3 credits)

Program Learning Outcomes | Spanish, B.A.

1. Interpersonal Communication: Student will be able to negotiate meaning with individuals via speaking, writing, or reading at the Intermediate-High rating of the ACFTL proficiency levels.
2. Interpretive Communication: Students will be able to interpret meaning in either oral, written or visual form with no recourse to active negotiation of meaning with the writer, speaker, or producer at the Intermediate-High rating of the ACTFL proficiency levels.
3. Presentational Communication: Students will be able to create messages that can be interpreted by members of the target language with no recourse to active negotiation of meaning with the writer, speaker or producer at the Intermediate-High rating of the ACTFL proficiency levels.

4. Intercultural Knowledge and Competence: Students will become aware of the importance of understanding the complexity of elements important to members of other cultures in relation to their history, values, politics, communication styles, economy, or beliefs and practices. Besides, students will articulate insights into their own cultural rules and biases, and they will be able to interpret intercultural experiences from the perspectives of more than one worldview as well as act in a supportive manner towards other cultural groups.

Ojibwe *minor*

Required Credits: 12
Required GPA: 2.00

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- OJIB 3311 Advanced Ojibwe I (4 credits)
- OJIB 3312 Advanced Ojibwe II (4 credits)

II REQUIRED STUDY

SELECT 1 OF THE FOLLOWING COURSES:

- OJIB 3213 Ojibwe Oral Literature (4 credits)
- OJIB 3300 Indigenous Language Field Program (4 credits)
- OJIB 3400 Instruction of Ojibwe Language (4 credits)

Spanish *minor*

Required Credits: 18
Required GPA: 2.25

I REQUIRED CORE COURSES

Complete the following courses:

- SPAN 1111 Elementary Spanish I (4 credits)
- SPAN 1112 Elementary Spanish II (4 credits)
- SPAN 2211 Intermediate Spanish I (3 credits)
- SPAN 2212 Intermediate Spanish II (4 credits)

II REQUIRED CORE ELECTIVES

Select 3 credits:

- SPAN 3300 Study Abroad (1-18 credits)
- SPAN 3311 Composition and Communication Skills (3 credits)
- SPAN 3312 Advanced Readings and Communication Skills (3 credits)
- SPAN 3313 Spanish Oral Proficiency Skills Workshop I (1 credit)
- SPAN 3317 Topics in Latin America (3 credits)
- SPAN 3319 Spanish for the Professions (3 credits)
- SPAN 3320 Latin America and Spain Through Cinema (1-3 credits)
- SPAN 3330 Traditional Folk Art of the Spanish-speaking World (2 credits)
- SPAN 3830 Voices of Women in the Spanish-speaking World (3 credits)
- SPAN 3840 Contemporary Issues in the Spanish-speaking World (3 credits)
- SPAN 3850 Art and Conflict in Spain and Latin America (3 credits)
- SPAN 3870 Intensive Immersion Practicum: Concordia Language Villages (4 credits)
- SPAN 3971 Intercultural Immersion Internship (1-4 credits)

Ojibwe Language Instruction *cert*

Required Credits: 12
Required GPA: 2.00

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- OJIB 3311 Advanced Ojibwe I (4 credits)
- OJIB 3312 Advanced Ojibwe II (4 credits)

II REQUIRED STUDY

COMPLETE THE FOLLOWING COURSE:

- OJIB 3400 Instruction of Ojibwe Language (4 credits)

Modern Languages Courses

ML 1111 American Sign Language 1 (3 credits)

In this introductory course, students learn basic sign vocabulary, grammatical structure, and fingerspelling. Introduction to the Deaf community as a linguistic and cultural minority in the United States. Explores differences in hearing and Deaf cultures throughout the world. Liberal Education Goal Area 8.

ML 1112 American Sign Language 2 (3 credits)

In this introductory course, students continue to learn basic sign vocabulary, grammatical structure, and fingerspelling. Students deepen their knowledge of the Deaf community as a linguistic and cultural minority in the United States. Explores differences in hearing and Deaf cultures throughout the world. Prerequisite: ED 1111 or ML 1111. Liberal Education Goal Area 8.

ML 1911 Directed Independent Study (3 credits)

Arranged individual study.

ML 3430 Linguistics (3 credits)

The general linguistic topics of phonology, morphology, syntax, lexicography, historical linguistics, and language acquisition theory. Students explore various topics in the language of their interest (German, Spanish, Ojibwe, English).

ML 3450 Second Language Acquisition (3 credits)

This class will provide a general overview of the main theories of second language acquisition and how they are relevant for second language teaching. We will compare the different models of second language acquisition under the light of linguistic theory. Through the study of language and language acquisition, students will become aware of issues regarding social and cultural diversity, among others, socio-economic factors, ethnic backgrounds, gender, sexual orientation, age, and functional diversity. Students will practice their oral and written communication skills in the three modes: interpersonal (negotiation of meaning among individuals), interpretive (interpretation of the message produced), and presentational (creation of messages). Learning practices include lecture, individual and group projects, class discussions, student led discussions, writing reports and research projects.

ML 3470 Methods Of Teaching Modern Languages (4 credits)

Principles and practices in modern language teaching at both the high school and elementary levels. Prerequisites: GER 3312 or OJIB 3312 or SPAN 3312 or consent of instructor and ED 3110.

ML 3970 Internship (1-12 credits)

Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
1940, 2940, 3940, 4940 IN-SERVICE COURSE
1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
1970, 2970, 3970, 4970 INTERNSHIP
1980, 2980, 3980, 4980 RESEARCH
1990, 2990, 3990, 4990 THESIS

German Courses

GER 1111 Elementary German I (4 credits)

An introductory course in listening, speaking, understanding, and writing German. The cultures of German-speaking countries are introduced. Liberal Education Goal Area 8

GER 1112 Elementary German II (4 credits)

An introductory course in listening, speaking, understanding, and writing German. The cultures of German-speaking countries are introduced. Prerequisite: GER 1111 or consent of instructor. Liberal Education Goal Area 8

GER 2211 Intermediate German I (3 credits)

Advancement of the four basic skills; understanding, speaking, reading, and writing, especially through expansion of vocabulary. Increased focus on accuracy. Deeper understanding of German culture. Selections from German literature, as well as other fields, are used as topics for discussion. Prerequisite: GER 1112 or consent of instructor. Liberal Education Goal Area 8

GER 2212 Intermediate German II (3 credits)

Advancement of the four basic skills; understanding, speaking, reading, and writing, especially through expansion of vocabulary. Increased focus on accuracy. Deeper understanding of German culture. Selections from German literature, as well as other fields, are used as topics for discussion. Prerequisites: GER 1112 or consent of instructor. Liberal Education Goal Area 8

GER 4430 German Grammar and Linguistics (1 credit)

Intensive grammar review and a focus on German linguistics as needed. Emphasis on aspects of the language that enhance communication and fluency. GER 2211 or GER 2212 or consent of the instructor (Might not be offered every year.)

GER 4467 Studies in the German Language and Culture (1-3 credits)

Possible topics: War and Language; the effect of political upheaval on language; Germanic beginnings and the German language; German literature and music. Consideration given to special problems and interests of the students. Prerequisite: GER 2211 or GER 2212 or consent of instructor. Might not be offered every year.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
1940, 2940, 3940, 4940 IN-SERVICE COURSE
1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
1970, 2970, 3970, 4970 INTERNSHIP
1980, 2980, 3980, 4980 RESEARCH
1990, 2990, 3990, 4990 THESIS

Ojibwe Courses

OJIB 1100 Ojibwe Culture (4 credits)

Surveys aspects of Ojibwe culture and history from pre-contact to the present. Liberal Education Goal Areas 6 & 7. (Might not be offered every year.)

OJIB 1111 Elementary Ojibwe I (4 credits)

The language of the Ojibwe with an emphasis on oral-aural skills as well as non-linguistic aspects of cultural background and surroundings. Prerequisite: Please consult with program faculty. Liberal Education Goal Area 8.

OJIB 1112 Elementary Ojibwe II (4 credits)

The language of the Ojibwe with an emphasis on oral-aural skills as well as non-linguistic aspects of cultural background and surroundings. Prerequisite: OJIB 1111 or consent of instructor. Liberal Education Goal Area 8.

OJIB 2211 Intermediate Ojibwe I (4 credits)

The language of the Ojibwe with continued emphasis on oral-aural skills as well as non-linguistic aspects of cultural background and surroundings. Prerequisite: OJIB 1112 or consent of instructor. Liberal Education Goal Area 8.

OJIB 2212 Intermediate Ojibwe II (4 credits)

The language of the Ojibwe with continued emphasis on oral-aural skills as well as non-linguistic aspects of cultural background and surroundings. Prerequisite: OJIB 2211 or consent of instructor. Liberal Education Goal Area 8.

OJIB 3213 Ojibwe Oral Literature (4 credits)

Students meet for the first several weeks to discuss, learn, and be tested on their knowledge of Ojibwe oral literature and methodologies for its collection. The last several weeks of the course are designed for students to meet, record, transcribe, translate, and analyze oral literature that they themselves collect from fluent speakers in the region. Guidance will be given at all stages. Prerequisite: OJIB 2212 or consent of instructor. Liberal Education Goal Area 6 (Might not be offered every year.)

OJIB 3300 Indigenous Language Field Program (4 credits)

Students will engage in deep, experiential learning in indigenous language, history, and culture. Students are required to participate in ten weeks of classroom work on campus plus travel to and engage in two weeks on a guided field classroom experience. Site of field experience will be a vibrant indigenous language community (location predetermined with each offering of the class) in Hawaii, New Zealand, Canada, or other indigenous language community. Prerequisite: Consent of Instructor. Liberal Education Goal Area 7.

OJIB 3311 Advanced Ojibwe I (4 credits)

Continued development of all skills in Ojibwe with special attention to grammar and oral tradition. Prerequisite: OJIB 2212 or consent of instructor. Liberal Education Goal Area 8.

OJIB 3312 Advanced Ojibwe II (4 credits)

Continued development of all skills in Ojibwe with special attention to grammar and oral tradition. Prerequisite: OJIB 3311 or consent of instructor. Liberal Education Goal Area 8.

OJIB 3400 Instruction of Ojibwe Language (4 credits)

Students meet for the first several weeks to discuss, learn, and be tested on their knowledge of Ojibwe curriculum, teaching strategies, and grammar paradigms. The last several weeks of the course are designed for students to develop their own lesson plans or methodological research on the instruction of the Ojibwe language. Guidance will be given at all stages. Prerequisite: OJIB 3312 or consent of instructor. (Might not be offered every year.)

OJIB 4430 Ojibwe Grammar and Linguistics (1 credit)

The application of knowledge from ML 3430 Linguistics to the Ojibwe language. Intensive grammar review as needed. Emphasis on aspects of the language that enhance the teaching of Ojibwe to English-speaking students. Prerequisite: OJIB 3312 or consent of instructor.

OJIB 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Spanish Courses**SPAN 1100 Hispanic Culture And Spanish Language (1-3 credits)**

Students acquire a basic understanding of the Hispanic culture and language. This course is taught in English, but basic Spanish expressions and Hispanic customs are emphasized. It is particularly suitable for students who have never studied a foreign language. The multidisciplinary composition of this course complements the study of all academic areas including International Studies.

SPAN 1111 Elementary Spanish I (4 credits)

Study and practice of the four basic skills: listening, speaking, reading, and writing. Stress on pronunciation, basic grammatical forms, and language patterns. Special emphasis on the Hispanic culture and civilization. Liberal Education Goal Area 8.

SPAN 1112 Elementary Spanish II (4 credits)

Study and practice of the four basic skills: listening, speaking, reading, and writing. Stress on pronunciation, basic grammatical forms, and language patterns. Special emphasis on the Hispanic culture and civilization. Prerequisite: SPAN 1111 or consent of instructor. Liberal Education Goal Area 8.

SPAN 2211 Intermediate Spanish I (3 credits)

Continuation of practice in the development of the four basic language skills. Continued acquisition of grammatical forms. Strong emphasis on the culture and civilization of Spain and Latin America. Prerequisite: SPAN 1112 or consent of instructor. Liberal Education Goal Area 8.

SPAN 2212 Intermediate Spanish II (4 credits)

This course is a continuation of Spanish 2211. Intensive review of basic grammar. Practice in oral and written communication and proficiency. Development of fluency with idiomatic expressions. Selected readings on culture and literature. For students whose native language is not Spanish. Prerequisite(s): SPAN 2211 or consent of instructor. Liberal Education Goal Area 8.

SPAN 3300 Study Abroad (1-18 credits)

Variable semester credits up to 18 credits to be granted to students of Bemidji State University for resident study in Spanish language area.

SPAN 3311 Composition and Communication Skills (3 credits)

A course designed to refine the basic skills of understanding oral and written Spanish and improving the correct grammatical writing of Spanish. The emphasis is on Spanish composition through literature. Prerequisite: SPAN 2212 or consent of instructor. Liberal Education Goal Area 8.

SPAN 3312 Advanced Readings and Communication Skills (3 credits)

Continuation of the practice in the skills of speaking, listening, and writing, with emphasis on reading both Spanish and Latin American short stories and plays. Prerequisite: SPAN 2212 or consent of instructor. Liberal Education Goal Area 8.

SPAN 3313 Spanish Oral Proficiency Skills Workshop I (1 credit)

A course designed to refine the basic skills of understanding oral Spanish and speaking proficiency. Course may be repeated for up to 2 credits. Might not be offered every year. Prerequisite(s): SPAN 2212 or consent of instructor.

SPAN 3317 Topics in Latin America (3 credits)

An in-depth study of Latin America. Topics vary by semester. May be repeated for up to 6 credits with different topic subtitles. Prerequisite(s): SPAN 2212 or consent of instructor. Liberal Education Goal Area 8. (Might not be offered every year.)

SPAN 3319 Spanish for the Professions (3 credits)

A course designed to develop the Spanish vocabulary necessary for work in a specific field. Professional areas change as announced: medical professions, education, business and finance, social work, criminal justice, law, and the courtroom. May be retaken multiple times with different topic subtitles. Prerequisites: SPAN 2212 or consent of instructor. Might not be offered every year.

SPAN 3320 Latin America and Spain Through Cinema (1-3 credits)

Explores contemporary issues in the cultures and societies of Latin America and Spain by watching, analyzing, and critically reading film and visual texts. Includes films that address issues of ethnicity, class representation, immigration and exile, dictatorship, experiences of war and violence, globalization, gender, as well as sexual and racial identities among others. Provides opportunities to improve students' proficiency in Spanish through oral and written communication in Spanish. Prerequisite(s): SPAN 2212 or consent of instructor. Liberal Education Goal Area 8. Might not be offered every year.

SPAN 3330 Traditional Folk Art of the Spanish-speaking World (2 credits)

This course is designed for students who are interested in learning the cultures of the Spanish-speaking world from precolonial times to the present. Students will explore the intellectual history of different artisan materials and culture of Latin America and Spain. They will gain understanding of the historic significance of works of arts by investigation and creating their own art. Understanding of richness of this heritage will be fostered by reading various articles, media, and the creation of works of art. Students will also get to experience working with a variety of different mediums such as fabric, wood, paper, plastic, wood, yarn, etc. During the process of creating works of art, students will use unique (preferably recyclable) materials to create their own artworks. Through the exposure to traditional art forms, students will learn the basic concepts that will enable them to interpret images and sound to understand the richness of cultures within the Spanish-speaking world. In this course it is very important to keep an open attitude and use perception, imagination, curiosity and sensibility. Students will spend 1-2 hours on each creation, and are required to present and exhibit their artwork at the end of the semester. This course will be taught in English. Liberal Education Goal Area 6. (Might not be offered every year.)

SPAN 3830 Voices of Women in the Spanish-speaking World (3 credits)

A study of selected women writers of the Spanish-speaking world. Emphasis is given to their contributions to the development of Spanish and Latin American Literature and Culture as well as their vision of the world. This course focuses on the emergence of women's voices of Latin America and Spain through a collection of selected authentic materials such as: articles, movies, short films, documentaries, interviews, literature of testimony, from the 16th century through the present. Special attention will be given to critical thinking and interpretation, speaking, and writing skills. This course is conducted entirely bilingually. Prerequisite(s): SPAN 2212 or consent of the instructor. (No prerequisites for non-Spanish majors.) Liberal Education Goal Area 6. (Might not be offered every year.)

SPAN 3840 Contemporary Issues in the Spanish-speaking World (3 credits)

Research and discussion of selected issues that significantly contribute to and affect life in contemporary Spanish-speaking societies. Examination and use of authentic media materials. Prerequisite(s): SPAN 2212 or consent of the instructor. Liberal Education Goal Area 8. (Might not be offered every year.)

SPAN 3850 Art and Conflict in Spain and Latin America (3 credits)

Explores instances of artistic resistance to violence in Spain and Latin America. The history of Spain and Latin America abounds in episodes of conflict: dictatorships, wars, forced displacement and human exploitation. This course studies how artists, writers, musicians, and filmmakers represented and resisted censorship and repression in Spain and Latin America. Through primary sources (films, artwork, poetry, and other texts) and historical accounts, students became aware of the cultures of protest created by those artists. This course is conducted in Spanish so students strengthen their language proficiency and communicative skills. Prerequisite(s): SPAN 2212 or consent of the instructor. Liberal Education Goal Area 6. Might not be offered every year.

SPAN 3870 Intensive Immersion Practicum: Concordia Language Villages (4 credits)

Students acquire first-hand experience with the Spanish Language and Spanish-speaking cultures in the United States by participating in a practical, hands on 80 hour volunteer experience at Concordia Language Villages. Two options are available. See department for further information. Criminal background check required. Prerequisites: SPAN 2212 or ACTFL Intermediate-low proficiency in Spanish. Instructor permission required. Liberal Education Goal Area 8.

SPAN 3971 Intercultural Immersion Internship (1-4 credits)

Students can acquire first-hand experience with the Spanish Language and Spanish-speaking cultures in the U.S. or abroad by participating in an intercultural immersion internship. In this volunteer internship students will acquire intercultural soft skills, improve language skills, gain career experience in their field, and more. See department for more information. May be repeated for maximum of 4 credits. Prerequisites: SPAN 2212 or ACTFL Intermediate-low proficiency in Spanish. Instructor permission required. Liberal Education Goal Area 8.

SPAN 4310 Advanced Spanish Composition (3 credits)

A writing course designed to improve the ability to write correct idiomatic (expressions natural to a native speaker) Spanish. Emphasis on acquisition of a wider vocabulary and structural understanding of the language. Selected topics from literary and cultural materials. Includes creative and formal writing in specific genres. Includes reading, writing, comprehending and producing written expression. Prerequisite(s): SPAN 3311, SPAN 3312, or consent of instructor.

SPAN 4314 Advanced Spanish Grammar Review Through Film and Literature (3 credits)

A course designed for advanced students with emphasis on critical grammatical application through examination of specific cultural and linguistic contexts of selected film and literature of the Spanish-speaking world. Students written proficiency level will be evaluated with the ACTFL guidelines. Prerequisite(s): SPAN 2212, SPAN 3311 Pre/Co-requisite: SPAN 3312, or consent of instructor. (Might not be offered every year.)

SPAN 4315 Spanish Oral Proficiency Skills Workshop II (1 credit)

This course is designed to refine Spanish speaking and comprehension competencies through the exploration of short stories, plays, articles, debates and films. Students will attain, develop, and demonstrate skills from the intermediate through advanced proficiency levels of the ACTFL Guidelines by using a variety of readings and articles related to assigned topics. Course may be repeated for up to 2 credits. Prerequisite(s): SPAN 3311, SPAN 3312, Co-requisite: SPAN 4314; or consent of instructor. (Might not be offered every year.)

SPAN 4413 Hispanic Short Fiction (3 credits)

A study of selected works of short fiction from Spain and Latin America. Prerequisite: SPAN 3312 or consent of instructor. (Might not be offered every year.)

SPAN 4414 The Hispanic Novel (3 credits)

A study of selected novels from Spain and Latin America. Prerequisite: SPAN 3312 or consent of instructor. (Might not be offered every year.)

SPAN 4415 Hispanic Drama (3 credits)

A study of selected works. Prerequisite: SPAN 3312 or consent of instructor. (Might not be offered every year.)

SPAN 4416 Hispanic Poetry (3 credits)

A study of selected works. Prerequisite: SPAN 3312. (Might not be offered every year.)

SPAN 4420 Twentieth Century Literature (3 credits)

A study of selected works of twentieth century Spanish and Latin American authors and their social and cultural context. Prerequisite: SPAN 3312 or consent of instructor. (Might not be offered every year.)

SPAN 4421 Women in Hispanic Literature and Culture (3 credits)

A study of selected literature from a broad range of Hispanic women writers from antiquity to the present. Prerequisite: SPAN 3312 or consent of instructor. (Might not be offered every year.)

SPAN 4422 Hispanic Literature and Culture in the United States (3 credits)

A bilingual offering of selected works of authors of Hispanic literature in the United States. Prerequisite: ENGL 2152 or ENGL 3150. (Might not be offered every year.)

SPAN 4423 From Text to Image: Hispanic Film and Literature (3 credits)

A study of the relationship between narrative and cinema in the Hispanic world. (Might not be offered every year.)

SPAN 4426 Latin American Culture and Civilization (3 credits)

History of Spanish American culture and civilization from antiquity to the present. Prerequisite: SPAN 3312 or consent of instructor. [Might not be offered every year.]

SPAN 4427 Spanish Culture and Civilization (3 credits)

History of Spanish culture and civilization from antiquity to the present. Prerequisite: SPAN 3312 or consent of instructor. (Might not be offered every year.)

SPAN 4430 Spanish Linguistics (3 credits)

The application of knowledge of ML 3430 Linguistics to the Spanish language. An introductory course of Spanish topics of phonology, morphology, syntax, lexicography, semantics, and language acquisition theory. Includes the study of the origins and evolution of Spanish and its current use. Prerequisite(s): SPAN 3311 and SPAN 3313 Pre/Co-requisite(s): ML 3430; or consent of instructor.

SPAN 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
1940, 2940, 3940, 4940 IN-SERVICE COURSE
1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
1970, 2970, 3970, 4970 INTERNSHIP
1980, 2980, 3980, 4980 RESEARCH
1990, 2990, 3990, 4990 THESIS

Leadership

The certificate in Leadership Studies prepares graduates for problem-solving within organizations and communities. Emphasis is placed on conflict resolution, evidence-based reasoning, and ethical perspectives on leadership.

Students will be introduced to major academic studies of leadership, including research on problem-solving in the work-place, political psychology and professional ethics. We integrate our students' major studies and professional goals, culminating in a project on leadership challenges in their future endeavors. Relevant professional skills, like writing policy, will also be covered.

Leadership Studies is an interdisciplinary program, drawing on psychology, sociology, communication studies, political science, philosophy, and other fields.

Programs

- Leadership *minor*
- Leadership *cert*

Leadership *minor*

Required Credits: 18

Required GPA: 2.00

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- LEAD 3500 Theories and Contexts of Leadership (3 credits)
- LEAD 4000 Capstone in Leadership Studies (3 credits)
- PHIL 2220 Ethics (3 credits)

II REQUIRED ELECTIVES

SELECT 9 CREDITS FROM THE FOLLOWING COURSES. NO MORE THAN TWO COURSES CAN BE CHOSEN FROM ONE DEPARTMENT:

(Note: Some elective options may require prerequisites that are not part of the minor.)

- BUAD 3520 Business Ethics (3 credits)
- BUAD 4354 Organizational Behavior (3 credits)
- ENGL 2150 Technical Writing (3 credits)
- ENGL 3155 Professional Writing (3 credits)
- ENGL 3177 Rhetoric of Social Media (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)
- INST 3317 Tribal Government and Leadership (3 credits)
- LEAD 2510 Topics-Humanities and Leadership (3 credits)
- LEAD 2520 Topics: History of Leadership (3 credits)
- MASC 3850 Media Ethics and Law (3 credits)
- NRSG 4250 Leadership in Nursing (3 credits)
- PHIL 2330 Philosophies of Non-Violence (3 credits)
- PHIL 3380 Political Philosophy (3 credits)
- POL 3210 Public Administration (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- PSY 2357 Industrial and Organizational Psychology (3 credits)

- PSY 3337 Group Processes (3 credits)
- PSY 3367 Social Psychology (3 credits)
- PSY 4408 Human Services Program Management (3 credits)
- SOC 3210 Social Movements and Change (3 credits)
- SOWK 2110 Intercultural Communication (3 credits)

Leadership *cert*

Required Credits: 15

Required GPA: 2.00

I REQUIRED CORE COURSES

Complete the following courses:

- LEAD 3500 Theories and Contexts of Leadership (3 credits)
- PHIL 2220 Ethics (3 credits)
- LEAD 4000 Capstone in Leadership Studies (3 credits)

II REQUIRED ELECTIVES

Select 6 credits from the following courses. No more than one course (3 credits) can be chosen from a particular department. Courses should be selected in consultation with the Leadership Studies Director.

Some courses require pre-requisites that are not part of the certificate.

- BUAD 3520 Business Ethics (3 credits)
- ENGL 2150 Technical Writing (3 credits)
- ENGL 3155 Professional Writing (3 credits)
- ENGL 3177 Rhetoric of Social Media (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- INST 3317 Tribal Government and Leadership (3 credits)
- MASC 3850 Media Ethics and Law (3 credits)
- NRSG 4250 Leadership in Nursing (3 credits)
- PHIL 3380 Political Philosophy (3 credits)

- POL 3210 Public Administration (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- PSY 2357 Industrial and Organizational Psychology (3 credits)
- PSY 3337 Group Processes (3 credits)
- PSY 3367 Social Psychology (3 credits)
- PSY 4408 Human Services Program Management (3 credits)
- SOC 3210 Social Movements and Change (3 credits)

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
 1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
 1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
 1940, 2940, 3940, 4940 IN-SERVICE COURSE
 1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
 1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
 1970, 2970, 3970, 4970 INTERNSHIP
 1980, 2980, 3980, 4980 RESEARCH
 1990, 2990, 3990, 4990 THESIS

III OTHER REQUIREMENTS Attend 2 guest lectures or workshops that are outside of any class requirement and take place outside of class on the topic of Leadership. These lectures and workshops must be pre-approved by the Director of the Leadership Studies Program. Synthesize the information presented and its relationship to coursework taken (both req'd and electives) Submit to the Leadership Program Director for evaluation and approval. This requirement must be completed prior to or concurrent with LEAD 4000, Capstone in Leadership. Develop a Personal Leadership Statement. As a part of this statement and as a culminating experience in pursuit of this certificate, students will discuss gains they have made since starting the Leadership certificate and will address three broad questions. What kind of leader am I? How have I demonstrated leadership knowledge and skills both inside and outside of the classroom? What gains have I made in affective, behavioral, ethical, social connectivity and collective action dimensions of leadership?

Leadership Courses

LEAD 2510 Topics-Humanities and Leadership (3 credits)

Students will be introduced to topics in leadership studies, drawing on perspectives from philosophy, art, literature and the human sciences. Topics may vary. Liberal Education Goal Areas 6 & 9.

LEAD 2520 Topics: History of Leadership (3 credits)

Students will be introduced to topics in leadership studies, drawing on historical perspectives from social and behavioral sciences. Topics may vary. Liberal Education Goal Areas 5 & 9.

LEAD 3500 Theories and Contexts of Leadership (3 credits)

Classic and contemporary theories of leadership and methods of study are discussed along with their strengths and weaknesses. Students will learn leadership theories and applications of those ideas, will evaluate themselves on the factors associated with ethical leadership, will identify their own leadership style and skills as well as ways to become leader-citizens. Liberal Education Goal Area 9.

LEAD 4000 Capstone in Leadership Studies (3 credits)

Leadership coursework thus far has explored questions regarding who we are as people, how we live together, and how we effect change. In this course, students put their leadership knowledge and skills into action through the synthesis of relevant concepts and experiences to formulate their own informed perspective on leadership in contemporary society. Students will develop and implement a research or action-based project with some aspect of leadership as a focus. Prerequisites: PHIL 2220 and LEAD 3500. Students enrolled in Certificate in Leadership Studies or in Minor in Leadership Studies should have completed all elective requirements prior to LEAD 4000. Concurrent enrollment in elective requirements only permitted with permission of Director of Leadership Studies.

LEAD 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

Liberal Studies

The Liberal Studies major is an interdisciplinary program in which students pursue broad interests or develop a specialized program in areas where majors are not currently offered. It encourages skills for responsible citizenship, including critical thinking, self-knowledge, and interdisciplinary understanding, and is appropriate for students who wish to participate fully in shaping their university education to their needs and interests.

Programs

- Liberal Studies, B.A. *major*

Career Directions

The Liberal Studies major by its nature does not aim at a single career path. Rather, it offers a meaningful liberal education to students who 1) have broad career goals, 2) already have a career and wish to advance it with a bachelor's degree, 3) seek to enrich their lives through a classic liberal education, 4) wish to prepare for graduate or professional study. The major could be appropriate for students interested in any of the following, for example:

Arts
Business
Communications
Education
Government
Human Services
Law
Library Science
Medicine
Nonprofit Organizations
Also: Graduate School
Professional School
Seminary

Liberal Studies, B.A. *major*

ADMISSION TO THE PROGRAM

A letter of application submitted to the chair of the Department of Humanities is required for admission to the Liberal Studies major. Ideally it would be submitted before the student's senior year. It should contain the following:

- A statement of understanding about the freedom of choice associated with this degree;
- A statement of future plans to use this degree for personal growth, further study, employment, or other purposes;
- An outline of a projected course of study and date of graduation.

The letter is reviewed by the program's advisor. When an application is approved, the student may declare the major.

The credits for the Liberal Studies major may be distributed in various ways. For example:

- Broad distribution across the colleges.
- Concentration in various areas of interest, including minors.
- Organization in a formal program of study of one or more major themes, such

as critical thinking, cultural heritage, science and technology.

No more than 23 credits for the Liberal Studies major may be applied toward a double-major or second degree in the designated disciplines.

Required Credits: 45
Required GPA: 2.25

REQUIREMENTS FOR THE LIBERAL STUDIES MAJOR Completion of 45 semester credits in the student's choice of courses from the following disciplines, with at least 30 of the 45 credits at the 3000-4000 level.

Anthropology
Biology
Chemistry
Communication Studies
Computer Science
Economics
English
Environmental Science
Gender and Women's Studies
Geography
Geology
History
Humanities
Indigenous Studies
Intl Studies
Mass Communication
Mathematics
Modern Lang
Music
Philosophy
Physics
Political Science
Psychology
Sociology
Technology, Art and Design - Design courses

Mathematics

Mathematics in its purest form is an art concerned with the exploration and expression of ideas. In its practical form, mathematics is a symbolic language and is concerned with the application of mathematical ideas and tools to the sciences and other areas of human endeavor.

The study of mathematics is grounded in problem solving and includes the ability to think in a certain, organized way. It is basic to careers in the natural sciences, essential to the effective use of computer technology, and valuable in related fields such as the social sciences, business, and industrial technology.

The Mathematics majors offered by the Department of Mathematics provide students with a core of knowledge in mathematics and allow specialization in both teaching and non-teaching programs.

Programs

- Elementary Education, B.S. (Mathematics Endorsement (Teacher Licensure)) *major*
- Mathematics Education, B.S. ((Teacher Licensure)) *major*
- Mathematics, B.S. (Actuarial Emphasis) *major*
- Mathematics, B.S. (General Emphasis) *major*
- Mathematics, B.S. (Applied Emphasis) *major*
- Mathematics *minor*

Career Directions

Actuarial Fields
Business and Industry
Computer Science
Data Processing
Economics
Engineering
Environmental Technology
Government
Mathematics Teaching
Medical Research
Natural Sciences
Statistics
Also: Graduate Study

Preparation

Recommended High School Courses
Computer Science
Mathematics at each grade level

Elementary Education, B.S. *major* Mathematics Endorsement (Teacher Licensure)

Required Credits: 85
Required GPA: 2.50

I ELEMENTARY EDUCATION FOUNDATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

COMPLETE THE FOLLOWING COURSE:

- ED 4820 Student Teaching - Elementary (1-16 credits)

II ELEMENTARY EDUCATION MAJOR COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3201 Language Arts I (3 credits)
- ED 3202 Language Arts II (3 credits)
- ED 3203 Language Arts III (3 credits)
- ED 3221 Elementary Math Methods (3 credits)
- ED 3222 Elementary Science Methods (3 credits)
- ED 3240 Social Studies in the Elementary School (3 credits)
- ED 3301 Creative Expressions (3 credits)

- ED 3302 Creative Process Foundations: Patterns (3 credits)
- HLTH 4100 Teaching Elementary School Health (2 credits)
- PHED 4200 Methods of Teaching Elementary Physical Education to Classroom Teachers (1 credit)

COMPLETE THE FOLLOWING COURSE:

- MATH 1011 Mathematics for Elementary School Teachers I (3 credits)

COMPLETE THE FOLLOWING COURSE:

- MATH 1013 Mathematics for Elementary School Teachers II (3 credits)

MATHEMATICS ENDORSEMENT

ENDORSEMENT CORE:

- ED 4737 Content Area Reading (3 credits)
- ED 3417 Teaching and Learning in the Middle School (3 credits)
- ED 4840 Student Teaching - Special Fields (5 credits)

COMPLETE THE FOLLOWING COURSES:

- MATH 3064 Number Concepts (4 credits)
- MATH 3065 Mathematical Foundations of Algebra (4 credits)
- MATH 3066 Geometry and Technology (4 credits)
- MATH 3067 Data, Probability, and Statistics (4 credits)

Mathematics Education, B.S. *major* (Teacher Licensure)

The Mathematics Bachelor of Science (Teacher Licensure) follows the guidelines of the National Council of Teacher of Mathematics for undergraduate programs for teachers of mathematics. Students majoring in this degree should also check the Professional Education requirements found in Professional Education:

Secondary.

Note: If the student's high school mathematics courses and/or the Mathematics Placement Test indicate a lack of readiness for calculus, the student will be placed in one of the following precalculus sequences: MATH 1470; or MATH 1170 and MATH 1180; or MATH 1170 and MATH 1470. Students who need to take more than one course in preparation for calculus may not be able to complete this program without exceeding 120 credits.

Required Credits: 76

Required GPA: 2.50

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- MATH 2210 Discrete Mathematics (4 credits)
- MATH 2471 Calculus I (5 credits)
- MATH 2472 Calculus II (5 credits)
- MATH 2480 Multivariable Calculus (4 credits)
- MATH 3310 Linear Algebra (4 credits)

II REQUIRED ELECTIVES

COMPLETE THE FOLLOWING COURSES:

- MATH 3065 Mathematical Foundations of Algebra (4 credits)
- MATH 3560 Classical and Modern Geometry (3 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- MATH 3067 Data, Probability, and Statistics (4 credits)
- STAT 2610 Applied Statistics (4 credits)
- STAT 3631 Probability and Statistics I (4 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- MATH 4350 Abstract Algebra (3 credits)
- MATH 4371 Modern Algebra (3 credits)

III REQUIRED CONCENTRATION, SECOND EDUCATION MAJOR OR MIDDLE LEVEL ENDORSEMENT

COMPLETE ONE OF THE FOLLOWING OPTIONS:

Note: If taken under II. above, MATH 3067 or STAT 3631 may be used to meet this requirement.

A. APPLIED MATHEMATICS/ CALCULUS CONCENTRATION COMPLETE 2 OF THE FOLLOWING COURSES:

- MATH 2490 Differential Equations (4 credits)
- MATH 3710 Mathematical Modeling (3 credits)
- MATH 3720 Numerical Methods (3 credits)
- MATH 4410 Introduction to Analysis (3 credits)
- MATH 4760 Topics in Applied Mathematics (3 credits)

B. COMPUTER SCIENCE CONCENTRATION COMPLETE 2 OF THE FOLLOWING COURSES:

- CS 2270 Introduction to Web Programming (3 credits)
- CS 2321 Computer Science I (4 credits)
- CS 2322 Computer Science II (4 credits)

C. MIDDLE LEVEL MATHEMATICS CONCENTRATION COMPLETE 2 OF THE FOLLOWING COURSES:

- MATH 3064 Number Concepts (4 credits)
- MATH 3066 Geometry and Technology (4 credits)
- MATH 3067 Data, Probability, and Statistics (4 credits)

D. STATISTICS CONCENTRATION COMPLETE 2 OF THE FOLLOWING COURSES:

- STAT 3610 Time Series Analysis (3 credits)
- STAT 3631 Probability and Statistics I (4 credits)
- STAT 3632 Probability and Statistics II (3 credits)

E: COMPLETE A SECONDARY EDUCATION MAJOR (OTHER THAN MATHEMATICS)

F: COMPLETE A MIDDLE LEVEL ENDORSEMENT (OTHER THAN MATHEMATICS)

REQUIRED PROFESSIONAL EDUCATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3440 Mathematics Methods in the Secondary School (4 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

COMPLETE 12 CREDITS OF THE FOLLOWING COURSE

- ED 4830 Student Teaching - Secondary (1-12 credits)

Program Learning Outcomes | Mathematics Education, B.S.

1. Knowledge: Students will understand the content and methods of the core areas of undergraduate mathematics.
2. Analysis: Students will identify, interpret and analyze problems, discern structure and pattern and make conjectures.
3. Application: Students will apply appropriate procedures and technology to solve problems.
4. Proof: Students will apply creative and analytic thinking to develop clear and valid mathematical arguments.
5. Communication: Students will communicate mathematical ideas and understanding effectively.
6. Pedagogy: Student will develop an understanding of a variety of pedagogical techniques and be able to apply them to the design of lessons and curriculum that communicate mathematical concepts to learners with diverse learning styles and ability levels.
7. Career Readiness: Students will be prepared for careers in education and

further study in mathematics.

Mathematics, B.S. *major*

Actuarial Emphasis

Note: If the student's high school mathematics courses and/or the Mathematics Placement Test indicate a lack of readiness for calculus, the student will be placed in one of the following precalculus sequences: MATH 1470; or MATH 1170 and MATH 1180; or MATH 1170 and MATH 1470.

Required Credits: 57
Required GPA: 2.25

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- MATH 2210 Discrete Mathematics (4 credits)
- MATH 2471 Calculus I (5 credits)
- MATH 2472 Calculus II (5 credits)
- MATH 2480 Multivariable Calculus (4 credits)
- MATH 3310 Linear Algebra (4 credits)

ACTUARIAL EMPHASIS

COMPLETE THE FOLLOWING COURSES:

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- BUAD 3771 Financial Management (3 credits)
- BUAD 3772 Advanced Financial Management (3 credits)
- CS 2321 Computer Science I (4 credits)
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)
- STAT 3610 Time Series Analysis (3 credits)
- STAT 3631 Probability and Statistics I (4 credits)
- STAT 3632 Probability and Statistics II (3 credits)

SELECT ONE OF THE FOLLOWING COURSES:

- MATH 2490 Differential Equations (4 credits)
- MATH 3710 Mathematical Modeling (3 credits)
- MATH 3720 Numerical Methods (3 credits)
- MATH 4760 Topics in Applied Mathematics (3 credits)

SUGGESTED SEMESTER SCHEDULE FOR MATHEMATICS MAJOR, B.S.

The following is a list of required Mathematics Major, B.S. courses by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible.

Freshman

- MATH 1470 Precalculus (5 credits)
- MATH 2471 Calculus I (5 credits)
- MATH 2472 Calculus II (5 credits)
- Liberal Education requirements

Sophomore

- MATH 2210 Discrete Mathematics (4 credits)
- MATH 2480 Multivariable Calculus (4 credits)
- MATH 3310 Linear Algebra (4 credits)
- Courses in the Field of Emphasis (consult with advisor)
- Liberal Education requirements

Junior/Senior

- Courses in the Field of Emphasis (consult with advisor)
- Complete Liberal Education requirements

Mathematics, B.S. *major*

General Emphasis

Note: If the student's high school mathematics courses and/or the Mathematics Placement Test indicate a lack of readiness for calculus, the student will be placed in one of the following precalculus sequences: MATH 1470; or MATH 1170 and MATH 1180; or MATH 1170 and MATH 1470.

Required Credits: 44
Required GPA: 2.25

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- MATH 2210 Discrete Mathematics (4 credits)
- MATH 2471 Calculus I (5 credits)
- MATH 2472 Calculus II (5 credits)
- MATH 2480 Multivariable Calculus (4 credits)
- MATH 3310 Linear Algebra (4 credits)

GENERAL EMPHASIS

COMPLETE THE FOLLOWING COURSE:

- STAT 3631 Probability and Statistics I (4 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- MATH 4350 Abstract Algebra (3 credits)
- MATH 4371 Modern Algebra (3 credits)
- MATH 4410 Introduction to Analysis (3 credits)

REQUIRED ELECTIVES

SELECT 5 COURSES (not used above) FROM THE FOLLOWING:

- CS 2322 Computer Science II (4 credits)
- MATH 2490 Differential Equations (4 credits)
- MATH 3260 Mathematical Problem Solving (3 credits)
- MATH 3440 Introduction to Fractals & Chaos (3 credits)
- MATH 3560 Classical and Modern Geometry (3 credits)
- MATH 3710 Mathematical Modeling (3 credits)
- MATH 3720 Numerical Methods (3 credits)
- MATH 3820 History of Mathematics (3 credits)
- MATH 4240 Number Theory (3 credits)
- MATH 4350 Abstract Algebra (3 credits)
- MATH 4371 Modern Algebra (3 credits)
- MATH 4410 Introduction to Analysis (3 credits)
- MATH4470
- MATH 4760 Topics in Applied Mathematics (3 credits)
- STAT 3610 Time Series Analysis (3 credits)

- STAT 3632 Probability and Statistics II (3 credits)

SUGGESTED SEMESTER SCHEDULE FOR MATHEMATICS MAJOR, B.S.

The following is a list of required Mathematics Major, B.S. courses by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible.

Freshman

- MATH 1470 Precalculus (5 credits)
- MATH 2471 Calculus I (5 credits)
- MATH 2472 Calculus II (5 credits)
- Liberal Education requirements

Sophomore

- MATH 2210 Discrete Mathematics (4 credits)
- MATH 2480 Multivariable Calculus (4 credits)
- MATH 3310 Linear Algebra (4 credits)
- Courses in the Field of Emphasis (consult with advisor)
- Liberal Education requirements

Junior/Senior

- Courses in the Field of Emphasis (consult with advisor)
- Complete Liberal Education requirements

Mathematics, B.S. *major* Applied Emphasis

Required Credits: 40

Required GPA: 2.25

I REQUIRED CORE COURSES

Complete the following courses:

- MATH 2210 Discrete Mathematics (4 credits)
- MATH 2471 Calculus I (5 credits)
- MATH 2472 Calculus II (5 credits)
- MATH 2480 Multivariable Calculus (4 credits)
- MATH 3310 Linear Algebra (4 credits)

APPLIED EMPHASIS

A. Complete 3 courses from the following list:

- CS 2322 Computer Science II (4 credits)
- MATH 2490 Differential Equations (4 credits)
- MATH 3710 Mathematical Modeling (3 credits)
- MATH 3720 Numerical Methods (3 credits)
- MATH 4410 Introduction to Analysis (3 credits)
- MATH 4760 Topics in Applied Mathematics (3 credits)

B. Complete 3 additional courses from the following list not previously taken above:

- CS 2322 Computer Science II (4 credits)
- CS 3752 Data Mining (3 credits)
- GEOG 4265 Spatial Analysis (3 credits)
- MATH 2490 Differential Equations (4 credits)
- MATH 3710 Mathematical Modeling (3 credits)

- MATH 3720 Numerical Methods (3 credits)
- MATH 4410 Introduction to Analysis (3 credits)
- MATH 4760 Topics in Applied Mathematics (3 credits)
- STAT 2610 Applied Statistics (4 credits)
- STAT 3610 Time Series Analysis (3 credits)
- STAT 3631 Probability and Statistics I (4 credits)
- STAT 3632 Probability and Statistics II (3 credits)

SUGGESTED SEMESTER SCHEDULE FOR MATHEMATICS MAJOR, B.S.

The following is a list of required Mathematics Major, B.S. courses by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible.

Freshman

- MATH 1470 Precalculus (5 credits)
- MATH 2471 Calculus I (5 credits)
- MATH 2472 Calculus II (5 credits)
- Liberal Education requirements

Sophomore

- MATH 2210 Discrete Mathematics (4 credits)
- MATH 2480 Multivariable Calculus (4 credits)
- MATH 3310 Linear Algebra (4 credits)
- Courses in the Field of Emphasis (consult with advisor)
- Liberal Education requirements

Junior/Senior

- Courses in the Field of Emphasis (consult with advisor)
- Complete Liberal Education requirements

Mathematics *minor*

Required Credits: 20.0

Required GPA: 2.00

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- MATH 2471 Calculus I (5 credits)
- MATH 2472 Calculus II (5 credits)

II REQUIRED ELECTIVES

SELECT 10 SEMESTER CREDITS FROM THE FOLLOWING COURSES:

(Must include at least one MATH or STAT class numbered 3260 or above.)

- MATH 2210 Discrete Mathematics (4 credits)
- MATH 2480 Multivariable Calculus (4 credits)
- MATH 2490 Differential Equations (4 credits)
- Any MATH course numbered 3260 or above
- Any STAT course except STAT 3660 Statistics for the Health Sciences (3 credits)

OR COMPLETE ALL OF THE FOLLOWING COURSES:

- MATH 2210 Discrete Mathematics (4 credits)
- MATH 2480 Multivariable Calculus (4 credits)
- MATH 2490 Differential Equations (4 credits)
- STAT 2610 Applied Statistics (4 credits)

Mathematics Courses

MATH 0800 Intermediate Algebra (3 credits)

An algebra course designed for students with an insufficient algebraic background for CS 1309, MATH 1100, MATH 1107, or MATH 1170. This course must be taken for a letter grade and, to use this course as a prerequisite for MATH 1100 or MATH 1107, a grade of C or better must be achieved, and to use this course as a prerequisite for CS 1309, MATH 1120 or MATH 1170, a grade of B or better must be achieved. Credits are not applicable towards graduation. Topics include solving linear and quadratic equations, applications, linear inequalities, factoring, operations on polynomials, rational and radical expressions, and graphing linear equations.

MATH 1011 Mathematics for Elementary School Teachers I (3 credits)

This course meets the new BOT fundamental topics in arithmetic competencies. These topics include addition, subtraction, multiplication, and division of whole numbers; number theory related to fractions; decimals; and integers. This is the first of two mathematics courses providing the background for teaching in the elementary school. Emphasizes the use of mathematics manipulatives for modeling the basic operations. Prerequisite: Elementary education major or consent of instructor.

MATH 1013 Mathematics for Elementary School Teachers II (3 credits)

This course meets the new BOT introduction to higher mathematics competencies. These topics include geometry, discrete mathematics, probability, and statistics. This is the second of two mathematics courses providing the background for teaching in the elementary school. Emphasizes the use of mathematics manipulatives for modeling the basic concepts. Prerequisite: MATH 1011.

MATH 1100 Mathematical Reasoning (3 credits)

Mathematical reasoning and algebraic concepts applied to a selection of topics, which may include the mathematics of social choice, and the mathematics of management, geometry, and problem solving. Descriptive statistics and introductory probability and inferential statistics. A graphing calculator is required. Not open to students who have completed Math 1107 or Math 1170. Prerequisites: Two years of high school algebra and an appropriate score on the Mathematics Placement Test or completion of MATH 0800 with a grade of C or better. Liberal Education Category 4.

MATH 1107 Introduction to Mathematical Sciences (3 credits)

This course integrates the study of algebra, statistics, and computing in a laboratory-instruction environment. Topics include functions, graphical and tabular analysis, rate of change, syntax and semantics, the process of computing, data manipulation, sampling, statistical measures, basic probability, and correlation. Examples are drawn from a wide range of disciplines and content is taught within the framework of discipline-specific examples. Students learn to use the software package Microsoft Excel. Not open to students who have completed Math 1100 or Math 1170. Prerequisites: Two years of high school algebra and an appropriate score on the Mathematics Placement Test or MATH 0800 with a grade of C or better. Liberal Education Goal Area 4.

MATH 1120 Environmental Mathematics (3 credits)

This course will explore topics in which mathematics is used to investigate and inform decisions about environmental issues. Environmental issues addressed may include a study of population change, geoscience topics as related to economics and water resources, the average temperature of the earth, and data about the environment. Mathematical concepts may include iterative functions, unit conversion and statistics. Prerequisite(s): Successful completion of MATH 0800 with a grade of B or better, or three years of high school mathematics (including two years of algebra) and an appropriate score on the Mathematics Placement Test. Liberal Education Goal Areas 4 & 10.

MATH 1170 College Algebra (4 credits)

Problem solving with linear, quadratic, rational and absolute value equations and inequalities; function notation and inverses; graphs of relations and functions; polynomial, rational, exponential, and logarithmic functions and applications; systems of equations and inequalities, matrices. Prerequisites: Successful completion of MATH 0800 with a grade of B or better, or three years of high school mathematics (including two years of algebra) and an appropriate score on the Mathematics Placement Test. Liberal Education Goal Area 4.

MATH 1180 Trigonometry (3 credits)

Trigonometric functions, identities, equations, and applications. Prerequisites: Successful completion of Math 1170, or 3 years of high school math (including two years of algebra), and an appropriate score on the Mathematics Placement Test. Liberal Education Goal Area 4.

MATH 1470 Precalculus (5 credits)

Intended to provide the essential mathematical background needed in calculus. Topics include equation solving, functions (including polynomial, rational, exponential, logarithmic, trigonometric, and inverse trigonometric), identities, applications, and parametric equations. A graphing calculator is required. Prerequisites: Three years of high school mathematics (including two years of algebra with a half year of trigonometry strongly recommended) and an appropriate score on the Mathematics Placement Test, or completion of MATH 1170 with a grade of C or better. Liberal Education Goal Area 4.

MATH 2210 Discrete Mathematics (4 credits)

Symbolic logic, number concepts, mathematical induction, set theory, relations and functions, graphs, trees, recurrence relations, and complexity of algorithms. Prerequisites: CS 2321 or Math 2471 or instructor permission.

MATH 2471 Calculus I (5 credits)

Limits, differentiation and integration of algebraic and trigonometric functions; applications of the derivative and curve sketching; applications of integration. A graphing calculator is required. Prerequisite: An appropriate ACT math subscore or Mathematics Placement Test score or a grade of C or better in MATH 1470 or grades of C or better in both MATH 1170 and MATH 1180 or consent of instructor. Liberal Education Goal Area 4.

MATH 2472 Calculus II (5 credits)

Differentiation and integration of transcendental functions, techniques of integration, infinite sequences and series, parametric equations, polar coordinates, analytic geometry, and vectors. A graphing calculator is required. Prerequisite: A grade of C or better in MATH 2471. Liberal Education Goal Area 4.

MATH 2480 Multivariable Calculus (4 credits)

Three dimensional analytic geometry, spherical, and cylindrical coordinate systems, vectors, partial derivatives, and multiple integrals. A graphing calculator is required. Prerequisite: Successful completion of MATH 2472.

MATH 2490 Differential Equations (4 credits)

Ordinary differential equations including first order and second order linear equations, series solutions, Laplace transformations, existence and uniqueness theory, systems of linear and nonlinear equations, dynamical systems and applications. A graphing calculator is required. Prerequisite: MATH 2472.

MATH 3064 Number Concepts (4 credits)

This course provides a background in number concepts that are pertinent to school mathematics. Topics include scientific notation, number sense, properties of integers, prime and composite numbers, divisors, GCDs, LCMs, the number of divisors, the sum of divisors, the Euclidean Algorithm, famous unsolved problems, finite mathematical systems, modular arithmetic, introductory graph theory and applications, permutations, combinations, sorting, congruences, sequences, direct and indirect proofs, mathematical induction, and traveling salesman problem and algorithms. Emphasis will be given to problem solving techniques as they relate to number concepts. Prerequisite MATH 1011 or equivalent or consent of instructor. Might not be offered every year.

MATH 3065 Mathematical Foundations of Algebra (4 credits)

This course investigates concepts of patterns, relations, and functions. Prerequisites: MATH 1011 or equivalent or consent of instructor. Might not be offered every year.

MATH 3066 Geometry and Technology (4 credits)

This course examines the concepts of patterns, shape and space; spatial sense; plane, solid, and coordinate geometry systems; generalizing geometric principals; limits, derivatives and integrals; and appropriate use of technology for Geometry. Prerequisites: MATH 1011 or equivalent or consent of instructor; (Might not be offered every year.)

MATH 3067 Data, Probability, and Statistics (4 credits)

This course explores data investigations and concepts of randomness and uncertainty. The collection, display, analysis, and interpretation of data are studied. Additional topics include randomness, sampling, probability in simple and compound events, the prediction of outcomes using a variety of techniques, and the comparison of theoretical and empirical results of experiments. Prerequisite MATH 1011 or equivalent or consent of instructor.

MATH 3069 Mathematics and Culture (3 credits)

This course will introduce students to the relationships between mathematics and cultures and how an understanding of these relationships can increase learning and success in the mathematics classroom. The main focus of this course is on current cultures and their mathematics although some history of cultural mathematics will be covered. Cultures from around the world will be examined and students will also be given the opportunity to study cultures of particular interest to them or of particular relevance to their career as an educator. This course is designed for students studying to become and students who already are mathematics educators. Prerequisite(s): Junior-level status, graduate status, or consent of instructor.

MATH 3260 Mathematical Problem Solving (3 credits)

Investigation of problems and the process of problem solving across a variety of mathematical areas. Development and application of strategies used to solve problems with emphasis on multistep and nonroutine problems. Application of the process of mathematical modeling to real situations. Prerequisite: MATH 2210. (Might not be offered every year.)

MATH 3310 Linear Algebra (4 credits)

Systems of linear equations, linear transformations, matrix operations, vector spaces, eigenvalues and eigenvectors, orthogonality, and applications. Prerequisites: MATH 2210 and MATH 2472 or consent of instructor.

MATH 3440 Introduction to Fractals & Chaos (3 credits)

An introduction to the topics of fractal geometry, chaos, and dynamic mathematical systems. Topics included are iteration, fractals and fractal dimension, iterated function systems, Julia set, Mandelbrot set, and bifurcation. Prerequisites: MATH 2210 and MATH 2472. (Might not be offered every year.)

MATH 3560 Classical and Modern Geometry (3 credits)

Euclidean and non-Euclidean geometry, axiomatic systems, the geometry of solids, transformations, measurement, and fractal geometry. Prerequisite: MATH 2210.

MATH 3710 Mathematical Modeling (3 credits)

Mathematical modeling of applications that involve difference equations, matrices, probability, differentiation, and integration. Applications may be chosen from among the biological and physical sciences, economics, the social sciences, or other areas of interest. A graphing calculator is required. Prerequisite: MATH 2472. (Might not be offered every year.)

MATH 3720 Numerical Methods (3 credits)

Root finding techniques, fixed point iteration, polynomial interpolation, methods for solving linear and nonlinear systems of equations, numerical integration and differentiation, numerical solutions of differential equations, and the method of steepest descent. Prerequisite: MATH 2472.

MATH 3820 History of Mathematics (3 credits)

Historical investigation and presentation of the sources and growth of mathematical knowledge and principles, including Peano's axioms, the Axiom of Choice, and Russell's Paradox. Prerequisites: Junior or senior status and consent of the instructor. (Might not be offered every year.)

MATH 3961 Special Purpose Instruction (3 credits)

A course intended for specific groups or organizations outside the University community.

MATH 3962 Special Purpose Instruction (3 credits)

A course intended for specific groups or organizations outside the University community.

MATH 3963 Special Purpose Instruction (3 credits)

A course intended for specific groups or organizations outside the University community.

MATH 3964 Special Purpose Instruction (3 credits)

A course intended for specific groups or organizations outside the University community.

MATH 3965 Special Purpose Instruction (3 credits)

A course intended for specific groups or organizations outside the University community.

MATH 3966 Special Purpose Instruction (3 credits)

A course intended for specific groups or organizations outside the University community.

MATH 3967 Special Purpose Instruction (3 credits)

A course intended for specific groups or organizations outside the University community.

MATH 3968 Special Purpose Instruction (3 credits)

A course intended for specific groups or organizations outside the University community.

MATH 3969 Special Purpose Instruction (3 credits)

A course intended for specific groups or organizations outside the University community.

MATH 4240 Number Theory (3 credits)

Properties of integers, primes and their distribution, linear and quadratic congruences, number-theoretic functions, Diophantine equations, Fibonacci numbers, primitive roots and quadratic reciprocity. Prerequisite: MATH 2210. (Might not be offered every year.)

MATH 4350 Abstract Algebra (3 credits)

A study of abstract algebraic systems with an emphasis on the development of number systems, properties of polynomials, rings, integral domains and fields. Prerequisites: MATH 3310. (Might not be offered every year.)

MATH 4371 Modern Algebra (3 credits)

A study of abstract algebraic systems with an emphasis on groups and an introduction to rings. Prerequisite: MATH 3310.

MATH 4410 Introduction to Analysis (3 credits)

Functions, sequences, and properties of limits. Topics from calculus including continuity, differentiation, and integration. Open and closed sets, cluster points, and other topological properties. Prerequisites: MATH 2210 and MATH 2472.

MATH 4760 Topics in Applied Mathematics (3 credits)

This course focuses on an advanced topic from applied mathematics. Possible topics include game theory, operations research, and cryptography. May be repeated for up to 6 credits with different topics. Prerequisite: MATH 2472. (Might not be offered every year.)

MATH 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
 1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
 1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
 1940, 2940, 3940, 4940 IN-SERVICE COURSE
 1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
 1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
 1970, 2970, 3970, 4970 INTERNSHIP
 1980, 2980, 3980, 4980 RESEARCH
 1990, 2990, 3990, 4990 THESIS

Statistics Courses

STAT 2610 Applied Statistics (4 credits)

A nontheoretical introduction to statistics with an emphasis on applications in a variety of disciplines. Topics include measures of central tendency, position and dispersion; basic probability; hypothesis testing; estimation; analysis of variance; linear correlation and regression; nonparametric statistics. Prerequisite: Three years of high school mathematics (including two years of algebra) and an appropriate score on the Mathematics Placement Test, or completion of MATH 1170 or higher. Liberal Education Goal Area 4.

STAT 3610 Time Series Analysis (3 credits)

Linear time models, seasonal models, stationary models, moving average, autoregressive and ARIMA models, model identification, confidence intervals and testing, forecasting and error analysis. Prerequisites: (MATH 2472 and STAT 2610) or STAT 3631. (Might not be offered every year.)

STAT 3631 Probability and Statistics I (4 credits)

Probability of finite sample spaces, discrete and continuous probability distributions, exploratory data analysis, statistical models. Prerequisites: MATH 2472.

STAT 3632 Probability and Statistics II (3 credits)

Multivariable distributions, sampling distribution theory, estimation, hypothesis testing, regression and correlation. Prerequisites: MATH 2480 and STAT 3631. (Might not be offered every year.)

STAT 3660 Statistics for the Health Sciences (3 credits)

Introduction to descriptive and inferential statistics in the context of the health sciences. Covers data types, methods for summarizing and displaying data, measures of central tendency and variability, hypothesis testing including the analysis of variance and nonparametric techniques, correlation and regression. Students learn to use the statistical software package SPSS for data analysis. Prerequisite: MATH 1170 or consent of instructor.

STAT 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
 1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
 1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
 1940, 2940, 3940, 4940 IN-SERVICE COURSE
 1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
 1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
 1970, 2970, 3970, 4970 INTERNSHIP
 1980, 2980, 3980, 4980 RESEARCH
 1990, 2990, 3990, 4990 THESIS

Media, Integrated

Mass communication is the primary means by which our society relays news, information, and entertainment to the public. Technological advances have promoted instantaneous, global, and persistent presentation of images and ideas, both positive and negative. Mass Communication at BSU has traditionally been divided into three major areas: print, electronic, and advertising/public relations. In this age of media convergence, however, these traditional barriers are almost nonexistent. Therefore, our revised curriculum aims to prepare all students to communicate meaningful messages successfully, utilizing print, still and moving images, audio and multimedia technologies.

The Department of Integrated Media encourages students to stretch themselves by taking courses outside their area of interest and by completing a minor in another department. Writing skills are emphasized. Intensive classroom and laboratory experiences include the study of historical, practical, and theoretical aspects of mass communication. These experiences help prepare students for the rapid technological and social changes they will encounter as they move through their careers. Their preparation culminates in the completion of an academic thesis or a creative project with appropriate documentation.

It is hoped that these experiences will prepare students for the challenges they encounter as technologies and media formats continue to change rapidly. All students are required to attain a 2.50 GPA in their major courses before being approved for graduation with a Mass Communication major or minor. They are also required to successfully complete at least two semesters of second language, in preparation for the global media job market.

Programs

- Environmental Communication, B.S. *major*
- Marketing Communication, B.S. *major*
- Mass Communication, B.S. *major*
- Environmental Communication *minor*
- Film Studies *minor*
- Mass Communication *minor*

Career Directions

Account Executive
Advertising Sales Person
Broadcaster
Editor
Information Manager
Journalist
Program Director
Program Producer
Public Relations Director
Station Manager
Also: Graduate Study

Preparation

Recommended High School Courses

Newspaper Production
Radio Production
Speech
Television Production
Writing

Environmental Communication, B.S. *major*

Required Credits: 62

Required GPA: 2.50

I REQUIRED CORE COURSES

Complete the following courses:

- COMM 3400 Environmental Communication (3 credits)
- ENVR 2000 Introduction to Environmental Science (3 credits)
- ENVR 3880 Environmental Controversies (2 credits)
- MASC 2243 Video Editing (3 credits)
- MASC 2460 Digital Photography (3 credits)
- MASC 2850 Media Writing I (3 credits)
- MASC 3260 Public Relations (3 credits)
- MASC 3270 Media and Social Change (3 credits)
- MASC 3450 Advanced Field Production (3 credits)
- MASC 3500 Media Design (3 credits)
- MASC 3720 Media Writing II (3 credits)
- MASC 4303 Final Media Showcase (3 credits)
- MASC 4840 Portfolio (3 credits)

Choose one of the following:

- COMM 3120 Communication in a Diverse Society (3 credits)
- SOWK 2110 Intercultural Communication (3 credits)

Choose one of the following:

- ENVR 3800 Environmental Data Analysis (3 credits)
- ENVR 4220 Sampling and Analysis (4 credits)
- GEOL 3120 Soils (4 credits)

Choose one of the following:

- ENVR 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
or INST 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
- ENVR 3720 Food Sovereignty, Health & Indigenous Environments (3 credits)
or INST 3720 Food Sovereignty, Health & Indigenous Environments (3 credits)
- ENVR 3730 Sustainable Communities: Local Indigenous Perspective (3 credits)
or INST 3730 Sustainable Communities: Local Indigenous Perspective (3 credits)
- ENVR 3740 Environment, Wellness & the Sacred Connection to Place (3 credits)

or INST 3740 Environment, Wellness & the Sacred Connection to Place (3 credits)

- ENVR 3750 Sustainable Communities: Global Indigenous Perspective (3 credits)
or INST 3750 Sustainable Communities: Global Indigenous Perspective (3 credits)

Choose one of the following:

- ENVR 3040 Environmental Economics (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)
- ENVR 4610 Sustainability: Theory and Practice (4 credits)
- ENVR 4260 Risk, Resilience and Sustainable Community Development (3 credits)
- GEOG 3532 Political Ecology (3 credits)
- POL 3230 Environmental Politics (3 credits)

Select one of the following courses (3 credits):

- ENVR 4970 Internship (3 credits)
- MASC 4970 Internship (1-12 credits)

II REQUIRED ELECTIVES

Select 9 credits of electives from the following courses:

Electives chosen must meet departmental approval.

- ENVR 2925 People of the Environment: Global Pollution Perspective (3 credits)
- ENVR 3700 Natural Resource Management (3 credits)
- ENVR 3840 Wetlands Ecology (3 credits)
- ENVR 4050 Geochemistry (3 credits)
- ENVR 4110 Environmental Chemistry (3 credits)
- ENVR 4200 Wastewater Treatment (3 credits)
- ENVR 4240 Waste Management (4 credits)
- ENVR 4400 Environmental Microbiology (3 credits)
- ENVR 4500 Environmental Toxicology (4 credits)
- GEOG 3125 Weather and Climate (3 credits)
- GEOG 3226 Cartography (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 3400 Economic Geography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
- GEOL 3212 Hydrogeology (3 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)
- GEOL 3500 Topics in Paleontology (3 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)
- GEOL 3700 Environmental Geophysics (3 credits)

Required Communication Elective (choose 1 course from):

- BIOL 3337 Science Communication (3 credits)
- COMM 1090 Interpersonal Communication (3 credits)
- COMM 1100 Public Speaking (3 credits)
- COMM 2100 Career and Professional Communication (3 credits)
- COMM 3500 Communication and Conflict (3 credits)
- COMM 3700 Persuasion and Communication (3 credits)
- MASC 3150 Photojournalism (3 credits)
- MASC 3600 Social Media Marketing (3 credits)
- MASC 3900 Topics in Mass Communication (1-3 credits)
- MASC 4220 Multimedia Marketing (3 credits)

Marketing Communication, B.S. *major*

Required Credits: 60

Required GPA: 2.25

I REQUIRED COURSES

Complete the following courses:

- BUAD 2280 Computer Business Applications (3 credits)
- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3467 Advertising Management (3 credits)
- BUAD 3500 Marketing Analytics (3 credits)
- BUAD 3567 Consumer Behavior (3 credits)
- BUAD 3568 Professional Selling (3 credits)
- BUAD 3569 E-Marketing (3 credits)
- BUAD 4467 Marketing Research (3 credits)
- BUAD 4468 Marketing Management (3 credits)
- MASC 2243 Video Editing (3 credits)
- MASC 2250 Video Production (3 credits)
- MASC 2850 Media Writing I (3 credits)
- MASC 3260 Public Relations (3 credits)
- MASC 3270 Media and Social Change (3 credits)
- MASC 3500 Media Design (3 credits)
- MASC 3600 Social Media Marketing (3 credits)
- MASC 4220 Multimedia Marketing (3 credits)
- MASC 4840 Portfolio (3 credits)

Select 1 of the following courses, 3 credits:

- MASC 4970 Internship (1-12 credits)
- BUAD 4970 Internship (1-12 credits)

Mass Communication, B.S. *major*

Required Credits: 57

Required GPA: 2.50

I REQUIRED CORE COURSES

Complete the following courses:

- MASC 1100 Mass Media and Society (3 credits)
- MASC 1500 Making Media (1 credit)
- MASC 2243 Video Editing (3 credits)
- MASC 2250 Video Production (3 credits)
- MASC 2460 Digital Photography (3 credits)
- MASC 2850 Media Writing I (3 credits)
- MASC 3270 Media and Social Change (3 credits)
- MASC 3450 Advanced Field Production (3 credits)
- MASC 3480 Advanced Audio Production (3 credits)
- MASC 3500 Media Design (3 credits)
- MASC 3600 Social Media Marketing (3 credits)
- MASC 3720 Media Writing II (3 credits)
- MASC 3850 Media Ethics and Law (3 credits)
- MASC 4303 Final Media Showcase (3 credits)
- MASC 4840 Portfolio (3 credits)

Complete the following course for 3 credits:

- MASC 4970 Internship (1-12 credits)

Select two of the following courses:

- MASC 3111 FM-90 Radio Practicum (1 credit)
- MASC 3112 KBSU-TV Practicum (1 credit)
- MASC 3350 Northern Student Magazine Practicum (1 credit)

II REQUIRED ELECTIVES

Select 9 semester credits of electives from the following courses:

- MASC 2600 Advertising and Culture (3 credits)
- MASC 2925 People of the Environment: Mass Media Perspectives (3 credits)
- MASC 3110 Media Content Creation (3 credits)
- MASC 3150 Photojournalism (3 credits)
- MASC 3260 Public Relations (3 credits)
- MASC 3330 Performance and Production (3 credits)
- MASC 3510 Podcasting 101 (3 credits)
- MASC 3650 Media Production for Social Entrepreneurship (3 credits)
- MASC 3670 Documentary Film (3 credits)
- MASC 3790 Screenwriting (3 credits)
- MASC 3900 Topics in Mass Communication (1-3 credits)
- MASC 4220 Multimedia Marketing (3 credits)
- MASC 4330 Engineering for Electronic Media (3 credits)
- MASC 4340 Digital Cinema (3 credits)
- MASC 4900 Topics in Mass Communication (1-3 credits)

SUGGESTED SEMESTER SCHEDULE FOR MASS COMMUNICATION, B.S. MAJOR

The following is a list of required Mass Communication, B.S. major courses by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible.

Freshman

- MASC 1500 Making Media (1 credit)
- MASC 2243 Video Editing (3 credits)
- MASC 2460 Digital Photography (3 credits)
- MASC 2850 Media Writing I (3 credits)
- Liberal Education Requirements (MASC 1100 Mass Media and Society fulfills Goal Area 9)

Sophomore

- MASC 2250 Media Production I (3 credits)
- MASC 2780 Culmination (3 credits)
- MASC 3111 Student Media Practicum I (1 credit)
- MASC 3251 Media Production II (3 credits)
- MASC 3450 Advanced Field Production (3 credits)
- MASC 3720 Media Writing II (3 credits)
- Choose from
 - MASC 1100 Mass Media and Society (3 credits)
 - MASC 2600 Advertising (3 credits)
 - MASC 3260 Public Relations (3 credits)
- MASC Required Electives
- Liberal Education Requirements

Junior

- MASC 3270 Media and Social Change (3 credits)
- MASC 3850 Media Ethics and Law (3 credits)
- MASC 3112 Student Media Practicum II (1 credit)
- MASC 3150 Photojournalism (3 credits)
- MASC 3480 Advanced Audio Production (3 credits)
- MASC 3330 Performance and Production (3 credits)

- MASC 3500 Media Design (3 credits)
- MASC 3600 Social Media Marketing (3 credits)
- MASC 4970 Internship (1-12 credits)
- MASC Required Electives
- Liberal Education Requirements

Senior

- MASC 4333 Multi-Platform Storytelling (3 credits)
- MASC 4450 Multimedia Production (3 credits)
- MASC 4303 Final Media Showcase (3 credits)
- MASC 4312 Production Company (3 credits)
- MASC 4840 Portfolio (3 credits)
- MASC 4970 Internship (1-12 credits)
- MASC Required Electives
- Liberal Education Requirements

Environmental Communication *minor*

Required Credits: 20

Required GPA: 2.25

I REQUIRED COURSES

Complete the following courses:

- ENVR 2000 Introduction to Environmental Science (3 credits)
- ENVR 3880 Environmental Controversies (2 credits)
- MASC 2460 Digital Photography (3 credits)
- MASC 2850 Media Writing I (3 credits)

II REQUIRED ELECTIVES

Choose two 3 credit courses from the following:

- BIOL 3337 Science Communication (3 credits)
- COMM 1100 Public Speaking (3 credits)
- COMM 2100 Career and Professional Communication (3 credits)
- COMM 3400 Environmental Communication (3 credits)
- MASC 2243 Video Editing (3 credits)
- MASC 3150 Photojournalism (3 credits)
- MASC 3260 Public Relations (3 credits)
- MASC 3270 Media and Social Change (3 credits)
- MASC 3450 Advanced Field Production (3 credits)
- MASC 3500 Media Design (3 credits)
- MASC 3600 Social Media Marketing (3 credits)
- MASC 3720 Media Writing II (3 credits)
- MASC 3900 Topics in Mass Communication (1-3 credits)
- MASC 4220 Multimedia Marketing (3 credits)

Choose one course from the following:

- ENVR 2925 People of the Environment: Global Pollution Perspective (3 credits)
- ENVR 3040 Environmental Economics (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 3700 Natural Resource Management (3 credits)
- ENVR 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
or INST 3710 Indigenous Environmental Knowledge: Global Perspective (3 credits)
- ENVR 3720 Food Sovereignty, Health & Indigenous Environments (3 credits)

or INST 3720 Food Sovereignty, Health & Indigenous Environments (3 credits)

- ENVR 3730 Sustainable Communities: Local Indigenous Perspective (3 credits)
or INST 3730 Sustainable Communities: Local Indigenous Perspective (3 credits)
- ENVR 3740 Environment, Wellness & the Sacred Connection to Place (3 credits)
or INST 3740 Environment, Wellness & the Sacred Connection to Place (3 credits)
- ENVR 3750 Sustainable Communities: Global Indigenous Perspective (3 credits)
or INST 3750 Sustainable Communities: Global Indigenous Perspective (3 credits)
- ENVR 3800 Environmental Data Analysis (3 credits)
- ENVR 3840 Wetlands Ecology (3 credits)
- ENVR 4050 Geochemistry (3 credits)
- ENVR 4110 Environmental Chemistry (3 credits)
- ENVR 4200 Wastewater Treatment (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)
- ENVR 4220 Sampling and Analysis (4 credits)
- ENVR 4240 Waste Management (4 credits)
- ENVR 4260 Risk, Resilience and Sustainable Community Development (3 credits)
- ENVR 4400 Environmental Microbiology (3 credits)
- ENVR 4500 Environmental Toxicology (4 credits)
- ENVR 4610 Sustainability: Theory and Practice (4 credits)
- GEOG 3125 Weather and Climate (3 credits)
- GEOG 3226 Cartography (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 3400 Economic Geography (3 credits)
- GEOG 3532 Political Ecology (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)
- GEOL 3120 Soils (4 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
- GEOL 3212 Hydrogeology (3 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)
- GEOL 3500 Topics in Paleontology (3 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)
- GEOL 3700 Environmental Geophysics (3 credits)

Film Studies *minor*

Required Credits: 15

Required GPA: 2.00

I REQUIRED COURSES

Complete the following courses:

- ENGL 2340 The American Film (3 credits)
- MASC 3670 Documentary Film (3 credits)
- MASC 3790 Screenwriting (3 credits)

II REQUIRED ELECTIVES

Select a minimum of 6 credits from the following:

- ANTH 2510 Visual Anthropology: Films and Culture (3 credits)
- ENGL 3607 Film Topics (3 credits)
- MASC 3900 Topics in Mass Communication (1-3 credits)
- MASC 4340 Digital Cinema (3 credits)

Mass Communication *minor*

Required Credits: 18

Required GPA: 2.50

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- MASC 2850 Media Writing I (3 credits)
- MASC 3850 Media Ethics and Law (3 credits)

SELECT 3 OF THE FOLLOWING COURSES:

- MASC 2243 Video Editing (3 credits)
- MASC 2250 Video Production (3 credits)
- MASC 2460 Digital Photography (3 credits)
- MASC 3110 Media Content Creation (3 credits)
- MASC 3150 Photojournalism (3 credits)
- MASC 3330 Performance and Production (3 credits)
- MASC 3480 Advanced Audio Production (3 credits)
- MASC 3500 Media Design (3 credits)
- MASC 3600 Social Media Marketing (3 credits)
- MASC 3650 Media Production for Social Entrepreneurship (3 credits)
- MASC 3670 Documentary Film (3 credits)
- MASC 3720 Media Writing II (3 credits)
- MASC 3790 Screenwriting (3 credits)
- MASC 4220 Multimedia Marketing (3 credits)
- MASC4333
- MASC 4340 Digital Cinema (3 credits)
- MASC4450

II REQUIRED ELECTIVES

SELECT 3 SEMESTER CREDITS FROM MASS COMMUNICATION COURSES AT THE 2000 LEVEL OR ABOVE

Mass Communications Courses

MASC 1100 Mass Media and Society (3 credits)

This class explores how the media we use shifts our thoughts, feelings, behaviors, and societies. We will look into the history of and current practices in major media industries, including print, television, radio, film, music and social media. We will learn how mass media affect politics, society and culture and examine some of the ethical issues. We will also analyze how we use, consume and create media every day. Liberal Education Goal Areas 5 and 9.

MASC 1500 Making Media (1 credit)

This course introduces students to the field of mass media by exploring the variety of forms and processes that shape the media landscape; i.e. television, radio, cinema, print, podcasts, web-based streaming, etc. Students new to the Mass Communication major will also be introduced to a variety of student media opportunities including KBSU-TV, FM90, the Northern Student and the Headwaters Film Festival. Liberal Education Goal Area 11.

MASC 2243 Video Editing (3 credits)

Video editing is a skill that is in demand for almost every discipline. We'll emphasize storytelling, you'll develop or improve your video editing skills, and study the aesthetics of editing. External storage device required.

MASC 2250 Video Production (3 credits)

This course provides an introduction to the creative process and tools of audio and video production from a convergent media perspective. Students create their own audio and video productions in order to gain hands-on experience in the creative process of media production in a studio and on-location. Prerequisite or Co-requisite: MASC 2243.

MASC 2460 Digital Photography (3 credits)

Theoretical and applied aspects of digital photography, including camera handling and Photoshop. Students become familiar with all aspects of operating a 35 mm camera and producing quality photographs for media-related work. A survey of the history and principles involved in producing digital photographs, transferring them to computers, enhancing them with software, and incorporating them in publications. Readings, discussions, and individual productions are utilized to familiarize students with the production of digital photos. Lab time required. Digital cameras provided. Lab fees.

MASC 2600 Advertising and Culture (3 credits)

Advertising is everywhere and we are bombarded by a great number of mediated messages each day. This course examines the theoretical and practical aspects of advertising and gives an overview of the field. Students will gain an increased awareness of how advertising works, where it fits into the fabric of our society, and how it is used--sometimes ethically and sometimes not. The course incorporates lecture, discussion, and projects and students analyze print, broadcast and digital advertising.

MASC 2780 Career Pathways (3 credits)

Prepares students to apply for an internship or job. Students will work on their resumes, portfolio and interview skills, as well as explore and discuss how their passion, values, skills and abilities play out in their personal and professional life. Prerequisite(s): Mass Communication or Marketing Communication major

MASC 2850 Media Writing I (3 credits)

You will learn the basics of media writing, how to craft good stories, and to how to shape those stories to fit a variety of media, such as: news, marketing, public relations, broadcast, and social media.

MASC 2925 People of the Environment: Mass Media Perspectives (3 credits)

For both majors and non-majors. Theoretical aspects of the effect of the mass media on environmental processes. Students should gain an understanding of the complexity of the cultural, political, and economic forces that shape media coverage of the environment, and the importance of such an understanding to maintaining a sustainable global environment. The course is a discussion section of the interdisciplinary lecture on environmental issues for liberal education. Liberal Education Goal Area 10.

MASC 2970 Internship (3 credits)

Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

MASC 3110 Media Content Creation (3 credits)

You will be producing a weekly TV newscast from stories around campus and around the area. These programs will appear on KBSU-TV Channel 17, and FM90. Each week you'll be assigned a role within the production. This will be a collaborative class. Prerequisite(s): MASC 2250.

MASC 3111 FM-90 Radio Practicum (1 credit)

Open to students of all majors, this practicum is designed to give students hands-on learning opportunities by working with the FM-90 radio station. Students may learn to DJ, work with music, story and program creation, or on the business and advertising side of the radio station.

MASC 3112 KBSU-TV Practicum (1 credit)

Open to students of all majors, this practicum is designed to give students hands-on learning opportunities by working with the KBSU-TV television station. Students may work with program creation, be on-air talent, or work on the production crew of the television station.

MASC 3150 Photojournalism (3 credits)

Applied aspects of press photography and picture editing. Students should gain competence in creating photographs and designing and laying out photo essays. Demonstration and hands-on experience covers darkroom processing, picture story planning and execution, and computer manipulation of images. The course concentrates on the application of basic principles of both photography and journalism, and requires laboratory work, as well as in-class participation. Prerequisites: MASC 2460.(May not be offered every year.)

MASC 3260 Public Relations (3 credits)

Learn the strategic planning process of doing public relations work and how to create a public relations plan. Students will learn and apply the various tactics used by public relations professionals to meet organizational goals.

MASC 3270 Media and Social Change (3 credits)

This course examines how media organizations and social activists alike communicate their messages to wide audiences in order to achieve social change. It explores critical and theoretical approaches to understanding contemporary mass media. Students learn to analyze media from across political, popular, and professional cultures. Prerequisite(s): MASC 2850.

MASC 3330 Performance and Production (3 credits)

This is an advanced media production course that provides an in-depth understanding of live programming, production, and field reporting. Students are taught how to perform professionally on-air in television, radio and web-based streaming environments. Prerequisite(s): MASC 2243, MASC 2250.

MASC 3350 Northern Student Magazine Practicum (1 credit)

Open to students of all majors, this practicum is designed to give students hands-on learning opportunities by working with the Northern Student magazine to learn the various aspects of print publishing. Students may write stories, do photography, or design page layouts.

MASC 3450 Advanced Field Production (3 credits)

An advanced media course in which students learn hands-on, single-camera production on-location. Areas of study include documentary, advanced newsgathering, and experimental/music video. All projects are edited with non-linear computer systems and published to DVD and Web. Lab hours required. Prerequisite(s): MASC 2243, MASC 2250, or consent of instructor.

MASC 3480 Advanced Audio Production (3 credits)

This course emphasizes the techniques of advanced audio production through hands-on experience in script writing, multiple-source audio recording, and multi-track editing. Students will be able to use the techniques learned in this class to produce advanced audio documentaries, advertisements, audio drama or sound tracks for film and video. In addition to lecture and demonstration, this course involves one-on-one, hands-on experience learning. A considerable amount of laboratory time is devoted to completing assigned audio productions. Each student will become proficient at the creative production process in-studio and on-location. The student will master their vocal abilities and become proficient at the production of creative audio ads. This course builds confidence in your production ability.

MASC 3500 Media Design (3 credits)

Good visual design is everywhere; from ads and magazines, to mobile content and websites, to marketing reports and brochures. Learn and apply effective design principles to a variety of projects using Adobe InDesign. Also learn the basics of interactive digital publishing.

MASC 3510 Podcasting 101 (3 credits)

This class is designed to teach you the audio skills needed to create a podcast from start to finish, and how to launch it to share it with listeners. You will learn how to edit audio and tailor your podcast to a target audience. You will learn to interview guests and tell stories that others want to hear. The course is open to all students of any major. No prior media experience needed. You will learn how to work with media equipment in a hands-on environment, enabling you to produce quality podcasts to get your message out to the world.

MASC 3600 Social Media Marketing (3 credits)

Social media has moved from a pastime to a professional endeavor. This course introduces the major social media platforms and theoretical constructs and examines how companies use social media for marketing, analytics and customer service. This course will give future media and communications professionals practical experience needed to successfully utilize social media for strategic endeavors.

MASC 3650 Media Production for Social Entrepreneurship (3 credits)

Are you passionate about solving social and environmental problems? We'll study social entrepreneurship -- a rapidly growing field that uses standard business methods to address problems. You'll work collaboratively to create a business model, pitch and video to promote your business.

MASC 3670 Documentary Film (3 credits)

Historical overview of the genre. Students view and analyze a variety of documentary films to gain an understanding of their purpose, their impact, their audiences, and their cultural and artistic value. (Might not be offered every year.)

MASC 3720 Media Writing II (3 credits)

Knowing how to research and write a good story is important for many professions: journalism, public relations, marketing, blogging and advertising. This class will teach you the important skills of researching, reporting and writing stories. Prerequisite: MASC 2850.

MASC 3790 Screenwriting (3 credits)

This is specialized writing course in which students learn the process of writing a dramatic screenplay for film and digital cinema. Students learn to develop the critical dramatic elements that are central to a successful screenplay: characterization, plot development, and cinematic description. Each student develops and writes a screenplay that is formatted to film industry standards.

MASC 3850 Media Ethics and Law (3 credits)

This course introduces students to the study of media ethics and the principles of media law as they apply to the work of media and communications professionals in a variety of fields. Examines the principles on which American law is based and discusses the creation, interpretation and the role of law, while analyzing ethical issues through case studies concerned with different media, including advertising, film, photojournalism, print and broadcast journalism, public relations, television and World Wide Web. Introduces a variety of key issues in media law and ethics and demonstrates the complexities in reaching outcomes.

MASC 3900 Topics in Mass Communication (1-3 credits)

Study of a specific mass communication topic or development, person, or time period, with the specific title being announced in each semester's class schedule.

MASC 3970 Internship (1-12 credits)

Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

MASC 4220 Multimedia Marketing (3 credits)

This course focuses on reaching potential customers through the use of multimedia content marketing. Using video, photos, audio and text, you will learn content marketing strategies and how to create content that delivers information about your product or services to your target audience. Prerequisite(s): MASC 2243.

MASC 4303 Final Media Showcase (3 credits)

Students will produce a 'calling card' project with advice and guidance from faculty. The project will represent the student's highest achievement in media production. Projects can include audio recordings, video, live broadcast, digital cinema, and other emerging media. All students present their projects at a public showcase at the end of the semester. Students must complete a proposal and project timeline and submit it to the instructor prior to registration. Prerequisite(s): MASC 2243, MASC 2250, and have senior status or consent of instructor.

MASC 4330 Engineering for Electronic Media (3 credits)

A very practical "mini course" in electronic fundamentals. Explores the basic theory of how things function in a broadcast environment. Practical use and repair of audio/video connectors, components, and circuitry. Reading of instruments, levels, and oscilloscope patterns in a television/radio studio. Techniques of soldering connectors, and cable repair used in everyday television/radio stations. Audio theory and components, as well as video signal operation. At the end of this course, students will have sufficient electronic knowledge to pass the FCC Amateur Radio license exam. This class builds confidence and understanding of broadcast operations. Lab hours required. Prerequisites: MASC 2250.

MASC 4340 Digital Cinema (3 credits)

Introduction to the theory and practice of motion picture filmmaking as it applies to digital media. An interdisciplinary group of students work together to make short films that manifest their ideas and beliefs. Topics include familiarity with filmmaking equipment; basic cinematic techniques; converting ideas to images; the use of lighting, editing, and sound in cinema; scheduling, casting, and location scouting; and the role of acting, directing, and good storytelling in the filmmaking process. (Might not be offered every year.)

MASC 4840 Portfolio (3 credits)

This course helps students organize and complete a professional portfolio. Students will present their portfolio to faculty and media professionals, and they will receive a constructive, one-on-one evaluation of their work from a variety of media, marketing and advertising professionals. Prerequisite(s): Mass Communication, Marketing Communication or Environmental Communication major and have senior status or consent of instructor.

MASC 4900 Topics in Mass Communication (1-3 credits)

Study of a specific mass communication topic or development, person, or time period, with the specific title being announced in each semester's class schedule.

MASC 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

MASC 4970 Internship (1-12 credits)

Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
 1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
 1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
 1940, 2940, 3940, 4940 IN-SERVICE COURSE
 1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
 1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
 1970, 2970, 3970, 4970 INTERNSHIP
 1980, 2980, 3980, 4980 RESEARCH
 1990, 2990, 3990, 4990 THESIS

Medical Laboratory Science

Programs

- Medical Laboratory Science, B.S. ((3 + 1 Option)) *major*
- Medical Laboratory Science, B.S. ((4 + 1 Option)) *major*

Medical Laboratory Science, B.S. *major* (3 + 1 Option)

Required Credits: 88

Required GPA: 2.25

REQUIRED CLINICAL STUDIES 3 + 1 OPTION

In this option, the student completes the required Medical Laboratory Science and Liberal Education courses at Bemidji State University, and then applies for admission to the clinical year program through the University of North Dakota or other affiliated institution. Please be aware admission to a clinical year program is competitive and not guaranteed; however, completion of a clinical year is required to complete a MLS 3+1 major. Additionally, a minimum 2.80 GPA in science courses is a requirement for admission to a clinical year program. The Medical Laboratory Science student must consult with the Medical Laboratory Science advisor at the start of the academic program and regularly throughout the course of study. The student must complete the Bemidji State University Liberal Education requirements before the clinical year of study.

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 2360 Genetics (4 credits)
- BIOL 3074 Molecular Techniques (2 credits)
or BCMB 3074 Molecular Techniques (2 credits)
- BIOL 3260 Human Physiology (4 credits)
- BIOL 3300 Introduction to Hematology (4 credits)
- BIOL 3580 Immunology (3 credits)
- BIOL 3710 Microbiology (4 credits)
- BIOL 4210 Parasitology (4 credits)
- BIOL 4715 Clinical Microbiology (3 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 4411 Biochemistry I (3 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- MATH 1170 College Algebra (4 credits)
- MATH 1470 Precalculus (5 credits)

II REQUIRED CLINICAL STUDIES

Clinical year courses, taken during the senior year beginning with summer term, are taken through entrance into the clinical year program at the University of North Dakota or at affiliated hospitals. The clinical year will consist of at least 37 credits.

NOTE: A clinical year position is not guaranteed. Students must apply for a clinical year position in

October of the junior year. Please see advisor regarding the clinical year of study.

The following courses are recommended, but not required for completion of the major:

- BIOL 1500 Diversity of Life (4 credits)
- STAT 2610 Applied Statistics (4 credits)
or PSY 3401 Basic Statistics for Research (4 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 4471 Biochemistry Laboratory I (1 credit)

SUGGESTED SEMESTER SCHEDULE FOR MEDICAL LABORATORY SCIENCE MAJOR, B.S. 3+1 option

The following is a list of Medical Laboratory Science courses arranged by year. This suggested schedule is intended to help students plan their courses without course conflicts.

Freshman

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 2360 Genetics (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- ENGL 1151 Composition (3 credits)
- ENGL 2152 Argument and Exposition (3 credits)
- MATH 1170 College Algebra (4 credits)
or MATH 1470 Precalculus (5 credits)
- Additional liberal education requirements

Sophomore

- BCMB 3074 Molecular Techniques (2 credits)
or BIOL 3074 Molecular Techniques (2 credits)
- BIOL 3260 Human Physiology (4 credits)
- BIOL 3710 Microbiology (4 credits)
- BIOL 4210 Parasitology (4 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- Additional liberal education requirements

Junior

- BIOL 3300 Introduction to Hematology (4 credits)
- BIOL 3580 Immunology (3 credits)
- BIOL 4715 Clinical Microbiology (3 credits)
- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)
- STAT 2610 Applied Statistics (4 credits)

- or PSY 3401 Basic Statistics for Research (4 credits)
- Any remaining liberal education requirements

Senior

- Clinical year courses

Medical Laboratory Science, B.S. *major* (4 + 1 Option)

Required Credits: 108

Required GPA: 2.25

REQUIRED CLINICAL STUDIES 4 + 1 OPTION

NOTE: After completing the clinical year courses, students will receive a double major: Biology, B.S. and Medical Laboratory Science, B.S. In this option, the student completes a Biology, B.S., major at Bemidji State University, and then applies for admission to the clinical year program through the University of North Dakota or other affiliated institution. Be aware that a 2.80 gpa in in science courses is one requirement for entrance into the clinical year program. This option may be of interest to students considering a pre-professional program such as pre-medicine, pre-physician's assistant, or other pre-professional area. Students have the option of pursuing a health-related career in Medical Laboratory Science but also gain clinical hours and experience that can facilitate admission to pre-professional programs.

I REQUIRED BIOLOGY COURSES

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)
- BIOL 3074 Molecular Techniques (2 credits)
or BCMB 3074 Molecular Techniques (2 credits)
- BIOL 3260 Human Physiology (4 credits)
- BIOL 3300 Introduction to Hematology (4 credits)
- BIOL 3580 Immunology (3 credits)
- BIOL 3710 Microbiology (4 credits)
- BIOL 4210 Parasitology (4 credits)
- BIOL 4715 Clinical Microbiology (3 credits)

II CAPSTONE PROJECT

The Biology capstone project, completed in the senior year, provides a culminating experience that integrates the knowledge and skills learned in previous courses and applies them to a scholarly activity. Examples of capstone projects may include original research projects, internships with state or federal agencies, shadowing experiences with professionals, or successfully passing professional/ graduate school entrance exams. The capstone project must be designed or chosen by the student in consultation with a faculty mentor or advisor, who must approve the project before work begins. Students should consult with their faculty mentor or advisor before their senior year commences. All capstone projects will include a written and oral component (except for professional/graduate school entrance exams).

PLEASE NOTE: For students admitted to a clinical year program, the required clinical studies (see Section IV below) can be used to satisfy the Capstone Project requirement.

Alternatively, the capstone project may be completed in one of the following ways (0-4 credits):

1. Students using a professional or graduate entrance exam as their capstone project must register for this course. Students must place in at least the 60th percentile on their exam to successfully complete this course.

- BIOL 4800 Advanced Project Certification (0 credit)

2. Complete BIOL 4894 OR BIOL 4895 (2 credits):

- BIOL 4894 Advanced Research Project I (2 credits)
- BIOL 4895 Advanced Research Project II (2 credits)

3. Complete BIOL 4894 AND BIOL 4895 (2 credits each):

- BIOL 4894 Advanced Research Project I (2 credits)
- BIOL 4895 Advanced Research Project II (2 credits)

III REQUIRED COURSES IN RELATED FIELDS

COMPLETE THE FOLLOWING COURSES:

- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)
- PHYS 1101 General Physics I (4 credits)
or PHYS 2101 Physics I (4 credits)
- PHYS 1102 General Physics II (4 credits)
or PHYS 2102 Physics II (4 credits)
- STAT 2610 Applied Statistics (4 credits)
or PSY 3401 Basic Statistics for Research (4 credits)

IV REQUIRED CLINICAL STUDIES

Clinical year courses, taken after the senior year beginning with summer term, are taken through entrance into the clinical year program at the University of North Dakota or at affiliated hospitals. The clinical year will consist of at least 37 credits.

NOTE: A clinical year position is not guaranteed. Students must apply for a clinical year position in October of the junior year. Please see advisor regarding the clinical year of study.

Music

The primary mission of the Music Department at Bemidji State University is to prepare students for professional careers in music. Accordingly, all students who wish to major in music must complete an audition (please contact the Music Department for details). The faculty recognizes the need for excellence within a broad liberal education, so the department places equal emphasis on music education, performance, and theoretical/historical study in its degree offerings. The department, an accredited institutional member of the National Association of Schools of Music, also maintains a cultural leadership and development role locally and regionally, while striving to achieve a national and international reputation.

The specific objectives of the Department of Music are

1. to provide students interested in teaching careers with the professional knowledge and skills necessary for success in the field;
2. to train students to become critical, independent, creative musicians with the necessary background in applied music (private instruction in voice/instrument), music theory, music history and literature, keyboard skills, sight-reading, and music technology; and to become full participants in music professions;
3. to provide all students of the university with opportunities to enrich themselves through participation in Music Department ensembles, academic courses, and applied lessons, and through attendance at concerts, recitals, and lectures;
4. to develop the creative potential of the region through workshops, performances, and a summer music camp.

Programs

- Music Education, B.S. (Vocal/Classroom K-12 Specialization (Teacher Licensure)) *major*
- Music Education, B.S. (Instrumental/Classroom K-12 Specialization (Teacher Licensure)) *major*
- Music, B.A. *major*
- Music, B.A. (Vocal Performance Emphasis) *major*
- Music, B.A. (Piano Performance and Pedagogy Emphasis) *major*
- Music, B.A. (Instrumental Performance Emphasis) *major*
- Music *minor*
- Arts Management *cert*

Career Directions

Arts Administrator
Business
Composer
Conductor
Educator
Music Librarian
Musician
Performer
Vocalist
Also: Graduate Study

Preparation

Recommended High School Courses

Music Ensembles

Music Theory

Music Appreciation

Recommended Activities

Performance Groups

Private Music/Vocal Lessons

Attendance at Performances

Piano

General Information and Requirements For All Music Majors and Minors

A Student Handbook outlining Department of Music procedures and policies is available in the Department of Music Office, Bangsberg 201.

All new majors and minors (including transfer students) are required to arrange for a personal interview with the department chair during the first week of classes. An advisor from the department will be assigned at that time.

All new music majors and minors must take the Music Theory and Ear training placement examination.

All music majors are required to register for a major performing organization each semester they are on campus.

A student may be required to validate course work that was completed more than seven (7) years prior to graduation and is to be included in the music major or minor. Only courses with grades of C or better may be validated. The student may be required to repeat such courses or take additional course work.

All B.A. music majors and minors are encouraged to pursue the study of a foreign language.

All music majors are required to give a Degree Recital during an academic term when they are enrolled at an appropriate level of applied instruction.

Licensure)

Required Credits: 93

Required GPA: 2.50

I REQUIRED MUSIC CORE COURSES

Complete the following course (required 7 times):

- MUS 1800 Performance Laboratory (0 credit)

Complete the following courses:

(Completion of these courses with a grade of "C" or better is required for all music degrees.)

- MUS 2117 World Music (2 credits)
- MUS 2201 Music Theory and Musicianship I (5 credits)
- MUS 2202 Music Theory and Musicianship II (5 credits)
- MUS 3201 Music Theory and Musicianship III (5 credits)
- MUS 3202 Music Theory and Musicianship IV (4 credits)
- MUS 3501 Music Technology I (2 credits)
- MUS 3618 Conducting Fundamentals (2 credits)
- MUS 3801 History and Literature of Music I (3 credits)
- MUS 3802 History and Literature of Music II (3 credits)

Complete the following courses:

- MUS 2310 Piano Proficiency (0 credit)
- MUS 3898 Degree Recital (0 credit)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

VOCAL AND CLASSROOM MUSIC

Required core courses

NOTE: Piano majors replace MUS 3417 with MUS 4106, Piano Pedagogy I (2 credits). MUS 4106 requires consent of instructor.

Select two of the following methods courses(2 credits):

- MUS 1348 String Methods (1 credit)
- MUS 1368 High Brass Methods (1 credit)
- MUS 1369 Low Brass Methods (1 credit)
- MUS 1378 Percussion Methods (1 credit)

- MUS 1388 Single Reeds Methods (1 credit)
- MUS 1389 Double Reeds/Flute Methods (1 credit)

Complete the following courses:

Note: Piano majors replace MUS 2417 with MUS 4106, which requires consent of instructor.

- MUS 2417 Diction For Singers I (2 credits)
- MUS 2418 Diction for Singers II (2 credits)
- MUS 2607 Music Education I: Introduction (2 credits)
- MUS 3300 Piano Accompanying (2 credits)
- MUS 3400 Vocal Pedagogy (1 credit)
- MUS 3607 Music Education II: Elementary Methods (3 credits)
- MUS 3638 Choral Conducting (2 credits)
- MUS 4607 Music Education III: Secondary Methods (2 credits)
- MUS 4811 Choral Notation and Arranging (1 credit)
- MUS 4812 Choral Studies (2 credits)

Required major applied area

NOTE: All music majors are required to register for applied area lessons until the Degree Recital is passed.

Complete the following course:

- MUS 2138 Voice, Level II (1 credit)

Complete the following courses:

- MUS 3138 Voice, Level III (1 credit)

Required vocal performing organizations:

NOTE: All music majors are required to participate in a major ensemble every semester they are enrolled. MUS 4800 and 4810 are by audition only.

Select 6 semester credits from the following courses:

- MUS 3800 Varsity Singers (0-2 credits)
- MUS 4800 Bemidji Choir (0-2 credits)
- MUS 4810 Chamber Singers (0-2 credits)

Music Education, B.S. *major* Instrumental/Classroom K-12 Specialization (Teacher Licensure)

Required Credits: 93

Required GPA: 2.50

I REQUIRED MUSIC CORE COURSES

Complete the following course (required 7 times):

- MUS 1800 Performance Laboratory (0 credit)

Complete the following courses:

(Completion of these courses with a grade of "C" or better is required for all music degrees.)

- MUS 2117 World Music (2 credits)
- MUS 2201 Music Theory and Musicianship I (5 credits)
- MUS 2202 Music Theory and Musicianship II (5 credits)
- MUS 3201 Music Theory and Musicianship III (5 credits)
- MUS 3202 Music Theory and Musicianship IV (4 credits)

- MUS 3501 Music Technology I (2 credits)
- MUS 3618 Conducting Fundamentals (2 credits)
- MUS 3801 History and Literature of Music I (3 credits)
- MUS 3802 History and Literature of Music II (3 credits)

Complete the following courses:

- MUS 2310 Piano Proficiency (0 credit)
- MUS 3898 Degree Recital (0 credit)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

INSTRUMENTAL AND CLASSROOM MUSIC SPECIALIZATION

Note: All music majors are required to register for applied area lessons until the Degree Recital is passed.

Required Core Courses

Complete the following courses:

- MUS 1138 Introduction to Voice (1 credit)
- MUS 1348 String Methods (1 credit)
- MUS 1368 High Brass Methods (1 credit)
- MUS 1369 Low Brass Methods (1 credit)
- MUS 1378 Percussion Methods (1 credit)
- MUS 1388 Single Reeds Methods (1 credit)
- MUS 1389 Double Reeds/Flute Methods (1 credit)
- MUS 2607 Music Education I: Introduction (2 credits)
- MUS 3100 Improvisation (1 credit)
- MUS 3607 Music Education II: Elementary Methods (3 credits)
- MUS 3628 Instrumental Conducting (2 credits)
- MUS 4100 Instrumental Arranging (1 credit)
- MUS 4607 Music Education III: Secondary Methods (2 credits)
- MUS 4737 Instrumental Studies (3 credits)

Required major applied area - major instrument

Select 1 semester credit at the 2000 level
(Numbered 2x48, 2x58, 2x68, 2x78) in one of the following, depending on major instrument: strings woodwinds, brass, or percussion.

Required major applied area - major instrument

Select 1 semester credit at the 3000 level

(numbered 3x48, 3x58, 3x68, 3x78) in one of the following, depending on major instrument: strings, woodwinds, brass or percussion.

Required instrumental performing organizations

Select 6 credits from the following courses:

Note: All music majors are required to participate in a major ensemble every semester they are enrolled.

MUS 4500 and MUS 4710 are by audition only.

Note: Students must be enrolled in MUS 4700, MUS 4703, MUS 4706, or MUS 4707 for at least one semester.

- MUS 4500 Bemidji Symphony Orchestra (0-2 credits)
- MUS 4610 Jazz Band (0-2 credits)
- MUS 4700 Instrumental Ensembles (0-2 credits)
- MUS 4710 Wind Ensemble (0-2 credits)

Music, B.A. *major*

Required Credits: 47

Required GPA: 2.25

(Completion of the following courses with a grade of "C" or better is required for all music degrees.)

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSE (REQUIRED 7 SEMESTERS):

- MUS 1800 Performance Laboratory (0 credit)

COMPLETE THE FOLLOWING COURSES:

- MUS 2201 Music Theory and Musicianship I (5 credits)
- MUS 2202 Music Theory and Musicianship II (5 credits)
- MUS 3201 Music Theory and Musicianship III (5 credits)
- MUS 3202 Music Theory and Musicianship IV (4 credits)
- MUS 3501 Music Technology I (2 credits)
- MUS 3618 Conducting Fundamentals (2 credits)
- MUS 3801 History and Literature of Music I (3 credits)
- MUS 3802 History and Literature of Music II (3 credits)

COMPLETE THE FOLLOWING COURSES:

- MUS 2310 Piano Proficiency (0 credit)
- MUS 3898 Degree Recital (0 credit)

GENERAL PROGRAM

REQUIRED APPLIED AREA

SELECT 4 SEMESTER CREDITS FROM MUS 2000 LEVEL OR HIGHER

SELECT 2 SEMESTER CREDITS FROM MUS 3000 LEVEL OR HIGHER

REQUIRED ELECTIVES IN MUSIC

Select 3 semester credits of MUS 3000 level or above, in consultation with advisor and included in a plan of study in the music office.

SELECT AN ADDITIONAL 9 SEMESTER CREDITS IN MUSIC IN CONSULTATION WITH ADVISOR.

Majors in this program are required to register for

band, choir, orchestra, vocal or jazz ensemble every term in residence.

SUGGESTED SCHEDULE FOR MUSIC MAJOR, B.A., GENERAL PROGRAM

The following is a list of courses arranged approximately by year. This schedule is only a suggestion; it is not recommended that students rely solely on this plan for advising purposes, as the frequency of course offerings cannot be guaranteed. See the Department Chair for specific guidelines. See course descriptions for prerequisites.

Freshman

- MUS 1100 Introduction to Music (3 credits)
- MUS2110
- MUS 2310 Piano Proficiency (0 credit)
- MUS 1138 Introduction to Voice (1 credit)
- MUS 1800 Performance Laboratory (0 credit)
- Major Performing Ensemble (e.g., Bemidji Choir, Varsity Singers, Bemidji Symphony Orchestra, Wind Ensemble)
- Appropriate Music Theory and Related Classes (as determined by the Music Theory Placement Examination, administered during the first day of registration each semester):
- MUS 1010 Fundamentals of Music Theory (1 credit)
or MUS 2201 Music Theory and Musicianship I (5 credits)
and MUS 2101, 2102 Sight Singing and Ear Training I, II
- Applied Music Study (on major performing instrument, such as voice, piano, trumpet, violin, etc.)
- Liberal Education Courses

Sophomore

- MUS 1800 Performance Laboratory (0 credit)
- Major Performing Ensemble
- Applied Music Study
- Appropriate Music Theory and Related Classes: MUS 2202 and MUS 3201 Music Theory II and III
- Liberal Education Courses

Junior

- MUS 1800 Performance Laboratory (0 credit)
- MUS 3202 Music Theory and Musicianship IV (4 credits)
- MUS 3801 History and Literature of Music I (3 credits)
- MUS 3802 History and Literature of Music II (3 credits)
- MUS 3618 Conducting Fundamentals (2 credits)
- MUS 3628 Instrumental Conducting (2 credits)
or MUS 3638 Choral Conducting (2 credits)
- Applied Music Study
- Major Performing Ensemble
- Liberal Education Courses

Senior

- MUS 1800 Performance Laboratory (0 credit)
- MUS 3898 Degree Recital (0 credit)
- Applied Music Study
- Major Performing Ensemble
- Liberal Education Courses

Music, B.A. *major*

Vocal Performance Emphasis

Required Credits: 66

Required GPA: 2.25

(Completion of the following courses with a grade of "C" or better is required for all music degrees.)

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSE (REQUIRED 7 SEMESTERS):

- MUS 1800 Performance Laboratory (0 credit)

COMPLETE THE FOLLOWING COURSES:

- MUS 2201 Music Theory and Musicianship I (5 credits)
- MUS 2202 Music Theory and Musicianship II (5 credits)
- MUS 3201 Music Theory and Musicianship III (5 credits)
- MUS 3202 Music Theory and Musicianship IV (4 credits)
- MUS 3501 Music Technology I (2 credits)
- MUS 3618 Conducting Fundamentals (2 credits)
- MUS 3801 History and Literature of Music I (3 credits)
- MUS 3802 History and Literature of Music II (3 credits)

COMPLETE THE FOLLOWING COURSES:

- MUS 2310 Piano Proficiency (0 credit)
- MUS 3898 Degree Recital (0 credit)

VOCAL PERFORMANCE EMPHASIS

REQUIRED COURSES

a. Required Applied Area (8 credits)

Students must pass barrier juries from MUS 2138 to MUS 3138, and from MUS 3138 to MUS 4138. Students must be at the 4000 level to present the Degree Recital.

- MUS 2138 Voice, Level II (1 credit)
- MUS 3138 Voice, Level III (1 credit)
- MUS 4138 Voice, Level IV (1 credit)

b. Required Major Ensemble (8 credits)

Note: All music majors are required to participate in a major ensemble every semester they are enrolled. Select 8 credits from the following courses:

- MUS 3800 Varsity Singers (0-2 credits)
- MUS 4800 Bemidji Choir (0-2 credits)
- MUS 4820 Vocal Ensemble (0-2 credits)

Required courses:

- MUS 2417 Diction For Singers I (2 credits)
- MUS 2418 Diction for Singers II (2 credits)
- MUS 3300 Piano Accompanying (2 credits)
- MUS 3400 Vocal Pedagogy (1 credit)

8 credits of a foreign language

Select three of the following courses (6 credits total)

- MUS 3430 Topics in Solo Song Literature (2 credits)
- MUS 4608 Topics in Musicology (2 credits)
- MUS 4609 Topics in Music Theory (2 credits)
- MUS 4708 Topics in Chamber Music (2 credits)
- MUS 4807 Topics in Symphonic Literature (2 credits)
- MUS 4808 Topics in Opera and Chamber Opera (2 credits)

Music, B.A. *major*

Piano Performance and Pedagogy Emphasis

Required Credits: 63

Required GPA: 2.25

(Completion of the following courses with a grade of "C" or better is required for all music degrees.)

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSE (REQUIRED 7 SEMESTERS):

- MUS 1800 Performance Laboratory (0 credit)

COMPLETE THE FOLLOWING COURSES:

- MUS 2201 Music Theory and Musicianship I (5 credits)
- MUS 2202 Music Theory and Musicianship II (5 credits)
- MUS 3201 Music Theory and Musicianship III (5 credits)
- MUS 3202 Music Theory and Musicianship IV (4 credits)
- MUS 3501 Music Technology I (2 credits)
- MUS 3618 Conducting Fundamentals (2 credits)
- MUS 3801 History and Literature of Music I (3 credits)
- MUS 3802 History and Literature of Music II (3 credits)

COMPLETE THE FOLLOWING COURSES:

- MUS 2310 Piano Proficiency (0 credit)
- MUS 3898 Degree Recital (0 credit)

B. PIANO PERFORMANCE AND PEDAGOGY EMPHASIS

REQUIRED COURSES

Required Applied Area (8 credits) - In order to present a senior recital, a student must pass barrier juries from the 2000 level to the 3000 level, and from the 3000 level to the 4000 level. Students must be at the 4000 level to present the Degree Recital.

COMPLETE 4 SEMESTER CREDITS OF THE FOLLOWING COURSE:

- MUS 2118 Piano, Level II (1 credit)

COMPLETE 2 SEMESTER CREDITS OF THE FOLLOWING COURSE:

- MUS 3118 Piano, Level III (1 credit)

COMPLETE 2 SEMESTER CREDITS OF THE FOLLOWING COURSE:

- MUS 4118 Piano, Level IV (1 credit)

Other Required Piano Courses

COMPLETE THE FOLLOWING COURSES:

- MUS 3300 Piano Accompanying (2 credits)

- MUS 4104 Piano Literature I (2 credits)
- MUS 4105 Piano Literature II (2 credits)
- MUS 4106 Piano Pedagogy I (2 credits)
- MUS 4110 Piano Pedagogy II (2 credits)

COMPLETE 8 SEMESTER CREDITS OF FOREIGN LANGUAGE

REQUIRED ELECTIVES IN MUSIC

COMPLETE 4 SEMESTER CREDITS OF MAJOR PERFORMING ENSEMBLE

- MUS 3800 Varsity Singers (0-2 credits)
- MUS 4610 Jazz Band (0-2 credits)
- MUS 4710 Wind Ensemble (0-2 credits)
- MUS 4800 Bemidji Choir (0-2 credits)

COMPLETE 4 SEMESTER CREDITS OF INSTRUMENTAL ENSEMBLES

- MUS 4700 Instrumental Ensembles (0-2 credits)

SUGGESTED SCHEDULE FOR MUSIC MAJOR, B.A., GENERAL PROGRAM

The following is a list of courses arranged approximately by year. This schedule is only a suggestion; it is not recommended that students rely solely on this plan for advising purposes, as the frequency of course offerings cannot be guaranteed. See the Department Chair for specific guidelines. See course descriptions for prerequisites.

Freshman

- MUS 1100 Introduction to Music (3 credits)
- MUS2110
- MUS 2310 Piano Proficiency (0 credit)
- MUS 1138 Introduction to Voice (1 credit)
- MUS 1800 Performance Laboratory (0 credit)
- Major Performing Ensemble (e.g., Bemidji Choir, Varsity Singers, Bemidji Symphony Orchestra, Wind Ensemble)
- Appropriate Music Theory and Related Classes (as determined by the Music Theory Placement Examination, administered during the first day of registration each semester):
- MUS 1010 Fundamentals of Music Theory (1 credit)
or MUS 2201 Music Theory and Musicianship I (5 credits)
and MUS 2101, MUS2102
- Applied Music Study (on major performing instrument, such as voice, piano, trumpet, violin, etc.)
- Liberal Education Courses

Sophomore

- MUS 1800 Performance Laboratory (0 credit)
- Major Performing Ensemble
- Applied Music Study
- Appropriate Music Theory and Related Classes: MUS 2202 Music Theory and Musicianship II (5 credits) and MUS 3201 Music Theory and Musicianship III (5 credits)
- Liberal Education Courses

Junior

- MUS 1800 Performance Laboratory (0 credit)
- MUS 3202 Music Theory and Musicianship IV (4 credits)
- MUS 3801 History and Literature of Music I (3 credits)
- MUS 3802 History and Literature of Music II (3 credits)

- MUS 3618 Conducting Fundamentals (2 credits)
- MUS 3628 Instrumental Conducting (2 credits)
or MUS 3638 Choral Conducting (2 credits)
- Applied Music Study
- Major Performing Ensemble
- Liberal Education Courses

Senior

- MUS 1800 Performance Laboratory (0 credit)
- MUS 3898 Degree Recital (0 credit)
- Applied Music Study
- Major Performing Ensemble
- Liberal Education Courses

Music, B.A. *major* Instrumental Performance Emphasis

Required Credits: 63

Required GPA: 2.25

(Completion of the following courses with a grade of "C" or better is required for all music degrees.)

REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSE (REQUIRED 7 SEMESTERS):

- MUS 1800 Performance Laboratory (0 credit)

COMPLETE THE FOLLOWING COURSES:

- MUS 2201 Music Theory and Musicianship I (5 credits)
- MUS 2202 Music Theory and Musicianship II (5 credits)
- MUS 3201 Music Theory and Musicianship III (5 credits)
- MUS 3202 Music Theory and Musicianship IV (4 credits)
- MUS 3501 Music Technology I (2 credits)
- MUS 3618 Conducting Fundamentals (2 credits)
- MUS 3801 History and Literature of Music I (3 credits)
- MUS 3802 History and Literature of Music II (3 credits)

COMPLETE THE FOLLOWING COURSES:

- MUS 2310 Piano Proficiency (0 credit)
- MUS 3898 Degree Recital (0 credit)

INSTRUMENTAL PERFORMANCE EMPHASIS

REQUIRED COURSES

a. Required Applied Area (8 credits)

Students must pass barrier juries from the 2000 level to the 3000 level, and from the 3000 level to the 4000 level. Students must be at the 4000 level to present must be at the 4000 level to present degree recital.

b. Required Major Ensemble (8 credits)

Note: All music majors are required to participate in a major ensemble every semester they are enrolled.

- MUS 4500 Bemidji Symphony Orchestra (0-2 credits)
- MUS 4710 Wind Ensemble (0-2 credits)

c. Required Courses

Choose 4 credits from any of the following courses:

- MUS 4700 Instrumental Ensembles (0-2 credits)
- MUS 4703 Brass Ensemble (1 credit)
- MUS 4706 Brass Quintet (0-1 credits)
- MUS 4707 Percussion Ensemble (0-1 credits)

Select 3 of the following courses:

- MUS 3430 Topics in Solo Song Literature (2 credits)
- MUS 4608 Topics in Musicology (2 credits)
- MUS 4609 Topics in Music Theory (2 credits)
- MUS 4708 Topics in Chamber Music (2 credits)
- MUS 4807 Topics in Symphonic Literature (2 credits)
- MUS 4808 Topics in Opera and Chamber Opera (2 credits)

Complete 8 semester credits of a foreign language:

SUGGESTED SCHEDULE FOR MUSIC MAJOR, B.A., GENERAL PROGRAM

The following is a list of courses arranged approximately by year. This schedule is only a suggestion; it is not recommended that students rely solely on this plan for advising purposes, as the frequency of course offerings cannot be guaranteed. See the Department Chair for specific guidelines. See course descriptions for prerequisites.

Freshman

- MUS 1100 Introduction to Music (3 credits)
- MUS2110
- MUS 2310 Piano Proficiency (0 credit)
- MUS 1138 Introduction to Voice (1 credit)
- MUS 1800 Performance Laboratory (0 credit)
- Major Performing Ensemble (e.g., Bemidji Choir, Varsity Singers, Bemidji Symphony Orchestra, Wind Ensemble)
- Appropriate Music Theory and Related Classes (as determined by the Music Theory Placement Examination, administered during the first day of registration each semester):
- MUS 1010 Fundamentals of Music Theory (1 credit)
or MUS 2201 Music Theory and Musicianship I (5 credits)
and MUS 2101, 2102 Sight Singing and Ear Training I, II
- Applied Music Study (on major performing instrument, such as voice, piano, trumpet, violin, etc.)
- Liberal Education Courses

Sophomore

- MUS 1800 Performance Laboratory (0 credit)
- Major Performing Ensemble
- Applied Music Study
- Appropriate Music Theory and Related Classes: MUS 2202 and MUS 3201 Music Theory II and III
- Liberal Education Courses

Junior

- MUS 1800 Performance Laboratory (0 credit)
- MUS 3202 Music Theory and Musicianship IV (4 credits)
- MUS 3801 History and Literature of Music I (3 credits)
- MUS 3802 History and Literature of Music II (3 credits)
- MUS 3618 Conducting Fundamentals (2 credits)
- MUS 3628 Instrumental Conducting (2 credits)
or MUS 3638 Choral Conducting (2 credits)
- Applied Music Study

- Major Performing Ensemble
- Liberal Education Courses

Senior

- MUS 1800 Performance Laboratory (0 credit)
- MUS 3898 Degree Recital (0 credit)
- Applied Music Study
- Major Performing Ensemble
- Liberal Education Courses

Music *minor*

Required Credits: 21

Required GPA: 2.00

(Completion of the following courses with a grade of "C" or better is required for all music degrees.)

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- MUS 2201 Music Theory and Musicianship I (5 credits)
- MUS 2202 Music Theory and Musicianship II (5 credits)

COMPLETE THE FOLLOWING COURSES:

- MUS 2300 Piano Fundamentals (1 credit)
- MUS 2310 Piano Proficiency (0 credit)

SELECT 1 OF THE FOLLOWING COURSES:

(Completion of the following courses with a grade of "C" or better is required for all music degrees.)

- MUS 3801 History and Literature of Music I (3 credits)
- MUS 3802 History and Literature of Music II (3 credits)

II REQUIRED ELECTIVES

MUSIC MINORS MUST COMPLETE A MINIMUM OF 4 SEMESTERS OF STUDY IN A MAJOR APPLIED AREA AND REACH LEVEL III. SEE DEPARTMENT CHAIR FOR FURTHER INFORMATION.

Arts Management *cert*

Required Credits: 18

Required GPA: 2.00

I REQUIRED COURSES

Complete the following courses:

- MUS 3150 Arts Organization Management (3 credits)
- MUS 3170 Arts Organization Fundraising and Grant Writing (3 credits)
- MUS 3190 Arts Organization Innovation (3 credits)
- POL 3320 Non-Profit Management (3 credits)
- POL 3330 Non-Profit Financial Management (3 credits)

Complete the following course for 3 credits:

- MUS 3970 Internship (3 credits)

Music Courses

MUS 1010 Fundamentals of Music Theory (1 credit)

An introductory course for students with limited background in music theory. Materials to be covered include rudimentary and fundamental theoretical concepts, with appropriate examples in both sight-singing and ear training.

MUS 1100 Introduction to Music (3 credits)

A course in music appreciation with an emphasis on the various styles of art music in western civilization. Presentations include: biographical information about composers, study and listening to representative compositions, and the relations of music to all art and history. Open to all students. Liberal Education Goal Area 6.

MUS 1109 Private Instrument I (Fee Basis) (1 credit)

One thirty minute lesson weekly per semester credit. Open to all students by consent of instructor and department chair. Level determined by instructor.

MUS 1119 Private Piano I (Fee Basis) (1 credit)

One thirty minute lesson weekly per semester credit. Open to all students by consent of instructor and department chair. Level determined by instructor.

MUS 1120 Introduction to Folk, Jazz, and Rock Music (2 credits)

A survey of American folk, jazz, and rock music and their place in American culture. Presentations include lectures, readings and listening to representative compositions. Open to all students. Liberal Education Goal Areas 6 & 7.

MUS 1138 Introduction to Voice (1 credit)

Group vocal instruction at the beginning level. Sections may be offered for students with no experience and students with some experience. Open to all students by consent of instructor or department chair.

MUS 1139 Private Voice I (Fee Basis) (1 credit)

One thirty minute lesson weekly per semester credit. Open to all students by consent of instructor and department chair. Level determined by instructor.

MUS 1348 String Methods (1 credit)

Group instruction to prepare students to demonstrate and describe proper hand, arm, and neck position; bow grip; shifting; intonation; and vibrato; as well as developmental techniques and pedagogical approaches for violin, viola, cello, and bass. (Might not be offered every year.)

MUS 1368 High Brass Methods (1 credit)

Group instruction to prepare students to demonstrate and describe proper embouchure, developmental techniques, and pedagogical approaches for trumpet and French horn.

MUS 1369 Low Brass Methods (1 credit)

Group instruction to prepare students to demonstrate and describe proper embouchure, developmental techniques, and pedagogical approaches for trombone, euphonium, and tuba. (Might not be offered every year.)

MUS 1378 Percussion Methods (1 credit)

Group instruction to prepare students to demonstrate and describe proper mallet and stick technique, care and maintenance of instruments, and percussion notation. Instruments covered include the snare drum, timpani, mallet instruments, and small percussion.

MUS 1388 Single Reeds Methods (1 credit)

Group instruction to prepare students to demonstrate and describe proper embouchure, developmental techniques, and pedagogical approaches for saxophone and clarinet.

MUS 1389 Double Reeds/Flute Methods (1 credit)

Group instruction to prepare students to demonstrate and describe proper embouchure, developmental techniques, and pedagogical approaches for flute, oboe, and bassoon. (Might not be offered every year.)

MUS 1800 Performance Laboratory (0 credit)

Individual and small group performances and lectures. Students must be enrolled in and successfully complete every semester of applied study (seven satisfactory semesters, except for transfer students).

MUS 2109 Private Instrument II (Fee Basis) (1 credit)

See description under MUS 1109.

MUS 2117 World Music (2 credits)

Students will develop three primary and interconnected literacies for the study and understanding of music of non-Eurocentric cultures: analytical music listening, understanding the concept of music culture, and interpretation of musical events. Student writing and musical analysis are primary tools for developing these literacies. Liberal Education Goal Areas 6 & 8.

MUS 2118 Piano, Level II (1 credit)

Private or group lessons in piano using a variety of technical exercises, improvisation, and repertoire. Level of study determined by audition or discretion of the instructor. Corequisite: MUS 1800. NOTE: Course requirements include solo performances in Master Classes, Performance Laboratory and semester Juries (performance finals) at the discretion of the instructor. Prerequisites: Music major or minor and complete an audition. These classes must be taken in sequence.

MUS 2119 Private Piano II (Fee Basis) (1 credit)

See description under MUS 1119.

MUS 2138 Voice, Level II (1 credit)

Private or group lessons using a variety of technical exercises, improvisation and repertoire appropriate to the students' chosen performance medium. Level of study determined by audition or discretion of the instructor. Corequisite: concurrent registration in MUS 1800 every semester. Note: Course requirements include solo performances in Master classes, Performance Laboratory, and semester Juries (performance finals) at the discretion of the instructor. Prerequisite: Student must be a music major or minor and complete an audition before enrolling in MUS 2138. These classes must be taken in sequence.

MUS 2139 Private Voice II (Fee Basis) (1 credit)

See description under MUS 1139.

MUS 2148 Strings: Violin, Level II (1 credit)

Private or group lessons in violin using a variety of technical exercises, improvisation and repertoire. Level of study determined by audition or discretion of the instructor. Corequisite: MUS 1800. NOTE: Course requirements include solo performances in Master Classes, Performance Laboratory and semester Juries (performance finals) at the discretion of the instructor.

MUS 2158 Woodwinds: Clarinet, Level II (1 credit)

Private or group lessons in clarinet using a variety of technical exercises, improvisation and repertoire. Level of study determined by audition or discretion of the instructor. Corequisite: MUS 1800. NOTE: Course requirements include solo performances in Master Classes, Performance Laboratory and semester Juries (performance finals) at the discretion of the instructor.

MUS 2168 Brass: Trumpet, Level II (1 credit)

Private or group lessons in trumpet using a variety of technical exercises, improvisation, and repertoire. Level of study determined by audition or discretion of the instructor. Corequisite: MUS 1800. NOTE: Course requirements include solo performances in Master Classes, Performance Laboratory and semester Juries (performance finals) at the discretion of the instructor.

MUS 2178 Percussion, Level II (1 credit)

Private or group lessons in snare drum, timpani, mallets, and traps. Percussion students are required to perform on all percussion instruments using a variety of technical exercises, improvisation and repertoire. Level of study determined by audition or discretion of the instructor. Corequisite: MUS 1800. NOTE: Course requirements include solo performances in Master Classes, Performance Laboratory and semester Juries (performance finals) at the discretion of the instructor.

MUS 2201 Music Theory and Musicianship I (5 credits)

The study of the basic elements of music and how they work together. Includes analysis, composition, sight singing, ear training, and improvisation of Western and Non-Western musical styles. Emphasis is on beginning harmony and part-writing. Visual and aural recognition of the elements of music through music performance, dictation, and improvisation using a variety of musical styles from Western and non-Western traditions. Completion of this course with a grade of "C" or better is required for all music degrees.

MUS 2202 Music Theory and Musicianship II (5 credits)

The study of the basic elements of music and how they work together. Continuation of study on harmony and part-writing. Emphasis on phrase structures, extended chords, and small musical forms. Continuation of visual and aural recognition of the elements of music through music performance, dictation, and improvisation using a variety of musical styles from Western and non-Western traditions. Completion of this course with a grade of "C" or better is required for all music degrees. Prerequisite: MUS 2201.

MUS 2238 Guitar, Level II (1 credit)

Private or group lessons in guitar using a variety of technical exercises, improvisation, and repertoire. Level of study is determined by audition or discretion of the instructor. NOTE: Course requirements include solo performances in Master Classes, Performance Laboratory, and semester Juries (performance finals) at the discretion of the instructor. This course is repeatable for credit. Corequisite: MUS 1800.

MUS 2248 Strings: Viola, Level II (1 credit)

Private or group lessons in viola using a variety of technical exercises, improvisation and repertoire. Level of study determined by audition or discretion of the instructor. Corequisite: MUS 1800. NOTE: Course requirements include solo performances in Master Classes, Performance Laboratory and semester Juries (performance finals) at the discretion of the instructor.

MUS 2258 Woodwinds: Saxophone, Level II (1 credit)

Private or group lessons in saxophone using a variety of technical exercises, improvisation and repertoire. Level of study determined by audition or discretion of the instructor. Corequisite: MUS 1800. NOTE: Course requirements include solo performances in Master Classes, Performance Laboratory and semester Juries (performance finals) at the discretion of the instructor.

MUS 2268 Brass: Horn, Level II (1 credit)

Private or group lessons in horn using a variety of technical exercises, improvisation, and repertoire. Level of study determined by audition or discretion of the instructor. Corequisite: MUS 1800. NOTE: Course requirements include solo performances in Master Classes, Performance Laboratory and semester Juries (performance finals) at the discretion of the instructor.

MUS 2300 Piano Fundamentals (1 credit)

Basic techniques of playing scales, intervals, and chord progressions. Required of all students in major, minor, and field of emphasis; others by consent of instructor. May be repeated for credit. Corequisite: Music Theory until requirements for MUS 2310 are completed.

MUS 2310 Piano Proficiency (0 credit)

Students register for this Exam when they are prepared to complete all material outlined in the Piano Proficiency Syllabus. Required of all majors, minors and music emphasis students. It is usually completed by the end of the sophomore year.

MUS 2348 Strings: Cello, Level II (1 credit)

Private or group lessons in cello using a variety of technical exercises, improvisation and repertoire. Level of study determined by audition or discretion of the instructor. Corequisite: MUS 1800. NOTE: Course requirements include solo performances in Master Classes, Performance Laboratory and semester Juries (performance finals) at the discretion of the instructor.

MUS 2358 Woodwinds: Oboe, Level II (1 credit)

Private or group lessons in oboe using a variety of technical exercises, improvisation and repertoire. Level of study determined by audition or discretion of the instructor. Corequisite: MUS 1800. NOTE: Course requirements include solo performances in Master classes, Performance Laboratory and semester Juries (performance finals) at the discretion of the instructor.

MUS 2368 Brass: Trombone, Level II (1 credit)

Private or group lessons in trombone using a variety of technical exercises, improvisation, and repertoire. Level of study determined by audition or discretion of the instructor. Corequisite: MUS 1800. NOTE: Course requirements include solo performances in Master Classes, Performance Laboratory and semester Juries (performance finals) at the discretion of the instructor.

MUS 2417 Diction For Singers I (2 credits)

Pronunciation and enunciation of English, Latin, and Italian text, using the International Phonetic Alphabet. Emphasis on language skill needed for vocal and choral singing and teaching. (Might not be offered every year.)

MUS 2418 Diction for Singers II (2 credits)

Pronunciation and enunciation of French and German text, using the International Phonetic Alphabet. Emphasis on language skill needed for vocal and choral singing and teaching. Prerequisite: MUS 2417. (Might not be offered every year.)

MUS 2448 Strings: Bass, Level II (1 credit)

Private or group lessons in double bass using a variety of technical exercises, improvisation and repertoire. Level of study determined by audition or discretion of the instructor. Corequisite: MUS 1800. NOTE: Course requirements include solo performances in Master classes, Performance Laboratory and semester Juries (performance finals) at the discretion of the instructor.

MUS 2458 Woodwinds: Bassoon, Level II (1 credit)

Private or group lessons in bassoon using a variety of technical exercises, improvisation and repertoire. Level of study determined by audition or discretion of the instructor. Corequisite: MUS 1800. NOTE: Course requirements include solo performances in Master classes. Performance Laboratory and semester Juries (performance finals) at the discretion of the instructor.

MUS 2468 Brass: Euphonium, Level II (1 credit)

Private or group lessons in euphonium using a variety of technical exercises, improvisation, and repertoire. Level of study determined by audition or discretion of the instructor. Corequisite: MUS 1800. NOTE: Course requirements include solo performances in Master Classes, Performance Laboratory and semester Juries (performance finals) at the discretion of the instructor.

MUS 2558 Woodwinds: Flute, Level II (1 credit)

Private or group lessons in flute using a variety of technical exercises, improvisation and repertoire. Level of study determined by audition or discretion of the instructor. Corequisite: MUS 1800. NOTE: Course requirements include solo performances in Master classes, Performance Laboratory and semester Juries (performance finals) at the discretion of the instructor.

MUS 2568 Brass: Tuba, Level II (1 credit)

Private or group lessons in tuba using a variety of technical exercises, improvisation, and repertoire. Level of study determined by audition or discretion of the instructor. Corequisite: MUS 1800. NOTE: Course requirements include solo performances in Master Classes. Performance Laboratory and semester Juries (performance finals) at the discretion of the instructor.

MUS 2607 Music Education I: Introduction (2 credits)

Introduction to general, vocal, and instrumental education for music students preparing to teach. Includes observations in the public schools, introduction to teacher education, and a broad overview of instructional and learning theory, philosophy, developmental and motivational psychology, characteristics of the successful teacher, and commitment to the teaching profession. Completion of this course with a grade of "C" or better is required for all music degrees.

MUS 2710 Symphonic Band (0-2 credits)

This ensemble will play the best music of the standard concert band repertoire, including a wide variety of classic 20th century band music, as well as contemporary concert band music. This music will not be at the level of difficulty of the wind ensemble repertoire, thus making it accessible for the musical level of the members of this ensemble. Repeatable for credit. Liberal Education Goal Areas 6 & 11.

MUS 2954 Study-Travel, Humanities and the Arts (1-6 credits)

Study Travel course in Music for Lib Ed Goal Area 6.

MUS 3100 Improvisation (1 credit)

Explores basic improvisation for general and jazz study. A focus on spontaneity, flexibility, and structure will be explored along with a variety of styles and improvisational techniques. Prerequisite(s): MUS 2201 and MUS 2202 or consent of instructor.

MUS 3107 Counterpoint (2 credits)

Analysis and composition of 18th century contrapuntal works including species counterpoint, canon, invention and fugue. Prerequisites: MUS 3201 and MUS 3202.

MUS 3109 Private Instrument III (Fee Basis) (1 credit)

See description under MUS 1109.

MUS 3118 Piano, Level III (1 credit)

See description under MUS 2118.

MUS 3120 The History of Jazz (3 credits)

This course will consist of class lectures, demonstrations, and listening examples of jazz artists that will provide the background information needed to understand and appreciate the music that has shaped our culture. In tests, papers, and class presentations, students will demonstrate the ability to identify and describe musical examples. Each student will demonstrate knowledge of the cultural background of the musical examples. Open to all students. Liberal Education Goal Areas 6 & 7.

MUS 3129 Private Organ III (Fee Basis) (1 credit)

See description under MUS 1129.

MUS 3130 The History of Rock and Roll (3 credits)

From its beginnings in the blues, to modern rock and popular music, this course will study characteristics of the music and the artists who create it. From class lectures, demonstrations and listening examples, students will demonstrate the ability to identify and describe music examples. Each student will demonstrate knowledge of the cultural background of the musical examples. Open to all students. Liberal Education Goal Areas 6 & 7.

MUS 3138 Voice, Level III (1 credit)

See description under MUS 2138.

MUS 3148 Strings: Violin, Level III (1 credit)

See description under MUS 2148.

MUS 3150 Arts Organization Management (3 credits)

This course will deepen students' understanding of managing an Arts Organizations. Topics covered include: the roles of the artistic leader, recruiting/retaining a Board of Directors, differentiating your arts organization, and building/maintaining a successful Arts Organization. Prerequisite(s): none.

MUS 3158 Woodwinds: Clarinet, Level III (1 credit)

See description under MUS 2158.

MUS 3168 Brass: Trumpet, Level III (1 credit)

See description under MUS 2168.

MUS 3170 Arts Organization Fundraising and Grant Writing (3 credits)

This course deepens students' understanding of fundraising and grant writing for Arts Organizations. Topics covered include grant writing, funding sources, engaging with donors, donor development, and financial sustainability. Prerequisite(s): none.

MUS 3178 Percussion, Level III (1 credit)

See description under MUS 2178.

MUS 3190 Arts Organization Innovation (3 credits)

This course deepens students' understanding of the roles of Arts Organization innovation. Topics covered include: innovating in arts organizations, assessing and analyzing innovation initiatives in Arts Organizations, and developing ways to leverage innovation for the arts. Prerequisite(s): none.

MUS 3201 Music Theory and Musicianship III (5 credits)

Study of the basic elements of music and how they work together. Continuation of study on harmony and part-writing. Emphasis on counterpoint and large musical forms. Continuation of visual and aural recognition of the elements of music through music performance, diction, and improvisation using a variety of musical styles from Western and non-Western traditions. Third semester of the two-year music theory sequence. Completion of this course with a grade of "C" or better is required for all music degrees. Prerequisites: MUS 2201 and MUS 2202.

MUS 3202 Music Theory and Musicianship IV (4 credits)

Study of the basic elements of music and how they work together. Continuation of study on harmony and part-writing. Emphasis on composition and twentieth-century forms and harmonies. Continuation of visual and aural recognition of the elements of music through music performance, diction, and improvisation using a variety of musical styles from Western and non-Western traditions. Fourth semester of the two-year music theory sequence. Completion of this course with a grade of "C" or better is required for all music degrees. Prerequisite: MUS 3201.

MUS 3238 Guitar, Level III (1 credit)

Private or group lessons in guitar using a variety of technical exercises, improvisation, and repertoire. Level of study is determined by audition or discretion of the instructor. NOTE: Course requirements include solo performances in Master Classes, Performance Laboratory, and semester Juries (performance finals) at the discretion of the instructor. This course is repeatable for credit. Corequisite: MUS 1800.

MUS 3248 Strings: Viola, Level III (1 credit)

See description under MUS 2248.

MUS 3258 Woodwinds: Saxophone, Level III (1 credit)

See description under MUS 2258.

MUS 3268 Brass: Horn, Level III (1 credit)

See description under MUS 2268.

MUS 3300 Piano Accompanying (2 credits)

Guided study in the practices and procedures of accompanying. Regular performing is required. Prerequisites: MUS 2310 or MUS 2118 or consent of instructor.

MUS 3348 Strings: Cello, Level III (1 credit)

See description under MUS 2348.

MUS 3358 Woodwinds: Oboe, Level III (1 credit)

See description under MUS 2358.

MUS 3368 Brass: Trombone, Level III (1 credit)

See description under MUS 2368.

MUS 3400 Vocal Pedagogy (1 credit)

Function, anatomy and physiology, and problems connected with the development of the singing voice and teaching techniques. Open to majors and minors only. Prerequisite: Concurrent enrollment in MUS 2138 or MUS 3138 or MUS 4138. May not be offered every year.

MUS 3405 Music in the Elementary Classroom (2 credits)

In order to meet the teacher licensure rule most effectively, this course provides a hands-on experience with the discipline of music. As the Creative Expressions course (ED 3301) offers philosophical and practical bases for including arts in the elementary classroom, this course gives students the opportunity to learn specific vocal and instrumental techniques that can enhance aesthetically both the academic experiences and the learning environment in the classroom. Nonperformance-based musical activities are also introduced to display the interconnectedness of music to other subject areas. Prerequisite: Music reading experience or MUS 1130.

MUS 3430 Topics in Solo Song Literature (2 credits)

Topics in Solo Song Literature from the Baroque to the present including historical style, performance practices and individual composer style characteristics. Open to majors and minors only.

MUS 3448 Strings: Bass, Level III (1 credit)

See description under MUS 2448

MUS 3458 Woodwinds: Bassoon, Level III (1 credit)

See description under MUS 2458

MUS 3468 Brass: Euphonium, Level III (1 credit)

See description under MUS 2468.

MUS 3501 Music Technology I (2 credits)

Learning and demonstration of the multiple uses of music technology through Musical Instrument Digital Interface (MIDI) basics, including MIDI theory, synthesizer exploration and ensemble, sequencing and notation and their relationships to music education, performance, and composition. Technical concepts include synthesis manipulation, real and step time sequencing, auto-sequencing programs, and desktop music notation publishing programs. Musical concepts include compositional and orchestration techniques, improvisation, and basic keyboard ensemble performance. Completion of this course with a grade of "C" or better is required for all music degrees. Prerequisites: Basic computer skills, music reading in treble and bass clefs, and playing melodies on a piano keyboard.

MUS 3502 Music Technology II (2 credits)

Advanced learning and demonstration of the multiple uses of music technology through Musical Instrument Digital Interface (MIDI), including MIDI internet resources, Computer Assisted Instruction (CAI) exploration and evaluation, media manipulation in the digital domain, and multimedia authoring and their relationships to music education, performance, and composition. Prerequisite: MUS 3501.

MUS 3558 Woodwinds: Flute, Level III (1 credit)

See description under MUS 2558.

MUS 3568 Brass: Tuba, Level III (1 credit)

See description under MUS 2568

MUS 3607 Music Education II: Elementary Methods (3 credits)

Philosophy, materials, techniques, and methods of instruction for a general music program in the elementary school. Topics include child development, classroom instruments, lesson planning, classroom management, program administration, and advocacy. Includes an individually scheduled, 25-hour practicum in the public schools. Prerequisites: MUS 2310, MUS 2607, MUS 3202, and MUS 3618.

MUS 3618 Conducting Fundamentals (2 credits)

Basics of choral and instrumental conducting. Emphasis on beat patterns and cues. Completion of this course with a grade of "C" or better is required for all music degrees. Prerequisites: MUS 2202 and MUS 2310.

MUS 3628 Instrumental Conducting (2 credits)

Refinement of conducting skills, score reading, and rehearsal procedures. Open to music majors only. Prerequisite: MUS 3618.

MUS 3638 Choral Conducting (2 credits)

Selecting, interpreting, and conducting choral music. Open to majors and minors only. Prerequisite: MUS 3618.

MUS 3800 Varsity Singers (0-2 credits)

A choral ensemble open to all students with no preliminary audition. Diverse choral literature performed. Basic vocal and choral training. Liberal Education Goal Area 11.

MUS 3801 History and Literature of Music I (3 credits)

Survey of the history of music from antiquity into the eighteenth century; emphasis on the music of Western civilization. Completion of this course with a grade of "C" or better is required for all music degrees. Liberal Education Goal Areas 6.

MUS 3802 History and Literature of Music II (3 credits)

Survey of the history of music from the eighteenth century to the present; emphasis on the music of Western civilization. Completion of this course with a grade of "C" or better is required for all music degrees. Liberal Education Goal Areas 6.

MUS 3898 Degree Recital (0 credit)

Performance of musical literature in the applied area of study at the 3000 level. Concurrent registration at the 3000 level in the applied area. Departmental approval required to allow substitution of an alternate project. Consult department chair or advisor for specific guidelines.

MUS 3970 Internship (3 credits)

Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

MUS 4100 Instrumental Arranging (1 credit)

Advanced study in techniques of orchestration and arranging. Open to music majors only. Prerequisite: MUS 3202.

MUS 4101 Advanced Jazz Improvisation (2 credits)

During class the student will study, learn, and develop skills necessary to the performance of advanced levels of jazz improvisation. The students in Advanced Jazz Improvisation will experience an intense study of jazz styles and incorporate the study of those styles into the creation of their own solos. The course will include use of a combination of technical exercises, scales, critical listening, solo transcription, methods, and solo repertoire to improve performance skills and knowledge of jazz improvisation. Additional assignments may include readings and study sheets covering particular techniques, terms, and styles of jazz's historical periods. Preparation for each class includes familiarity with all musical terms and concepts related to the current topic, and evidence of practice and study of the musical material for that lesson. Prerequisite: MUS 3100.

MUS 4104 Piano Literature I (2 credits)

Students gain an understanding of the following: musical forms, styles, and vocabulary related to music for keyboard instruments; keyboard literature from 1600 through the early 19th century within the larger context of Western Art Music of the Baroque and Classical eras. Students engage in active aural and written analysis of keyboard literature. Prerequisite: MUS 2118; Corequisite: MUS 3801 or consent of instructor. (Might not be offered every year.)

MUS 4105 Piano Literature II (2 credits)

Students gain an understanding of the following: musical forms, styles, and vocabulary related to music for keyboard instruments; keyboard literature from the early 19th century through the present within the larger context of Western Art Music of the Romantic and Contemporary eras. Students engage in active aural and written analysis of keyboard literature. Prerequisite: MUS 4104; Corequisite: MUS 3802 or consent of instructor. (Might not be offered every year.)

MUS 4106 Piano Pedagogy I (2 credits)

Students gain an understanding of the following: teaching skills appropriate for instruction of the young beginner through intermediate-level student; musical and pianistic skills and the means of acquiring and developing those skills. Students compile a collection of materials and resources related to the instruction of young beginner through intermediate students, which will later aid in the establishment of their own teaching studios. Prerequisite: Consent of instructor. (Might not be offered every year.)

MUS 4109 Private Instrument IV (Fee Basis) (1 credit)

See description under MUS 1109.

MUS 4110 Piano Pedagogy II (2 credits)

Students gain an understanding of the following: teaching skills appropriate for instruction of the adult beginner in both private and small class settings, in which students observe and teach; studio procedures related to the career needs of a piano pedagogue (i.e., professional affiliations, business skills, studio policies, etc.); pedagogical skills necessary for the training of the advanced pianist. Students expand their collection of materials and resources related to all areas of piano pedagogy, which will later aid in the establishment of their own teaching studios. Prerequisite: MUS 4106 or consent of instructor. (Might not be offered every year.)

MUS 4118 Piano, Level IV (1 credit)

See description under MUS 2118.

MUS 4138 Voice, Level IV (1 credit)

See description under MUS 2138.

MUS 4148 Strings: Violin, Level IV (1 credit)

See description under MUS 2148.

MUS 4158 Woodwinds: Clarinet, Level IV (1 credit)

See description under MUS 2158.

MUS 4168 Brass: Trumpet, Level IV (1 credit)

See description under MUS 2168.

MUS 4178 Percussion, Level IV (1 credit)

See description under MUS 2178.

MUS 4200 Composition (1 credit)

Creation of original works in variety forms, styles and genres. Prerequisite: MUS 2202.

MUS 4238 Guitar, Level IV (1 credit)

Private or group lessons in guitar using a variety of technical exercises, improvisation, and repertoire. Level of study is determined by audition or discretion of the instructor. NOTE: Course requirements include solo performances in Master Classes, Performance Laboratory, and semester Juries (performance finals) at the discretion of the instructor. This course is repeatable for credit. Corequisite: MUS 1800.

MUS 4248 Strings: Viola, Level IV (1 credit)

See description under Mus 2248

MUS 4258 Woodwinds: Saxophone, Level IV (1 credit)

See description under MUS 2258.

MUS 4268 Brass: Horn, Level IV (1 credit)

See description under MUS 2268.

MUS 4348 Strings: Cello, Level IV (1 credit)

See description under MUS 2348

MUS 4358 Woodwinds: Oboe, Level IV (1 credit)

See description under MUS 2358.

MUS 4368 Brass: Trombone, Level IV (1 credit)

See description under MUS 2368

MUS 4448 Strings: Bass, Level IV (1 credit)

See description under MUS 2448

MUS 4458 Woodwinds: Bassoon, Level IV (1 credit)

See description under MUS 2458.

MUS 4468 Brass: Euphonium, Level IV (1 credit)

See description under MUS 2468

MUS 4500 Bemidji Symphony Orchestra (0-2 credits)

A symphony orchestra open to university students and members of the local community and commuting area. The orchestra performs public concerts several times each year, and it assists in the production of selected choral and operatic works. The orchestra is a cooperative effort between the University and the Bemidji Orchestral Society. String membership open by permission of the conductor; woodwinds, brass and percussion by audition.

MUS 4558 Woodwinds: Flute, Level IV (1 credit)

See description under MUS 2558.

MUS 4568 Brass: Tuba, Level IV (1 credit)

See description under MUS 2568

MUS 4600 Jazz Combo (1 credit)

Open to all students by audition. Small jazz group(s) for students interested in improvisation.

MUS 4607 Music Education III: Secondary Methods (2 credits)

Philosophy, materials, techniques, and methods of instruction for a general music program in the secondary school. Topics include child development for middle and high school students, guitar, soprano and alto recorders, lesson planning, technology, program administration, and advocacy. Prerequisites: MUS 2310, MUS 2607, MUS 3202, MUS 3607, and MUS 3618.

MUS 4608 Topics in Musicology (2 credits)

Study of selected topic(s) in current musicological and historical scholarship through listening, analysis and reading. Course may be repeated for a maximum of 4 credits under different topic subtitles. Prerequisite(s): MUS 3201, MUS 3801, MUS 3802.

MUS 4609 Topics in Music Theory (2 credits)

Study of selected topics in current music analytic and theoretic scholarship through listening, analysis and reading. Course may be repeated for a maximum of 4 credits under different topic subtitles. Prerequisite(s): MUS 3202.

MUS 4610 Jazz Band (0-2 credits)

Open to all students by audition. Enrollment demand usually permits the formation of two groups.

MUS 4648 Advanced Conducting (2 credits)

Further development of choral or instrumental conducting skills. Open to music majors only. Consent of instructor. Prerequisites: MUS 3628 and MUS 3638.

MUS 4700 Instrumental Ensembles (0-2 credits)

Chamber music experience in strings, woodwinds, brass, percussion, piano and miscellaneous chamber groups.

MUS 4703 Brass Ensemble (1 credit)

A brass ensemble (trumpets, horns, trombones, euphoniums, tubas, and percussion) open to all university students who play or have an active interest in the brass family of instruments.

MUS 4706 Brass Quintet (0-1 credits)

A brass quintet (two trumpets, horn, trombone, tuba) open to university students by audition only. Prerequisite: Performance audition or consent of instructor.

MUS 4707 Percussion Ensemble (0-1 credits)

A percussion ensemble of six or more open to all university students who play or have an active interest in the percussion family of instruments. Prerequisite: Performance audition and/or consent of instructor.

MUS 4708 Topics in Chamber Music (2 credits)

Study, through listening, analysis and performance of chamber music from the sonata to modern chamber music. (Might not be offered every year.)

MUS 4710 Wind Ensemble (0-2 credits)

A select smaller concert band, formed for the purpose of playing the wind ensemble repertoire. Open to all woodwind, brass, and percussion players by audition. Prerequisite: Successful audition. Liberal Education Goal Areas 6 and 11.

MUS 4737 Instrumental Studies (3 credits)

Survey of methods, materials, and strategies for effective instruction in secondary instrumental music programs. Topics include standard ensemble repertoire and strategies for developing ensemble musicianship. Prerequisites: MUS 1348, MUS 1368, MUS 1378, MUS 1388, MUS 2310, and MUS 3618.

MUS 4800 Bemidji Choir (0-2 credits)

A mixed choir of 45-60 voices. Rehearse daily. In addition to concerts on campus, make annual domestic tours and triennial foreign tours. Open to all students by audition or consent of instructor. Liberal Education Goal Area 11.

MUS 4807 Topics in Symphonic Literature (2 credits)

Study of symphonic literature, through listening and analysis, from 1600 through modern symphonic music. (Might not be offered every year.)

MUS 4808 Topics in Opera and Chamber Opera (2 credits)

Study of selected examples of operatic literature, through listening, analysis and preparation, from 1600 to the present. (Might not be offered every year.)

MUS 4810 Chamber Singers (0-2 credits)

A mixed vocal ensemble of 14 voices. Perform at various functions on and off-campus including Madrigal Dinner and concerts. Open to all students by audition or consent of instructor.

MUS 4811 Choral Notation and Arranging (1 credit)

Beginning choral arranging including a practical survey of choral literature of all periods. Emphasis on the needs of secondary school choral directors. Prerequisite: MUS 3202.

MUS 4812 Choral Studies (2 credits)

Survey of choral literature to include an in-depth study of various aspects of the choral art such as tone production, vocal timbre, phrasing, Western and non-Western styles, balance, ornamentation, and improvisation. Emphasis on the needs of secondary school music directors. Prerequisite: MUS 4811.

MUS 4820 Vocal Ensemble (0-2 credits)

Small vocal ensembles specializing in music for events such as Madrigal Dinner, Opera Night, or Musical Theater. Open to all students by audition or consent of instructor.

MUS 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP
1980, 2980, 3980, 4980 RESEARCH
1990, 2990, 3990, 4990 THESIS

Nursing

Professional nurses provide direct care to individuals and work with others in a variety of settings to address the health needs of individuals, families, and communities. The practice of nursing aims to help people of all ages experience optimal health. Respect for human dignity and a commitment to caring are essential to nursing practice. Expectations of the baccalaureate Nursing graduate include professional growth and scholarly approaches to practice. The profession of nursing provides opportunities for graduates to assume many roles in a variety of clinical areas. A baccalaureate degree in Nursing also provides a foundation for graduate study and further specialization.

The baccalaureate degree program in nursing at Bemidji State University is accredited by the Commission on Collegiate Nursing Education, 655 K Street, NW, Suite 750, Washington, DC 20001, 202-887-6791. The program has two tracks, the RN to Baccalaureate Track and the 4-Year Track.

The **RN to Baccalaureate Track** serves registered nurses who live and work in various geographical areas. Courses are offered in block schedules, and some components are offered on the Internet and some on-campus. Students may enroll in liberal education courses and selected Nursing courses prior to being admitted to the Nursing major.

The **Pre-licensure Track** serves students who are entering Bemidji State University as freshmen and are seeking a baccalaureate nursing education that will prepare them to take the NCLEX RN exam after graduation.

Programs

- Nursing, B.S. (Pre-Licensure Track) *major*
- Nursing, B.S. (RN To Baccalaureate Track) *major*

Career Directions

Community Health
Home Care/Hospice
Hospitals
Long-term Care
Schools
Also: Graduate Study

Preparation

RN to Baccalaureate Track

Registered Nurse Licensure in Minnesota, North Dakota, or Wisconsin

Pre-licensure Track

See Section II, Enrollment for required high school preparation

Recommended High School Courses

Algebra
Biology
Chemistry
Health
Life Sciences

Nursing, B.S. *major* Pre-Licensure Track

Required Credits: 86

Required GPA: 2.25

III REQUIRED COURSES

A. Non-Nursing Courses

Applicants must have completed at least 30 semester credits, including the designated required non-nursing courses listed as follows, for admission consideration.

Complete the following courses:

- BIOL 1111 Anatomy and Physiology for Allied Health I (4 credits)
- BIOL 1112 Anatomy and Physiology for Allied Health II (4 credits)
- BIOL 2750 Medical Microbiology (3 credits)
- CHEM 1111 General Chemistry I (4 credits)
- PSY 1100 Introductory Psychology (4 credits)
- PSY 3237 Lifespan Development (4 credits)

B. Nursing Courses

Complete the following courses:

- NRSG 2000 Introduction to Professional Nursing (3 credits)

- NRSG 2203 Introduction to Clinical Practice (4 credits)
- NRSG 2204 Health Assessment (3 credits)
- NRSG 2207 Nursing Pharmacology (3 credits)
- NRSG 3000 Elements of Scholarly Practice (2 credits)
- NRSG 3007 Acute Care Practicum I (4 credits)
- NRSG 3008 Acute Care Practicum II (4 credits)
- NRSG 3011 Nursing Care of Individuals I (4 credits)
- NRSG 3012 Nursing Care of Individuals II (4 credits)
- NRSG 3120 Transcultural Nursing (2 credits)
- NRSG 3201 The Childbearing Family (2 credits)
- NRSG 3202 Child/Adolescent Health (4 credits)
- NRSG 4001 Mental Health Nursing (4 credits)
- NRSG 4003 Rural Populations Practicum (5 credits)
- NRSG 4010 Nursing Care with Complex Needs (2 credits)
- NRSG 4100 Nursing Research (3 credits)
- NRSG 4110 Community Health Nursing (3 credits)
- NRSG 4201 Role Integration Practicum (4 credits)
- NRSG 4250 Leadership in Nursing (3 credits)

Suggested Semester Schedule for | NURSING (Pre-Licensure) B.S. *major*

Freshman Fall

- BIOL 1111 Anatomy and Physiology for Allied Health I (4 credits)
- ENGL 1151 Composition (3 credits)
- PSY 1100 Introductory Psychology (4 credits)
- MATH Liberal Education requirement

- UNIV 1190 First Year Experience Seminar (1 credit)

Freshman Spring

- BIOL 1112 Anatomy and Physiology for Allied Health II (4 credits)
- ENGL 2152 Argument and Exposition (3 credits)
(or other Liberal Education requirement)
- CHEM 1111 General Chemistry I (4 credits)
- CHEM 1171 General Chemistry I Lab (0 credit)
- PSY 3237 Lifespan Development (4 credits)
- MATH Liberal Education requirement
- UNIV 1190 First Year Experience Seminar (1 credit)

Complete sometime before start of sophomore year:

- Certified Nursing Assistant course
- American Heart Association HeartCode BLS CPR certification
- ATI TEAS Assessment Exam

Sophomore Fall

- xxxx2925 (any People of the Environment course)
- Liberal Education requirements (6-9 credits)
(the above two courses may be taken as a freshman)

Sophomore Spring

- BIOL 2750 Medical Microbiology (3 credits)
- NRSG 2000 Introduction to Professional Nursing (3 credits)
- NRSG 2203 Introduction to Clinical Practice (4 credits)
- NRSG 2204 Health Assessment (3 credits)
- NRSG 2207 Nursing Pharmacology (3 credits)
- Liberal Education requirements (3 credits)

Junior Fall

- NRSG 3000 Elements of Scholarly Practice (2 credits)
- NRSG 3007 Acute Care Practicum I (4 credits)
- NRSG 3011 Nursing Care of Individuals I (4 credits)
- NRSG 3120 Transcultural Nursing (2 credits)

Junior Spring

- NRSG 3008 Acute Care Practicum II (4 credits)
- NRSG 3012 Nursing Care of Individuals II (4 credits)
- NRSG 3201 The Childbearing Family (2 credits)
- NRSG 4001 Mental Health Nursing (4 credits)
- Elective or Liberal Education credits as needed

Senior Fall

- NRSG 3202 Child/Adolescent Health (4 credits)
- NRSG 4003 Rural Populations Practicum (5 credits)
- NRSG 4110 Community Health Nursing (3 credits)
- Elective or Liberal Education credits as needed

Senior Spring

- NRSG 4010 Nursing Care with Complex Needs (2 credits)
- NRSG 4100 Nursing Research (3 credits)
- NRSG 4201 Role Integration Practicum (4 credits)
- NRSG 4250 Leadership in Nursing (3 credits)

Nursing, B.S. major

RN To Baccalaureate Track

Required Credits: 32

Required GPA: 2.25

I ADMISSION TO THE MAJOR

- Be fully admitted to Bemidji State University
- Have a cumulative GPA of 2.5 or higher
- Submit a Department of Nursing Application
- Applicants to the program must have earned an associate or diploma degree as a registered nurse. *Be licensed to practice as a registered nurse or be a graduate with license pending in Minnesota, Wisconsin or North Dakota. Full admission to the program requires unencumbered licensure.
- Have internet access suitable for delivery of online courses, practice experiences and peer collaboration.
- Students must reside in Minnesota, North Dakota, or Wisconsin and a student must have an unencumbered RN license from the state in which they reside. If a student changes state of residency while in the program they may not be able to continue in the program unless they move to North Dakota, Wisconsin, or Minnesota. If a student changes states of residency, they must notify the Department of Nursing.

II PROGRESSION

All individual nursing courses applied to the upper division major requirements must reflect a letter grade of C or better.

III REQUIRED NURSING COURSES

Complete the following courses:

- NRSG 3100 Concepts of Nursing and Health Care (3 credits)
- NRSG 3140 Advanced Health Assessment (3 credits)
- NRSG 3150 Integrative and Cultural Nursing (3 credits)
or NRSG 3400 American Indian Health Issues & Nursing (3 credits)
- NRSG 3240 Information Management and Collaborative Communication (3 credits)
- NRSG 3300 Health Care Policy, Finance, and Regulatory Environments (3 credits)
- NRSG 4116 Family and Population Health Nursing (4 credits)
- NRSG 4120 Family and Population Health Practicum (4 credits)
- NRSG 4210 Nursing Leadership and Management RN-BS (3 credits)
- NRSG 4260 Evidence, Practice, and Research (4 credits)

Complete one of the following courses for two credits:

- NRSG 3150 Integrative and Cultural Nursing (3 credits)
- NRSG 3200 Health Education in Nursing Practice (3 credits)
- NRSG 3400 American Indian Health Issues & Nursing (3 credits)
- NRSG 3410 APA Format, Nursing (2 credits)
- NRSG 3430 Health Promotion (2 credits)
- NRSG 3440 Palliative Care Nursing (3 credits)
- NRSG 3450 Holistic Nursing (2 credits)
- NRSG 3460 Child Abuse and Nursing Forensics (3 credits)
- NRSG 3920 Directed Group Study (1-4 credits)

SUGGESTED PART-TIME SEMESTER SCHEDULE FOR NURSING MAJOR, B.S.

Fall Semester

- NRSG 3100 Concepts of Nursing and Health Care (3 credits)
- NRSG 3150 Integrative and Cultural Nursing (3 credits)
or NRSGS 3400

Spring Semester

- NRSRG 3140 Advanced Health Assessment (3 credits)
- NRSRG 3240 Information Management and Collaborative Communication (3 credits)

Summer Semester

- NRSRG 3300 Health Care Policy, Finance, and Regulatory Environments (3 credits)

Complete one of the following courses for 2 credits

- NRSRG 3920 Directed Group Study (1-4 credits)
- NRSRG 3200 Health Education in Nursing Practice (3 credits)
- NRSRG 3400 American Indian Health Issues & Nursing (3 credits)
(if not taken in lieu of NRSRG 3150 Integrative and Cultural Nursing)
- NRSRG 3410 APA Format, Nursing (2 credits)
- NRSRG 3430 Health Promotion (2 credits)
- NRSRG 3440 Palliative Care Nursing (3 credits)
- NRSRG 3450 Holistic Nursing (2 credits)
- NRSRG 3460 Child Abuse and Nursing Forensics (3 credits)

Fall Semester

- NRSRG 4116 Family and Population Health Nursing (4 credits)
- NRSRG 4120 Family and Population Health Practicum (4 credits)

Spring Semester

- NRSRG 4210 Nursing Leadership and Management RN-BS (3 credits)
- NRSRG 4260 Evidence, Practice, and Research (4 credits)

A full-time program includes one Fall semester (all Fall courses as above) and one Spring semester (all Spring courses as above), followed by Summer courses as above

Nursing Courses

NRSRG 2000 Introduction to Professional Nursing (3 credits)

Introduces concepts related to the discipline of nursing, health and health care, and the social context of the profession, including attention to rural health care. Addresses psychosocial and spiritual dimensions of nursing care, introducing therapeutic communication and socialization into nursing practice.

NRSRG 2203 Introduction to Clinical Practice (4 credits)

The nursing process as a framework for providing a holistic approach to nursing care. Focuses on knowledge and practice related to basic needs and selected interventions, including medication administration. Learning environments include classroom and laboratory settings. Prerequisites: 4 year track enrollee, NRSRG 2000.

NRSRG 2204 Health Assessment (3 credits)

Introduces beginning theory and practice for systematic data collection about the health status of individuals, including the identification of characteristics common to particular age groups. Guides the student in distinguishing between normal and abnormal profiles and potential health concerns. Learning environments include classroom and laboratory settings. Prerequisites: Admission to the program and NRSRG 2000.

NRSRG 2207 Nursing Pharmacology (3 credits)

This course is designed to develop theoretical knowledge of pharmacotherapeutics for nursing practice. The focus of major drug classifications and specific medicinal agents will be discussed in relation to pharmacodynamics, pharmacokinetics, therapeutic uses, adverse reactions, and precautions. Prerequisites: enrollment in 4 year nursing program, NRSRG 2000.

NRSRG 3000 Elements of Scholarly Practice (2 credits)

Examines forms of knowledge, the interrelationship between knowledge and practice, and the development of critical reflective thought. Introduces selected nursing theories, evidence-based practice, and an exploration of implications for nursing practice approaches. Includes study of ingredients expected in formal paper presentations. Prerequisites: prelicensure track enrollee only.

NRSRG 3003 Practicum: Adult/Gerian (4 credits)

The nursing process, incorporating a holistic view, serves as the framework for the provision of nursing care to adults and gerians. Nursing practice roles and abilities relate to promotion, attainment, and preservation of health, amelioration of suffering, and supporting a peaceful death. Learning experiences include laboratory and a variety of rural health care environments. Prerequisite: 4-year track enrollee, NRSRG 2000, NRSRG 2203, NRSRG 2204. Corequisite: NRSRG 3001. Pre- or corequisite NRSRG 3120.

NRSRG 3007 Acute Care Practicum I (4 credits)

The nursing process, incorporating a holistic view, serves as the framework for the provision of nursing care across the lifespan. Learning experiences include laboratory and a variety of rural health care environments. Clinical rotations may include medical surgical, operating room, intensive care units, telemetry, cardiac catheter laboratory, emergency room, or operating room, or others as assigned. Prerequisite(s): Pre-licensure track enrollee, NRSRG 2203, NRSRG 2204, NRSRG 2207; Co-requisite NRSRG 3010 or NRSRG 3012.

NRSRG 3008 Acute Care Practicum II (4 credits)

The nursing process, incorporating a holistic view, serves as the framework for the provision of nursing care across the lifespan. Learning experiences include laboratory and a variety of rural health care environments. Clinical rotations may include labor & delivery, postpartum & nursery, pediatrics, obstetrics & gynecology, wound or ostomy, acute rehab, or others as assigned. Prerequisite(s): Pre-licensure track enrollee, NRSRG 2203, NRSRG 2204, NRSRG 2207; Co-requisite NRSRG 3010 or NRSRG 3020.

NRSRG 3011 Nursing Care of Individuals I (4 credits)

Focuses on common physiological health and illness concerns experienced by adults and older adults. Emphasis will be on implementing evidence-based nursing care that reflects an understanding of human growth and development, pathophysiology, pharmacology, medical management, and nursing management for adults and older adults. Prerequisites: Pre-licensure track enrollee, NRSRG 2203, NRSRG 2204, NRSRG 2207.

NRSRG 3012 Nursing Care of Individuals II (4 credits)

Focuses on common physiological health and illness concerns experienced by adults and older adults. Emphasis will be on implementing evidence-based nursing care that reflects an understanding of human growth and development, pathophysiology, pharmacology, medical management, and nursing management for adults and older adults. Prerequisite(s): Pre-licensure track enrollee, NRSRG 3011, NRSRG 3000, NRSRG 3120; Co-requisite(s): NRSRG 3007.

NRSRG 3100 Concepts of Nursing and Health Care (3 credits)

Introduces concepts emphasized in the program. Explores the nature of the discipline within professional and social contexts. Concepts of health are studied in relation to professional practice roles. Examines philosophies, theories, and frameworks for nursing practice. Students also address values clarification and ethical decision making. Prerequisite: Current RN license and admitted to major.

NRSG 3120 Transcultural Nursing (2 credits)

Health beliefs and practices of clients from diverse backgrounds, including the concept of rural culture and cultural barriers to quality health care. Theoretical frameworks for performing a cultural assessment and for planning and implementing culturally appropriate nursing care. Provides opportunity for students to reflect on culture in relation to oneself and nursing practice roles. Prerequisite: Admitted to major.

NRSG 3140 Advanced Health Assessment (3 credits)

Integrates understanding of altered physiologic states and principles of psychosocial and holistic nursing into a comprehensive approach to advanced nursing assessment for individuals across the lifespan. Guides the student in collecting and interpreting history information, physical information, and results of diagnostic studies. Analysis of information results in nursing diagnoses. Emphasis on advanced assessment process to evaluate response to nursing care. Prerequisite: Current unencumbered RN license; Prerequisite/Co-requisite: NRSG 3100.

NRSG 3150 Integrative and Cultural Nursing (3 credits)

Examines the health beliefs and practices of clients from diverse backgrounds, including the concept of rural culture and cultural barriers to quality health care. Theoretical frameworks for performing a cultural assessment and for planning and implementing culturally appropriate nursing care. Includes opportunities for students to reflect on culture in relation to oneself and nursing practice roles. Also explores integrative medicine as a component of cultural practice, values, and beliefs in response to a growing rate of patient demand for wellness-promoting integrative therapies. Prerequisites: Current unencumbered RN license; Prerequisite/Co-requisite: NRSG 3100.

NRSG 3200 Health Education in Nursing Practice (3 credits)

This course examines the role of health education in nursing practice and healthcare. Concepts, principles, and theories related to teaching-learning processes are addressed. The development, delivery, and evaluation of health education are studied in relation to healthcare and professional nursing roles. Group dynamics are also examined. Prerequisite: Current unencumbered RN license and admitted to the major.

NRSG 3201 The Childbearing Family (2 credits)

Introduces family assessment as a framework for nursing practice. Incorporates a holistic approach in the nursing care of families and newborns during an uncomplicated perinatal experience. Prerequisites: NRSG 2203, 2204, 2207, and pre/corequisite NRSG 3008.

NRSG 3202 Child/Adolescent Health (4 credits)

Focuses on health and illness concerns experienced by infants, children, and adolescents. Studies nursing care management approaches and health care resources supportive of promotion, attainment, and preservation of health and amelioration of suffering. Includes nutritional and pharmacological dimensions of nursing practice. Prerequisites: NRSG 3012, NRSG 3008, NRSG 3201, NRSG 4001.

NRSG 3203 Practicum: The Family (4 credits)

The nursing process, including family assessment, serves as the framework for providing a holistic approach in the nursing care of childbearing families, children, adolescents, and adults. Nursing practice roles and abilities relate to promotion, attainment, and preservation of health and amelioration of suffering. Learning experiences include laboratory and a variety of rural health care environments. Prerequisite: 4-year track enrollee; Corequisites: NRSG 3201 and NRSG 3202.

NRSG 3240 Information Management and Collaborative Communication (3 credits)

Introduces the concepts of delivering high quality health care focused on inter-professional communication, and the use of information management and patient care technology. Prerequisites: Current unencumbered RN license; Prerequisite/Co-requisite: NRSG 3100.

NRSG 3300 Health Care Policy, Finance, and Regulatory Environments (3 credits)

Provides an overview of the health care system in the United States. Examines and analyzes current health care policies at a federal, state, and facility level. Prerequisites: Current unencumbered RN license; Prerequisite/Co-requisite: NRSG 3100.

NRSG 3400 American Indian Health Issues & Nursing (3 credits)

Students will examine and analyze the health care issues that American Indians face in current times. Explore how the professional nurse may remedy the profound health disparities of American Indians. Prerequisite(s)/Co-requisite: NRSG 3100 in RN-BS track or completion of NRSG 2000 level courses in 4-yr track.

NRSG 3410 APA Format, Nursing (2 credits)

This course describes the American Psychological Association (APA) (7th ed.) style and Publication guidelines and provides opportunities for application of these guidelines. Topics of focus will include manuscript structure and content, mechanics of style, crediting sources, and reference examples. Correct application of APA Style will be evaluated with quizzes and a final paper/reference page. Prerequisites: Declared nursing major.

NRSG 3430 Health Promotion (2 credits)

The course applies the concepts of health promotion to nursing practice to enable the client to manage and improve health outcomes. While focusing on the methodology critical to developing a holistic plan of care for clients, students will learn the rationale and techniques for utilizing specific assessment tools, analysis of assessment data, selection of lifespan appropriate interventions, implementation of interventions, and measurement of resulting outcomes. Prerequisite(s): Admitted to the major.

NRSG 3440 Palliative Care Nursing (3 credits)

This course examines nursing care needs common to individuals and families receiving palliative and end-of-life care. Emphasizes nursing practice representing a holistic, interdisciplinary, client-centered approach aimed to ameliorate suffering and support serious illness, dying, and a peaceful death. Addresses symptom-control and quality of life issues for patients with life-threatening illness who are not yet experiencing end-of-life issues. Health care resources and issues related to the provision of palliative care are addressed. Prerequisite(s): Admitted to the major.

NRSG 3450 Holistic Nursing (2 credits)

This course introduces the concepts of Holistic Nursing and The American Nurses Association: Scope and Standards of practice for Holistic Nursing. This course will focus on the topics necessary to be ready to apply to take the Holistic Nurse Certificate Examination. Prerequisite(s): Admitted to the major.

NRSG 3460 Child Abuse and Nursing Forensics (3 credits)

This course is intended to provide an overview of child abuse. A basic introduction of child sexual abuse and child physical abuse will be examined. The course will examine the history, etiology, assessment, and consequences of child abuse. Mandated reporting and the role of the nurse and the forensic nurse clinician in relation to child abuse will be discussed. Prerequisite(s): Admitted to the major

NRSG 3920 Directed Group Study (1-4 credits)

Provides an in-depth study of a selected topic. Course title, credit, and prerequisites vary by course offering. Selected courses open to general university students. Prerequisite: 4-year track or RN enrollee.

NRSG 3970 Internship (1 credit)

Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

NRSG 4001 Mental Health Nursing (4 credits)

Focuses on the psychodynamics of human behavior in relation to the mental health/mental illness spectrum and common lifespan concerns. In addition to assessment, nursing care management includes interventions such as psychopharmacologic approaches and therapeutic communication. Examines nursing and health care delivery resources that address mental health needs, especially those of people living in rural areas. Prerequisites: 4-year track enrollee and all 3000-level NRSG courses required for 4-year track.

NRSG 4002 Palliative Care Nursing (2 credits)

Examines nursing care needs common to individuals and families receiving palliative and end-of-life care. Emphasizes nursing practice representing a holistic, interdisciplinary, client-centered approach aimed at ameliorating suffering and supporting a peaceful death. Health care resources and issues related to the provision of palliative care are addressed. Prerequisites: 4-year track enrollee and all 3000-level NRSG courses required for 4-year track.

NRSG 4003 Rural Populations Practicum (5 credits)

Provides opportunity to use the nursing process with a community/population as the client. Nursing practice roles and abilities relate to health promotion, attainment, and preservation of optimal health of clients, including clients with mental health needs, in diverse rural community settings. Prerequisite: Pre-licensure track enrollee, NRSG 3012, NRSG 3007, NRSG 3201, NRSG 4001.

NRSG 4010 Nursing Care with Complex Needs (2 credits)

Focuses on complex physiological health and illness concerns experienced across the lifespan. Emphasis will be on implementing evidence-based nursing care that reflects an understanding of human growth and development, pathophysiology, pharmacology, medical management, and nursing management. Prerequisite(s): Pre-licensure track enrollee, NRSG 3202, NRSG 4110, NRSG 4003.

NRSG 4100 Nursing Research (3 credits)

Considers the role and use of nursing research in nursing practice. An introduction to the research process is provided and interpreted for its utilization in nursing practice. Prerequisites: Admitted to major.

NRSG 4110 Community Health Nursing (3 credits)

Emphasizes use of the nursing process as the framework for addressing the community/population as client. Nursing role abilities inherent in the conduct of community/population-focused practice. Contemporary community topics, health concerns related to selected populations, and nursing/health care delivery in diverse community (including rural) contexts. Prerequisite: 4-year track or RN enrollee and all 3000-level NRSG courses required for 4-year track or RN program except NRSG 3920.

NRSG 4116 Family and Population Health Nursing (4 credits)

Emphasizes the use of the nursing process as the framework for addressing the family/community/population as client. Nursing role abilities inherent in the conduct of family/community/population-focused practice. Prerequisites: Current unencumbered RN license; Prerequisite/Co-requisite: NRSG 3100; Co-requisite NRSG 4120.

NRSG 4120 Family and Population Health Practicum (4 credits)

Provides opportunity to use the nursing process with the community and family as client. Focuses on client populations in diverse community settings and participation in professional nursing practice roles. Prerequisites: Current unencumbered RN license; Prerequisite/Co-requisite: NRSG 3100; Co-requisite: NRSG 4116.

NRSG 4201 Role Integration Practicum (4 credits)

A comprehensive practicum supportive to the continued development of role expectations of the baccalaureate graduate. Emphasizes providing, designing, managing, and coordinating nursing care within a selected rural setting. Prerequisites: Pre-licensure track enrollee, NRSG 3202, NRSG 4110, NRSG 4003; Co-requisites: NRSG 4010, NRSG 4100, NRSG 4250.

NRSG 4210 Nursing Leadership and Management RN-BS (3 credits)

A study of leadership/management theories, concepts, and strategies as applied to professional nursing roles and practice. Topics relate to nursing care delivery patterns, leadership/management processes, issues, and resources. Prerequisite: Current unencumbered RN license; Prerequisite/Co-requisite: NRSG 3100.

NRSG 4250 Leadership in Nursing (3 credits)

A study of leadership/management theories, concepts, and strategies as applied to professional nursing roles and practice. Topics relate to nursing care delivery patterns, leadership/management processes, issues, and resources. The contemporary social context of nursing (including rural settings), social action, and the responsibilities of membership in the profession are addressed. Prerequisite(s): Pre-licensure track enrollee, NRSG 3202, NRSG 4110, NRSG 4003.

NRSG 4260 Evidence, Practice, and Research (4 credits)

This course considers the nursing role in the use of nursing research and evidence-based practice. An introduction to the research process and evidence-based practice is provided and interpreted for its utilization in nursing practice. Prerequisite(s): Admitted to the major, current unencumbered RN license; Prerequisite/Co-requisite: NRSG 3100.

NRSG 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
 1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
 1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
 1940, 2940, 3940, 4940 IN-SERVICE COURSE
 1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
 1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
 1970, 2970, 3970, 4970 INTERNSHIP
 1980, 2980, 3980, 4980 RESEARCH
 1990, 2990, 3990, 4990 THESIS

Ojibwe

Programs

- Ojibwe *minor*
- Ojibwe Language Instruction *cert*

Ojibwe *minor*

Required Credits: 12

Required GPA: 2.00

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- OJIB 3311 Advanced Ojibwe I (4 credits)
- OJIB 3312 Advanced Ojibwe II (4 credits)

II REQUIRED STUDY

SELECT 1 OF THE FOLLOWING COURSES:

- OJIB 3213 Ojibwe Oral Literature (4 credits)
- OJIB 3300 Indigenous Language Field Program (4 credits)
- OJIB 3400 Instruction of Ojibwe Language (4 credits)

Ojibwe Language Instruction *cert*

Required Credits: 12

Required GPA: 2.00

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- OJIB 3311 Advanced Ojibwe I (4 credits)
- OJIB 3312 Advanced Ojibwe II (4 credits)

II REQUIRED STUDY

COMPLETE THE FOLLOWING COURSE:

- OJIB 3400 Instruction of Ojibwe Language (4 credits)

Ojibwe Courses

OJIB 1100 Ojibwe Culture (4 credits)

Surveys aspects of Ojibwe culture and history from pre-contact to the present. Liberal Education Goal Areas 6 & 7. (Might not be offered every year.)

OJIB 1111 Elementary Ojibwe I (4 credits)

The language of the Ojibwe with an emphasis on oral-aural skills as well as non-linguistic aspects of cultural background and surroundings. Prerequisite: Please consult with program faculty. Liberal Education Goal Area 8.

OJIB 1112 Elementary Ojibwe II (4 credits)

The language of the Ojibwe with an emphasis on oral-aural skills as well as non-linguistic aspects of cultural background and surroundings. Prerequisite: OJIB 1111 or consent of instructor. Liberal Education Goal Area 8.

OJIB 2211 Intermediate Ojibwe I (4 credits)

The language of the Ojibwe with continued emphasis on oral-aural skills as well as non-linguistic aspects of cultural background and surroundings. Prerequisite: OJIB 1112 or consent of instructor. Liberal Education Goal Area 8.

OJIB 2212 Intermediate Ojibwe II (4 credits)

The language of the Ojibwe with continued emphasis on oral-aural skills as well as non-linguistic aspects of cultural background and surroundings. Prerequisite: OJIB 2211 or consent of instructor. Liberal Education Goal Area 8.

OJIB 3213 Ojibwe Oral Literature (4 credits)

Students meet for the first several weeks to discuss, learn, and be tested on their knowledge of Ojibwe oral literature and methodologies for its collection. The last several weeks of the course are designed for students to meet, record, transcribe, translate, and analyze oral literature that they themselves collect from fluent speakers in the region. Guidance will be given at all stages. Prerequisite: OJIB 2212 or consent of instructor. Liberal Education Goal Area 6 (Might not be offered every year.)

OJIB 3300 Indigenous Language Field Program (4 credits)

Students will engage in deep, experiential learning in indigenous language, history, and culture. Students are required to participate in ten weeks of classroom work on campus plus travel to and engage in two weeks on a guided field classroom experience. Site of field experience will be a vibrant indigenous language community (location predetermined with each offering of the class) in Hawaii, New Zealand, Canada, or other indigenous language community. Prerequisite: Consent of Instructor. Liberal Education Goal Area 7.

OJIB 3311 Advanced Ojibwe I (4 credits)

Continued development of all skills in Ojibwe with special attention to grammar and oral tradition. Prerequisite: OJIB 2212 or consent of instructor. Liberal Education Goal Area 8.

OJIB 3312 Advanced Ojibwe II (4 credits)

Continued development of all skills in Ojibwe with special attention to grammar and oral tradition. Prerequisite: OJIB 3311 or consent of instructor. Liberal Education Goal Area 8.

OJIB 3400 Instruction of Ojibwe Language (4 credits)

Students meet for the first several weeks to discuss, learn, and be tested on their knowledge of Ojibwe curriculum, teaching strategies, and grammar paradigms. The last several weeks of the course are designed for students to develop their own lesson plans or methodological research on the instruction of the Ojibwe language. Guidance will be given at all stages. Prerequisite: OJIB 3312 or consent of instructor. (Might not be offered every year.)

OJIB 4430 Ojibwe Grammar and Linguistics (1 credit)

The application of knowledge from ML 3430 Linguistics to the Ojibwe language. Intensive grammar review as needed. Emphasis on aspects of the language that enhance the teaching of Ojibwe to English-speaking students. Prerequisite: OJIB 3312 or consent of instructor.

OJIB 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted.

Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Philosophy

The name of philosophy translates literally to 'love of wisdom.' Wisdom, as opposed to any sort of specialized knowledge, is the ability to discern what sorts of knowledge and skills lead to a better life for individuals and communities. The pursuit a good life requires individuals and communities to subject their priorities to careful scrutiny. Philosophy promotes a thoughtful engagement with the world around us through a careful analysis of the problems that confront us on a daily basis.

Bemidji State University's philosophy program emphasizes the history of philosophy and applied ethics. We examine closely how current debates in politics, law, religion, and the arts are grounded in longstanding theoretical debates. In our program, students are taught to read, write, and speak on those debates. In this way, students will develop knowledge and skills applicable to public service, law school, human rights, public policy, the arts, and religious leadership training.

Programs

- Philosophy, B.A. (Pre Law Emphasis) *major*
- Philosophy, B.A. *major*
- Philosophy *minor*

Career Directions

Business
Communications
Government
Higher Education
Law
Ministry
Nonprofit Organizations
Public Service
Also: Graduate Study

Preparation

Recommended High School Courses

Critical Thinking
Humanities
Science
Debate Recommended Activity

Philosophy, B.A. *major* Pre Law Emphasis

Required Credits: 39
Required GPA: 2.25

I REQUIRED COURSES

REQUIRED CORE COURSES:

- PHIL 2220 Ethics (3 credits)
- PHIL 2230 Logic (3 credits)

HISTORY CYCLE: COMPLETE THE FOLLOWING COURSES:

- PHIL 3310 Ancient and Medieval Philosophy (3 credits)
- PHIL 3320 Modern Philosophy (3 credits)
- PHIL 3330 Nineteenth Century Philosophy (3 credits)
- PHIL 3340 Twentieth-Century Philosophy (3 credits)

II REQUIRED ELECTIVES

COMPLETE 21 ELECTIVE CREDITS (AT LEAST 15 CREDITS MUST BE PHIL ELECTIVES. UP TO 6 CREDITS OF ELECTIVES MAY BE TAKEN FROM THE LISTED NON-PHIL COURSES:

- PHIL 2330 Philosophies of Non-Violence (3 credits)
- PHIL 2400 The American Mind (3 credits)
- PHIL 2954 Study-Travel, Humanities and the Arts (1-6 credits)
- PHIL 2925 People of the Environment: Environmental Ethics Perspective (3 credits)
- PHIL 3380 Political Philosophy (3 credits)

- PHIL 4490 Close Readings in Philosophy (1-3 credits)

NON-PHILOSOPHY COURES:

- HST 3258 The Roman Civil Law Tradition (3 credits)
- INST 4900 Social Justice (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 4200 Constitutional Law (3 credits)
- SOC 2230 Race and Ethnic Relations (3 credits)

SUGGESTED SEMESTER SCHEDULE FOR PHILOSOPHY MAJOR, B.S. PRE-LAW EMPHASIS

Students will be able to complete their major requirements in 2-3 years. This will allow students to participate in the BSU-Mitchell Hamline School of Law 3+3 Pre-Law Articulation.

Freshman

- PHIL 2220 Ethics (3 credits)
- PHIL 2230 Logic (3 credits)
- PHIL elective

Sophomore

- PHIL 3310 Ancient and Medieval Philosophy (3 credits)
- PHIL elective
- PHIL 3320 Modern Philosophy (3 credits)
- PHIL elective

Junior/Senior

- PHIL 3330 Nineteenth Century Philosophy (3 credits)
- PHIL elective

- PHIL 3340 Twentieth-Century Philosophy (3 credits)
- PHIL elective

Philosophy, B.A. *major*

Required Credits: 39

Required GPA: 2.25

I REQUIRED COURSES

REQUIRED CORE COURSES:

- PHIL 2220 Ethics (3 credits)
- PHIL 2230 Logic (3 credits)

HISTORY CYCLE: COMPLETE THE FOLLOWING COURSES:

- PHIL 3310 Ancient and Medieval Philosophy (3 credits)
- PHIL 3320 Modern Philosophy (3 credits)
- PHIL 3330 Nineteenth Century Philosophy (3 credits)
- PHIL 3340 Twentieth-Century Philosophy (3 credits)

II REQUIRED ELECTIVES

COMPLETE 21 ELECTIVE CREDITS (AT LEAST 15 CREDITS MUST BE PHIL ELECTIVES. UP TO 6 CREDITS OF ELECTIVES MAY BE TAKEN FROM THE LISTED NON-PHIL COURSES:

- PHIL 1100 Introduction to Philosophy (3 credits)
- PHIL 2240 Aesthetics (3 credits)
- PHIL 2250 Human Nature (3 credits)
- PHIL 2260 Women and Philosophy (3 credits)
- PHIL 2290 Topics or Philosophers (3 credits)
- PHIL 2310 Philosophy in Literature (3 credits)
- PHIL 2330 Philosophies of Non-Violence (3 credits)
- PHIL 2400 The American Mind (3 credits)
- PHIL 2925 People of the Environment: Environmental Ethics Perspective (3 credits)
- PHIL 2954 Study-Travel, Humanities and the Arts (1-6 credits)
- PHIL 3360 Asian Philosophy (3 credits)
- PHIL 3380 Political Philosophy (3 credits)
- PHIL 4490 Close Readings in Philosophy (1-3 credits)

SELECT UP TO 6 CREDITS FROM THE FOLLOWING IN CONSULTATION WITH PROGRAM DIRECTORS.

Note: Some courses below require pre-requisites that are not part of this program.

- ANTH 1110 Cultural Anthropology (3 credits)
- ARTH 2551 Art History Survey I (4 credits)
- ARTH 2552 Art History Survey II (4 credits)
- ENGL 2330 American Literature to 1865 (3 credits)
- ENGL 2337 American Literature from 1865 to Present (3 credits)
- HST 2799 Religion in America (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- INST 2201 Creation to Contact (3 credits)
- INST 4207 Indigenous Lifeways (3 credits)
- INST 4900 Social Justice (3 credits)
- LEAD 3500 Theories and Contexts of Leadership (3 credits)
- POL 3180 International Law and Organization (3 credits)

- POL 4200 Constitutional Law (3 credits)
- PSY 3367 Social Psychology (3 credits)
- PSY 3437 Cognitive Psychology (3 credits)
- SOC 2230 Race and Ethnic Relations (3 credits)
- SOC 3210 Social Movements and Change (3 credits)

Philosophy *minor*

Required Credits: 18

Required GPA: 2.00

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- PHIL 2220 Ethics (3 credits)
- PHIL 2230 Logic (3 credits)

II REQUIRED COURSES IN THE HISTORY OF PHILOSOPHY

SELECT 6 CREDITS FROM THE FOLLOWING COURSES:

- PHIL 3310 Ancient and Medieval Philosophy (3 credits)
- PHIL 3320 Modern Philosophy (3 credits)
- PHIL 3330 Nineteenth Century Philosophy (3 credits)
- PHIL 3340 Twentieth-Century Philosophy (3 credits)
- PHIL 3360 Asian Philosophy (3 credits)
- PHIL 3380 Political Philosophy (3 credits)

III REQUIRED ELECTIVES

SELECT 6 SEMESTER CREDITS OF ELECTIVES FROM PHILOSOPHY COURSES

Philosophy Courses

PHIL 1100 Introduction to Philosophy (3 credits)

Introduction to a variety of philosophical issues and the philosophers, past and present, who have tried to resolve them. Selection of readings and approach vary with instructor. Liberal Education Goal Area 6.

PHIL 2220 Ethics (3 credits)

Introduction to the philosophical treatment of selected moral issues; alternative theories of ethical right and wrong, good and bad will also be addressed. Liberal Education Goal Area(s) 6 & 9.

PHIL 2230 Logic (3 credits)

Methods of distinguishing between correct and incorrect reasoning. Special emphasis on deductive reasoning and informal fallacies. Liberal Education Goal Area 4.

PHIL 2240 Aesthetics (3 credits)

Philosophical problems involved in judgment and experience of beauty and ugliness in nature and art of various kinds. Might not be offered every year. Liberal Education Goal Area 6.

PHIL 2250 Human Nature (3 credits)

Various views of the nature of human beings. Might not be offered every year. Liberal Education Goal Area(s) 6 & 8.

PHIL 2260 Women and Philosophy (3 credits)

A historical survey of the views of patriarchal and feminist thinkers from Plato to the present. Might not be offered every year. Liberal Education Goal Areas 6 & 8.

PHIL 2290 Topics or Philosophers (3 credits)

Study of a philosophical subject or movement or a philosopher or group of philosophers, as announced in the schedule. Might not be offered every year.

PHIL 2310 Philosophy in Literature (3 credits)

Exploration of a variety of literary texts with an emphasis on the philosophical issues they raise. Might not be offered every year. Liberal Education Goal Area 6.

PHIL 2330 Philosophies of Non-Violence (3 credits)

Philosophical foundations of non-violent conflict resolution as they have been articulated in a variety of historical and cultural contexts. Questions regarding moral, political, and religious values, as well as related metaphysical and epistemological issues, will be addressed. Might not be offered every year. Liberal Education Goal Areas 6 & 9.

PHIL 2400 The American Mind (3 credits)

The American Mind acquaints students with American philosophical traditions, emphasizing the diversity of views on topics such as freedom, knowledge, faith, peace, and "the American dream". The specific themes of the course will be up to the instructor, but the current relevance of debates in American philosophy will be the focus. Might not be offered every year. Liberal Education Goal Areas 6 & 9.

PHIL 2925 People of the Environment: Environmental Ethics Perspective (3 credits)

The purpose of this section of People of the Environment is to examine our moral obligations to the environment. No matter how strong these moral obligations may be, the only way to follow through with them is in the political arena. This course is therefore largely devoted to exploring the intersection of environmental ethics and politics. The course explores a number of environmental issues, the theoretical and practical impasses of the environmental movement, and environmental philosophy, as well as the challenge of mitigating global climate change. Liberal Education Goal Area 10.

PHIL 2954 Study-Travel, Humanities and the Arts (1-6 credits)

Study-Travel course in Philosophy for Lib Ed Goal Area 6.

PHIL 3310 Ancient and Medieval Philosophy (3 credits)

History of European philosophy from Thales to William of Occam. Might not be offered every year. Liberal Education Goal Areas 6 & 8.

PHIL 3320 Modern Philosophy (3 credits)

Historical survey of 17th and 18th century European philosophy. Might not be offered every year. Liberal Education Goal Area 6.

PHIL 3330 Nineteenth Century Philosophy (3 credits)

History of European philosophy from Hegel to Nietzsche. Might not be offered every year. Liberal Education Goal Area 6.

PHIL 3340 Twentieth-Century Philosophy (3 credits)

This course covers the major movements in twentieth-century Western philosophy, including contemporary analytic philosophy and continental philosophy. Might not be offered every year. Liberal Education Goal Areas 6 & 7.

PHIL 3360 Asian Philosophy (3 credits)

Historical survey of influential philosophies and philosophers of Asia. Might not be offered every year. Liberal Education Goal Areas 6 & 8.

PHIL 3380 Political Philosophy (3 credits)

Various philosophical views on the nature of human society and the state. Might not be offered every year. Liberal Education Goal Areas 6 & 9.

PHIL 4490 Close Readings in Philosophy (1-3 credits)

In this course students will practice a close reading of a single text over the course of the semester. We will pay very close attention to the author's strategic choice of vocabulary. We will become attentive to the thinkers to whom the philosopher responds, as well as the historical and philosophical influences that shape the ideas presented in the text. We will move slowly through each paragraph, thinking carefully about the practical implications of each element of the theory in question, as well as the theory as a whole. Topics will vary from semester to semester.

PHIL 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Physical Education

The vision of the Department of Human Performance, Sport, and Health is “preparing and empowering future professionals to promote physical activity, health, and sport.”

The mission of the Department of Human Performance, Sport, and Health is “to provide students with opportunities to excel through purposeful experiences resulting in skills, including leadership, communication, use of technology, and appreciation of individual differences. Through our programs, students develop an appreciation of the contributions of physical activity, wellness, and sport to society.”

The Physical Education teacher licensure program, Minnesota Board of Teaching approved, leads to licensure for teaching physical education in K-12 schools. It also prepares students for graduate school. The curriculum includes studies in the basic and exercise sciences, methods and activities, curricular development, and assessment as well as professional education. Hands-on learning is emphasized in laboratory and methods classes and includes teaching experiences in the field.

The Department of Human Performance, Sport, and Health offers minors and a coaching specialist program that provide students with the skills and expertise to work in physical activity settings, coach teams, or teach special needs students. Also, in addition to offering a variety of activities classes that enhance students' liberal education, the department works with Campus Recreation and Athletics to offer a broad range of learning experiences.

Programs

- Physical Education, B.S. ((Teacher Licensure)) *major*
- Developmental/ Adapted Physical Education, B.S. ((Teacher Licensure)) *minor*
- Human Performance Minor *minor*
- Coaching Certificate *cert*

Career Directions

Athletic Coaching

Developmental Adapted Physical Education Teacher
Physical Education Teaching
Teaching physical activities in a variety of settings
Also: Graduate Study and Professional Programs

Preparation

Recommended High School Courses

Biology
Chemistry
Coaching
Exercise Science
Health
Life Sciences
Physical Education
Sports
Wellness

Physical Education, B.S. *major* (Teacher Licensure)

Required Credits: 79
Required GPA: 2.50

I REQUIRED COURSES

Select 1 of the following courses:

- BIOL 1110 Human Biology (4 credits)
- BIOL 1400 Cellular Principles (4 credits)

Complete the following courses:

- BIOL 1111 Anatomy and Physiology for Allied Health I (4 credits)
- HLTH 2100 First Aid and CPR/AED (1 credit)
- PHED 2100 Foundations of Physical Education, Exercise Science, and Sport (3 credits)
- PHED 3100 Motor Development (2 credits)
- PHED 3110 Motor Learning (2 credits)
- PHED 3120 Psychology of Sport (2 credits)
- PHED 3200 Introduction to Sport Biomechanics (3 credits)
- PHED 3300 Physiology of Exercise and Nutrition (3 credits)
- PHED 3449 Socio-Culture and Ethical Issues in Sport (3 credits)

- PHED 3504 Teaching Rhythms and Dance (2 credits)
- PHED 3505 Teaching Elementary Physical Education (2 credits)
- PHED 3604 Teaching Team Sports (2 credits)
- PHED 3605 Teaching Individual Sports (2 credits)
- PHED 3607 Teaching Fitness (2 credits)
- PHED 4400 Curriculum and Assessment in Physical Education (3 credits)
- PHED 4500 Inclusive Physical Education (3 credits)

Complete the following course:

- PHED 4920 DGS: (1 credit)

Complete the following course:

- PHED 4870 Practicum in Physical Education Teaching (1 credit)

II REQUIRED AQUATICS ELECTIVES

Select 1 of the following courses:

- PHED 1116 Advanced Swimming (1 credit)
- PHED 2630 Lifeguard Training (3 credits)
- PHED 2640 Water Safety Instructor (3 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

Program Learning Outcomes | Physical Education, B.S. (Teacher Licensure)

1. Collaboration: Identifies strategies to become an advocate in the school & community to promote a variety of physical activity opportunities (C6) 2. Identifies & actively seeks community resources to enhance physical activity opportunities (B7).

2. Growth & Development: Designs safe instruction that meets student developmental needs in the physical, cognitive, and social/emotional domains (B7, B8) 2. Understands the biological, psychological, sociological, experiential, & environmental factors that influence developmental readiness to learn & refine movement skills (A4) 3. Identifies, selects, implements appropriate learning/practice opportunities based on understanding the student, learning environment, task (C1).

3. Diverse Students: Identify, select, & implement appropriate instruction that is sensitive to students' strengths/weaknesses, multiple needs, learning styles, & prior experiences (B11).

4. Management & Motivation: Uses managerial routines that create smoothly functioning learning experiences & environments (C2) 2. Uses a variety of developmentally appropriate practices to motivate students to participate in physical activity in and out of school (C3) 3. Uses strategies to help students demonstrate responsible & social behaviors that promote positive relationships & a productive learning environment (B6).

5. Communication: Demonstrates effective communication skills (e.g. use of language, clarity, conciseness, pacing, giving & receiving feedback, age appropriate language, non-verbal communication (D2) 2. Communicates managerial & instructional information in a variety of ways (e.g. bulletin boards, music, task cards, posters, Internet, video) 3. Communicates in ways that demonstrate sensitivity to all students (e.g. ethnic, cultural, socio-economic, ability, gender differences) (D3).

6. Planning & Instruction: Identifies, develops, & implements appropriate program & instructional goals (B4, B5) 2. Develops plans linked to program & instructional goals, & student needs (B4, B5) 3. Uses instructional strategies, based on content, student needs, & safety issues, to facilitate learning (C1, C9) 4. Designs & implements learning experiences that are safe, appropriate, relevant, and based on principles of effective instruction (C2, C9) 5. Applies disciplinary & pedagogical knowledge in developing & implementing effective learning environments & experiences (C2, C9) 6. Provides learning experiences that allow students to integrate knowledge & skills from multiple subject areas (B4) 7. Selects & implements appropriate teaching resources & curriculum materials (B5) 8. Uses effective demonstrations & explanations to link physical activity

concepts to learning experiences. 9. Develops & uses appropriate instructional cues & prompts to facilitate competent motor skill performance (A3)

7. Student Assessment: Uses a variety of appropriate authentic & traditional assessment techniques to assess student understanding & performance, provide feedback, & communicate student progress (C2) 2. Involves students in self & peer assessment 3. Interprets & uses learning & performance data to make informed curricular and/or instructional decisions (C2, C4).

8. Reflection: Uses a reflective cycle that describes teaching, justification of teaching performance, critique of teaching performance, setting of teaching goals, & implementation of change.

9. Technology: Demonstrates knowledge of current technologies & their application in physical education.

SUGGESTED SEMESTER SCHEDULE FOR PHYSICAL EDUCATION MAJOR, B.S. (TEACHER LICENSURE)

Students are encouraged to take the required Physical Education, B.S. courses in approximate numerical order. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions. Students are encouraged to consult the course descriptions for prerequisites.

Freshman

- BIOL1110
or BIOL1400
- PHED2100
- Liberal Education requirements

Sophomore

- BIOL1111
- HLTH2100
- PHED3100
- PHED3110
- PHED3120
- PHED3200
- PHED3300
- Required Electives in Major
- Liberal Education requirements
- Take the Pre-professional Skills Test

Junior

- Begin Professional Education Courses
- PHED3449
- PHED3504
- PHED3505
- PHED3604
- PHED3605
- PHED3607
- Required Electives in Major
- Liberal Education requirements

Senior

- PHED4400
- PHED4500
- PHED4870
- PHED4920
- Complete Professional Education Courses including student teaching

Developmental/ Adapted Physical Education, B.S. *minor* (Teacher Licensure)

Required Credits: 18
Required GPA: 2.50

I REQUIRED SPECIAL EDUCATION COURSES

COMPLETE THE FOLLOWING COURSES:

- SPED 3600 Study of the Learner with Special Needs (3 credits)
- SPED 3650 Collaborative Techniques for Special Educators (3 credits)
- SPED 3655 Due Process in Special Education I: Individual Education Plan (3 credits)

II REQUIRED PHYSICAL EDUCATION COURSES

COMPLETE THE FOLLOWING COURSES:

- PHED 4514 DAPE Program Planning (3 credits)
- PHED 4515 DAPE Teaching Strategies (3 credits)
- PHED 4516 The DAPE Professional (3 credits)

Human Performance Minor *minor*

Required Credits: 21
Required GPA: 2.00

I REQUIRED COURSES

Complete the following courses:

- BIOL 1110 Human Biology (4 credits)
or BIOL 1400 Cellular Principles (4 credits)
- HLTH 2100 First Aid and CPR/AED (1 credit)
- PHED 2100 Foundations of Physical Education, Exercise Science, and Sport (3 credits)
- PHED 3300 Physiology of Exercise and Nutrition (3 credits)
- PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)

Complete 1-3 credits of the following course:

- PHED 4975 Internship: Human Performance (1-3 credits)

REQUIRED OPTION

Select one of the following options (Physical Education and Exercise Science majors may not double count courses in either option.)

II REQUIRED OPTION

Option A. Pedagogy

Select 3 of the following courses:

- PHED 2640 Water Safety Instructor (3 credits)
- PHED 3100 Motor Development (2 credits)
or PHED 3110 Motor Learning (2 credits)
- PHED 3504 Teaching Rhythms and Dance (2 credits)
- PHED 3505 Teaching Elementary Physical Education (2 credits)
- PHED 3604 Teaching Team Sports (2 credits)
- PHED 3605 Teaching Individual Sports (2 credits)

- PHED 3607 Teaching Fitness (2 credits)

Option B. Fitness and Training

Select 1 of the following:

- PHED 4160 Advanced Fitness Assessment & Prescription-Aerobic (3 credits)
- PHED 4170 Advanced Principles for Strength and Speed Training Exercise (3 credits)

Select an additional 2 of the following courses:

Note: PHED 4160 and PHED 4170 cannot be double counted under Option B.

- HLTH 3300 Nutrition (3 credits)
- PHED 1240 Skills for Life: Techniques of Neuromuscular Relaxation (1 credit)
- PHED 3100 Motor Development (2 credits)
- PHED 3200 Introduction to Sport Biomechanics (3 credits)
- PHED 3504 Teaching Rhythms and Dance (2 credits)
- PHED 4160 Advanced Fitness Assessment & Prescription-Aerobic (3 credits)
- PHED 4170 Advanced Principles for Strength and Speed Training Exercise (3 credits)

Coaching Certificate *cert*

Required Credits: 12
Required GPA: 2.00

I REQUIRED THEORY COURSES

Complete the following courses:

- HLTH 2100 First Aid and CPR/AED (1 credit)
- PHED 3090 Sport Physiology (2 credits)
- PHED 3120 Psychology of Sport (2 credits)
- PHED 3190 Athletic Training (2 credits)
- PHED 3690 Coaching Principles (2 credits)

II REQUIRED ELECTIVE COURSES

Select 1 of the following courses:

- PHED 3710 Basketball Coaching (2 credits)
- PHED 3720 Football Coaching (2 credits)
- PHED 3740 Ice Hockey Coaching (2 credits)
- PHED 3750 Soccer Coaching (2 credits)
- PHED 3770 Swimming Coaching (2 credits)
- PHED 3790 Track and Field Coaching (2 credits)
- PHED 3800 Volleyball Coaching (2 credits)

III REQUIRED PRACTICUM

Complete the following course:

- PHED 4879 Athletic Coaching Practicum (1 credit)

Physical Education Courses

PHED 1114 Skills For Life: Beginning Swimming (1 credit)

An activity course for non-swimmers. Emphasis will be on personal adjustment to the water, basic strokes, and fundamentals of water safety. Liberal Education Goal Area 11.

PHED 1115 Intermediate Swimming (1 credit)

An activity course for swimmers who have the ability to jump into deep water, swim a front stroke 25 yards, and swim on the back 25 yards. Emphasis will be on five basic strokes, elementary diving, and related aquatic skills. Course may lead to American Red Cross Learn to Swim Certification Level 4 or 5. May not be offered every year.

PHED 1116 Advanced Swimming (1 credit)

An activity course for swimmers who can swim in satisfactory form 25 yards of each of the five basic strokes (back crawl, breaststroke, front crawl, elementary backstroke, sidestroke). Emphasis will be on developing and refining thirteen strokes, diving and other advanced aquatic skills. Course leads to American Red Cross Learn to Swim Certification Level 6 - Fitness Swimmer. This course is preparatory for the Water Safety Instructor course.

PHED 1120 Introduction to Sea Kayaking (1 credit)

An activity course that introduces the basics of kayak history, design, skills, and equipment. Taught through lecture, demonstration, and both on- and off-the-water skills practice.

PHED 1139 Beginning Scuba Diving (1 credit)

Upon completion of this course, students will understand and be able to demonstrate the safe scuba diving practices of the Professional Association of Dive Instructors (PADI) curriculum. Focuses on classroom knowledge development and confined-water skill development. Equipment and supplies are provided. This course is phase 1 of the PADI certification course. Students wishing to complete the certification as an Open Water Diver will need to take additional instruction. Liberal Education Goal Area 11.

PHED 1180 Canoeing (1 credit)

An activity course that introduces the fundamental skills of canoeing. Emphasis is on safety and on tandem and solo paddling techniques. Prerequisite: swimming test or consent of instructor. Liberal Education Goal Area 11.

PHED 1190 Skills for Life: Sailing (1 credit)

An activity course that introduces the fundamental skills of sailing. Development of skills and knowledge of safety, nomenclature, designs, rigging, handling, maintaining, and racing for sailboats. Prerequisite: swimming test or consent of instructor. Liberal Education Goal Area 11.

PHED 1200 Introduction To Rock Climbing (1 credit)

Introduction to the basics of Top Rope Rock Climbing and Rappelling through practice at the BSU Climbing Wall and/or other sites. Also includes climbing communication, "leave no trace" climbing techniques, techniques for setting anchors, and discussion of environmental values. Liberal Education Goal Area 11.

PHED 1230 Yoga (1 credit)

This course introduces students to basic yoga techniques and allows practice and development of the physical skills needed to perform approximately 40 basic exercises and postures. Liberal Education Goal Area 11.

PHED 1240 Skills for Life: Techniques of Neuromuscular Relaxation (1 credit)

An introduction to skill development in Jacobson's techniques to improve awareness of muscular tension and procedures for enhanced neuromuscular relaxation. Origins of stress and the body's responses to stress and stress management techniques will be included. Liberal Education Goal Area 11.

PHED 1260 Skills for Life: Cycling (1 credit)

Introduction to and practice in bicycling either off-road or road riding. Basic maintenance skills such as adjusting derailleurs, brakes and changing tires will be presented. Information on cycling for fitness, racing and bicycle touring will be presented. Liberal Education Goal Area 11.

PHED 1300 Skills for Life: Weight Training (1 credit)

An activity course that consists of an individualized or group weight program dealing with the fundamentals and practice of resistance exercise techniques for the development of the human body. Liberal Education Goal Area 11.

PHED 1380 Skills for Life: Self Defense (1 credit)

An activity course that examines and applies preventative and precautionary measures, assault awareness information, and most commonly needed personal self-defense skills and techniques. Liberal Education Goal Area 11.

PHED 1430 Skills for Life: Archery (1 credit)

An activity course that examines and applies the fundamentals and skills of archery. Selection and care of equipment, instruction and practice of shooting skills and scoring in target archery will be included. Liberal Education Goal Area 11.

PHED 1454 Skills for Life: Golf (1 credit)

An activity course that examines and applies the fundamentals and skills of golf. Selection and care of equipment, history and rules of the game, safety, etiquette, instruction and practice will be included. Liberal Education Goal Area 11.

PHED 1474 Skills for Life: Bowling (1 credit)

An activity course that examines and applies the fundamentals and skills of bowling. Students will demonstrate a knowledge of bowling history, scoring, handicapping and skills in bowling and etiquette. Liberal Education Goal Area 11.

PHED 1490 Skills for Life: Badminton (1 credit)

An activity course that examines and applies the fundamentals and skills of badminton. Students will demonstrate a knowledge of badminton history, scoring, and rules and regulations in singles and doubles play. Racket grips, strokes, footwork and tactics will be discussed and practiced. Liberal Education Goal Area 11.

PHED 1500 Skills for Life: Ice Skating (1 credit)

An activity course that examines and applies the fundamentals and skills of ice skating. Forward and backward stroking, crossovers and stops will be part of the evaluation. Liberal Education Goal Area 11.

PHED 1520 Downhill Skiing (1 credit)

An activity course that introduces the basic skills of beginning downhill skiing. Technique and skill development in traversing, turning, speed control and stopping will be included. The language of ski safety will also be discussed. (May not be offered every year.)

PHED 1530 Snowboarding (1 credit)

An activity course that introduces the basic skills of snowboarding, including toe turns, heel turns, carving, skating, stopping, and various forms of "riding." Includes an overview of snowboard equipment and how to select appropriate equipment. Liberal Education Goal Area 11.

PHED 1540 Skills for Life: Curling (1 credit)

An activity course that introduces the skills of curling, including techniques of throwing rocks and sweeping as well as strategies, rules, and scoring. (May not be offered every year) Liberal Education Goal Area 11.

PHED 1554 Skills for Life: Cross Country Skiing (1 credit)

An activity course that introduces the basic skills of cross country skiing including downhill turns and stopping. The student may choose to learn either skate skiing skills or the traditional skills of diagonal stride skiing. Some trail skiing will be included. Liberal Education Goal Area 11.

PHED 1574 Skills for Life: Tennis (1 credit)

An activity course that introduces the basic skills of tennis including techniques of basic grips, strokes and footwork. Entry level strategies for singles and doubles, history and rules of the game, etiquette, and scoring will be taught. Liberal Education Goal Area 11.

PHED 1604 Skills for Life: Social Dance I (1 credit)

This beginner-level activity course examines and applies the fundamentals and skills of contemporary, popular, and club style partner dances not typically included in a classic ballroom syllabus. Liberal Education Goal Area 11.

PHED 1605 Social Dance II (1 credit)

This intermediate- to advanced-level activity course examines and applies the fundamentals and skills of contemporary, popular, and club style partner dances not typically included in a classic ballroom syllabus. Prerequisite: PHED 1604 or consent of instructor. (Might not be offered every year.)

PHED 1606 Skills for Life: American Style Ballroom Dance I (1 credit)

An activity course that examines and applies the fundamentals and skills of classic ballroom dance. The steps taught are from the Dance Vision International Dance Association (DVIDA) American Bronze syllabus. Liberal Education Goal Area(s): 11.

PHED 1607 Skills for Life: American Style Ballroom Dance II (1 credit)

An activity course that examines and applies the fundamentals and skills of classic ballroom dance at an intermediate to advanced level. The steps taught are from the Dance Vision International Dance Association (DVIDA) American Bronze syllabus. Prerequisite: PHED 1606 or consent of instructor.

PHED 1608 Skills for Life: International Style Ballroom Dance (1 credit)

An activity course that examines and applies the fundamentals and skills of classic international style ballroom dance. The steps taught are from the Dance Vision International Dance Association (DVIDA) International Bronze syllabus. Liberal Education Goal Area 11.

PHED 1764 Skills for Life: Basketball (1 credit)

An activity course that examines and applies the fundamentals and skills of basketball. History and rules of the game, safety, drills, entry level strategies, conditioning, individual and group instruction and practice will be included. Liberal Education Goal Area 11.

PHED 1784 Skills for Life: Volleyball (1 credit)

An activity course that examines and applies the fundamentals and skills of volleyball. History and development, basic team systems, rules and strategies of the game will be included. Liberal Education Goal Area 11.

PHED 1814 Skills for Life: Softball (1 credit)

An activity course that examines and applies the fundamentals and skills of slow and fast pitch softball. History and rules of the game, terminology, score keeping, safety, field playing areas, drills, and entry level game strategies will be included. Liberal Education Goal Area 11.

PHED 1840 Skills for Life: Racquetball (1 credit)

An activity course that examines and applies the fundamentals and skills of racquetball. Components such as safety, serving and volleying will be emphasized. Singles, cutthroat, and doubles play will be introduced. Liberal Education Goal Area 11.

PHED 1854 Skills for Life: Soccer (1 credit)

An activity course that examines and applies the fundamentals and skills of soccer. The history of the game, rules and regulations and entry level drill and game strategies will be examined. Liberal Education Goal Area 11.

PHED 1890 Lifetime Fitness (2 credits)

This personal fitness class will allow students to develop their own aerobic and possibly strengthening program. They will receive some instruction in the development of fitness, use of equipment, etc., but the focus will be active participation in walking, jogging, rowing, stepping, etc. Liberal Education Goal Area 11.

PHED 2100 Foundations of Physical Education, Exercise Science, and Sport (3 credits)

A critical examination of the history, people, events, programs and philosophical positions that have led to the current status of physical education, fitness and sport in the United States. Students will be provided with up-to-date information about physical education and its diverse sub-fields as well as an introduction to career roles and preparation for professional service in all areas of physical education, kinesiology and exercise science.

PHED 2109 Introduction to Sport Management (3 credits)

This course will help and assist the prospective sport management major to discover specialized training personnel positions in the rapidly growing sport management field. Concentration will be on the duties and tasks performed, and the competencies needed for a career in sport management.

PHED 2200 A Lifestyle for Wellness (2 credits)

An examination of the social, emotional, mental, spiritual and physical dimensions of wellness. Students will examine their own lifestyles and learn how to make behavioral changes. Emphasis on self-esteem, nutritional habits, exercise habits and the importance of self-responsibility. Liberal Education Goal Area 9.

PHED 2630 Lifeguard Training (3 credits)

A lecture course with laboratory activity that examines and applies the fundamentals and skills of supervising swimming pool and water front activities. American Red Cross Certification may be earned for: Lifeguard Training and First Aid, CPR/AED for the Professional Rescuer, and Waterfront Lifeguarding. Good swimming skills are needed to succeed in this course.

PHED 2640 Water Safety Instructor (3 credits)

A lecture course with laboratory activity that constitutes all the aspects for the training of American Red Cross Water Safety Instructors. American Red Cross Water Safety Instructor Certification may be earned. Contact professor for further details. (May not be offered every year.)

PHED 2925 People of the Environment: Outdoor Ethics/Recreational Activity Perspective (3 credits)

This class will explore the concepts of wilderness and recreation and how these relate to practices that protect or enhance the environment. May not be offered every year. Liberal Education Goal Area 10.

PHED 2970 Internship: Sport Management Practicum (2 credits)

When taken as Sport Management Practices, the following description applies: A study of various skills, roles, and functions of sport managers in managing people, the workplace, and day-to-day operations. Topics include definitions; management theories; functions of management; time management skills; effective decision making and problem solving; motivational theories, morale, and strategies; leadership theories; personal styles of leadership; and skills and competencies of sport leaders. Also includes practical experience in the organization and administration of sporting events or related areas. Prerequisite: PHED 2109 or consent of instructor.

PHED 3090 Sport Physiology (2 credits)

Emphasis on conditioning athletes including body composition, nutrition, cardiovascular fitness, flexibility, strength and other conditioning issues as related to sport training and participation. This course is designed primarily for non-PE majors who are interested in the coaching specialist program.

PHED 3100 Motor Development (2 credits)

An introduction to motor development and related motor theories. Application of these basic motor principles to the teaching of physical education and activity at all levels.

PHED 3110 Motor Learning (2 credits)

An introductory class in motor control and learning that gives an overview of the processes and mechanisms involved in generating, acquiring, and refining motor skills and of factors that foster or hinder the acquisition and refinement of these skills.

PHED 3120 Psychology of Sport (2 credits)

Study of the general relationship between individuals and sports behavior. Covers competitiveness, goal setting, peak performance, psychosocial influences, and rehabilitation. Also includes guides to show how teaching and learning may be applied to the coaching of sport and to bring out the relationship of meaningful learning to successful athletic coaching.

PHED 3190 Athletic Training (2 credits)

A lecture course with laboratory activity introducing the five practice domains of athletic training that include: prevention, recognition and evaluation, rehabilitation, reconditioning of athletic injuries, administration and professional development. Other topics include the theory and practice of athletic taping and risk management.

PHED 3200 Introduction to Sport Biomechanics (3 credits)

Introduction to biomechanical concepts and principles. Application of these principles to evaluating and improving performance in physical activities. Introduction to methods for qualitative movement analysis. Prerequisite(s): BIOL 1111 (or BIOL 3250) and PHED 3100 or consent of instructor.

PHED 3219 Sport Economics (2 credits)

This course will provide the student an understanding of theories and concepts related to economics of sport. Topics covered: economic growth of the sport industry, concepts of competitive strategy, economic impact principles, economic theory applied to various levels of sport, labor relations, stadium and arenas, venues and events, manufacturing, and service industries. Prerequisite: ECON 2000 or consent of instructor.

PHED 3300 Physiology of Exercise and Nutrition (3 credits)

An examination of the effects of exercise on the systems of the body as they relate to health and performance. Nutritional concepts of weight control, ergogenic aids and fluid replacement will be discussed. Techniques for developing, prescribing, and assessing fitness components will be presented. Prerequisite(s): BIOL 1111 or BIOL 3250 or consent of instructor.

PHED 3449 Socio-Culture and Ethical Issues in Sport (3 credits)

Study of the general relationship between individuals and sport, and sport and society. Examine the ways sport is linked to other spheres of social life, the organization and behavior patterns of both individuals and groups within sport settings, and the cultural, structural, and situational factors affecting sport and sport experiences.

PHED 3504 Teaching Rhythms and Dance (2 credits)

Methods and materials for teaching various forms of rhythms and dance. Components include effective individual and group instruction; cultural and historical implications; dance steps, fundamentals, and a variety of traditional, creative and contemporary dance forms applicable to the K-12 setting. Prerequisite: entrance into the teacher education program or consent of instructor.

PHED 3505 Teaching Elementary Physical Education (2 credits)

An introduction to the developmental physical education program at the elementary school level. Components include learner characteristics, program content and organization and methods of teaching physical education. Prerequisite: PHED 3504 and entrance into the teacher education program or consent of instructor.

PHED 3509 Sport Event Management (2 credits)

This course will provide the student with an understanding of the responsibilities in managing sport facilities, administering, organizing and producing sporting events. The topics will range from personnel issues, facility protocol and procedures, and emergency plans. Prerequisite: BUAD 2280 or consent of instructor.

PHED 3519 Sport Facility Management (2 credits)

This course provides an understanding of sport facility management, facility planning, site and design development, systems and operations, and facility administration. Prerequisite: BUAD 2280 or consent of instructor.

PHED 3600 Sport Marketing (3 credits)

Study of fundamental marketing principles utilized in sport. Topics include definitions, marketing planning process, goals and objectives of marketing, marketing mix, target markets, consumer behavior, sponsorship, endorsement, merchandising, fundraising, and mass communication. Prerequisite(s): BUAD 2280 or consent of instructor.

PHED 3604 Teaching Team Sports (2 credits)

Activities and teaching methods for team sport activities included in current physical education programs at all levels. Prerequisite: entrance into the teacher education program or consent of instructor.

PHED 3605 Teaching Individual Sports (2 credits)

Methods of teaching and the practice of the skills such sports as tennis, golf, pickleball, archery, badminton, bowling, and racquetball are the focus. Development of lesson plan, unit plans and application of teaching methods is emphasized. Prerequisite: entrance into the teacher education program or consent of instructor.

PHED 3607 Teaching Fitness (2 credits)

Methods of teaching and the practice in the development of physical fitness, including development of the health related fitness components of strength, cardiovascular endurance, muscular endurance, and flexibility with activities such as cross country skiing, exercise walking, orienteering, cycling, yoga, and weight training. Prerequisite: Entrance into the Teacher Education program or consent of instructor.

PHED 3690 Coaching Principles (2 credits)

The fundamental concepts and basic trends in the field of coaching. The history, present philosophies, psychology, pedagogy, physiology, sports medicine and objectives will be analyzed and examined. Topics that are universal to all coaching disciplines like scheduling, risk management, sport law, dealing with media, parents, peer pressure, and academic requirements will be covered.

PHED 3710 Basketball Coaching (2 credits)

The study of the game of basketball and the instructional techniques of individual and team play. Organizational procedures, practice preparation, scouting, rules and regulations, skill sequence and development, offensive, defensive and transitional systems, coaching philosophies and public relations will be examined.

PHED 3720 Football Coaching (2 credits)

A comprehensive study of developing a successful football team with an emphasis on teaching appropriate techniques and skills of the game. Practice and game organization, delegation of staff responsibilities and public relations will also be examined.

PHED 3740 Ice Hockey Coaching (2 credits)

In depth lectures and discussion concerning offensive and defensive skills and tactics, power play and penalty killing. Skilled positional play of goalies, defensemen, centers, and wings (forwards). Coaching techniques, motivational and leadership development, theory, rules, and regulations. Additional assignments involve planning and evaluating practices, games and athletic talent. Rules, budgets, and equipment repair will be discussed. (May not be offered every year.)

PHED 3750 Soccer Coaching (2 credits)

Organization and preparation for interscholastic competition. Emphasis will be on teaching specific soccer skills, individual player structures, practice preparation, and management. Strategies, conditioning and psychology of coaching issues will be examined. (May not be offered every year.)

PHED 3770 Swimming Coaching (2 credits)

Emphasis will be on developing knowledge and understanding of the applications of various laws of motion, leverage and flotation in the teaching of advanced swimming and diving skills. Emphasis on pool operation, swimming meet organization and swimming meet rules is included. Class participation includes classroom and laboratory experiences. (May not be offered every year.)

PHED 3790 Track and Field Coaching (2 credits)

Discussion and application of fundamental concepts required for effective teaching of the events in track and field. Event enrollment and management along with the aspects of practice and event coaching will be discussed.

PHED 3800 Volleyball Coaching (2 credits)

Provides information and training for teaching and coaching volleyball with an emphasis on the high school level. Class lecture and application activities on the court included. (May not be offered every year.)

PHED 4160 Advanced Fitness Assessment & Prescription-Aerobic (3 credits)

Theory and practice of physical fitness assessment for the purpose of prescribing aerobic exercise to adults, both healthy populations and those with special conditions, such as obesity, diabetes, osteoporosis, asthma, hypertension, and heart disease. Prepares students for American College of Sports Medicine (ACSM) Health Fitness Specialist exam as well as other personal trainer certifications. Prerequisite: PHED 3300 or consent of instructor.

PHED 4170 Advanced Principles for Strength and Speed Training Exercise (3 credits)

Theory and practice of strength and speed training with emphasis on technique analysis and instructional methods for strength training. Includes facility design and equipment purchasing and maintenance. Prepares students for National Strength and Conditioning Association Certified Strength and Conditioning Specialist (CSCS). Prerequisite: PHED 3300 or consent of instructor.

PHED 4200 Methods of Teaching Elementary Physical Education to Classroom Teachers (1 credit)

Organization and conduct of the physical education program in the elementary school.

PHED 4209 Sport Finance (3 credits)

This course will provide the student an understanding of theories and concepts used in financial resource management for the operation of programs in both public and private sectors of sport. Topics include ethical concerns, decision making, principles of budgeting, budget development, financial statements, spread sheet utilization, and sources of revenue for financing sport. Prerequisites: ACCT 2101 or consent of instructor.

PHED 4250 Teaching Secondary Physical Education (2 credits)

An online methods course designed specifically for physical education teacher licensure candidates in the FasTrack program. Students utilize national physical education standards, appropriate management protocols and pedagogical best practice to plan and deliver physical education lessons for students in grades 6-12. Students design learning and assessment activities that align with current national standards and learning outcomes.

PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)

An overview of the field of sports law, with applications to amateur sport, professional sport, recreation, health, healthcare, and fitness settings. Key areas of the law are identified, and applications within the sport, health and fitness industries are studied. Provides information about legal issues that may help professionals avoid litigation by foreseeing and preventing problems. Prerequisite: Junior or Senior status.

PHED 4360 Adventure Programming (3 credits)

Nuts and bolts of planning educational outdoor adventure experiences. Also reviews theory, literature, and program types.

PHED 4400 Curriculum and Assessment in Physical Education (3 credits)

Focus on the curricular process and its evaluation to determine if the curriculum is meeting community and individual student needs. A second focus will be on assessment goals, objectives and outcomes of the cognitive, affective and motor aspects of physical education. Prerequisites: PHED 2100, PHED 3200, and PHED 3300 or consent of instructor.

PHED 4409 Sport Business Management (3 credits)

Study of the structures and processes of sport organizations, as well as examine principles and concepts as they apply to sport businesses. Topics include definitions; and internal processes such as social responsibility and ethics, organizational behavior and structure, organizational philosophy, mission statements, goals and objectives, chain of command, strategic plans, adapting to change, and so on. Prerequisite(s): PHED 2970 or consent of instructor.

PHED 4500 Inclusive Physical Education (3 credits)

An introduction to the study and practice of teaching physical education to children with disabilities in the public schools. Prerequisites: PHED 3100, PHED 3110, PHED 3200, PHED 3504, PHED 3505, PHED 3604, PHED 3605, PHED 3607, or consent of instructor.

PHED 4514 DAPE Program Planning (3 credits)

First in a series of three courses, DAPE Program Planning provides knowledge necessary to develop, organize, and administer DAPE programs supported by DAPE historical and philosophical foundations, legal bases, the IEP process, resources, and an understanding of health-related physical and motor fitness, assistive technology, and adapted equipment. Students assess fitness, motor and behavioral skills of three K-12 students with identified disabilities at a local school. Using assessment information, students develop DAPE programs for elementary, middle, and secondary school levels. Programs reflect individual student goals and objectives. The course includes 15 hours of required field experience. Prerequisites: SPED 3600, SPED 3650, co-requisite SPED 3655.

PHED 4515 DAPE Teaching Strategies (3 credits)

Second in a series of three courses, DAPE Teaching Strategies provides knowledge and practical experiences necessary for future teachers to develop individual DAPE lessons based on typical and atypical motor development patterns, to deliver lesson plan content using best practice instructional strategies, behavioral interventions, safe learning environments and methods of communicating with nonverbal students. Students will teach the lesson plans to K-12 DAPE students. The course includes 30 hours of required field experience. Prerequisites: SPED 3600, SPED 3650, SPED 3655; PHED 4514.

PHED 4516 The DAPE Professional (3 credits)

Third in a series of three courses, The DAPE Professional: provides students with opportunities to combine content, theory and research with practical experiences in DAPE programming and teaching strategies. This capstone course allows students to cultivate and maintain positive, collaborative relationships with students, families, and other professional, and the community to support student development and educational process. This course includes 20 hours of required field experience. Prerequisites: SPED 3600, SPED 3650, SPED 3655; PHED 4514, PHED 4515.

PHED 4870 Practicum in Physical Education Teaching (1 credit)

A supervised experience in teaching K-12 students in physical education. Emphasis is on meeting the requirements for physical education majors by the Minnesota Professional Education Licensing and Standards Board (PELSB). Required: A minimum of 30 practicum hours per credit. Prerequisite(s): PHED 3505 and PHED 3604.

PHED 4879 Athletic Coaching Practicum (1 credit)

Application of the principles and practices in athletic coaching. A 30-hour practical coaching experience under the guidance and supervision of a licensed coach. This practicum must be conducted at the high school level. Appropriate forms must be filed with the department chairperson. Prerequisite(s): Completion of at least 70 percent of Physical Education Major or Coaching Specialist Program or consent of instructor.

PHED 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

PHED 4920 DGS: (1 credit)

When taken as Exercise Science Seminar the following description applies: Intended as a capstone course to prepare the Exercise Science major for employment, internship/job procurement, or continuing education in a graduate program. This course integrates discussion of strategies for professional development, as well as providing quality written composition on employment/graduate program goals and objectives. Prerequisite: Senior status or consent of instructor. When taken as Physical Education Seminar the following description applies: Intended as a capstone course to prepare the physical education major for employment, student teaching/job procurement, or continuing education in a graduate program. This course integrates discussion of strategies for professional development, as well as providing quality written composition on employment/graduate program goals and objectives. Prerequisite: Senior status or consent of instructor. When taken as Sport Management Seminar the following description applies: Intended as a capstone course to prepare the sport management major for employment; internship/job procurement, or continuing education in a graduate program. This course integrates discussion of strategies for professional development, as well as providing quality written composition on employment/graduate program goals and objectives. Prerequisite: Senior status or consent of instructor.

PHED 4921 Varsity Sport: (1 credit)

Varsity Sport - Participation credit, may be taken once per year of eligibility.

PHED 4970 Internship (1-12 credits)

Internship

PHED 4971 Internship: Sport Management (1-12 credits)

Sport management majors are required to complete a field experience that is relevant to their career goals. The internship needs to provide an opportunity for the student to apply the different theories and concepts learned from class in a practical setting through: observation, planning, decision-making, committee work, leadership, operation management, individual projects, and group projects. Required: 400 hours for 12-credit internship to meet accreditation guidelines. Prerequisite(s): consent of instructor

PHED 4972 Internship: Exercise Science (2-6 credits)

This course is for the purpose of providing a supervised field internship experience in an exercise, fitness, and/or wellness-related setting, including hospitals, corporations, private fitness-facilities, and governmental agencies. Or, the internship may take the form of a special project or research on a topic relevant to exercise science. Prior approval must be obtained from the student's internship advisor. A journal, written paper, and/or oral presentation is to be presented following the learning experience. The student is expected to complete 30 hours per credit. Prerequisite(s): PHED 4160 and PHED 4170 or consent of instructor.

PHED 4975 Internship: Human Performance (1-3 credits)

This course is for the purpose of providing a supervised field internship experience in an exercise, fitness, and/or wellness-related setting, including university or high school athletics, corporations, private fitness-facilities, governmental agencies. Internship setting is dependent on coursework taken within selected Required Option. Prior approval must be obtained from the student's internship advisor. A journal, written paper and/or oral presentation is to be presented following the learning experience. The student is expected to complete 30 hours per credit. Prerequisite(s): senior status or consent of instructor.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Physics

Physics is a fundamental science from which nearly all of modern engineering and technology has emerged, and its perspectives on theory and experimentation continue to influence profoundly the evolution of all sciences. It addresses all domains, from the submicroscopic worlds of atoms and quarks to the vast realms of space, from the esoteric to the mundane. It requires imagination and persistence from those who would participate.

The Department of Physics offers a flexible assortment of course work, laboratories, and guided research. Its laboratories are complemented by a variety of general and specialized apparatus; computers are employed in most aspects of experimentation and analysis, at all levels.

Programs

- Science Education, B.S. (Physics Specialty (Teacher Licensure)) *major*
- Physics *minor*

Career Directions

Government Laboratories
High School Teaching
Industry Laboratories
Post-Secondary Teaching
Also: Graduate and Professional Schools

Preparation

Recommended High School Courses

Advanced Mathematics
Physics
Chemistry
Computer Programming

Science Education, B.S. *major* Physics Specialty (Teacher Licensure)

Required Credits: 82

Required GPA: 2.50

Core Courses for Science Teaching in Grades 5-8

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
or BIOL 1110 Human Biology (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
or BIOL 1120 General Biology: Evolution And Ecology (3 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
or CHEM 1111 General Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
or CHEM 1112 General Chemistry II (4 credits)
- GEOL 1110 Physical Geology (4 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)
or ED 3410 Secondary Science Methods (4 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

PHYSICS SPECIALTY

Complete the following courses:

MATH 2471 is recommended (required for PHYS 2101)

- PHYS 2101 Physics I (4 credits)
or PHYS 1101 General Physics I (4 credits)
- PHYS 2102 Physics II (4 credits)
or PHYS 1102 General Physics II (4 credits)
- PHYS 3103 Physics III (4 credits)
- PHYS 3300 Thermal and Statistical Physics (3 credits)
or CHEM 4711 Physical Chemistry I (3 credits)
- PHYS 4300 Optics (4 credits)

Complete the following course:

- PHYS 4980 Research (3 credits)

Physics *minor*

Required Credits: 28

Required GPA: 2.00

I REQUIRED COURSES

Complete the following courses:

- MATH 2471 Calculus I (5 credits)
- MATH 2472 Calculus II (5 credits)
- PHYS 2101 Physics I (4 credits)
- PHYS 2102 Physics II (4 credits)
- PHYS 3103 Physics III (4 credits)

II REQUIRED ELECTIVES

Select 6 semester credits from physics courses

OR Complete CHEM 4711, CHEM 4712 and any Physics course numbered 3300 or higher:
(Some courses in this section require pre-requisites)

that are not part of this program)

Physics Courses

PHYS 1101 General Physics I (4 credits)

A survey of introductory physics, with laboratory. Topics include mechanics, vibrations, fluids, waves, heat, electricity, magnetism, dc circuits, and optics. Elementary algebra and trigonometry are employed as needed. Liberal Education Goal Area 3 (LC).

PHYS 1102 General Physics II (4 credits)

Continuation of a survey of introductory physics, with laboratory. Topics include mechanics, vibrations, fluids, waves, heat, electricity, magnetism, DC circuits, and optics. Elementary algebra and trigonometry are employed as needed. Liberal Education Goal Area 3 (LC).

PHYS 1200 Time, Matter, and Energy (3 credits)

An introduction to modern physics concepts at a level suitable for non-science majors. Topics of discussion may include interstellar travel, lasers, quantum computers, nuclear power, black holes, dark matter, and dark energy. The course will be mostly descriptive, with trace amounts of algebra employed as needed. Prerequisites: None. Liberal Education Goal Area 3 (LL).

PHYS 2101 Physics I (4 credits)

First course of a calculus-based introductory physics sequence, with laboratory. Topics include Newton's laws of motion, gravitation, fluids, vibrations and waves. Prerequisite: MATH 2471 or consent of instructor. Liberal Education Goal Area 3 (LC).

PHYS 2102 Physics II (4 credits)

Continuation of a calculus-based introductory physics sequence, with laboratory. Topics include gases, heat and thermodynamics, electricity, magnetism, and electrical circuits. Prerequisite: PHYS 2101, MATH 2471. Pre/Co-requisite MATH 2472 or consent of instructor. Liberal Education Goal Area 3 (LC).

PHYS 2210 Statics and Strength of Materials (3 credits)

Analysis of loads and moments borne by non-accelerating bodies and structures, considering distribution of forces and moments, material deformation, and prediction of material failure. Prerequisite: PHYS 2101.

PHYS 2220 Dynamics (3 credits)

Dynamics force and moment systems, including applications to systems of particles and rigid bodies, with an engineering emphasis. Prerequisite: PHYS 2101.

PHYS 2500 Electronics (4 credits)

Use and analysis of digital ICs, with application to computer circuitry and interfacing. Intensive laboratory. Corequisite: PHYS 1101 or PHYS 2101, or consent of instructor.

PHYS 3103 Physics III (4 credits)

Conclusion of a calculus-based introductory physics sequence with a focus on modern physics, with laboratory. Topics include special relativity, quantum mechanics, atomic physics and radiation, elementary particles, astrophysics and cosmology. Prerequisites: PHYS 2102, MATH 2472, or consent of instructor.

PHYS 3300 Thermal and Statistical Physics (3 credits)

Principles of thermodynamics and statistical mechanics. Topics include temperature, the laws of thermodynamics, entropy, heat engines and refrigerators, free energy, and Boltzmann and quantum statistics. Prerequisites: PHYS 2102, PHYS 3103, MATH 2472, or consent of instructor.

PHYS 3400 Mathematical Physics (3 credits)

Introduction to mathematical techniques used to solve problems in the physical sciences. Topics include complex numbers, Fourier series, ordinary and partial differential equations, and series solutions including Legendre polynomials and Bessel functions. Prerequisites: PHYS 2102, MATH 2472, or consent of instructor.

PHYS 3700 Classical Mechanics (3 credits)

Newton's laws applied to systems of particles and rigid bodies. Topics includes energy and momentum conservation, non-inertial reference frames, Lagrangian and Hamiltonian mechanics. Prerequisites: PHYS 2101, PHYS 3400 or MATH 2490.

PHYS 3720 Advanced Laboratory (1 credit)

A laboratory designed to supplement various advanced courses that currently have no laboratory component. Content varies with term and may be repeated. Prerequisite: PHYS 2102.

PHYS 4100 Solid-State Physics (3 credits)

Fundamentals of condensed matter physics, emphasizing crystalline solids. Includes transport mechanisms, band theory, lattice vibrations, insulators and semiconductors. Prerequisites: PHYS 2102, PHYS 3103, MATH 2472.

PHYS 4300 Optics (4 credits)

Electromagnetic wave phenomena, including Fraunhofer and Fresnel diffraction, interference, coherence, dispersion, and polarization. Lecture and laboratory. Prerequisites: PHYS 2102, PHYS 3400 or MATH 2490, or consent of instructor.

PHYS 4500 Electromagnetism (4 credits)

Classical theory of electric and magnetic fields. Topics include Maxwell's equations, boundary value problems, static fields, dielectric materials, waves, waveguides, and antennas. Prerequisites: PHYS 2102, PHYS 3400, or consent of instructor.

PHYS 4700 Quantum Mechanics (3 credits)

Development and formulation of quantum mechanics, with selected applications in spectroscopy, atomic/nuclear structure, and lasers. Prerequisites: PHYS 3103, PHYS 3400.

PHYS 4800 Special Topics in Theoretical Physics (4 credits)

Advanced topics in electromagnetism, classical mechanics, and quantum mechanics. Prerequisites: PHYS 3103, PHYS 3400, and consent of instructor.

PHYS 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

PHYS 4980 Research (3 credits)

Research carried out by the student that is based on appropriate methodology and scholarship.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
1940, 2940, 3940, 4940 IN-SERVICE COURSE
1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
1970, 2970, 3970, 4970 INTERNSHIP
1980, 2980, 3980, 4980 RESEARCH
1990, 2990, 3990, 4990 THESIS

Political Science

Political science is the study of political systems and how they function. It has its origins in the fourth century B.C., when Aristotle set out to classify governments. Today it encompasses four major focus areas: International Politics, including the behavior of countries, trade regimes, and theories of war; American Politics, including political parties, interest groups, and legislative, judicial, and executive powers; Comparative Politics, including the nature of democracy and comparison of parliamentary and other political systems; and Political Theory, including philosophical considerations such as what constitutes a good society.

Students of political science gain an understanding of the political nature of the contemporary world, from simple acts such as choosing products as consumers to the complexity of global politics in the information age. As governments and the private sectors of society become more intermingled, political scientists become more valued for their understanding of how both systems work and for their reasoning and analytical skills. Majors in political science are prepared for entry level positions in a variety of fields and for graduate study. Advanced degrees in political science offer the applied skills often necessary for professional advancement.

Note: Good communication and computer skills are essential to political scientists. Students are encouraged to develop their communication skills by taking ENGL 3150 Writing in the Disciplines and COMM 1100 Public Speaking and to develop their computer skills by taking BUAD 2280 Computer Business Applications.

Programs

- Political Science, B.A. *major*
- Social Studies, B.A. (Political Science Emphasis) *major*
- Applied Public Policy *minor*
- International Relations *minor*
- Political Science *minor*
- Public and Non-Profit Management *cert*

Career Directions

Business
Government
Interest Groups
International Organizations
Journalism
Law
Also: Graduate Study

Preparation

Recommended High School Courses

English
History
Social Studies
Speech
Computers
Languages
Recommended Activities
Reading Diverse News Sources
Attention to News Events
Civic Engagement

Political Science, B.A. *major*

Required Credits: 42
Required GPA: 2.25

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- PHIL 3380 Political Philosophy (3 credits)
or POL 1100 Understanding Politics (3 credits)
- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)
- POL 3400 Political Theory (3 credits)
- POL 4100 Political Inquiry (3 credits)
- POL 4500 Thesis and Career Preparation (3 credits)

A. GENERAL

SELECT 15 SEMESTER CREDITS OF GUIDED ELECTIVES FROM POLITICAL SCIENCE COURSES NUMBERED ABOVE 3000 WITH CONSENT OF ADVISOR. MAY INCLUDE INTERNSHIP UP TO 4 CREDITS:

SELECT 6 SEMESTER CREDITS OF GUIDED ELECTIVES FROM APPROPRIATE COURSES NUMBERED ABOVE 3000 WITH CONSENT OF ADVISOR. MAY INCLUDE INTERNSHIP UP TO 4 SEMESTER CREDITS.

Note: A total of up to 8 credits of internship may be taken.

B. PRE-LAW EMPHASIS

COMPLETE THE FOLLOWING COURSE:

- POL 4200 Constitutional Law (3 credits)

SELECT 18 SEMESTER CREDITS OF GUIDED ELECTIVES FROM APPROPRIATE COURSES NUMBERED ABOVE 3000 WITH CONSENT OF ADVISOR.

Program Learning Outcomes| Political Science, B.A.

1. An understanding of American government and politics: Students will be able to develop an in depth understanding of American governmental institutions and policy-making processes; with an

appreciation of the role of the citizen and the motivations of public officials.

2. Develop thinking, leadership and communication skills: Students will be able to develop student abilities in critical thinking, analytical reasoning, leadership, writing, presentation, and research.
3. Effectively present paper to college community: Students will be able to effectively present their senior paper in a roundtable or panel format to the college community.
4. Evaluate political beliefs and tolerance of diversity: Enable students to evaluate political structures in terms of their beliefs about the proper relationship between the individual and the state. To encourage students to appreciate the diversity of political perspective, and to encourage understanding and tolerance of differing point of view.
5. Evaluating politics from a comparative perspective: Enable student to evaluate differing governmental systems and policy outputs from a comparative perspective.
6. Foundation for career, learning and participation: Student will be able to provide the foundations for a career in the public or private sector and for a lifetime of learning and participation in politics.
7. Produce a quality senior paper: Students will be able to write a senior paper of approximately 20 pages that is tightly focused, persuasive, well documented and clearly presented. The papers should contain an abstract, literature review, original analysis, and a discussion and conclusion.
8. Students should participate in politics: Student will be able to participate in politics in some form either on or off campus either for credit or not. (e.g., Model UN, Student government, political campaigning, community volunteer work, internship, etc.)
9. Understand and utilize research methodologies: Students will be able to understand and utilize the major research methodologies of the discipline.
10. Understand theories explaining international actors: Students will be able to understand the various theories useful in explaining the behavior of nation-states and other international actors.

SUGGESTED SEMESTER SCHEDULE FOR POLITICAL SCIENCE MAJOR B.A.

The following is a list of required Political Science Major, B.A. courses arranged by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible.

Freshman

- POL1200
- POL1300
- Liberal Education requirements

Sophomore

- POL1100
- POL1400
- Liberal Education requirements
- Electives in Political Science

Junior

- POL3240
- POL3400
- Liberal Education Requirements
- Electives in Political Science
- Courses needed for minor

Senior

- POL4100
- POL4500
- Electives in Political Science
- Courses needed for minor

Social Studies, B.A. *major* Political Science Emphasis

Required Credits: 48

Required GPA: 2.50

Note: A minimum of 22 semester credits used to meet course requirements in I and II must be completed at Bemidji State University. No course grade below a C may be used to meet these requirements and a minimum GPA of 2.50 in this major is required for graduation. Students who desire a second field of emphasis are to consider a completion of a minor or a second major in that field. Such action may complement and increase the marketability of this major.

I REQUIRED CORE CURRICULUM

CAPSTONE COURSE

COMPLETE THE FOLLOWING COURSE:

- POL 4500 Thesis and Career Preparation (3 credits)

ECONOMICS COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)

WORLD HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2218 Medieval Europe (3 credits)
- HST 2219 Medieval European Culture (3 credits)
- HST 2228 Renaissance and Reformation Europe (3 credits)
- HST 2580 Russia (3 credits)
- HST 2600 Topics in History (3 credits)
- HST 2660 Women and History (3 credits)
- HST 2700 The History of World Religions (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)
- HST 3277 Readings and Research in European History (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)

- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)

U.S. HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2600 Topics in History (3 credits)
- HST 2610 Minnesota History (3 credits)
- HST 2667 Men and Women: Gender in America (3 credits)
- HST 3117 American Revolutionary Era, 1763-1800 (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- HST 3137 The American Civil War (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3187 American West (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 3100 American Foreign Policy (3 credits)
- POL 3130 Asian Political Development (3 credits)
- POL 3150 Topics in Political Science (1-3 credits)
- POL 3160 Comparative European Politics (3 credits)
- POL 3170 International Relations (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3190 International Political Economy (3 credits)
- POL 3200 Minnesota Politics (3 credits)
- POL 3210 Public Administration (3 credits)
- POL 3230 Environmental Politics (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- POL 3420 Campaigns and Elections (3 credits)
- POL 4200 Constitutional Law (3 credits)

SOCIOLOGY COURSES

COMPLETE THE FOLLOWING COURSES:

- SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)
- SOC 3210 Social Movements and Change (3 credits)

II REQUIRED FIELD OF EMPHASIS

SELECT 18 SEMESTER CREDITS OF ELECTIVES FROM POLITICAL SCIENCE:

Applied Public Policy *minor*

Required Credits: 32
Required GPA: 2.00

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 3010 Public Economics (3 credits)
- ECON 3230 Benefit/Cost Analysis (3 credits)

- GEOG 2400 Introduction to Planning (3 credits)
- POL 1200 Introduction to American Politics (3 credits)
- POL 3200 Minnesota Politics (3 credits)
- POL 3210 Public Administration (3 credits)

II REQUIRED OPTION

SELECT 12 SEMESTER CREDITS FROM ONE OF THE FOLLOWING OPTIONS:

A. ENVR POLICY:

- GEOG 3560 Metropolitan Land Use Planning (3 credits)
- POL 3230 Environmental Politics (3 credits)
- SOC 3050 Environmental Sociology (3 credits)
- ECON 3040 Environmental Economics (3 credits)
or ENVR 3040 Environmental Economics (3 credits)

B. PLANNING:

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 3570 Public Lands Planning (3 credits)
- GEOG 3560 Metropolitan Land Use Planning (3 credits)
- GEOG 3580 Regional Development Planning (3 credits)

C. AM POL/ECON:

- ECON 2100 Macroeconomics and the Business Cycle (3 credits)
- ECON 3070 Labor Economics (3 credits)
- ECON 3200 Economics of the Financial Sector (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- POL 3420 Campaigns and Elections (3 credits)

D. INT/POL/ECON:

- ECON 2100 Macroeconomics and the Business Cycle (3 credits)
- ECON 3400 International Trade and Finance (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- POL 3170 International Relations (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3190 International Political Economy (3 credits)

E. PUBLIC POLICY SERVICE LEARNING

COMPLETE THE FOLLOWING COURSE. (1 credit per semester; must be taken twice, but no more than 4 credits total)

- POL 3910 Directed Independent Study: Student Leadership (1 credit)

COMPLETE THE FOLLOWING COURSE:

- POL 3970 Internship (3 credits)

International Relations *minor*

Required Credits: 18
Required GPA: 2.00

I REQUIRED COURSES

Complete the following courses:

- POL 1300 Introduction to International Relations (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)

II ELECTIVE CREDITS

Elective credits, you must complete 12 credits from groups A and B, with at least 3 coming from group B.

Group A: Political Science Electives (at least 6 credits)

- POL 3100 American Foreign Policy (3 credits)
- POL 3130 Asian Political Development (3 credits)
- POL 3140 Canadian Politics (3 credits)
- POL 3160 Comparative European Politics (3 credits)
- POL 3170 International Relations (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3190 International Political Economy (3 credits)

Group B: Other Electives (at least 3 credits)

- ANTH 1110 Cultural Anthropology (3 credits)
- BUAD 3751 International Marketing (3 credits)
- COMM 1090 Interpersonal Communication (3 credits)
- ECON 3400 International Trade and Finance (3 credits)
- ENGL 2357 British Literature to 1800 (3 credits)
- ENGL 2358 British Literature from 1800 to Present (3 credits)
- ENGL 2370 World Literature to 1600 (3 credits)
- ENGL 2377 World Literature from 1600 to Present (3 credits)
- GEOG 1400 World Regional Geography (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)
- GEOG 3850 Geography of the Middle East (3 credits)
- GEOG 3860 Geography of Latin America and the Caribbean (3 credits)
- GEOG 3870 Planning for Sustainable Cities (3 credits)
- HST 1304 World History I, Prehistory-1500 (3 credits)
- HST 1305 World History II, 1500-Present (3 credits)
- HST 2218 Medieval Europe (3 credits)
- HST 2219 Medieval European Culture (3 credits)
- HST 2228 Renaissance and Reformation Europe (3 credits)
- HST 2580 Russia (3 credits)
- HST 2660 Women and History (3 credits)
- HST 2700 The History of World Religions (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)
- HST 3277 Readings and Research in European History (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)
- HST 3799 Tudor and Stuart England, 1485-1714 (3 credits)
- INTL 1130 Education Abroad Basics (3 credits)
- INTL 2100 Instructed International Tour (1-3 credits)
- INTL 2200 International Study Experience - Humanities (1-3 credits)
- INTL 2300 Comparative International Study Project (1-3 credits)
- SOWK 2110 Intercultural Communication (3 credits)
- SPAN 1111 Elementary Spanish I (4 credits)
- SPAN 1112 Elementary Spanish II (4 credits)
- SPAN 2211 Intermediate Spanish I (3 credits)
- SPAN 2212 Intermediate Spanish II (4 credits)

Political Science *minor*

Required Credits: 24

Required GPA: 2.00

REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- PHIL 3380 Political Philosophy (3 credits)
or POL 1100 Understanding Politics (3 credits)
- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)

GUIDED ELECTIVES

SELECT 12 SEMESTER CREDITS FROM POLITICAL SCIENCE COURSES NUMBERED ABOVE 3000 WITH CONSENT OF ADVISOR. MAY INCLUDE INTERNSHIP UP TO 4 CREDITS.

Public and Non-Profit Management *cert*

Required Credits: 18

Required GPA: 2.50

Admission requirement: Sophomore status or prior work experience in the non-profit or public section. See program coordinator for additional details.

I REQUIRED COURSES

Complete the following courses:

- POL 3200 Minnesota Politics (3 credits)
- POL 3210 Public Administration (3 credits)
or INST 4000 Nation Building and Leadership (3 credits)
- POL 3310 Intersection of Public and Non-Profit Sectors (3 credits)
- POL 3320 Non-Profit Management (3 credits)
- POL 3330 Non-Profit Financial Management (3 credits)

Complete the following course for 3 credits:

- POL 3970 Internship (3 credits)

Political Science Courses

POL 1100 Understanding Politics (3 credits)

An introduction to the basic ideologies, concepts, processes and institutions of modern government and politics. Liberal Education Goal Areas 6 & 9.

POL 1200 Introduction to American Politics (3 credits)

An introductory survey to the institutions and actors, such as the media, interest groups, political parties, congress, and presidency of contemporary American government and politics. Liberal Education Goal Area 5 & 7.

POL 1300 Introduction to International Relations (3 credits)

Surveys various theories explaining the behavior of nation-states, the causes of war and peace as well as the role of multinational corporations and international organizations in international politics. Liberal Education Goal Areas 8 & 9.

POL 1400 Introduction to Comparative Politics (3 credits)

A comparative analysis of political systems and their functions in the context of unique cultures and histories. Liberal Education Goal Area 8.

POL 2925 People of the Environment: Political Science Perspective (3 credits)

An introduction to political processes and institutions involved in making environmental policy. Might not be offered every year. Liberal Education Goal Area 10.

POL 2953 Study-Travel, History and the Social and Behavioral Sciences (1-6 credits)

Study Travel course in Political Science for Lib Ed Goal Area 5.

POL 3100 American Foreign Policy (3 credits)

Traces the development of American foreign policy: its objectives, limitations, domestic and international factors influencing foreign policy. Prerequisite: POL 1300. (Might not be offered every year.)

POL 3130 Asian Political Development (3 credits)

Course investigates the unique political and economic challenges facing the countries of Asia and South Asia. Prerequisite: POL 1400. (Might not be offered every year.)

POL 3140 Canadian Politics (3 credits)

Explanation of Canada's history, political and economic systems, and regional variations within the nation-state. Special attention to political parties, ideologies, policy processes, and outcomes. (Might not be offered every year.)

POL 3150 Topics in Political Science (1-3 credits)

Course explores underlying political dimensions of topical issues. (Might not be offered every year.)

POL 3160 Comparative European Politics (3 credits)

Course includes an analysis of political structures and processes in Europe. The mechanisms of parliamentary governments, political parties, interest groups and ideologies are included. Prerequisite: POL 1400. (Might not be offered every year.)

POL 3170 International Relations (3 credits)

The study of conflict and cooperation in international relations, the foreign policies of the great powers, international organizations, and the United Nations. Prerequisite: POL 1300. (Might not be offered every year.)

POL 3180 International Law and Organization (3 credits)

Explores the role of international organizations such as the United Nations, economic alliances, international law, and regional consolidation in international politics. Prerequisite: POL 1300. (Might not be offered every year.)

POL 3190 International Political Economy (3 credits)

Analyzes how economic policy decisions are made within and between countries and the effect those decisions have on affected interests in domestic and international politics. Prerequisite: POL 1300. (Might not be offered every year.)

POL 3200 Minnesota Politics (3 credits)

Using Minnesota politics as a central focus, the role of and function of state and local governments in the context of American federalism is examined. (Might not be offered every year.) Liberal Education Goal Areas 5 & 9.

POL 3210 Public Administration (3 credits)

An introduction to the field of public administration. Emphasis is on the political dimensions of management in the public sector. Prerequisite: POL 1200. (Might not be offered every year.)

POL 3230 Environmental Politics (3 credits)

Surveys the dynamics of the policy process that produce our environmental policies. An analysis of actors, institutions, and organizations that shape U.S. environmental law and policy. Prerequisite: POL 1200 or consent of instructor. (Might not be offered every year.)

POL 3240 Political Analysis (3 credits)

Examines the application of political science research methodology to current questions of politics and public policy. Prerequisite: Completion of Core Curriculum mathematics requirement (Goal Area 4) or consent of instructor.

POL 3310 Intersection of Public and Non-Profit Sectors (3 credits)

Studies federal, state and local agency policy domains and interactions; government agency grant making policies and procedures, ideological and partisan views of the public and non-profit sectors. Prerequisite(s): none.

POL 3320 Non-Profit Management (3 credits)

This course deepens students' understanding of the role of management and leadership in today's nonprofit sector. Topics covered include: the responsibilities and challenges facing today's non-profit managers, the role of the board of directors, planning, funding and staffing programs, financial accountability, and ethical decision making. Prerequisite(s): none.

POL 3330 Non-Profit Financial Management (3 credits)

This course examines the critical financial considerations of nonprofit organization, including sources of funds and fundraising, grant writing and management and financial accountability. The students will consider the key financial measures and strategies required to ensure the effectiveness and sustainability of the organization. The course will also consider nonprofit financial statements as indicators of financial health and sound management. Prerequisite(s): none.

POL 3400 Political Theory (3 credits)

This course surveys the development of western political thought. Included is an examination of some of the ideas and values associated with major social and political movements in Europe and the United States. Topics will vary and may include liberalism, conservatism, populism, democracy, communism, nationalism, fascism, environmentalism, realism, and feminism. POL 1100 or consent of instructor. (Might not be offered every year.)

POL 3410 Legislative and Executive Relations (3 credits)

Explores the legislative process by analyzing the motives and evolving legislative styles of legislators in relation to the evolution and powers of the modern presidency and executive establishment. Prerequisite: POL 1200. (Might not be offered every year.)

POL 3420 Campaigns and Elections (3 credits)

Includes analysis of the congressional and presidential electoral process, including the role of political parties, interest groups, and the media. Prerequisite: POL 1200. (Might not be offered every year.)

POL 3910 Directed Independent Study: Student Leadership (1 credit)

Directed Independent Study

POL 3970 Internship (3 credits)

Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

POL 4100 Political Inquiry (3 credits)

Students will learn the theory and practice of quantitative political analysis through the completion of original research projects.

POL 4200 Constitutional Law (3 credits)

An examination of legal interpretations of the constitution regarding the separation of powers and the Bill of Rights. Prerequisite: POL 1200. (Might not be offered every year.)

POL 4500 Thesis and Career Preparation (3 credits)

This is a senior year capstone course. In a seminar format, students discuss progress on their individual research projects and develop career plans and skills. Prerequisite: POL 4100 or consent of instructor.

POL 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
1940, 2940, 3940, 4940 IN-SERVICE COURSE
1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
1970, 2970, 3970, 4970 INTERNSHIP
1980, 2980, 3980, 4980 RESEARCH
1990, 2990, 3990, 4990 THESIS

Pre-Professional Study

Pre-professional programs are specifically designed programs that vary in length from one to four years and prepare students for entrance into professional schools. Bemidji State University offers fourteen pre-professional programs.

While some students choose to complete pre-professional programs that require one or two years of study, students preparing for entrance to schools of medicine, dentistry, law, pharmacy, optometry, veterinary medicine, or other fields are advised to earn a baccalaureate degree in an appropriate field of study.

Pre-professional programs are very demanding, and entrance into professional schools is dependent upon the preparation and academic competence achieved at the pre-professional level. This academic preparation must be planned to meet requirements defined by each professional school. Academic advisors assist students in selecting courses and in understanding entrance criteria. For these reasons, it is particularly important that pre-professional students work closely with their pre-professional advisor. Delay in meeting with the pre-professional advisor could result in delayed entrance in professional school.

Programs

- Pre-Chiropractic
- Pre-Dentistry
- Pre-Engineering
- Pre-Law
- Pre-Medicine
- Pre-Mortuary Science
- Pre-Occupational Therapy
- Pre-Optometry
- Pre-Osteopathic Medicine
- Pre-Pharmacy
- Pre-Physical Therapy
- Pre-Physician Assistant
- Pre-Podiatric Medicine
- Pre-Veterinary Medicine

Pre-Chiropractic

Advisors: Dr. Julie Larson

1. The pre-chiropractic student should fulfill all requirements for a Bachelor of Science degree at Bemidji State University. The student should declare an academic major. Pre-chiropractic is not an academic major. Although the major may be in any field of study, experience indicates that a Biology major will provide the student with an advantage while attending chiropractic school.
2. Early entrance into chiropractic school is possible for some students. Most students, however, enter chiropractic school after completing a baccalaureate degree. Many states now require that chiropractors must have a baccalaureate degree in addition to their chiropractic degree prior to being licensed as a chiropractor. In addition, some chiropractic schools may require more courses than listed below. It is the responsibility of the pre-chiropractic student to become aware of these additional requirements and to plan his or her pre-chiropractic curriculum accordingly.
3. The pre-chiropractic student should work closely with the pre-

chiropractic advisor so all course requirements are fulfilled prior to entrance into chiropractic school. Delay in meeting with the pre-chiropractic advisor will likely result in delayed entrance into chiropractic school.

4. In addition to a strong background in behavioral sciences, English, and humanities, the following courses are specifically required for entrance into most chiropractic schools:

BIOL 1400, 1500, 2360, 3250, 3260, 3710
CHEM 2211, 2212, 3311, 3312, 3371, 3372
ENGL 1151, 2152
MATH 1470
PHYS 1101, 1102 (or) 2101, 2102

5. The following courses are strongly recommended to be included in the student's pre-chiropractic curriculum:

ACCT 1100
BIOL 1300, 3580, 3590, 3920, 4270
CHEM 4411, 4412, 4471
COMM 1100
PSY 1100
SOC 1104

6. A suggested pre-chiropractic academic schedule is listed below; numbers in parentheses are semester credits:

Freshman

BIOL 1400, 1500; F, S; (4,4)
CHEM 2211, 2212; F, S; (4,4)
ENGL 1151, 2152; F, S; (3,3)
MATH 1470; F or S; (5)
Electives: Consult your Pre-Chiropractic Advisor

Sophomore

BIOL 1300; F or S; (2)
BIOL 2360, 3710; F, S; (4,4)
BIOL 3920; F; (1)
CHEM 3311, 3312; F, S; (3,3)
CHEM 3371, 3372; F, S; (1,1)
PHYS: Consult your Pre-Chiropractic Advisor F, S; (5,5)
Electives: Consult your Pre-Chiropractic Advisor

Junior

BIOL 3250, 3260; F, S; (4,4)
Electives: Consult your Pre-Chiropractic Advisor

Senior

Consult your Pre-Chiropractic Advisor

Pre-Dentistry

Advisors: Dr. Julie Larson

1. The pre-dental student should fulfill all requirements for a Bachelor of Science degree at Bemidji State University. The student should declare an academic major. Pre-Dentistry is not an academic major. The major may be in any field of study. The Dental Admission Test (DAT) is taken in the spring of the junior year.
2. Early entrance into dental school is possible for some students. Most students, however, enter dental school after completing a baccalaureate degree. In addition, some dental schools may require more courses than listed below. It is the responsibility of the pre-dental student to become aware of these additional requirements and to plan his or her pre-dental curriculum accordingly.
3. The pre-dental student should work closely with the pre-dentistry advisor so all course requirements are fulfilled prior to entrance into dental school. Delay in meeting with a pre-dental advisor will likely result in delayed entrance into dental school.
4. In addition to a strong background in behavioral sciences, English, and humanities, the following courses are specifically required for entrance into most dental schools:

BIOL 1400, 1500
CHEM 2211, 2212, 3311, 3312, 3371, 3372
ENGL 1151, 2152
MATH 1470
PHYS 1101, 1102 (or) 2101, 2102
5. The following courses are recommended to be included in the student's pre-dental curriculum:

BIOL 2110 or 2310, 3590, 3710, 4270
CHEM 4411, 4412, 4471

6. A suggested pre-dental academic schedule is listed below; numbers in parentheses are semester credits:

Freshman

BIOL 1400, 1500; F, S; (4,4)
CHEM 2211, 2212; F, S; (4,4)
ENGL 1151, 2152; F, S; (3,3)
MATH 1470; F or S; (5)
Electives: Consult your Pre-Dentistry Advisor

Sophomore

BIOL 2110 or 2310, 3710; F, S; (5 or 4,4)
CHEM 3311, 3312; F, S; (3,3)
CHEM 3371, 3372; F, S; (1,1)
PHYS 1101, 1102 or 2101, 2102; F, S; (4,4 or 5,5)
Electives: Consult your Pre-Dentistry Advisor

Junior

Electives: Consult your Pre-Dentistry Advisor

Senior

Consult your Pre-Dentistry Advisor

Pre-Engineering

The pre-engineering program is a course of study that provides the lower division foundation course work in engineering. Students in this program can transfer to an engineering school for their junior and senior years. Course work taken at Bemidji State can be applied to standard engineering degree programs at the University of Minnesota and at other nearby institutions. The lower division curriculum is rather universal, but the requirements will vary somewhat with the specialty field and with the choice of professional school. Two curricular options are shown below, and other options are available. Only the freshman year is presented; subsequent years must be scheduled in consultation with an advisor.

Option I-Freshman Year (2 year curriculum)

ENGL 1151, 2152
CHEM 2211, 2212
CS 2321 or equivalent; consult with advisor.
MATH 2471
PHYS 2101, 2102
Liberal Education Requirements

Option II-Freshman Year (2-3 year curriculum)

This option allows for a review of algebra and trigonometry prior to enrollment in the calculus sequence. Since registration in the Physics sequence is delayed in this option, an additional year may be required for completion. Please note that review courses in mathematics will not transfer to an engineering school.

CHEM 2211, 2212
CS 2321 or equivalent; consult with advisor.
ENGL 1151, 2152
MATH 1470, 2471
PHYS 2101

Pre-Law

Advisor: Dr. Patrick Donnay

A number of career opportunities are available for those interested in careers in the legal field. Lawyers are employed in private practice, corporations, non-profit organizations, and by the government. Legal assistants are in growing demand. Students should develop communication and analytical skills as well as an understanding of human values and institutions. Law school admissions are dependent upon grade point average, performance on the LSAT exam and other criteria. A variety of undergraduate programs are appropriate for law school, though the department of political science has an interdisciplinary pre-law emphasis in its major.

Fast track your undergraduate and law degrees with our 3+3 program offered in partnership with the Mitchell Hamline School of Law. See the Law School Early Admission program for additional information.

Pre-Medicine

Advisors: Dr. Holly LaFerriere, Dr. Julie Larson

1. The pre-medical student should fulfill all requirements for a Bachelor of Science degree at Bemidji State University. The student should declare an academic major. Pre-Medicine is not an academic major. Although the major may be in any field of study, experience indicates that a Biology or Chemistry major will provide the student with an advantage on the Medical College Admission Test (MCAT).
2. Early entrance into medical school is possible for some students. Most students, however, enter medical school after completing a baccalaureate degree. In addition, some medical schools may require more courses than listed below. It is the responsibility of the pre-medical student to become aware of these additional requirements and to plan his or her pre-medical curriculum accordingly.
3. Admission to medical school is highly competitive; typically, only about 10% of applicants are accepted. Admitted students normally have a grade point average of 3.5 or higher and MCAT scores of 9 or higher in each section of the exam. In planning your program it is important to consider alternatives, in case you are not accepted into medical school.
4. Normally, a pre-medicine student will take the MCAT exam in the spring of their junior year. Therefore, all of the courses on which the MCAT is based (a year of biology, a year of introductory chemistry, a year of organic chemistry, and a year of physics) should be completed by the fall of your junior year. The pre-medical student should work closely with their pre-medicine advisor so all course requirements are fulfilled prior to entrance into medical school. A delay in meeting with the pre-medical advisor will likely result in delayed entrance into medical school.
5. In addition to a strong background in behavioral sciences, English, and humanities, the following courses are specifically required for entrance into most medical schools:

BIOL 1400, 1500 (some schools require additional biology credits)

CHEM 2211, 2212, 3311, 3312, 3371, 3372 (some schools require biochemistry)
 ENGL 1151, 2152
 PHYS 1101, 1102 (or) 2101, 2102
 MATH (math requirements vary from school to school)

6. Additional coursework in the sciences and social sciences will help students prepare for the MCAT and provide useful background for medical school courses. Consult the Pre-Medical advisor for suggestions on additional coursework.
7. A suggested pre-medical academic schedule is listed below:

Freshman

BIOL 1400, 1500
 CHEM 2211, 2212
 ENGL 1151, 2152
 Electives: Consult your Pre-Medicine Advisor

Sophomore

CHEM 3311, 3312
 CHEM 3371, 3372
 PHYS 1101, 1102 or 2101, 2102
 Electives: Consult your Pre-Medicine Advisor

Junior

Electives: Consult your Pre-Medicine Advisor

Senior

Consult your Pre-Medicine Advisor

Pre-Mortuary Science

Advisor: Contact the Biology Department for additional information.

1. Pre-mortuary science is a two-year program at Bemidji State University. Students will make application and transfer to another four-year accredited university to complete their baccalaureate degree in mortuary science.
2. Pre-mortuary science students at Bemidji State University should declare themselves as Biology majors and work closely with the pre-mortuary science advisor so that all course requirements are fulfilled prior to entrance into mortuary science school. Delay in meeting with the pre-mortuary science advisor will likely result in delayed entrance into mortuary science school.
3. Courses listed below meet prerequisite requirements for most mortuary science programs within the United States. Some mortuary science schools may require more courses than listed below. It is the responsibility of the student to research all prerequisite requirements for the mortuary science programs they plan to make application to, and bring all prerequisites to the pre-mortuary science advisor to assist in planning the student's two-year pre-mortuary science academic program at Bemidji State University.

ACCT 2101
 BIOL 1110, 1120, 1300, 2110, 3755
 BUAD 1100, 2220
 CHEM 1111, 1112

COMM 1100
ENGL 1151, 2152
HLTH 3500
MATH 1100
PSY 1100
SOC 1104
STAT 2610

First Year Courses

BIOL 1110, 1120; F, S; (4,3)
BIOL 1300; S; (2)
CHEM 1111, 1112; F, S; (4,4)
COMM 1100; S; (3)
ENGL 1151, 2152; F, S; (3,3)
MATH 1100; F; (3)
Electives: Consult the Pre-Mortuary Science Advisor

Second Year Courses

ACCT 2101; F; (3)
BIOL 2110, 3755; F, S; (5,3)
BUAD 1100, 2220; F, S; (3,3)
HLTH 3500; S; (3)
PSY 1100; F; (4)
SOC 1104; S; (3)
STAT 2610; S; (4)
Electives: Consult the Pre-Mortuary Science Advisor

Pre-Occupational Therapy

Advisors: Dr. Christina Kippenhan

1. The pre-occupational therapy student should fulfill all requirements for a Bachelor of Science or Bachelor of Arts degree at Bemidji State University. The student should declare an academic major. Pre-occupational therapy is not an academic major. The major may be in any field of study. The Allied Health Professions Admission Test (AHPAT) or Graduate Record Examination (GRE) is taken in the spring of the junior year.
2. Many universities are dropping their undergraduate occupational therapy programs and replacing them with a graduate program. Most students enter occupational therapy school after completing a baccalaureate degree. In addition, some occupational therapy schools may require more courses than listed below. It is the responsibility of the pre-occupational therapy student to become aware of these additional requirements and to plan his or her pre-occupational therapy curriculum accordingly.
3. The pre-occupational therapy student should work closely with the pre-occupational therapy advisor so all course requirements are fulfilled prior to entrance into occupational therapy school. Delay in meeting with the pre-occupational therapy advisor will likely result in delayed entrance into occupational therapy school.
4. In addition to a strong background in behavioral sciences, English, and humanities, the following courses are specifically required for entrance into most occupational therapy schools:

BIOL 1400, 1500, 2110, 2360
CHEM 1111, 1112
ENGL 1151, 2152
MATH 1170

PHYS 1101, 1102
PSY 1100, 2217, 2237
SOC 1104

5. The following courses are strongly recommended to be included in the student's pre-occupational therapy curriculum:

ACCT 1100
BIOL 1300, 3920
COMM 1100
PHED 3100, 3110, 3200, 3300, 4150
STAT 2610

6. A suggested pre-occupational therapy academic schedule is listed below; numbers in parentheses are semester credits:

Freshman

BIOL 1400, 1500; F, S; (4,4)
CHEM 1111, 1112; F, S; (4,4)
ENGL 1151, 2152; F, S; (3,3)
MATH 1170; F; (4)
PSY 1100; S (4)
Electives: Consult your Pre-Occupational Therapy Advisor

Sophomore

BIOL 1300; F or S; (2)
BIOL 2110, 2360; F, S; (4,4)
BIOL 3920; F; (1)
PHYS 1101, 1102; F, S; (5,5)
PSY 2217, 2237; F, S; (4,4)
SOC 1104; F; (3)
Electives: Consult your Pre-Occupational Therapy Advisor

Junior and Senior

Consult your Pre-Occupational Therapy Advisor

Pre-Optometry

Advisors: Dr. Holly LaFerriere, Dr. Julie Larson

1. The pre-optometry student should fulfill all requirements for a Bachelor of Science degree at Bemidji State University. The student should declare an academic major. Pre-Optometry is not an academic major. The major may be in any field of study. The Optometry Admission Test (OAT) is taken in the winter of the junior year.
2. Early entrance into optometry school is possible for some students. Most students, however, enter optometry school after completing a baccalaureate degree. In addition, some optometry schools may require more courses than listed below. It is the responsibility of the pre-optometry student to become aware of these additional requirements and to plan his or her pre-optometry curriculum accordingly.
3. The pre-optometry student should work closely with the pre-optometry advisor so all course requirements are fulfilled prior to entrance into optometry school. Delay in meeting with the pre-optometry advisor will likely result in delayed entrance into optometry school.

- General requirements for all schools include at least one year of biology or zoology, general chemistry, general physics, English, college mathematics, and psychology.

BIOL 1400, 1500, 3710
 CHEM 1111, 1112 (or) 2211, 2212; 3311, 3371
 ENGL 1151, 2152
 MATH 1470
 PHYS 1101, 1102 (or) 2101, 2102
 PSY 1100

- The following courses are strongly recommended to be included in the student's pre-optometry curriculum:
 BIOL 2110 or 2310
 CHEM 4411, 4471
- A suggested pre-optometry academic schedule is listed below; numbers in parentheses are semester credits:

Freshman

BIOL 1400, 1500; F, S; (3,3)
 CHEM 2211, 2212; F, S; (4,4)
 ENGL 1151, 2152; F, S; (3,3)
 MATH 1470; F or S; (5)
 Electives: Consult your Pre-Optometry Advisor

Sophomore

BIOL 2110 or 2310, 3710; F, S; (5 or 4,4)
 BIOL 3920; F; (1)
 CHEM 3311, 3312; F, S; (3,3)
 CHEM 3371, 3372; F, S; (1,1)
 PHYS 1101, 1102 or 2101, 2102; F, S; (4,4 or 5,5)
 Electives: Consult your Pre-Optometry Advisor

Junior

Electives: Consult your Pre-Optometry Advisor

Senior

Consult your Pre-Optometry Advisor

Pre-Osteopathic Medicine

Advisors: Dr. Holly LaFerriere

- The pre-osteopathic medical student should fulfill all requirements for a Bachelor of Science degree at Bemidji State University. The student should declare an academic major. Pre-Osteopathic Medicine is not an academic major. Although the major may be in any field of study, experience indicates that a Biology or Chemistry major will provide the student with an advantage on the Medical College Admission Test (MCAT). The MCAT is taken by early Spring of the Junior year, and application to osteopathic medical school is submitted by early September of the Senior year.
- Early entrance into osteopathic medical school is possible for some students. Most students, however, enter osteopathic medical school after completing a baccalaureate degree. In addition, some osteopathic medical schools may require more courses than listed below. It is the responsibility of the pre-osteopathic medical student to become aware of these additional requirements and plan his or her

pre-osteopathic medical curriculum accordingly.

- The pre-osteopathic medical student should work closely with the pre-osteopathic medical advisor so all course requirements are fulfilled prior to entrance into osteopathic medical school. A delay in meeting with the pre-osteopathic medical advisor will likely result in delayed entrance into osteopathic medical school.
- In addition to a strong background in behavioral sciences, English, and humanities, the following courses are specifically required for entrance into most osteopathic medical schools:
 BIOL 1400, 1500 (additional biology courses may be required)
 CHEM 2211, 2212, 3311, 3312, 3371, 3372 (biochemistry may be required)
 ENGL 1151, 2152
 PHYS 1101, 1102 (or) 2101, 2102
- The following courses are strongly recommended to be included in the student's pre-osteopathic medicine curriculum:
 BIOL 1300, 2110, 2360, 3250, 3260, 3580, 3590, 3710, 4270
 CHEM 4411, 4412, 4471, 4472
 MATH 2471, 2472
- Consult your pre-osteopathic medical advisor for additional courses, including Liberal Education courses, which will be most beneficial for successful osteopathic medical school candidates.
- A suggested pre-osteopathic medicine academic schedule is listed below; numbers in parentheses are semester credits.

Freshman

BIOL 1400, 1500; F, S; (4,4)
 CHEM 2211, 2212; F, S; (4,4)
 ENGL 1151, 2152; F, S; (3,3)
 MATH 1470; F or S; (5)
 Electives: Consult your Pre-Osteopathic Medical Advisor

Sophomore

BIOL 1300; F or S; (2)
 CHEM 3311, 3312; F, S; (4,4)
 PHYS: Consult your Pre-Osteopathic Medical Advisor
 MATH: Consult your Pre-Osteopathic Medical Advisor

Junior

BIOL 3250, 3260; F, S (4,4)
 Electives: Consult your Pre-Osteopathic Medical Advisor
 MCAT—Early Spring

Senior

Consult your Pre-Osteopathic Medical Advisor
 Osteopathic Medical School Application—Early September

Pre-Pharmacy

Advisors: Dr. Julie Larson

Note: There is some variation depending on which pharmacy school is attended. Consult with advisor as soon as possible.

Freshman

BIOL 1110, 1120 (4,3)
or BIOL 1400, 1500 (4,4)
*CHEM 1111, 1112 (4,4)
or CHEM 2211, 2212 (4,4)
COMM 1100 (3)
ENGL 1151, 2152 (3,3)
MATH 1470, 2471 (5,5)

Electives, taken with consent of advisor.

*Which sequence to take depends on which pharmacy school is attended, but 1400, 1500 is recommended.

Sophomore

BIOL 2110 (5)
BIOL 3710 (4)
CHEM 3311, 3312 (3,3)
CHEM 3371, 3372 (1,1)
ECON 2000 (3)
MATH 2472 (5)
PHYS 1101, 1102 (4,4)
or PHYS 2101, 2102 (5,5)
PSY 1100 (4)
SOC 1104 (3)

Electives, with consent of advisor

Pre-Physical Therapy

Advisors: Dr. Christina Kippenhan

1. The pre-physical therapy student should fulfill all requirements for a Bachelor of Science or Bachelor of Arts degree at Bemidji State University. The student should declare an academic major. Pre-physical therapy is not an academic major. The major may be in any field of study. The Allied Health Professions Admission Test (AHPAT) or Graduate Record Examination (GRE) is taken in the spring of the junior year.
2. Many universities are dropping their undergraduate physical therapy programs and replacing them with a graduate program. Most students enter physical therapy school after completing a baccalaureate degree. In addition, some physical therapy schools may require more courses than listed below. It is the responsibility of the pre-physical therapy student to become aware of these additional requirements and to plan his or her pre-physical therapy curriculum accordingly.
3. The pre-physical therapy student should work closely with the pre-physical therapy advisor so all course requirements are fulfilled prior to entrance into physical therapy school. Delay in meeting with the pre-physical therapy advisor will likely result in delayed entrance into physical therapy school.
4. In addition to a strong background in behavioral sciences, English, and humanities, the following courses are specifically required for entrance into most physical therapy schools:

BIOL 1400, 1500, 2110, 2360, 3710
CHEM 2211, 2212, 3311, 3312, 3371, 3372
ENGL 1151, 2152
MATH 1470
PHYS 1101, 1102 (or) 2101, 2102

5. The following courses are strongly recommended to be included in the student's pre-physical therapy curriculum:

ACCT 1100
BIOL 1300, 3590, 3920, 4270
COMM 1100
PHED 3100, 3110, 3190, 3200, 3300, 4150
PSY 1100, 2217, 2237
SOC 1104
STAT 2610

6. A suggested pre-physical therapy academic schedule is listed below; numbers in parentheses are semester credits:

Freshman

BIOL 1400, 1500; F, S; (4,4)
CHEM 2211, 2212; F, S; (4,4)
ENGL 1151, 2152; F, S; (3,3)
MATH 1470; F or S; (5)
Electives: Consult your Pre-Physical Therapy Advisor

Sophomore

BIOL 1300; F or S; (2)
BIOL 2360, 3710; F, S; (4,4)
BIOL 3920; F; (1)
CHEM 3311, 3312; F, S; (3,3)
CHEM 3371, 3372; F, S; (1,1)
PHYS: Consult your Pre-Physical Therapy Advisor
Electives: Consult your Pre-Physical Therapy Advisor

Junior

Electives: Consult your Pre-Physical Therapy Advisor

Senior

Consult your Pre-Physical Therapy Advisor

Pre-Physician Assistant

Advisors: Dr. Holly LaFerriere, Dr. Julie Larson

1. The pre-physician assistant student should fulfill all requirements for a Bachelor of Science degree at Bemidji State University. The student should declare an academic major. Pre-Physician Assistant is not an academic major. The major may be in any field of study.
2. Early entrance into physician assistant school is possible for some students. Many physician assistant programs now require more patient care hours to qualify for entrance into their program. Physician Assistant programs in the United States vary significantly, and the pre-physician assistant student must research the type of program they desire to enter. In addition, some physician assistant schools may require more courses than listed below. It is the responsibility of the pre-physician assistant student to become aware of these additional requirements and to plan his or her pre-physician assistant curriculum accordingly.
3. The pre-physician assistant student should work closely with the pre-physician assistant advisor so all course requirements are fulfilled

prior to entrance into physician assistant school. Delay in meeting with the pre-physician assistant advisor will likely result in delayed entrance into physician assistant school.

4. In addition to a strong background in behavioral sciences, English, and humanities, the following courses are specifically required for entrance into most physician assistant schools:

BIOL 1400, 1500, 1300, 2110, 3710
CHEM 2211, 2212, 3311, 3312, 3371, 3372, 4411, 4412
ENGL 1151, 2152
PHYS 1101, 1102 (or) 2101, 2102
STAT 2610

5. The following courses are strongly recommended to be included in the student's pre-physician assistant curriculum:
BIOL 2360, 3580, 3590, 4270
CHEM 4471, 4472
PSY 1100, 2237
6. A suggested pre-physician assistant academic schedule is listed below; numbers in parentheses are semester credits:

Freshman

BIOL 1400, 1500; F, S; (4,4)
CHEM 2211, 2212; F, S; (4,4)
ENGL 1151, 2152; F, S; (3,3)
STAT 2610; F or S; (4)
Electives: Consult your Pre-Physician Assistant Advisor

Sophomore

BIOL 1300; F or S; (2)
BIOL 2360, 3710; F, S; (4,4)
CHEM 3311, 3312; F, S; (3,3)
CHEM 3371, 3372; F, S; (1,1)
PHYS 1101, 1102, or 2101, 2102
Electives: Consult your Pre-Physician Assistant Advisor

Junior

Consult your Pre-Physician Assistant Advisor

Senior

Consult your Pre-Physician Assistant Advisor

Pre-Podiatric Medicine

1. The pre-podiatric medical student should fulfill all requirements for a Bachelor of Science degree at Bemidji State University. The student should declare an academic major. Pre-Podiatric Medicine is not an academic major. Although the major may be in any field of study, experience indicates that a Biology or Chemistry major will provide the student with an advantage on the Medical College Admission Test (MCAT). The MCAT is taken by early Spring of the Junior year, and application to podiatric medical school is submitted by early September of the Senior year.

2. Early entrance into podiatric medical school is possible for some students. Most students, however, enter podiatric medical school after completing a baccalaureate degree. In addition, some podiatric medical schools may require more courses than listed below. It is the responsibility of the pre-podiatric medical student to become aware of these additional requirements and plan his or her pre-podiatric medical curriculum accordingly.

3. The pre-podiatric medical student should work closely with the pre-podiatric medical advisor so all course requirements are fulfilled prior to entrance into podiatric medical school. A delay in meeting with the pre-podiatric medical advisor will likely result in delayed entrance into podiatric medical school.

4. In addition to a strong background in behavioral sciences, English, and humanities, the following courses are specifically required for entrance into most podiatric medical schools:

BIOL 1400, 1500 (additional biology courses may be required)
CHEM 2211, 2212, 3311, 3312, 3371, 3372 (biochemistry may be required)
ENGL 1151, 2152
PHYS 1101, 1102 (or) 2101, 2102

5. The following courses are strongly recommended to be included in the student's pre-podiatric medicine curriculum:

BIOL 1300, 2110, 2360, 3250, 3260, 3580, 3590, 3710, 4270
CHEM 4411, 4412, 4471, 4472
MATH 2471, 2472

6. Consult your pre-podiatric medical advisor for additional courses, including Liberal Education courses, which will be most beneficial for successful podiatric medical school candidates.

7. A suggested pre-podiatric medicine academic schedule is listed below; numbers in parentheses are semester credits.

Freshman

BIOL 1400, 1500; F, S; (4,4)
CHEM 2211, 2212; F, S; (4,4)
ENGL 1151, 2152; F, S; (3,3)
MATH 1470; F or S; (5)
Electives: Consult your Pre-Podiatric Medical Advisor

Sophomore

BIOL 1300; F or S; (2)
CHEM 3311, 3312; F, S; (4,4)
PHYS: Consult your Pre-Podiatric Medical Advisor
MATH: Consult your Pre-Podiatric Medical Advisor

Junior

BIOL 3250, 3260; F, S (4,4)
Electives: Consult your Pre-Podiatric Medical Advisor
MCAT—Early Spring

Senior

Consult your Pre-Podiatric Medical Advisor
Podiatric Medical School Application—Early September

Pre-Veterinary Medicine

Advisors: Dr. Holly LaFerriere

1. The pre-veterinary medical student should fulfill all requirements for a Bachelor of Science degree at Bemidji State University. The

student should declare an academic major. Pre-Veterinary Medicine is not an academic major. Although the major may be in any field of study, experience indicates that a science major will provide the student with an advantage while attending veterinary medical school and in preparing for the Veterinary College Admissions Test. Most veterinary medical schools require the student to take the Graduate Record Examination (GRE) or the Veterinary College Admissions Test (VCAT). The GRE or VCAT is taken in the spring of the junior year.

2. Admission to veterinary school is very competitive. Accepted students typically have a grade point average of 3.70 and average GRE scores of 1800 or higher. Pre-veterinary students should plan their program so they have other options if they are not admitted to veterinary school.
3. Early entrance into veterinary medical school is possible for some students. Most students, however, enter veterinary medical school after completing a baccalaureate degree. In addition, some veterinary medical schools may require more courses than listed below. It is the responsibility of the pre-veterinary medical student to become aware of these additional requirements and to plan his or her pre-veterinary medical curriculum accordingly.
4. The pre-veterinary medical student should work closely with the pre-veterinary medicine advisor so all course requirements are fulfilled prior to entrance into veterinary medical school. A delay in meeting with your pre-veterinary medicine advisor will likely result in delayed entrance into veterinary medical school.
5. In addition to a strong background in behavioral sciences, English, and humanities, the following courses are specifically required for entrance into most pre-veterinary medical schools:

BIOL 1400, 1500, 2360
 CHEM 2211, 2212, 3311, 3312, 3371, 3372, 4411
 ENGL 1151, 2152
 PHYS 1101, 1102 (or) 2101, 2102
 MATH (math requirements vary from school to school)

6. In addition, the following courses are recommended, as they are required by some veterinary schools:

BIOL 3250, 3260, 3710
 CHEM 4412, 4471
 COMM 1100

7. A suggested pre-veterinary medical academic schedule is listed below:

CHEM 3371, 3372
 PHYS 1101, 1102 (or) 2101, 2102
 Other recommended Pre-Veterinary courses
 Electives: Consult your Pre-Veterinary Medicine Advisor

Junior

CHEM 4411
 Other recommended Pre-Veterinary courses
 Electives: Consult your Pre-Veterinary Medicine Advisor

Senior

Consult your Pre-Veterinary Medicine Advisor

Freshman

BIOL 1400, 1500
 CHEM 2211, 2212
 ENGL 1151, 2152
 MATH (Choose course(s) based on requirements of school you plan to attend)
 Electives: Consult your Pre-Veterinary Medicine Advisor

Sophomore

BIOL 2360
 CHEM 3311, 3312

Professional Education

For All Education Majors

General Entry Requirements

A completed basic skills test, or equivalent (approved by Minnesota Board of Teaching) taken and on file.

30 semester credits completed

2.5 cumulative GPA

General Exit Requirements

A minimum GPA of 2.5 in professional education/special education courses. Signed forms by the cooperating teacher and the faculty supervisor that the student has satisfactorily completed student teaching for each licensure sought.

An acceptable score on standardized professional field competency assessments.

Programs

- Elementary Education, B.S. (Pre-Primary Endorsement (Teacher Licensure)) *major*
- Elementary Education, B.S. (Social Studies Endorsement (Teacher Licensure)) *major*
- Elementary Education, B.S. (Mathematics Endorsement (Teacher Licensure)) *major*
- Elementary Education, B.S. (Science Endorsement (Teacher Licensure)) *major*
- Elementary Education, B.S. ((Teacher Licensure)) *major*
- Elementary Education, B.S. (Communication Arts & Literature Endorsement (Teacher Licensure)) *major*
- English Education, B.S. ((Teacher Licensure)) *major*
- Health Education, B.S. ((Teacher Licensure)) *major*
- Mathematics Education, B.S. ((Teacher Licensure)) *major*
- Music Education, B.S. (Vocal/Classroom K-12 Specialization (Teacher Licensure)) *major*
- Music Education, B.S. (Instrumental/Classroom K-12 Specialization (Teacher Licensure)) *major*
- Physical Education, B.S. ((Teacher Licensure)) *major*
- Science Education, B.S. (Life Science Specialty (Teacher Licensure)) *major*
- Science Education, B.S. (Chemistry Specialty (Teacher Licensure)) *major*
- Science Education, B.S. (Physics Specialty (Teacher Licensure)) *major*
- Science Education, B.S. (Earth and Space Science Specialty (Teacher Licensure)) *major*
- Social Studies Education, B.S. ((Teacher Licensure)) *major*
- Early Childhood Studies *minor*

Career Directions

Adult Educator
Community Education Coordinator
Curriculum Developer
Education Specialist
Preschool, Elementary, Middle School, Secondary Teacher
Training Manager
Youth Program Director
Also: Graduate Study

Elementary Education, B.S. *major* Pre-Primary Endorsement (Teacher Licensure)

Required Credits: 74
Required GPA: 2.50

I ELEMENTARY EDUCATION FOUNDATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)

- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

COMPLETE THE FOLLOWING COURSE, UP TO 12 CREDITS:

- ED 4820 Student Teaching - Elementary (1-16 credits)

II ELEMENTARY EDUCATION MAJOR COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3201 Language Arts I (3 credits)
- ED 3202 Language Arts II (3 credits)
- ED 3203 Language Arts III (3 credits)
- ED 3221 Elementary Math Methods (3 credits)
- ED 3222 Elementary Science Methods (3 credits)
- ED 3240 Social Studies in the Elementary School (3 credits)
- ED 3301 Creative Expressions (3 credits)
- ED 3302 Creative Process Foundations: Patterns (3 credits)
- HLTH 4100 Teaching Elementary School Health (2 credits)
- PHED 4200 Methods of Teaching Elementary Physical Education to Classroom Teachers (1 credit)

COMPLETE THE FOLLOWING COURSE:

- MATH 1011 Mathematics for Elementary School Teachers I (3 credits)

COMPLETE THE FOLLOWING COURSE:

- MATH 1013 Mathematics for Elementary School Teachers II (3 credits)

PREPRIMARY ENDORSEMENT

COMPLETE THE FOLLOWING COURSES:

- ED 3670 Foundations of Early Childhood Education (3 credits)
- ED 3677 Relations and Management in Early Childhood Education (3 credits)

COMPLETE THE FOLLOWING COURSE, 5 CREDITS:

- ED 4811 Preprimary Student Teaching (3-10 credits)

Elementary Education, B.S. *major* Social Studies Endorsement (Teacher Licensure)

Required Credits: 92
Required GPA: 2.50

I ELEMENTARY EDUCATION FOUNDATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

COMPLETE THE FOLLOWING COURSE:

- ED 4820 Student Teaching - Elementary (1-16 credits)

II ELEMENTARY EDUCATION MAJOR COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3201 Language Arts I (3 credits)
- ED 3202 Language Arts II (3 credits)
- ED 3203 Language Arts III (3 credits)
- ED 3221 Elementary Math Methods (3 credits)
- ED 3222 Elementary Science Methods (3 credits)
- ED 3240 Social Studies in the Elementary School (3 credits)
- ED 3301 Creative Expressions (3 credits)
- ED 3302 Creative Process Foundations: Patterns (3 credits)
- HLTH 4100 Teaching Elementary School Health (2 credits)
- PHED 4200 Methods of Teaching Elementary Physical Education to Classroom Teachers (1 credit)

COMPLETE THE FOLLOWING COURSE:

- MATH 1011 Mathematics for Elementary School Teachers I (3 credits)

COMPLETE THE FOLLOWING COURSE:

- MATH 1013 Mathematics for Elementary School Teachers II (3 credits)

SOCIAL STUDIES ENDORSEMENT

ENDORSEMENT CORE:

- ED 4737 Content Area Reading (3 credits)
- ED 3417 Teaching and Learning in the Middle School (3 credits)
- ED 4840 Student Teaching - Special Fields (1-12 credits)

COMPLETE THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- HST 1115 United States History II, since 1877 (3 credits)
- HST 2610 Minnesota History (3 credits)
- POL 1200 Introduction to American Politics (3 credits)

Elementary Education, B.S. *major* Mathematics Endorsement (Teacher Licensure)

Required Credits: 85
Required GPA: 2.50

I ELEMENTARY EDUCATION FOUNDATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

COMPLETE THE FOLLOWING COURSE:

- ED 4820 Student Teaching - Elementary (1-16 credits)

II ELEMENTARY EDUCATION MAJOR COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3201 Language Arts I (3 credits)
- ED 3202 Language Arts II (3 credits)
- ED 3203 Language Arts III (3 credits)
- ED 3221 Elementary Math Methods (3 credits)
- ED 3222 Elementary Science Methods (3 credits)
- ED 3240 Social Studies in the Elementary School (3 credits)
- ED 3301 Creative Expressions (3 credits)
- ED 3302 Creative Process Foundations: Patterns (3 credits)
- HLTH 4100 Teaching Elementary School Health (2 credits)
- PHED 4200 Methods of Teaching Elementary Physical Education to Classroom Teachers (1 credit)

COMPLETE THE FOLLOWING COURSE:

- MATH 1011 Mathematics for Elementary School Teachers I (3 credits)

COMPLETE THE FOLLOWING COURSE:

- MATH 1013 Mathematics for Elementary School Teachers II (3 credits)

MATHEMATICS ENDORSEMENT

ENDORSEMENT CORE:

- ED 4737 Content Area Reading (3 credits)
- ED 3417 Teaching and Learning in the Middle School (3 credits)
- ED 4840 Student Teaching - Special Fields (5 credits)

COMPLETE THE FOLLOWING COURSES:

- MATH 3064 Number Concepts (4 credits)
- MATH 3065 Mathematical Foundations of Algebra (4 credits)
- MATH 3066 Geometry and Technology (4 credits)
- MATH 3067 Data, Probability, and Statistics (4 credits)

Elementary Education, B.S. *major* Science Endorsement (Teacher Licensure)

Required Credits: 101

Required GPA: 2.50

I ELEMENTARY EDUCATION FOUNDATION COURSES

Complete the following courses:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

Complete the following course, up to 12 credits:

- ED 4820 Student Teaching - Elementary (1-16 credits)

II ELEMENTARY EDUCATION MAJOR COURSES

Complete the following courses:

- ED 3201 Language Arts I (3 credits)
- ED 3202 Language Arts II (3 credits)
- ED 3203 Language Arts III (3 credits)
- ED 3221 Elementary Math Methods (3 credits)
- ED 3222 Elementary Science Methods (3 credits)
- ED 3240 Social Studies in the Elementary School (3 credits)
- ED 3301 Creative Expressions (3 credits)
- ED 3302 Creative Process Foundations: Patterns (3 credits)
- HLTH 4100 Teaching Elementary School Health (2 credits)
- PHED 4200 Methods of Teaching Elementary Physical Education to Classroom Teachers (1 credit)

Complete the following course:

- MATH 1011 Mathematics for Elementary School Teachers I (3 credits)

Complete the following course:

- MATH 1013 Mathematics for Elementary School Teachers II (3 credits)

SCIENCE ENDORSEMENT

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
or BIOL 1110 Human Biology (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
or BIOL 1120 General Biology: Evolution And Ecology (3 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
or CHEM 1111 General Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
or CHEM 1112 General Chemistry II (4 credits)
- GEOL 1110 Physical Geology (4 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)
or ED 3410 Secondary Science Methods (4 credits)

EDUCATION CORE

COMPLETE THE FOLLOWING COURSES:

- ED 3417 Teaching and Learning in the Middle School (3 credits)
- ED 4737 Content Area Reading (3 credits)

COMPLETE THE FOLLOWING COURSE (5 CREDITS):

- ED 4840 Student Teaching - Special Fields (1-12 credits)

Elementary Education, B.S. *major* (Teacher Licensure)

Required Credits: 63

Required GPA: 2.50

I ELEMENTARY EDUCATION FOUNDATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

COMPLETE THE FOLLOWING COURSE, UP TO 12 CREDITS:

- ED 4820 Student Teaching - Elementary (1-16 credits)

II ELEMENTARY EDUCATION MAJOR COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3201 Language Arts I (3 credits)
- ED 3202 Language Arts II (3 credits)
- ED 3203 Language Arts III (3 credits)
- ED 3221 Elementary Math Methods (3 credits)
- ED 3222 Elementary Science Methods (3 credits)
- ED 3240 Social Studies in the Elementary School (3 credits)
- ED 3301 Creative Expressions (3 credits)
- ED 3302 Creative Process Foundations: Patterns (3 credits)
- HLTH 4100 Teaching Elementary School Health (2 credits)
- PHED 4200 Methods of Teaching Elementary Physical Education to Classroom Teachers (1 credit)

COMPLETE THE FOLLOWING COURSE:

- MATH 1011 Mathematics for Elementary School Teachers I (3 credits)

COMPLETE THE FOLLOWING COURSE:

- MATH 1013 Mathematics for Elementary School Teachers II (3 credits)

Elementary Education, B.S. *major* Communication Arts & Literature Endorsement (Teacher Licensure)

Required Credits: 86

Required GPA: 2.50

I ELEMENTARY EDUCATION FOUNDATION COURSES

Complete the following courses:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

Complete the following course, up to 12 credits:

- ED 4820 Student Teaching - Elementary (1-16 credits)

II ELEMENTARY EDUCATION MAJOR COURSES

Complete the following courses:

- ED 3201 Language Arts I (3 credits)
- ED 3202 Language Arts II (3 credits)
- ED 3203 Language Arts III (3 credits)
- ED 3221 Elementary Math Methods (3 credits)
- ED 3222 Elementary Science Methods (3 credits)
- ED 3240 Social Studies in the Elementary School (3 credits)
- ED 3301 Creative Expressions (3 credits)
- ED 3302 Creative Process Foundations: Patterns (3 credits)
- HLTH 4100 Teaching Elementary School Health (2 credits)
- PHED 4200 Methods of Teaching Elementary Physical Education to Classroom Teachers (1 credit)

Complete the following course:

- MATH 1011 Mathematics for Elementary School Teachers I (3 credits)

Complete the following course:

- MATH 1013 Mathematics for Elementary School Teachers II (3 credits)

COMMUNICATION ARTS AND LITERATURE ENDORSEMENT

COMPLETE THE FOLLOWING COURSES:

- ED 3208 Developmental Reading in Middle School (3 credits)
- ED 3417 Teaching and Learning in the Middle School (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ENGL 2337 American Literature from 1865 to Present (3 credits)
- ENGL 3540 Literature for Young Adults (3 credits)

COMPLETE THE FOLLOWING COURSE (5 CREDITS):

- ED 4840 Student Teaching - Special Fields (1-12 credits)

COMMUNICATION ARTS AND LITERATURE ENDORSEMENT

SELECT 1 OF THE FOLLOWING COURSES:

- ENGL 2357 British Literature to 1800 (3 credits)
- ENGL 2358 British Literature from 1800 to Present (3 credits)
- ENGL 2370 World Literature to 1600 (3 credits)
- ENGL 2377 World Literature from 1600 to Present (3 credits)

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English Education, B.S. *major* (Teacher Licensure)

Required Credits: 82

Required GPA: 2.50

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- ENGL 2330 American Literature to 1865 (3 credits)
- ENGL 2337 American Literature from 1865 to Present (3 credits)
- ENGL 3540 Literature for Young Adults (3 credits)
- ENGL 3580 The English Language (3 credits)
- *or* ML 3430 Linguistics (3 credits)
- ENGL 4420 Shakespeare and His Age (3 credits)

- or ENGL 4429 Shakespeare for Teachers (3 credits)
- ENGL 4455 Seminar: Literary Criticism and Theory (3 credits)

SELECT 2 OF THE FOLLOWING COURSES:

- ENGL 2357 British Literature to 1800 (3 credits)
- ENGL 2358 British Literature from 1800 to Present (3 credits)
- ENGL 2370 World Literature to 1600 (3 credits)
- ENGL 2377 World Literature from 1600 to Present (3 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- ENGL 2150 Technical Writing (3 credits)
- ENGL 3155 Professional Writing (3 credits)
- ENGL 3177 Rhetoric of Social Media (3 credits)
- ENGL 3179 Elements of Digital Rhetoric (3 credits)

II REQUIRED ELECTIVES

Select 12 semester credits from the following courses; at least three credits must be at the 4000 level. The courses may be taken multiple times with different topic subtitles.

- ENGL 3183 Topics in Writing or Rhetoric (3 credits)
- ENGL 3600 Author Topics (3 credits)
- ENGL 3606 Culture Topics (3 credits)
- ENGL 3607 Film Topics (3 credits)
- ENGL 3608 Genre Topics (3 credits)
- ENGL 3609 Period Topics (3 credits)

SELECT ONE OF THE FOLLOWING:

- ENGL 4183 Advanced Topics in Writing or Rhetoric (3 credits)
- ENGL 4700 Advanced Author Topics (3 credits)
- ENGL 4706 Advanced Culture Topics (3 credits)
- ENGL 4707 Advanced Film Topics (3 credits)
- ENGL 4708 Advanced Genre Topics (3 credits)
- ENGL 4709 Advanced Period Topics (3 credits)

III REQUIRED FOR LICENSURE

COMPLETE THE FOLLOWING COURSES:

NOTE:

ED 4737 is required for licensure and is listed under the secondary education core requirement.

ED 3208 has a prerequisite not included in this major, ED 3201 Language Arts I; but the prerequisite is enforced only for elementary education students.

- ED 3208 Developmental Reading in Middle School (3 credits)
- ENGL 3520 Writing for the Secondary School Teacher (3 credits)
- ENGL 3550 Methods of Teaching English and Communication (4 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)

- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

Health Education. B.S. *major* (Teacher Licensure)

Required Credits: 70

Required GPA: 2.50

I REQUIRED COURSES

Select 1 of the following courses:

- BIOL 1110 Human Biology (4 credits)
- BIOL 1400 Cellular Principles (4 credits)

Complete the following courses:

- BIOL 1111 Anatomy and Physiology for Allied Health I (4 credits)
- HLTH 2100 First Aid and CPR/AED (1 credit)
- HLTH 3150 Theoretical and Ethical Foundations of Health (3 credits)
- HLTH 3200 Personal and Consumer Health (3 credits)
- HLTH 3300 Nutrition (3 credits)
- HLTH 3500 Community Health (3 credits)
- HLTH 3710 Disease Prevention and Epidemiology (3 credits)
- HLTH 4206 Secondary School Health (2 credits)
- HLTH 4410 Health Programming (3 credits)
- PHED 3300 Physiology of Exercise and Nutrition (3 credits)
- PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)

Complete the following course:

- HLTH 4920 Directed Group Study: Health Seminar (1 credit)

Complete the following course:

- HLTH 4870 Practicum in Health Teaching (1 credit)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

SUGGESTED SEMESTER SCHEDULE FOR HEALTH EDUCATION MAJOR, B.S. (TEACHER LICENSURE)

The following is a list of required Health Education Major, B.S. courses arranged by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible.

Freshman

- BIOL 1110 Human Biology (4 credits)
or BIOL 1400 Cellular Principles (4 credits)
- HLTH 2100 First Aid and CPR/AED (1 credit)
- Liberal Education requirements

Sophomore

- BIOL 1111 Anatomy and Physiology for Allied Health I (4 credits)
- HLTH 3150 Theoretical and Ethical Foundations of Health (3 credits)
- HLTH 3200 Personal and Consumer Health (3 credits)
- Complete Liberal Education requirements
- Take the Minnesota Teacher Licensure Exam (MTLE) Basic Skills test

Junior

- Begin Professional Education Standards of Effective Practice (SEP) courses
- HLTH 3300 Nutrition (3 credits)
- PHED 3300 Physiology of Exercise and Nutrition (3 credits)
- HLTH 3500 Community Health (3 credits)
- HLTH 3710 Disease Prevention and Epidemiology (3 credits)
- HLTH 4206 Secondary School Health (2 credits)
- HLTH 4970 Internship (1-12 credits)

Senior

- HLTH 4410 Health Programming (3 credits)
- HLTH 4920 Directed Group Study: Health Seminar (1 credit)
- PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)
- Complete Professional Education Standards of Effective Practice (SEP) courses
- Student teaching

Mathematics Education, B.S. *major* (Teacher Licensure)

The Mathematics Bachelor of Science (Teacher Licensure) follows the guidelines of the National Council of Teacher of Mathematics for undergraduate programs for teachers of mathematics. Students majoring in this degree should also check the Professional Education requirements found in Professional Education: Secondary.

Note: If the student's high school mathematics courses and/or the Mathematics Placement Test indicate a lack of readiness for calculus, the student will be placed in one of the following precalculus sequences: MATH 1470; or MATH 1170 and MATH 1180; or MATH 1170 and MATH 1470. Students who need to take more than one course in preparation for calculus may not be able to complete this program without exceeding 120 credits.

Required Credits: 76

Required GPA: 2.50

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- MATH 2210 Discrete Mathematics (4 credits)
- MATH 2471 Calculus I (5 credits)
- MATH 2472 Calculus II (5 credits)
- MATH 2480 Multivariable Calculus (4 credits)
- MATH 3310 Linear Algebra (4 credits)

II REQUIRED ELECTIVES

COMPLETE THE FOLLOWING COURSES:

- MATH 3065 Mathematical Foundations of Algebra (4 credits)
- MATH 3560 Classical and Modern Geometry (3 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- MATH 3067 Data, Probability, and Statistics (4 credits)
- STAT 2610 Applied Statistics (4 credits)
- STAT 3631 Probability and Statistics I (4 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- MATH 4350 Abstract Algebra (3 credits)
- MATH 4371 Modern Algebra (3 credits)

III REQUIRED CONCENTRATION, SECOND EDUCATION MAJOR OR MIDDLE LEVEL ENDORSEMENT

COMPLETE ONE OF THE FOLLOWING OPTIONS:

Note: If taken under II. above, MATH 3067 or STAT 3631 may be used to meet this requirement.

A. APPLIED MATHEMATICS/ CALCULUS CONCENTRATION

COMPLETE 2 OF THE FOLLOWING COURSES:

- MATH 2490 Differential Equations (4 credits)
- MATH 3710 Mathematical Modeling (3 credits)
- MATH 3720 Numerical Methods (3 credits)
- MATH 4410 Introduction to Analysis (3 credits)
- MATH 4760 Topics in Applied Mathematics (3 credits)

B. COMPUTER SCIENCE CONCENTRATION

COMPLETE 2 OF THE FOLLOWING COURSES:

- CS 2270 Introduction to Web Programming (3 credits)
- CS 2321 Computer Science I (4 credits)
- CS 2322 Computer Science II (4 credits)

C. MIDDLE LEVEL MATHEMATICS CONCENTRATION

COMPLETE 2 OF THE FOLLOWING COURSES:

- MATH 3064 Number Concepts (4 credits)
- MATH 3066 Geometry and Technology (4 credits)
- MATH 3067 Data, Probability, and Statistics (4 credits)

D. STATISTICS CONCENTRATION

COMPLETE 2 OF THE FOLLOWING COURSES:

- STAT 3610 Time Series Analysis (3 credits)
- STAT 3631 Probability and Statistics I (4 credits)

- STAT 3632 Probability and Statistics II (3 credits)

E: COMPLETE A SECONDARY EDUCATION MAJOR
(OTHER THAN MATHEMATICS)

F: COMPLETE A MIDDLE LEVEL ENDORSEMENT
(OTHER THAN MATHEMATICS)

REQUIRED PROFESSIONAL EDUCATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3440 Mathematics Methods in the Secondary School (4 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

COMPLETE 12 CREDITS OF THE FOLLOWING COURSE

- ED 4830 Student Teaching - Secondary (1-12 credits)

Program Learning Outcomes | Mathematics Education, B.S.

1. Knowledge: Students will understand the content and methods of the core areas of undergraduate mathematics.
2. Analysis: Students will identify, interpret and analyze problems, discern structure and pattern and make conjectures.
3. Application: Students will apply appropriate procedures and technology to solve problems.
4. Proof: Students will apply creative and analytic thinking to develop clear and valid mathematical arguments.
5. Communication: Students will communicate mathematical ideas and understanding effectively.
6. Pedagogy: Student will develop an understanding of a variety of pedagogical techniques and be able to apply them to the design of lessons and curriculum that communicate mathematical concepts to learners with diverse learning styles and ability levels.
7. Career Readiness: Students will be prepared for careers in education and further study in mathematics.

Music Education, B.S. *major*

Vocal/Classroom K-12 Specialization (Teacher Licensure)

Required Credits: 93

Required GPA: 2.50

I REQUIRED MUSIC CORE COURSES

Complete the following course (required 7 times):

- MUS 1800 Performance Laboratory (0 credit)

Complete the following courses:

(Completion of these courses with a grade of "C" or better is required for all music degrees.)

- MUS 2117 World Music (2 credits)
- MUS 2201 Music Theory and Musicianship I (5 credits)
- MUS 2202 Music Theory and Musicianship II (5 credits)
- MUS 3201 Music Theory and Musicianship III (5 credits)
- MUS 3202 Music Theory and Musicianship IV (4 credits)
- MUS 3501 Music Technology I (2 credits)
- MUS 3618 Conducting Fundamentals (2 credits)
- MUS 3801 History and Literature of Music I (3 credits)
- MUS 3802 History and Literature of Music II (3 credits)

Complete the following courses:

- MUS 2310 Piano Proficiency (0 credit)
- MUS 3898 Degree Recital (0 credit)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

VOCAL AND CLASSROOM MUSIC

Required core courses

NOTE: Piano majors replace MUS 3417 with MUS 4106, Piano Pedagogy I (2 credits). MUS 4106 requires consent of instructor.

Select two of the following methods courses(2 credits):

- MUS 1348 String Methods (1 credit)
- MUS 1368 High Brass Methods (1 credit)
- MUS 1369 Low Brass Methods (1 credit)
- MUS 1378 Percussion Methods (1 credit)
- MUS 1388 Single Reeds Methods (1 credit)
- MUS 1389 Double Reeds/Flute Methods (1 credit)

Complete the following courses:

Note: Piano majors replace MUS 2417 with MUS 4106, which requires consent of instructor.

- MUS 2417 Diction For Singers I (2 credits)
- MUS 2418 Diction for Singers II (2 credits)
- MUS 2607 Music Education I: Introduction (2 credits)
- MUS 3300 Piano Accompanying (2 credits)
- MUS 3400 Vocal Pedagogy (1 credit)
- MUS 3607 Music Education II: Elementary Methods (3 credits)
- MUS 3638 Choral Conducting (2 credits)
- MUS 4607 Music Education III: Secondary Methods (2 credits)
- MUS 4811 Choral Notation and Arranging (1 credit)
- MUS 4812 Choral Studies (2 credits)

Required major applied area

NOTE: All music majors are required to register for applied area lessons until the Degree Recital is passed.

Complete the following course:

- MUS 2138 Voice, Level II (1 credit)

Complete the following courses:

- MUS 3138 Voice, Level III (1 credit)

Required vocal performing organizations:

NOTE: All music majors are required to participate in a major ensemble every semester they are enrolled. MUS 4800 and 4810 are by audition only.

Select 6 semester credits from the following courses:

- MUS 3800 Varsity Singers (0-2 credits)
- MUS 4800 Bemidji Choir (0-2 credits)
- MUS 4810 Chamber Singers (0-2 credits)

Music Education, B.S. *major* Instrumental/Classroom K-12 Specialization (Teacher Licensure)

Required Credits: 93

Required GPA: 2.50

I REQUIRED MUSIC CORE COURSES

Complete the following course (required 7 times):

- MUS 1800 Performance Laboratory (0 credit)

Complete the following courses:

(Completion of these courses with a grade of "C" or better is required for all music degrees.)

- MUS 2117 World Music (2 credits)
- MUS 2201 Music Theory and Musicianship I (5 credits)
- MUS 2202 Music Theory and Musicianship II (5 credits)
- MUS 3201 Music Theory and Musicianship III (5 credits)
- MUS 3202 Music Theory and Musicianship IV (4 credits)
- MUS 3501 Music Technology I (2 credits)
- MUS 3618 Conducting Fundamentals (2 credits)
- MUS 3801 History and Literature of Music I (3 credits)
- MUS 3802 History and Literature of Music II (3 credits)

Complete the following courses:

- MUS 2310 Piano Proficiency (0 credit)
- MUS 3898 Degree Recital (0 credit)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

INSTRUMENTAL AND CLASSROOM MUSIC SPECIALIZATION

Note: All music majors are required to register for applied area lessons until the Degree Recital is passed.

Required Core Courses

Complete the following courses:

- MUS 1138 Introduction to Voice (1 credit)
- MUS 1348 String Methods (1 credit)
- MUS 1368 High Brass Methods (1 credit)
- MUS 1369 Low Brass Methods (1 credit)
- MUS 1378 Percussion Methods (1 credit)
- MUS 1388 Single Reeds Methods (1 credit)
- MUS 1389 Double Reeds/Flute Methods (1 credit)
- MUS 2607 Music Education I: Introduction (2 credits)
- MUS 3100 Improvisation (1 credit)
- MUS 3607 Music Education II: Elementary Methods (3 credits)
- MUS 3628 Instrumental Conducting (2 credits)
- MUS 4100 Instrumental Arranging (1 credit)
- MUS 4607 Music Education III: Secondary Methods (2 credits)
- MUS 4737 Instrumental Studies (3 credits)

Required major applied area - major instrument

Select 1 semester credit at the 2000 level

(Numbered 2x48, 2x58, 2x68, 2x78) in one of the following, depending on major instrument: strings woodwinds, brass, or percussion.

Required major applied area - major instrument

Select 1 semester credit at the 3000 level

(numbered 3x48, 3x58, 3x68, 3x78) in one of the following, depending on major instrument: strings, woodwinds, brass or percussion.

Required instrumental performing organizations

Select 6 credits from the following courses:

Note: All music majors are required to participate in a major ensemble every semester they are enrolled.

MUS 4500 and MUS 4710 are by audition only.

Note: Students must be enrolled in MUS 4700, MUS 4703, MUS 4706, or MUS 4707 for at least one semester.

- MUS 4500 Bemidji Symphony Orchestra (0-2 credits)
- MUS 4610 Jazz Band (0-2 credits)
- MUS 4700 Instrumental Ensembles (0-2 credits)
- MUS 4710 Wind Ensemble (0-2 credits)

Physical Education, B.S. *major* (Teacher Licensure)

Required Credits: 79

Required GPA: 2.50

I REQUIRED COURSES

Select 1 of the following courses:

- BIOL 1110 Human Biology (4 credits)
- BIOL 1400 Cellular Principles (4 credits)

Complete the following courses:

- BIOL 1111 Anatomy and Physiology for Allied Health I (4 credits)
- HLTH 2100 First Aid and CPR/AED (1 credit)
- PHED 2100 Foundations of Physical Education, Exercise Science, and Sport (3 credits)
- PHED 3100 Motor Development (2 credits)
- PHED 3110 Motor Learning (2 credits)
- PHED 3120 Psychology of Sport (2 credits)
- PHED 3200 Introduction to Sport Biomechanics (3 credits)
- PHED 3300 Physiology of Exercise and Nutrition (3 credits)
- PHED 3449 Socio-Culture and Ethical Issues in Sport (3 credits)
- PHED 3504 Teaching Rhythms and Dance (2 credits)
- PHED 3505 Teaching Elementary Physical Education (2 credits)
- PHED 3604 Teaching Team Sports (2 credits)
- PHED 3605 Teaching Individual Sports (2 credits)
- PHED 3607 Teaching Fitness (2 credits)
- PHED 4400 Curriculum and Assessment in Physical Education (3 credits)
- PHED 4500 Inclusive Physical Education (3 credits)

Complete the following course:

- PHED 4920 DGS: (1 credit)

Complete the following course:

- PHED 4870 Practicum in Physical Education Teaching (1 credit)

II REQUIRED AQUATICS ELECTIVES

Select 1 of the following courses:

- PHED 1116 Advanced Swimming (1 credit)
- PHED 2630 Lifeguard Training (3 credits)
- PHED 2640 Water Safety Instructor (3 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3

credits)

- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

Program Learning Outcomes | Physical Education, B.S. (Teacher Licensure)

1. Collaboration: Identifies strategies to become an advocate in the school & community to promote a variety of physical activity opportunities (C6) 2. Identifies & actively seeks community resources to enhance physical activity opportunities (B7).

2. Growth & Development: Designs safe instruction that meets student developmental needs in the physical, cognitive, and social/emotional domains (B7, B8) 2. Understands the biological, psychological, sociological, experiential, & environmental factors that influence developmental readiness to learn & refine movement skills (A4) 3. Identifies, selects, implements appropriate learning/practice opportunities based on understanding the student, learning environment, task (C1).

3. Diverse Students: Identify, select, & implement appropriate instruction that is sensitive to students' strengths/weaknesses, multiple needs, learning styles, & prior experiences (B11).

4. Management & Motivation: Uses managerial routines that create smoothly functioning learning experiences & environments (C2) 2. Uses a variety of developmentally appropriate practices to motivate students to participate in physical activity in and out of school (C3) 3. Uses strategies to help students demonstrate responsible & social behaviors that promote positive relationships & a productive learning environment (B6).

5. Communication: Demonstrates effective communication skills (e.g. use of language, clarity, conciseness, pacing, giving & receiving feedback, age appropriate language, non-verbal communication (D2) 2. Communicates managerial & instructional information in a variety of ways (e.g. bulletin boards, music, task cards, posters, Internet, video) 3. Communicates in ways that demonstrate sensitivity to all students (e.g. ethnic, cultural, socio-economic, ability, gender differences) (D3).

6. Planning & Instruction: Identifies, develops, & implements appropriate program & instructional goals (B4, B5) 2. Develops plans linked to program & instructional goals, & student needs (B4, B5) 3. Uses instructional strategies, based on content, student needs, & safety issues, to facilitate learning (C1, C9) 4. Designs & implements learning experiences that are safe, appropriate, relevant, and based on principles of effective instruction (C2, C9) 5. Applies disciplinary & pedagogical knowledge in developing & implementing effective learning environments & experiences (C2, C9) 6. Provides learning experiences that allow students to integrate knowledge & skills from multiple subject areas (B4) 7. Selects & implements appropriate teaching resources & curriculum materials (B5) 8. Uses effective demonstrations & explanations to link physical activity concepts to learning experiences. 9. Develops & uses appropriate instructional

cues & prompts to facilitate competent motor skill performance (A3)

7. Student Assessment: Uses a variety of appropriate authentic & traditional assessment techniques to assess student understanding & performance, provide feedback, & communicate student progress (C2) 2. Involves students in self & peer assessment 3. Interprets & uses learning & performance data to make informed curricular and/or instructional decisions (C2, C4).

8. Reflection: Uses a reflective cycle that describes teaching, justification of teaching performance, critique of teaching performance, setting of teaching goals, & implementation of change.

9. Technology: Demonstrates knowledge of current technologies & their application in physical education.

SUGGESTED SEMESTER SCHEDULE FOR PHYSICAL EDUCATION MAJOR, B.S. (TEACHER LICENSURE)

Students are encouraged to take the required Physical Education, B.S. courses in approximate numerical order. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions. Students are encouraged to consult the course descriptions for prerequisites.

Freshman

- BIOL1110
or BIOL1400
- PHED2100
- Liberal Education requirements

Sophomore

- BIOL1111
- HLTH2100
- PHED3100
- PHED3110
- PHED3120
- PHED3200
- PHED3300
- Required Electives in Major
- Liberal Education requirements
- Take the Pre-professional Skills Test

Junior

- Begin Professional Education Courses
- PHED3449
- PHED3504
- PHED3505
- PHED3604
- PHED3605
- PHED3607
- Required Electives in Major
- Liberal Education requirements

Senior

- PHED4400
- PHED4500
- PHED4870
- PHED4920
- Complete Professional Education Courses including student teaching

Science Education, B.S. *major* Life Science Specialty (Teacher Licensure)

Required Credits: 83

Required GPA: 2.50

Core Courses for Science Teaching in Grades 5-8

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
or BIOL 1110 Human Biology (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
or BIOL 1120 General Biology: Evolution And Ecology (3 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
or CHEM 1111 General Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
or CHEM 1112 General Chemistry II (4 credits)
- GEOL 1110 Physical Geology (4 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)
or ED 3410 Secondary Science Methods (4 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

LIFE SCIENCE SPECIALTY

A. REQUIRED BIOLOGY COURSES

COMPLETE THE FOLLOWING COURSES:

- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)
- BIOL 3710 Microbiology (4 credits)
- BIOL 4620 Evolution (3 credits)
- BIOL 3720 Plant Form and Function (4 credits)
or BIOL 3830 Aquatic Plants and Algae (4 credits)
- BIOL 4894 Advanced Research Project I (2 credits)
or BIOL 4895 Advanced Research Project II (2 credits)

B. REQUIRED BIOLOGY ELECTIVE

SELECT 1 OF THE FOLLOWING COURSES:

- BIOL 3150 Animal Behavior (3 credits)
- BIOL 3310 Entomology (3 credits)
- BIOL 4510 Ornithology (3 credits)

- BIOL 4520 Mammalogy (3 credits)
- BIOL 4534 Ichthyology (4 credits)

SUGGESTED SEMESTER SCHEDULE FOR LIFE SCIENCE SPECIALTY, SCIENCE EDUCATION MAJOR, B.S. (TEACHER LICENSURE)

The following is a list of required Science (Life Science) Major, B.S. courses arranged by year. This schedule is intended to assist students in planning their courses. There is some flexibility in this schedule, but graduation within four years will require close adherence to the specified sequence of courses. Always consult your Biology academic advisor as to the proper courses and sequence of courses needed for graduation. It is possible, in some circumstances, that courses in a student's Liberal Education program may be used in his or her academic major.

Freshman

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
- Liberal Education requirements

Sophomore

- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)
- BIOL 4894 Advanced Research Project I (2 credits) or BIOL 4895
- BIOL 3720 Plant Form and Function (4 credits)
- GEOL 1110 Physical Geology (4 credits)
- PHYS 1101 General Physics I (4 credits)
or PHYS 2101 Physics I (4 credits)
- Consider starting Professional Education sequence
- Liberal Education requirements

Junior

- BIOL 3710 Microbiology (4 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)
- Other Professional Education requirements
- Liberal Education requirements

Senior

- Biology Elective (BIOL 3150, 3310, 3510, 4520, or 4534)
- BIOL 4620 Evolution (3 credits)
- Complete Professional Education requirements, including one semester of student teaching
or Complete liberal education requirements

Science Education, B.S. *major* Chemistry Specialty (Teacher Licensure)

Required Credits: 78
Required GPA: 2.50

Core Courses for Science Teaching in Grades 5-8

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
or BIOL 1110 Human Biology (4 credits)

- BIOL 1500 Diversity of Life (4 credits)
or BIOL 1120 General Biology: Evolution And Ecology (3 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
or CHEM 1111 General Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
or CHEM 1112 General Chemistry II (4 credits)
- GEOL 1110 Physical Geology (4 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)
or ED 3410 Secondary Science Methods (4 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

CHEMISTRY SPECIALTY

COMPLETE THE FOLLOWING COURSES:

- CHEM 3110 Laboratory Management and Safety (2 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 3507 Analytical Chemistry (3 credits)
- CHEM 3570 Analytical Chemistry Laboratory (1 credit)
- CHEM 3980 Research (1 credit)

SELECT 1 OF THE FOLLOWING COURSES:

- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4811 Advanced Inorganic Chemistry I (3 credits)

Science Education, B.S. *major* Physics Specialty (Teacher Licensure)

Required Credits: 82
Required GPA: 2.50

Core Courses for Science Teaching in Grades 5-8

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
or BIOL 1110 Human Biology (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
or BIOL 1120 General Biology: Evolution And Ecology (3 credits)

- CHEM 2211 Principles of Chemistry I (4 credits)
or CHEM 1111 General Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
or CHEM 1112 General Chemistry II (4 credits)
- GEOL 1110 Physical Geology (4 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)
or ED 3410 Secondary Science Methods (4 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

PHYSICS SPECIALTY

Complete the following courses:

MATH 2471 is recommended (required for PHYS 2101)

- PHYS 2101 Physics I (4 credits)
or PHYS 1101 General Physics I (4 credits)
- PHYS 2102 Physics II (4 credits)
or PHYS 1102 General Physics II (4 credits)
- PHYS 3103 Physics III (4 credits)
- PHYS 3300 Thermal and Statistical Physics (3 credits)
or CHEM 4711 Physical Chemistry I (3 credits)
- PHYS 4300 Optics (4 credits)

Complete the following course:

- PHYS 4980 Research (3 credits)

Science Education, B.S. *major*

Earth and Space Science Specialty (Teacher Licensure)

Required Credits: 86

Required GPA: 2.50

Core Courses for Science Teaching in Grades 5-8

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
or BIOL 1110 Human Biology (4 credits)
- BIOL 1500 Diversity of Life (4 credits)

- or BIOL 1120 General Biology: Evolution And Ecology (3 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
or CHEM 1111 General Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
or CHEM 1112 General Chemistry II (4 credits)
- GEOL 1110 Physical Geology (4 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)
or ED 3410 Secondary Science Methods (4 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

EARTH AND SPACE SCIENCE SPECIALTY

COMPLETE THE FOLLOWING COURSES:

- ENVR 2000 Introduction to Environmental Science (3 credits)
- GEOL 1120 Historical Geology (4 credits)
- GEOL 2110 Mineralogy and Petrology (4 credits)
- GEOL 3500 Topics in Paleontology (3 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)
- SCI 2100 Astronomy (3 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- GEOL 3211 Environmental Hydrology (3 credits)
- ENVR 4050 Geochemistry (3 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- GEOL 4970 Internship (3 credits)
- GEOL 4980 Research (3 credits)

Social Studies Education, B.S. *major*

(Teacher Licensure)

Note: Students must have a minimum overall 2.50 GPA in the major. No grade below a "C" may be used to meet program requirements. A minimum of 22 of the 56 Social Studies program credits must be completed at BSU.

Required Credits: 89

Required GPA: 2.50

I ECONOMICS COURSES

Complete the following courses:

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

II GEOGRAPHY COURSES

Complete the following courses:

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)

Select 1 of the following courses:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)
- GEOG 3850 Geography of the Middle East (3 credits)
- GEOG 3860 Geography of Latin America and the Caribbean (3 credits)

III HISTORY COURSES

Complete the following courses:

- HST 1114 United States History I, to 1877 (3 credits)
- HST 1115 United States History II, since 1877 (3 credits)
- HST 1304 World History I, Prehistory-1500 (3 credits)
- HST 1305 World History II, 1500-Present (3 credits)
- HST 2610 Minnesota History (3 credits)

Select 1 of the following courses:

- HST 3117 American Revolutionary Era, 1763-1800 (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- HST 3137 The American Civil War (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3187 American West (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)
- HST 3650 Environmental History (3 credits)
- HST 3799 Tudor and Stuart England, 1485-1714 (3 credits)
- HST 3800 Georgian Britain, 1688-1820 (3 credits)
- HST 4000 Historiography (3 credits)
- HST 4500 Historical Methods (3 credits)

IV POLITICAL SCIENCE COURSES

Complete the following courses:

- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)

Select 1 of the following courses (3 credits minimum):

- POL 3100 American Foreign Policy (3 credits)
- POL 3130 Asian Political Development (3 credits)
- POL 3140 Canadian Politics (3 credits)
- POL 3150 Topics in Political Science (1-3 credits)

- POL 3160 Comparative European Politics (3 credits)
- POL 3170 International Relations (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3190 International Political Economy (3 credits)
- POL 3200 Minnesota Politics (3 credits)
- POL 3210 Public Administration (3 credits)
- POL 3230 Environmental Politics (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- POL 3420 Campaigns and Elections (3 credits)
- POL 4200 Constitutional Law (3 credits)

V PSYCHOLOGY COURSE

Complete the following course:

- PSY 1100 Introductory Psychology (4 credits)

VI SOCIOLOGY COURSES

Complete the following courses:

- SOC 1104 Society and Social Issues (3 credits)
- SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)

VII SOCIAL STUDIES METHODS COURSE

Complete the following course:

- ED 3580 Teaching of Middle and Secondary School Social Studies (4 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

Early Childhood Studies *minor*

Required Credits: 21

Required GPA: 2.50

I REQUIRED COURSES

Complete the following courses:

- ED 2100 Child Development and Learning (3 credits)
- ED 3670 Foundations of Early Childhood Education (3 credits)

- ED 3677 Relations and Management in Early Childhood Education (3 credits)
- ED 4700 Developmentally Appropriate Preprimary Education (3 credits)
- ED 4817 Practicum in Young Child and Family Setting (3 credits)

II REQUIRED ELECTIVES

Select 6 elective credits from the following:

- COMM 3130 Family Communication (3 credits)
- HLTH 3500 Community Health (3 credits)
- INST 1107 Introduction to Turtle Island (3 credits)
- INST 3170 Indigenous Education (3 credits)
- SOC 2230 Race and Ethnic Relations (3 credits)
- SOC 3300 Family and Society (3 credits)
- SOWK 2110 Intercultural Communication (3 credits)
or COMM 3120 Communication in a Diverse Society (3 credits)

Education Courses

ED 1111 American Sign Language 1 (3 credits)

In this introductory course, students learn basic sign vocabulary, grammatical structure, and fingerspelling. Introduction to the Deaf community as a linguistic and cultural minority in the United States. Explores differences in hearing and Deaf cultures throughout the world. Liberal Education Goal Area 8.

ED 1112 American Sign Language 2 (3 credits)

In this introductory course, students continue to learn basic sign vocabulary, grammatical structure, and fingerspelling. Students deepen their knowledge of the Deaf community as a linguistic and cultural minority in the United States. Explores differences in hearing and Deaf cultures throughout the world. Prerequisite: ED 1111 or ML 1111. Liberal Education Goal Area 8.

ED 2007 Anatomy of Hate (3 credits)

Exploration of the mentality and culture of various hate groups, with connections between historical and contemporary events. Discussion of dissemination of sensitive material in the K-12 environment. Liberal Education Goal Area(s) 7 & 9.

ED 2100 Child Development and Learning (3 credits)

Child development and learning from prenatal through eight years of age. Emphasis on developmental domains and learning: physical (including health practices), cognitive, language, emotional, social (includes cultural), and creative. Assessment of development and learning. Field experiences required for child observation and assessment. Prerequisite: 2.50 GPA.

ED 2925 People of the Environment: Education Perspective (3 credits)

This course will survey the philosophical, historical, and ecological basis for environmental education within the context of K-12 educational institutions. Environmental issues of a local, state, federal, and global nature will be investigated. The role of pedagogy as a basis for changing societal attitudes relative to environment will be explored. Liberal Education Goal Area 10.

ED 3000 Introduction to FasTrack (1 credit)

This course provides a comprehensive evaluation of the professional and academic experiences of aspiring teacher candidates. Transcripts and professional data are reviewed. Once the evaluation is completed, the student will work with the instructor to create an individualized program plan that leads to teacher licensure. Students are introduced to the concept of professional reflection based on the Standards of Effective practice. Student concerns and questions are addressed as well as an introduction to D2L and online learning. Discussions around the four components of the Professional Education Conceptual Framework in the areas of environmental awareness, technology, proficiency in teaching and collaboration occur via D2L. An introduction to TaskStream and its relation to the documenting of the Standards of Effective practice is provided. The cost for reviewing transcripts is waived for candidates who enroll in this course. This course is required before taking any other courses in the FasTrack program. Prerequisite: An earned bachelor's degree.

ED 3100 Introduction to the Foundations of Public School Education (3 credits)

Introduction to the historical, social, and political foundations of public school education. Introduction to the roles, functions, and responsibilities of an elementary or secondary public school teacher; a practicum experience.

ED 3110 Educational Psychology (3 credits)

A study of the teaching and learning process: teaching with emphasis on planning effective instruction, management, and assessment; learning from behavioral, information processing, and constructivist views focusing on how learning is influenced by cognitive, personal, social, and moral development, and by teaching approaches, motivation, and other factors.

ED 3140 Human Relations In Education (3 credits)

Study of the causes and psychological dynamics of racism, sexism, and other forms of human oppression. Focus on building teacher/family relationships as a strategy in anti-bias teaching. Prerequisite: ED 3100 and ED 3110.

ED 3160 Philosophy and Organization of the Middle School (2 credits)

Specific information and skills relative to the development of a philosophy and rationale for a middle school. Emphasis on the relationship between the middle school student, the middle school teacher, and the philosophy, organization (including interdisciplinary planning, advisor/advisee plan, etc.), and program of the middle school.

ED 3170 Education of the American Indian (3 credits)

Survey of traditional and western models used in the education of American Indians from colonial times to the present.

ED 3201 Language Arts I (3 credits)

A survey of various approaches and an investigation of the multiplicity of tasks involved in the teaching of elementary school reading. Focuses on emerging literacy development as well as assessment in the early years of learning to read. Corequisites: ED 3100 and ED 3110.

ED 3202 Language Arts II (3 credits)

Focuses on the use of children's literature in the elementary and middle schools and the role of literature in a balanced literacy program and continued language development. A balanced literacy program includes the integration of reading, writing, spelling, listening, speaking, and viewing skills meeting the needs of diverse learners. Prerequisites: ED 3201 for Elementary Education licensure candidates.

ED 3203 Language Arts III (3 credits)

Focuses on literacy components of the elementary and the middle school reading program. Special emphasis is given to the development of literacy skills in writing, listening, speaking, media literacy, and presenting and viewing as a part of a holistic view of language and communication. Prerequisites: ED 3202 for Elementary Education licensure candidates.

ED 3207 Reading in the Primary Grades (3 credits)

Methods and materials used in the teaching of reading in the primary grades with an emphasis on instructional problems methodology, and materials.

ED 3208 Developmental Reading in Middle School (3 credits)

Intensive study of reading in the middle school grades with an emphasis on instructional problems, methodology, and materials. Prerequisite: ED 3201.

ED 3212 Curriculum Instruction using Response to Intervention (RTI) (3 credits)

This course is designed to provide students with opportunities to apply learning in an authentic setting. Students will demonstrate-through fieldwork, online discussion, and course assessments-their knowledge of curriculum using Response to Intervention (RTI) and how to supervise a reading program. Prerequisites: ED 3201 (Elementary Students) or ED 4737 (Secondary Students).

ED 3217 Curriculum Enrichment through Media Resources (3 credits)

Designed to develop activities, projects, and units with a focus on the integration of the language arts throughout the elementary school curriculum. Various media resources are explored with an emphasis on technology. Prerequisite or Corequisite: ED 3201

ED 3218 Laboratory Experiences in Reading (2 credits)

Designed to provide students with actual teaching experiences in the area of reading. Time arranged.

ED 3221 Elementary Math Methods (3 credits)

Objectives, materials and methods of teaching modern mathematics. Requires visits to elementary schools. Prerequisites: ED 3100, MATH 1011 and Math 1013.

ED 3222 Elementary Science Methods (3 credits)

Consists of 1) a process science component covering physical, earth, and life science as related to Piagetian learning theory, and 2) an environmental education component including the philosophy, objectives, methods, and materials of environmental education. Prerequisites: ED 3100 and ED 3110.

ED 3240 Social Studies in the Elementary School (3 credits)

Objectives, strategies, and materials related to teaching social studies in the elementary school. Prerequisites: ED 3110, and ED 3140.

ED 3257 Introduction to Environmental Education and Interpretation (3 credits)

Objectives, program ideas, methods, and materials of outdoor education. General and specific techniques of implementing a program of environmental education and interpretation. Might not be offered every year.

ED 3258 Environmental Interpretation (3 credits)

Introduces the student to the profession of interpretation. Students gain an understanding of the principles of interpretation and their application in interpretative services in a wide variety of setting including museums, zoological gardens, industrial sites, and parks. Might not be offered every year.

ED 3301 Creative Expressions (3 credits)

Designed to help pre-service teacher education majors learn how to integrate literature, art, drama, dance/movement, and music throughout the curriculum by providing a basic arts knowledge base, clear reasons for integration, and specific arts integration principles. Emphasis is on teaching with, about, in, and through the arts. Prerequisites: ED 3100 and ED 3110.

ED 3302 Creative Process Foundations: Patterns (3 credits)

A comprehensive and holistic approach to arts education designed to provide pre-service teachers with a set of tools and strategies to teach the arts and incorporate them with other core disciplines. It provides the tools and resources to prepare teachers and students to create knowledge--emphasis on "create".

ED 3305 Literature Based Differentiated Instruction (3 credits)

This course emphasizes theory and practice in understanding, diagnosing and correcting problems in reading through differentiated literature-based instruction. Sims strategies as well instructional differentiated instruction will be introduced and implemented in a 20-hour clinical experience. (3 credits) Prerequisites: ED 3201 (Elementary Students) or ED 4737 (Secondary Students).

ED 3350 Pedagogy: Planning for Instruction (3 credits)

Introduction to the elements of designing effective instruction: learners, goals and objectives, teaching strategies, instructional technologies, and assessment, with special attention to the learners. Concepts from educational psychology and human relations are applied to the development of appropriate educational materials for diverse learners. Prerequisites: ED 3100 and ED 3110.

ED 3410 Secondary Science Methods (4 credits)

Introduces strategies and materials for teaching science grades 5-12. Discusses the teaching of science through a hands-on, inquiry-oriented methodology, and includes laboratory activities, class discussions, and modification of materials to address current Minnesota state standards. A field experience is required in an appropriate grade level with public school students. Prerequisite: Senior status or consent of instructor.

ED 3417 Teaching and Learning in the Middle School (3 credits)

Course provides comprehensive preparation for teaching in the middle school. Topics of study include young adolescent development, the family's impact on the middle school learner; middle school philosophy and content, instruction, and assessment at the middle school level. Study is given to the impact of technology on middle school teaching and learning. Course is project-focused, meaning content is organized around projects completed by students individually and in teams. Field experience is required.

ED 3440 Mathematics Methods in the Secondary School (4 credits)

NCTM Standards, lesson planning, Minnesota Frameworks, Graduation Rule, objectives, methods, and materials. Prerequisites: ED 3110 or consent of instructor.

ED 3480 Methods of Teaching Industrial Technology, Vocational Education (2 credits)

Approaches to teaching industrial technology education including philosophy, innovative approaches, classroom and laboratory strategies and methodology. Includes program visitation, evaluation and micro-teaching. Prerequisites: IT 3850, IT junior or senior status, and ED 3110.

ED 3500 Young Children with Special Needs (3 credits)

Introduction to teaching young children with special needs. Includes discussion of important aspects of education for young children in special education and mainstreamed settings. Students interrelate experiences working with young children with special needs to developing an educational philosophy. Prerequisite: ED 3110 or consent of instructor.

ED 3508 Parent/Professional Teams in Early Childhood (3 credits)

Emphasizes cooperative and coordinated educational programming with parents of normally and atypically developing infants, toddlers, and preschool age children. Models of early intervention and parent-teacher educational programs are presented and adapted for use with parents. First is interagency staffing patterns and cooperation among agencies and second is geographic, economic and social factors and related problems. Prerequisite: ED 3670 or ED 3500.

ED 3580 Teaching of Middle and Secondary School Social Studies (4 credits)

Objectives, activities, methods, and materials in teaching social studies in grades 5-12. Additional laboratory time is required. Prerequisite: ED 3110.

ED 3601 Assistive Technology (3 credits)

An overview of assistive technology for use by individuals with disabilities will be covered. Five types of devices will be examined and their uses discussed. They include environmental control devices simple augmentative communication devices; switches, modules, and mounting systems; computer adapted input devices; and special needs software. This course provides a format via e-mail for discussion regarding application and analysis of assistive technology devices. In addition, students will synthesize and evaluate information on disabilities and assistive technology devices found on the Internet.

ED 3608 Mathematics for Learners with Special Needs (2 credits)

Study of the problems that students who have learning difficulties exhibit in mathematics. Diagnostic, remedial, and instructional activities are developed. Requires an approved elementary (K-4) clinical experience. Prerequisites: ED 3221 and SPED 3600.

ED 3670 Foundations of Early Childhood Education (3 credits)

Social, psychological, historical, and educational foundations of kindergarten and prekindergarten programming are explored. Emphasis is placed on efforts of modern programs to adapt curriculum and instruction to the developmental levels and experience backgrounds of young children. Content will be geared toward teaching at the kindergarten and prekindergarten levels. Requires visitations at level of professional interest.

ED 3677 Relations and Management in Early Childhood Education (3 credits)

Study and development of skills in relations with young children, parents, and co-workers. Guidance and group management techniques are addressed for working effectively with prekindergarten and young school aged children. Experience in prekindergarten or kindergarten settings is a part of the class.

ED 3715 Learning Experiences for Infants and Toddlers (4 credits)

Students study and build skills in relation to developmentally appropriate and nurturing communication techniques, relationships, environments, and learning activities for infants and toddlers. Collaborative and culturally responsive relationships with families and co-workers are emphasized. Fifteen-hour field experience is required. (Might not be offered every year.)

ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)

Focuses on designing and managing the learning environment to meet needs for growth in all learners in affective, cognitive, psychomotor, and social domains. Theories of individual behavior, diverse learners, group dynamics, communication, behavioral interventions, and classroom management presented and applied in simulations. Research on related topics is undertaken. Prerequisites: ED 3100, ED 3110, ED 3140, and ED 3350.

ED 4605 Infant and Toddler Student Teaching (5 credits)

Students integrate theory and practice through working as a member of a teaching team with placement in an infant and/or toddler classroom. Students complete portfolio-based student teaching experience, focusing on selected INTASC and BOT indicators. Weekly seminars. 3 hours of lab per week per credit. Prerequisite or Corequisite: ED 3715.

ED 4700 Developmentally Appropriate Preprimary Education (3 credits)

Students will design and implement developmentally appropriate curriculum in programs serving preschool children and their families. Students will develop integrated learning experiences across all developmental domains as described in Minnesota's Early Indicators of Progress. Students will assess the development and learning of children and use this information in planning and instructional decision-making. Students will plan and teach lessons using developmentally appropriate instructional strategies reflecting knowledge of children's development and individual and community sociocultural contexts. This course requires 20 hours of field experience in a preschool setting. Prerequisite(s): ED 3670.

ED 4737 Content Area Reading (3 credits)

Intensive study of content area reading issues. Assessment techniques and instructional strategies appropriate for grades four through twelve. Literacy requirements addressed include application competencies that take into account classroom experiences related to various disciplines. Prerequisites: ED 3100 and ED 3110.

ED 4740 Methods of Using Instructional Technology (3 credits)

Fundamentals of theory and practice in using instructional technology in teaching. Explores current and future methods of teaching with technology. Assists teachers and prospective teachers in utilizing various instructional technologies in their teaching.

ED 4747 Curriculum Development And Instructional Technology (4 credits)

How to modify existing curriculum to incorporate instructional technology into the educational program. Focuses on curriculum development processes that link advanced multi-media technologies to the curriculum.

ED 4750 Family, School, Community Relations (3 credits)

Course focuses on family involvement as essential in the successful education of the prekindergarten-12th grade learner. Study is given to family dynamics, trends in family-school relations, problems that inhibit parent involvement, and strategies for productive family involvement. Community and cultural considerations in family-school-community relations are examined. Pertinent field activities are required. Prerequisites: ED 3110, and ED 3140.

ED 4757 Philosophy and Methods of Parent Education (3 credits)

Historical, cultural, social, and psychological foundations in the philosophy of parent education are explored. Methods in the education of adults in the context of the family are studied. Models of parent/family education are examined. Visitations to early childhood family education programs are required. Prerequisites: ED 3500, ED 3670, and ED 3677.

ED 4758 Teaching the Learner at Risk: An Ecological Perspective (2 credits)

The course explores family and school factors that put the learner at risk for academic and social failure. Strategies are developed for addressing these factors, including collaborative efforts within and outside of the classroom. Prerequisite or Corequisite: ED 3110 and ED 3140.

ED 4760 Vocal Music Consultant in the Elementary School (1 credit)

Music resources, films, records, song literature, and community resources; demonstration and observation lessons; workshops, staff relations, purchase and maintenance of materials and equipment.

ED 4770 Organization and Administration of Environmental Education & Interpretation (2 credits)

The organization and administration of environmental education and interpretation experiences in varying lengths, and the acquisition, development, and maintenance of outdoor education facilities and programs. Prerequisite: ED 3257. Might not be offered every year.

ED 4777 Field Experiences in Environmental Education and Interpretation (3 credits)

An interdisciplinary field oriented course designed to provide the student with basic knowledge of the natural environment and its relationship to the total school curriculum. Each student will design and execute an environmental or outdoor education project related to their major field of study. Arrangements will be made to test out the activity on an appropriate group (e.g. school children, adults, etc.) Prerequisite: ED 3257. Might not be offered every year.

ED 4790 Teaching PK-12 Multilingual Learners (3 credits)

This course is an intensive study to develop instructional competencies that support the literacy development of students from culturally and linguistically diverse backgrounds. Pedagogical approaches and methods, curriculum planning, assessment, differentiated instruction, materials adaptation, and collaborative teaching will be presented. The course will examine cross-disciplinary literacy instruction and approaches to develop students' reading, writing, speaking, and listening skills in all content areas. This course is designed for teacher candidates, experienced teachers, and those who want to develop their knowledge and understanding of fundamental principles, practices, and policies for working with multilingual learners.

ED 4799 The Professional Teacher (1 credit)

Students study the role of the student teacher in planning for full-time teaching. Reviews classroom procedures, organization, planning, and technologies, and covers student teacher and beginning teacher procedures, general background, introduction to the classroom, teaching strategies, language, thinking, evaluation, employment (including letters of application, resume writing, and interviews), and continued professional growth. The course must be taken the semester before student teaching. Note: Elementary majors must successfully complete all methods courses prior to student teaching; secondary majors must successfully complete all methods courses and 80 percent of their content courses prior to student teaching. Prerequisites: ED 3100, ED 3110, ED 3140, ED 3350, and ED 3780; ECE majors are exempt from ED 3350 and ED 3780.

ED 4811 Preprimary Student Teaching (3-10 credits)

Students integrate theory and practice through working as a member of a teaching team in a prekindergarten placement. Includes application of content and methods from ED 3670 and ED 3677, as well as documentation of attainment of BOT outcomes as specified in the syllabus. Prerequisites or Corequisites: ED 3670 and ED 3677.

ED 4817 Practicum in Young Child and Family Setting (3 credits)

Students work in a child and family prekindergarten setting that may be in part home-based. Students assist cooperating teacher/home visitor in conduct of the program including such tasks as assessment, planning, activity implementation, parenting education, and evaluation of activity effectiveness. Requirements: Forty-five (45) clock hours of experience including weekly seminars, for each semester credit.

ED 4818 Field Experience in Instructional Technology (4 credits)

Students teach the use of technology equipment and software in elementary or secondary school settings and complete companion reflection activities and projects. Prerequisites: ED 4740 and ED 4747.

ED 4820 Student Teaching - Elementary (1-16 credits)

Full-time teaching with guidance and supervision by University supervisors and assigned school personnel. Graded Satisfactory/Unsatisfactory only. Prerequisites: ED 3100, ED 3110, ED 3140, ED 3350, ED 3780, and ED 4799.

ED 4827 Primary Student Teaching (1-12 credits)

Students work as a member of a teaching team in a public school primary grade classroom. Students complete portfolio-based student teaching experience, focusing on selected INTASC, BOT, and Graduation Standards outcomes. Weekly seminars. University selected and approved classroom placement. Three contact hours per week per credit, including seminar. Taken at end of Early Childhood Licensure program.

ED 4830 Student Teaching - Secondary (1-12 credits)

Full-time teaching with guidance and supervision by University supervisors and assigned school personnel. Graded Satisfactory/Unsatisfactory only. Prerequisites: ED 3110 and ED 4799.

ED 4840 Student Teaching - Special Fields (1-12 credits)

Full-time teaching with guidance and supervision by University supervisors and assigned school personnel (visual arts, business education, industrial arts education, instrumental music, vocal music, health and physical education.) Graded Satisfactory/Unsatisfactory only. Prerequisites: ED 3100, ED 3110, ED 3140, ED 3350, ED 3780, and ED 4799.

ED 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Special Education Courses**SPED 3105 Professional Practice in Special Education I (1 credit)**

This one-credit course is designed to augment the clinical experiences required throughout the Special Education Licensure Program and facilitate interaction with teacher coaches/mentors. This course is taken during the candidate's first semester in the program. Signature Assessment 1 is completed in this course. Prerequisites: Current teacher license or completion of a teaching degree or completion of ED 3100, ED 3110, enrolled in or completed ED 3350 or consent of instructor. Co-requisite: SPED 3600.

SPED 3106 Professional Practice in Special Education II (1 credit)

This one-credit course is designed to augment the clinical experiences required throughout the Special Education Licensure Program and facilitate interaction with teacher coaches/mentors. The course is taken during the program's third semester. Signature Assessment 2 is completed in this course. Prerequisites: SPED 3600, SPED 3105 and consent of instructor.

SPED 3107 Professional Practice in Special Education III (2 credits)

This two-credit course is designed to augment the clinical experiences required throughout the Special Education Licensure Program and facilitate interaction with teacher coaches/mentors. The course is taken during the program's fifth semester together with the final courses in the program. Signature Assessment 3 is completed in this course. Ten hours of field work for consultation and discussion with the mentor teacher and other professionals in the schools regarding content in the course and tasks related to Signature Assessment 3, are required. Prerequisites: SPED 3600, SPED 3105, SPED 3106 and consent of instructor.

SPED 3566 Survey of Mild Disabilities (3 credits)

This is an introductory level survey course that studies the strategies, methods and materials for educational programming necessary when teaching students with mild disabilities. This course focuses on history, etiology, characteristics, and instructional needs for individuals with mild disabilities including Autism Spectrum Disorder, Learning Disabilities, and Emotional Behavior Disorders. This course addresses learner traits relevant to specific intervention methods and instructional strategies across content areas as well as the roles of educators in inclusive settings to successfully collaborate to meet the needs of individuals with exceptionalities. Prerequisite(s): ED 3100, 3110, 3140, 3350, SPED 3600, 3650 or instructor consent.

SPED 3567 Survey of Special Education Law (3 credits)

The focus of this course is on a formal set of policies and procedures to be implemented by schools and districts for children in special education programs. This course introduces students to the referral, evaluation, planning, and programming process. This course will build an understanding of the role a teacher of special education has: being able to address academic and behavioral strategies, understands and applies principles of prevention and intervening early and procedures for referral, assessment, evaluation, individualized planning, programming, and placement specific to teaching students who have mild to moderate needs in the areas of academics, behavior, social, emotional, communication, and functional performance. 20 hours of field experience. Prerequisite(s): ED 3100, 3110, 3140, 3350, SPED 3600, 3650 or instructor consent.

SPED 3600 Study of the Learner with Special Needs (3 credits)

This is a foundation course for special education. The course provides an introductory overview of special education and characteristics and learning needs of school-age children with exceptionalities. A 15-hour approved clinical experience at the Kindergarten through 12 grade (K-12) level is required. The course is taken simultaneously with SPED 5105. Prerequisites: Current standard teaching license or completion of a teaching degree or completion of ED 3100, ED 3110, enrolled in or completed ED 3350 or consent of instructor. Co-requisite: SPED 3105 (Exempt: DAPE) Consent of instructor.

SPED 3620 Teaching the Learner with Specific Learning Disabilities I (3 credits)

This course is designed to introduce the candidate to the field of learning disabilities. It is a study of learners whose learning problems inhibit their ability to meet academic performance standards and developmental expectations for their age. Emphasis is placed on historical foundations, current education definitions of learning deficits, federal and Minnesota eligibility criteria for services, etiology of learning disabilities, relationship between learning disabilities and other associated conditions, impact of information processing deficits on children with learning disabilities, and social or emotional aspects of children and youth with learning disabilities. A 20-hour approved clinical experience at the Kindergarten through 6 grade (K-6) level is required. Prerequisites: SPED 3600 and consent of instructor.

SPED 3630 Teaching the Learner with Emotional Behavioral Disorders I (3 credits)

The course is an introduction to the characteristics and needs of students with emotional and behavioral disorders within the context of school, family and community settings. A 20-hour approved clinical experience at the Kindergarten through 6 grade (K-6) level is required. Prerequisites: SPED 3600 and consent of instructor.

SPED 3650 Collaborative Techniques for Special Educators (3 credits)

A study of the importance of and techniques for collaboration with parent, caregivers, community services and other support services to enhance the learning outcomes for students with special needs. A 10-hour approved clinical experience at the Kindergarten through 12 grade (K-12) level is required. Prerequisites: Consent of instructor.

SPED 3655 Due Process in Special Education I: Individual Education Plan (3 credits)

The course focuses on a formal set of policies and procedures to be implemented by schools and districts for children in special education programs. This course concentrates on the creation of compliant Individualized Education Plans (IEP) to meet the academic and/or emotional and behavioral needs of students receiving special education services. A 10-hour approved clinical experience at the Kindergarten through 6 grade (K-6) level is required. Prerequisites: SPED 3600 and consent of instructor.

SPED 3660 Teaching the Learner with Autism Spectrum Disorder I: Mild to Moderate (3 credits)

This course presents a whole-person perspective of individuals with high-functioning Autism Spectrum Disorder and surveys research-based approaches to teaching, biological and neurological information necessary for assessment, genetic research, legislation, and the Council for Exceptional Children (CEC) Code of Ethics. The course material covers birth through the age of 21 and requires 20 hours of field experience with 10 hours dedicated to birth to Pre-Kindergarten and 10 hours dedicated to Kindergarten through Grade 6. Prerequisites: SPED 3600 and consent of instructor.

SPED 3665 Social Skills (3 credits)

This course is designed to explore evidence based social skill and communication skill interventions for students diagnosed with Autism Spectrum Disorder (ASD), Emotional Behavioral Disorders (EBD) and Specific Learning Disability (SLD). The course requires 20 hours of field experience with students in Grades 5-8. Prerequisites: SPED 3600 and consent of instructor.

SPED 4715 Curriculum Techniques with Special Populations (3 credits)

The focus of the course is curricular interventions and techniques for accommodating diverse learners within the general education setting. A 20-hour approved clinical experience at the 6-8 grade level is required. Prerequisites: SPED 3600 and consent of instructor.

SPED 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

All-University Courses

The course numbers listed below, not always included in the semester class

Psychology

Psychology is the science of behavior, cognition, and affect. All psychology is grounded in research that ultimately seeks to understand the actions, thoughts, and emotions of people. Applied psychology is designed to provide practical solutions to human problems.

The Psychology major emphasizes psychology as an applied and scientific discipline. Students majoring in Psychology receive particular preparation for graduate study in the field and broad preparation for employment in the human services and a wide range of positions requiring a college degree.

Advanced degrees are required for the following representative careers: child psychologist, clinical psychologist, college professor, experimental psychologist, industrial psychologist, rehabilitation counselor, school psychologist, and secondary school counselor.

Programs

- Psychology, B.A. *major*
- Psychology, B.S. *major*
- Social Studies, B.A. (Psychology Emphasis) *major*
- Psychology *minor*

Career Directions

Adolescent Counselor
Agency Administrator
Career Counselor
Case Worker
Chemical Dependency Counselor
Corrections Worker
Crisis Counselor
Data Analyst
Day Care Teacher
Early Childhood Family Education Specialist
Gerontology Specialist
Group Facilitator
Head Start Worker
Human Resources Specialist
In-Home Family Counselor
Juvenile Treatment Specialist
Law
Medicine
Probation Officer
Psychiatric Aide
Sexual Assault Advocate
Special Education Worker
Specialized Career Directions/Applied Psychology
Specialized Career Directions/Psychology
Also: Graduate Training/Professional Psychology

Preparation

Recommended High School Courses

Biology
English
Mathematics
Social Science

Psychology, B.A. *major*

Required Credits: 49

Required GPA: 2.25

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- PSY 1100 Introductory Psychology (4 credits)
- PSY 2217 Abnormal Psychology (4 credits)
- PSY 2227 Learning and Cognition (4 credits)
- PSY 3237 Lifespan Development (4 credits)
- PSY 3401 Basic Statistics for Research (4 credits)
- PSY 3402 Research Methods (4 credits)
- PSY 4588 Multicultural Psychology (4 credits)

II REQUIRED ELECTIVES

Students should choose electives in the major that best match their interests and career goals. In consultation with their advisor, students should select 21 credits of elective courses as follows.

GROUP 1: ELECTIVES

Select a minimum of 12 additional credits of Psychology

courses at any level.

These credits may include Pre-Internship Seminar (PSY 4870) and up to 6 credits of Internship in Psychology (PSY 4970). Internships require senior standing, completion of all relevant coursework and consent of an advisor.

Additional credits from Research Lab may also be included. An overall maximum of 6 credits from Research Lab can be used to fulfill the 21 elective requirement of the major (Group 1 and Group 2).

General Elective credits may also include a course from outside the department of Psychology. In consultation with their advisor, students may include up to 4 credits from one of the following courses from outside the department.

- BIOL 1110 Human Biology (4 credits)
- BIOL 1400 Cellular Principles (4 credits)
- BIOL 3150 Animal Behavior (3 credits)
- CRJS 4487 Principles of Criminal Justice Supervision (3 credits)
- HLTH 3500 Community Health (3 credits)
- INST 1107 Introduction to Turtle Island (3 credits)

- INST 2202 Survivance Since Contact (3 credits)
- JUST3307
- PHIL 2220 Ethics (3 credits)
- PHIL 2230 Logic (3 credits)
- PHIL 3330 Nineteenth Century Philosophy (3 credits)
- SOWK 2030 Introduction to Addictions (3 credits)
- SOWK 3201 Family: Dynamics and Intervention (3 credits)
- SOC 2230 Race and Ethnic Relations (3 credits)

- PSY 4447 Research Laboratory (1-4 credits)
- PSY 4970 Psychology Senior Internship (6-12 credits)

GROUP 2: 4000 - LEVEL ELECTIVES

Select a minimum of 9 credits of Psychology courses at the 4000 level. These credits may include a maximum of 3 credits from Research Lab (PSY 4447). Credits from Pre-Internship Seminar (PSY 4870), Teaching Assistantships (PSY 4917) and Internship in Psychology (PSY 4970) may not be included.

Psychology, B.S. *major*

The Psychology major at BSU provides students with unique opportunities to prepare for work in applied psychology and the human services at the Bachelor's level. The major also offers unique opportunities for students to prepare for graduate programs leading to Master's and Doctoral degrees in various fields of psychological practice and science. Many students choose the major to complete a general liberal arts degree or to prepare for work in fields other than psychology.

Required Credits: 49
Required GPA: 2.25

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- PSY 1100 Introductory Psychology (4 credits)
- PSY 2217 Abnormal Psychology (4 credits)
- PSY 2227 Learning and Cognition (4 credits)
- PSY 3237 Lifespan Development (4 credits)
- PSY 3401 Basic Statistics for Research (4 credits)
- PSY 3402 Research Methods (4 credits)
- PSY 4588 Multicultural Psychology (4 credits)

II REQUIRED ELECTIVES

Students should choose electives in the major that best match their interests and career goals. In consultation with their advisor, students should select 21 credits of elective courses as follows.

GROUP 1: ELECTIVES

Select a minimum of 12 additional credits of Psychology courses at any level.

These credits may include Pre-Internship Seminar (PSY 4870) and up to 6 credits of Internship in Psychology (PSY 4970). Internships require senior standing, completion of all relevant coursework and consent of an advisor.

Additional credits from Research Lab may also be included. An overall maximum of 6 credits from Research Lab can be used to fulfill the 21 elective requirement of the major (Group 1 and Group 2).

General Elective credits may also include a course from outside the Department of Psychology. In consultation with their advisor, students may include up to 4 credits from one of the following courses from outside the department.

- BIOL 1110 Human Biology (4 credits)
- BIOL 1400 Cellular Principles (4 credits)
- BIOL 3150 Animal Behavior (3 credits)
- CRJS 3307 Victimological Theory and Practice (3 credits)
- CRJS 4487 Principles of Criminal Justice Supervision (3 credits)
- HLTH 3500 Community Health (3 credits)
- INST 1107 Introduction to Turtle Island (3 credits)
- INST 2202 Survivance Since Contact (3 credits)
- PHIL 2220 Ethics (3 credits)
- PHIL 2230 Logic (3 credits)
- PHIL 3330 Nineteenth Century Philosophy (3 credits)
- SOWK 2030 Introduction to Addictions (3 credits)
- SOWK 3201 Family: Dynamics and Intervention (3 credits)
- SOC 2230 Race and Ethnic Relations (3 credits)
- PSY 4447 Research Laboratory (1-4 credits)
- PSY 4970 Psychology Senior Internship (6-12 credits)

GROUP 2: 4000 - LEVEL ELECTIVES

Select a minimum of 9 credits of Psychology courses at the 4000 level. These credits may include a maximum of 3 credits from Research Lab (PSY 4447). Credits from Pre-Internship Seminar (PSY 4870), Teaching Assistantships (PSY 4917) and Internship in Psychology (PSY 4970) may not be included.

Social Studies, B.A. *major*

Psychology Emphasis

Required Credits: 48
Required GPA: 2.50

Note: A minimum of 22 semester credits used to meet course requirements in I and II must be completed at Bemidji State University. No course grade below a C may be used to meet these requirements and a minimum GPA of 2.50 in this major is required for graduation. Students who desire a second field of emphasis are to consider a completion of a minor or a second major in that field. Such action may complement and increase the marketability of this major.

I REQUIRED CORE CURRICULUM

CAPSTONE COURSE

COMPLETE THE FOLLOWING COURSE:

- POL 4500 Thesis and Career Preparation (3 credits)

ECONOMICS COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)

WORLD HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2218 Medieval Europe (3 credits)
- HST 2219 Medieval European Culture (3 credits)
- HST 2228 Renaissance and Reformation Europe (3 credits)
- HST 2580 Russia (3 credits)
- HST 2600 Topics in History (3 credits)
- HST 2660 Women and History (3 credits)
- HST 2700 The History of World Religions (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)
- HST 3277 Readings and Research in European History (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)

U.S. HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2600 Topics in History (3 credits)
- HST 2610 Minnesota History (3 credits)
- HST 2667 Men and Women: Gender in America (3 credits)
- HST 3117 American Revolutionary Era, 1763-1800 (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- HST 3137 The American Civil War (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3187 American West (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 3100 American Foreign Policy (3 credits)
- POL 3130 Asian Political Development (3 credits)
- POL 3150 Topics in Political Science (1-3 credits)
- POL 3160 Comparative European Politics (3 credits)
- POL 3170 International Relations (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3190 International Political Economy (3 credits)
- POL 3200 Minnesota Politics (3 credits)
- POL 3210 Public Administration (3 credits)
- POL 3230 Environmental Politics (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)

- POL 3420 Campaigns and Elections (3 credits)
- POL 4200 Constitutional Law (3 credits)

SOCIOLOGY COURSES

COMPLETE THE FOLLOWING COURSES:

- SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)
- SOC 3210 Social Movements and Change (3 credits)

II REQUIRED FIELD OF EMPHASIS

COMPLETE THE FOLLOWING COURSE:

- PSY 1100 Introductory Psychology (4 credits)

SELECT 14 SEMESTER CREDITS OF ELECTIVES FROM PSYCHOLOGY:

Psychology *minor*

Required Credits: 19

Required GPA: 2.00

I REQUIRED COURSES

SELECT THE FOLLOWING COURSE:

- PSY 1100 Introductory Psychology (4 credits)

II REQUIRED ELECTIVES

SELECT 15 SEMESTER CREDITS FROM PSYCHOLOGY COURSES

Psychology Courses

PSY 1010 Stress and Coping (2 credits)

Focuses on the development of personal skills related to health and lifetime achievement. Topics include stress management, self-motivation, study skills, interpersonal relationships, and overcoming common anxieties. Liberal Education Goal Area 11.

PSY 1100 Introductory Psychology (4 credits)

Introduction to the study of behavior, cognition, and emotion and general survey of psychological principles. Liberal Education Goal Area 5.

PSY 2200 Human Sexuality (4 credits)

This course is a survey of issues and attitudes associated with human sexuality. Emphasis will be placed on the social, cultural, and individual differences in sexual and reproductive attitudes, values, and behavior. Students will be introduced to common sex-related issues and to the particular concerns of gender and sexual minorities. This course will also engage students in real world issues and provides opportunities to develop the expertise and practice the skills required to make informed choices about sexuality for themselves and their families. Liberal Education Goal Area 7.

PSY 2217 Abnormal Psychology (4 credits)

Survey of the major forms of psychopathology in children, adolescents, and adults. Examines assessment, diagnosis, and current research into the causes and treatment of psychological disorders. Prerequisite: PSY 1100.

PSY 2227 Learning and Cognition (4 credits)

An introduction to behavioral and cognitive theories of behavior change and associated applications in animal training, education, and applied psychology. Prerequisite: PSY 1100.

PSY 2357 Industrial and Organizational Psychology (3 credits)

Presentation and analysis of theoretical, technical, and applied aspects of psychology in work settings. Topics include: human resources activities (selection, training and evaluation of personnel), work motivation, job satisfaction, leadership, organizational structure, group/team communication, working conditions. Prerequisite: PSY 1100.

PSY 2925 People of the Environment: Psychology Perspective (3 credits)

This class will provide an opportunity for students to reflect on concepts presented in the large class and apply them to their own lives. The emphasis will be on using social science approaches to design and implement effective, ethical, research-based programs that address environmental problems. Liberal Education Goal Area 10.

PSY 3210 Death and Culture (3 credits)

Death is a universal human experience shaped by the attitudes of any given culture. Examines death and dying in various cultural contexts and the accompanying psychological research into death attitudes and processes. Liberal Education Goal Area 8.

PSY 3237 Lifespan Development (4 credits)

A review of theories and research on the psychological, physical, and environmental factors influencing adjustment and development across the lifespan. Prerequisite: PSY 1100.

PSY 3332 Counseling and Crisis Interventions (4 credits)

A practical, skills-based introduction to the development of interpersonal awareness, beginning counseling techniques, and crisis intervention techniques. Prerequisites: PSY 1100 and PSY 2217.

PSY 3337 Group Processes (3 credits)

The examination and practical application of principles and dynamics underlying group behavior from a psychological perspective. Prerequisites: PSY 1100 and PSY 3401, or consent of instructor.

PSY 3367 Social Psychology (3 credits)

Survey of contemporary research in interpersonal perception and attraction, aggression and altruism, group dynamics, conformity, compliance, and attitude formation and change. Prerequisite: PSY 1100.

PSY 3387 Topics in Psychology (1-4 credits)

An in-depth study of topics of current interest in psychology. Prerequisite: PSY 1100.

PSY 3388 Health Psychology (3 credits)

This course provides an overview of the major theoretical perspectives and constructs related to the field of health psychology. Students will review readings on theory, research, and practice in understanding and improving health behavior. Health, wellness, and illness are addressed from biological, psychological, social, and cultural viewpoints. Prerequisite(s): PSY 1100.

PSY 3401 Basic Statistics for Research (4 credits)

Measures of central tendency, variability, and shape; t-tests; correlation; linear regression; chi-square tests; and one-way analysis of variance. Emphasis is on the use of appropriate statistical procedures for research using SPSS statistical software. Prerequisite: Completion of Liberal Education mathematics requirement (Category 4).

PSY 3402 Research Methods (4 credits)

Survey of research methods, concepts, issues, and strategies. Topics will include experimental and non-experimental methods; designing, conducting, and analyzing different types of studies; critiquing research; and writing research reports. Prerequisites: PSY 1100 and PSY 3401.

PSY 3437 Cognitive Psychology (3 credits)

Survey of models and research in cognition, including the topics of attention, memory, knowledge representation, language, problem solving, reasoning, and decision making. Prerequisite: PSY 1100.

PSY 3490 Disability and Ableism (3 credits)

This course will examine disability and disability experiences from a combination of social psychological and disability studies disciplinary perspectives. The primary objective being to provide students an opportunity to think critically about disability from a variety of different perspectives and to develop self-reflexivity when it comes to their own feelings about disability and disabled people. This course encourages the consideration of disability as a social, historical, political, cultural, and environmental phenomenon and emphasizes the subjectivity of disabled people as a historically marginalized minority group. At the same time, this course is primarily grounded by social psychological theory and methodology will consider disability-related phenomena that fall under the auspices of social psychological theory and practice including: prejudice, stereotyping, stigma, attitudes, attributions, self and social identity, social representations, and collective action; will critically pull from the extant body of literature on the social psychology of disability. Prerequisite(s): PSY 1100 or consent of instructor.

PSY 3500 Psychology of Aging (4 credits)

This course examines adult development in the senior years from a biopsychosocial perspective. Aspects of normal and abnormal development are covered as well as the impact of aging on the individual and the family. Prerequisites: PSY 3237 or consent of instructor.

PSY 3636 Positive Psychology (3 credits)

This course introduces students to the rapidly growing field of positive psychology. Positive Psychology encompasses the study of positive experiences, positive character traits, positive relationships, and the institutions (education, work, family, leadership) and practices that facilitate their development. This course reviews the history of positive psychology, empirical support for the field, measurement, and implications of deliberately attempting to increase happiness and well-being. Throughout the course students will engage in experiential learning and practical exercises to increase well-being, which will inform their theoretical and empirical understanding of important questions in positive psychology. Prerequisite(s): PSY 1100.

PSY 4242 Psychology of Women and Gender (3 credits)

This course is designed to explore the psychology of women and gender using from a feminist social psychological perspective. Students will use intersectional theory to investigate how women's experiences differ based on other privileged and/or marginalized identities (like race, class, sexual identity, and disability). Topics in the course will include the ways gender is constructed and socialized; the female-deficit model perspective in psychological research; mental and physical health issues unique to gender minorities; and, how sexism and misogyny shapes the lived experiences of cisgender women, transgender women, and non-binary people. Prerequisite(s): PSY 1100, PSY 2200, PSY 3402, or consent of instructor.

PSY 4328 Behavioral and Cognitive Intervention (4 credits)

Behavioral theory and the method of applied behavior analysis are explored. Therapeutic application of behavioral and cognitive/behavioral principles to human problems in various settings is practiced. Prerequisites: PSY 1100 and PSY 2227.

PSY 4347 Psychological Measurement (3 credits)

This course is designed to provide a basic understanding of psychometric theory and methods of psychological test construction, and to effect familiarity with established measures of personality, interests, intelligence, and academic achievement. Prerequisites: PSY 1100 and PSY 3401.

PSY 4403 Advanced Statistics and Research Design (4 credits)

Advanced statistics, focusing on factorial analysis of variance and multiple regression using SPSS, as well as associated research designs. Emphasis on logic, applications, and communication. Prerequisites: PSY 3401 and PSY 3402, or consent of instructor.

PSY 4408 Human Services Program Management (3 credits)

Theories and techniques of managing human service agencies including planning, administration, evaluation and grant writing. Prerequisites: PSY 1100, PSY 3401, PSY 3402, or consent of instructor.

PSY 4447 Research Laboratory (1-4 credits)

Supervised, original research in selected areas. May be repeated for credit. Prerequisites: PSY 1100, PSY 3401, and PSY 3402, or consent of instructor.

PSY 4450 Behavioral Neuroscience (4 credits)

A neurological study of behavior focusing on the neurons, neurotransmitters, neuronal circuits, and basic biology of the nervous system. The beginning of the course will focus on building an understanding of the structure and function of nerve cells, and neuro and hormonal chemical transmission within the nervous system. The rest of the course will focus on how these biological processes lead to normal and pathological behavior. Prerequisite(s): PSY 1100.

PSY 4459 Sensation and Perception (4 credits)

An in-depth introduction, including the topics of the nervous system, electrochemical and neurochemical bases of behavior, vision, audition, somatic and chemical senses, movement, emotion, and cognition. Prerequisites: PSY 1100, PSY 3401, and PSY 3402, or consent of instructor.

PSY 4467 Personality Theories (3 credits)

Introduction to major theories of personality and related research. Prerequisites: PSY 1100, PSY 2217, PSY 3401, and PSY 3402, or consent of instructor.

PSY 4487 History and Systems of Psychology (3 credits)

Contemporary issues and theories in psychology and their historical developments. Prerequisite: Senior standing in the major.

PSY 4490 Stereotyping, Prejudice, and Discrimination (3 credits)

This course considers the social psychological phenomena associated with social oppression. Social oppression refers to a relationship between two social categories in which one benefits from the abuse and exploitation of the other. Starting with racism as a foundation, we address historical and structural factors that constitute racism and move to connect to other intersecting identity experiences throughout the course. This course primarily uses social psychological perspectives and research methods to identify specific intergroup phenomena under consideration are stereotyping, prejudice, and discrimination (SPD). Within SPD phenomena, we consider the causes, consequences, and factors for increasing/decreasing the expression of each SPD phenomena; we focus on both perpetrators' and targets' experiences within SPD phenomena; and we pay special attention to the psychology of privilege as a critical factor in the perpetuation of SPD phenomena. Prerequisite(s): PSY 1100, PSY 3367, or consent of instructor.

PSY 4587 Advanced Topics in Psychology (2-4 credits)

In-depth study of topics of current interest in psychology. Prerequisites: PSY 3401 and senior standing in the major.

PSY 4588 Multicultural Psychology (4 credits)

The purpose of this course is to examine cultural processes as a defining characteristic of what it is to be human, and as a central, or proximal variable in psychology. This course is intended to provide students with a better appreciation of the myriad of ways in which culture determines psyche and behavior, and to enhance their awareness of the countless variations in human behavior across cultures. In this course, we will examine the goals and nature of multicultural and cross-cultural psychology. In this course, we will consider current theories and research on culture, race, and ethnicity. Topics covered in the class range from culturally relevant styles of communication, values from different cultures, racial identity, power and privilege, and issues around health. This course will help prepare students to grapple with issues of multiculturalism in the modern diverse society. Prerequisite(s): PSY 3401 and senior standing in the major or consent of instructor.

PSY 4870 Pre-Internship Seminar (1 credit)

Selection of internship site and preparation for the internship experience. Prerequisite: Junior or senior standing in the psychology major.

PSY 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

PSY 4970 Psychology Senior Internship (6-12 credits)

Supervised community and campus internships in human service and research settings. Two hundred hours of internship work experience are required for 6 credits, four hundred hours for 12 credits. Prerequisites: PSY 4870, senior status, and completion of core courses for the psychology major and any elective courses related to the internship.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Science Education

While the term "science" is applied generally to the study of natural phenomena, in the Science degree program at Bemidji State University it applies to a combined study of the life, earth, and physical sciences in the context of teacher certification for grades 5-8. This "broad science" degree is favored by school districts for their junior high/middle school science positions. Students in the Teacher Licensure Grades 5-12 degree program are also required to select at least one specialty for grades 9-12 from one of the following science areas: Chemistry, Earth and Space Science, Life Science, or Physics.

Programs

- Elementary Education, B.S. (Science Endorsement (Teacher Licensure)) *major*
- Science Education, B.S. (Life Science Specialty (Teacher Licensure)) *major*
- Science Education, B.S. (Chemistry Specialty (Teacher Licensure)) *major*
- Science Education, B.S. (Physics Specialty (Teacher Licensure)) *major*
- Science Education, B.S. (Earth and Space Science Specialty (Teacher Licensure)) *major*

Career Directions

Middle School Teacher
Junior High School Teacher
High School Science Teacher

Preparation

Recommended High School Courses

Biology
Chemistry
Physics
Algebra
Trigonometry

Elementary Education, B.S. *major* Science Endorsement (Teacher Licensure)

Required Credits: 101

Required GPA: 2.50

I ELEMENTARY EDUCATION FOUNDATION COURSES

Complete the following courses:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

Complete the following course, up to 12 credits:

- ED 4820 Student Teaching - Elementary (1-16 credits)

II ELEMENTARY EDUCATION MAJOR COURSES

Complete the following courses:

- ED 3201 Language Arts I (3 credits)
- ED 3202 Language Arts II (3 credits)
- ED 3203 Language Arts III (3 credits)
- ED 3221 Elementary Math Methods (3 credits)
- ED 3222 Elementary Science Methods (3 credits)
- ED 3240 Social Studies in the Elementary School (3 credits)
- ED 3301 Creative Expressions (3 credits)
- ED 3302 Creative Process Foundations: Patterns (3 credits)
- HLTH 4100 Teaching Elementary School Health (2 credits)

- PHED 4200 Methods of Teaching Elementary Physical Education to Classroom Teachers (1 credit)

Complete the following course:

- MATH 1011 Mathematics for Elementary School Teachers I (3 credits)

Complete the following course:

- MATH 1013 Mathematics for Elementary School Teachers II (3 credits)

SCIENCE ENDORSEMENT

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
or BIOL 1110 Human Biology (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
or BIOL 1120 General Biology: Evolution And Ecology (3 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
or CHEM 1111 General Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
or CHEM 1112 General Chemistry II (4 credits)
- GEOL 1110 Physical Geology (4 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)
or ED 3410 Secondary Science Methods (4 credits)

EDUCATION CORE

COMPLETE THE FOLLOWING COURSES:

- ED 3417 Teaching and Learning in the Middle School (3 credits)
- ED 4737 Content Area Reading (3 credits)

COMPLETE THE FOLLOWING COURSE (5 CREDITS):

- ED 4840 Student Teaching - Special Fields (1-12 credits)

Science Education, B.S. *major*

Life Science Specialty (Teacher Licensure)

Required Credits: 83

Required GPA: 2.50

Core Courses for Science Teaching in Grades 5-8

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
or BIOL 1110 Human Biology (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
or BIOL 1120 General Biology: Evolution And Ecology (3 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
or CHEM 1111 General Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
or CHEM 1112 General Chemistry II (4 credits)
- GEOL 1110 Physical Geology (4 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)
or ED 3410 Secondary Science Methods (4 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

LIFE SCIENCE SPECIALTY

A. REQUIRED BIOLOGY COURSES

COMPLETE THE FOLLOWING COURSES:

- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)
- BIOL 3710 Microbiology (4 credits)
- BIOL 4620 Evolution (3 credits)
- BIOL 3720 Plant Form and Function (4 credits)
or BIOL 3830 Aquatic Plants and Algae (4 credits)
- BIOL 4894 Advanced Research Project I (2 credits)
or BIOL 4895 Advanced Research Project II (2 credits)

B. REQUIRED BIOLOGY ELECTIVE

SELECT 1 OF THE FOLLOWING COURSES:

- BIOL 3150 Animal Behavior (3 credits)
- BIOL 3310 Entomology (3 credits)
- BIOL 4510 Ornithology (3 credits)

- BIOL 4520 Mammalogy (3 credits)
- BIOL 4534 Ichthyology (4 credits)

SUGGESTED SEMESTER SCHEDULE FOR LIFE SCIENCE SPECIALTY, SCIENCE EDUCATION MAJOR, B.S. (TEACHER LICENSURE)

The following is a list of required Science (Life Science) Major, B.S. courses arranged by year. This schedule is intended to assist students in planning their courses. There is some flexibility in this schedule, but graduation within four years will require close adherence to the specified sequence of courses. Always consult your Biology academic advisor as to the proper courses and sequence of courses needed for graduation. It is possible, in some circumstances, that courses in a student's Liberal Education program may be used in his or her academic major.

Freshman

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
- Liberal Education requirements

Sophomore

- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)
- BIOL 4894 Advanced Research Project I (2 credits) or BIOL 4895
- BIOL 3720 Plant Form and Function (4 credits)
- GEOL 1110 Physical Geology (4 credits)
- PHYS 1101 General Physics I (4 credits)
or PHYS 2101 Physics I (4 credits)
- Consider starting Professional Education sequence
- Liberal Education requirements

Junior

- BIOL 3710 Microbiology (4 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)
- Other Professional Education requirements
- Liberal Education requirements

Senior

- Biology Elective (BIOL 3150, 3310, 3510, 4520, or 4534)
- BIOL 4620 Evolution (3 credits)
- Complete Professional Education requirements, including one semester of student teaching
- Complete liberal education requirements

Science Education, B.S. *major*

Chemistry Specialty (Teacher Licensure)

Required Credits: 78

Required GPA: 2.50

Core Courses for Science Teaching in Grades 5-8

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
or BIOL 1110 Human Biology (4 credits)

- BIOL 1500 Diversity of Life (4 credits)
or BIOL 1120 General Biology: Evolution And Ecology (3 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
or CHEM 1111 General Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
or CHEM 1112 General Chemistry II (4 credits)
- GEOL 1110 Physical Geology (4 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)
or ED 3410 Secondary Science Methods (4 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

CHEMISTRY SPECIALTY

COMPLETE THE FOLLOWING COURSES:

- CHEM 3110 Laboratory Management and Safety (2 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 3507 Analytical Chemistry (3 credits)
- CHEM 3570 Analytical Chemistry Laboratory (1 credit)
- CHEM 3980 Research (1 credit)

SELECT 1 OF THE FOLLOWING COURSES:

- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4811 Advanced Inorganic Chemistry I (3 credits)

Science Education, B.S. *major* Physics Specialty (Teacher Licensure)

Required Credits: 82

Required GPA: 2.50

Core Courses for Science Teaching in Grades 5-8

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
or BIOL 1110 Human Biology (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
or BIOL 1120 General Biology: Evolution And Ecology (3 credits)

- CHEM 2211 Principles of Chemistry I (4 credits)
or CHEM 1111 General Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
or CHEM 1112 General Chemistry II (4 credits)
- GEOL 1110 Physical Geology (4 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)
or ED 3410 Secondary Science Methods (4 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

PHYSICS SPECIALTY

Complete the following courses:

MATH 2471 is recommended (required for PHYS 2101)

- PHYS 2101 Physics I (4 credits)
or PHYS 1101 General Physics I (4 credits)
- PHYS 2102 Physics II (4 credits)
or PHYS 1102 General Physics II (4 credits)
- PHYS 3103 Physics III (4 credits)
- PHYS 3300 Thermal and Statistical Physics (3 credits)
or CHEM 4711 Physical Chemistry I (3 credits)
- PHYS 4300 Optics (4 credits)

Complete the following course:

- PHYS 4980 Research (3 credits)

Science Education, B.S. *major* Earth and Space Science Specialty (Teacher Licensure)

Required Credits: 86

Required GPA: 2.50

Core Courses for Science Teaching in Grades 5-8

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
or BIOL 1110 Human Biology (4 credits)
- BIOL 1500 Diversity of Life (4 credits)

- or BIOL 1120 General Biology: Evolution And Ecology (3 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
or CHEM 1111 General Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
or CHEM 1112 General Chemistry II (4 credits)
- GEOL 1110 Physical Geology (4 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)
or ED 3410 Secondary Science Methods (4 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

EARTH AND SPACE SCIENCE SPECIALTY

COMPLETE THE FOLLOWING COURSES:

- ENVR 2000 Introduction to Environmental Science (3 credits)
- GEOL 1120 Historical Geology (4 credits)
- GEOL 2110 Mineralogy and Petrology (4 credits)
- GEOL 3500 Topics in Paleontology (3 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)
- SCI 2100 Astronomy (3 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- GEOL 3211 Environmental Hydrology (3 credits)
- ENVR 4050 Geochemistry (3 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- GEOL 4970 Internship (3 credits)
- GEOL 4980 Research (3 credits)

Science Courses

SCI 1110 Physical Science I (4 credits)

A single-semester survey of Physical Science, with laboratory. Includes selected topics in physics, chemistry, geology, astronomy, and meteorology. Includes laboratory and computer sessions. Liberal Education Goal Area 3 (LC).

SCI 1120 Physical Science II (4 credits)

Science and Technology in Society (STS). An alternative perspective on Physical Science, using selected topics to discuss societal concerns and responsibilities. Includes laboratory and related computer-based small group sessions. Liberal Education Goal Area 3 (LC).

SCI 2100 Astronomy (3 credits)

A one-semester survey course, with emphasis on the history of astronomy, the science of stellar and solar system formation, the evolution of stars and galaxies, and modern cosmology and the fate of the universe. Includes laboratory simulations and field exercises. Liberal Education Goal Area 3.

SCI 2200 Meteorology (3 credits)

A one-semester survey course, with emphasis on the science of the atmospheric dynamics of weather and climate, precipitation, storms, and forecasting. Includes laboratory simulations and field exercises. Liberal Education Goal Area 3.

SCI 2925 People of the Environment: Science Perspective (3 credits)

The discussions of this section will include the specific relation between air, water, and solid waste pollution and the effect on the environment, including the following: acid rain, smog, global warming, measurement of environmental pollutants, and the role of science in solving pollution problems. Liberal Education Goal Area 10.

SCI 2951 Study-Travel Natural Science (1-6 credits)

Study Travel course in Science for Lib Ed Goal Area 3.

SCI 3100 Integrative Science for Teachers (4 credits)

An interdisciplinary laboratory-based course incorporating the areas of biology, chemistry, earth science, and physics. Focuses on conducting a series of investigations by Science Inquiry and demonstrating the connection between the various disciplines. Prerequisites: 2 courses each in the life sciences and physical sciences.

SCI 3450 Science Methods For Grades 5-8 (4 credits)

Strategies for implementation of the Minnesota Graduation Standards in the areas of Science and Inquiry for grades 5-8. Strategies include laboratory activities, discussions, the development of classroom activities, and the adaptation of these strategies for use in the elementary and high school science classroom. Prerequisite: Senior status or consent of instructor.

SCI 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
1940, 2940, 3940, 4940 IN-SERVICE COURSE
1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
1970, 2970, 3970, 4970 INTERNSHIP
1980, 2980, 3980, 4980 RESEARCH
1990, 2990, 3990, 4990 THESIS

Social Studies

Social Studies educates students for democracy. An interdisciplinary social science major, it draws from economics, geography, history, political science, psychology and sociology.

The Bachelor of Science, Teacher Licensure major prepares students for a career at the secondary level and requires a passion for both the subject matter and for teaching. Geography, history, and political science form the "matrix" for social studies education. To increase their employability, students are encouraged to take a second major or minor in a social studies discipline. Students interested in Social Studies as a major or minor should meet as early as possible with the coordinator.

The Bachelor of Arts major prepares students for employment in a broad number of careers. This major offers breadth in background and content combined with applied skills development in the areas of the social sciences.

Programs

- Social Studies Education, B.S. ((Teacher Licensure)) *major*
- Social Studies, B.A. (History Emphasis) *major*
- Social Studies, B.A. (Psychology Emphasis) *major*
- Social Studies, B.A. (Economics Emphasis) *major*
- Social Studies, B.A. (Econ/ Pol Sci/ Soc/ Anth: Broad Field Emphasis) *major*
- Social Studies, B.A. (Sociology-Anthropology Emphasis) *major*
- Social Studies, B.A. (Geography Emphasis) *major*
- Social Studies, B.A. (Political Science Emphasis) *major*
- Social Studies *minor*

Career Directions

Business
Civil Service
Education
Journalism
Also: Graduate Study

Preparation

Recommended High School Courses

History
Geography
Government
Economics

Recommended Activities

Teaching Assistant
Speech

Social Studies Education, B.S. *major* (Teacher Licensure)

Note: Students must have a minimum overall 2.50 GPA in the major. No grade below a "C" may be used to meet program requirements. A minimum of 22 of the 56 Social Studies program credits must be completed at BSU.

Required Credits: 89

Required GPA: 2.50

I ECONOMICS COURSES

Complete the following courses:

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

II GEOGRAPHY COURSES

Complete the following courses:

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)

Select 1 of the following courses:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)

- GEOG 3850 Geography of the Middle East (3 credits)
- GEOG 3860 Geography of Latin America and the Caribbean (3 credits)

III HISTORY COURSES

Complete the following courses:

- HST 1114 United States History I, to 1877 (3 credits)
- HST 1115 United States History II, since 1877 (3 credits)
- HST 1304 World History I, Prehistory-1500 (3 credits)
- HST 1305 World History II, 1500-Present (3 credits)
- HST 2610 Minnesota History (3 credits)

Select 1 of the following courses:

- HST 3117 American Revolutionary Era, 1763-1800 (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- HST 3137 The American Civil War (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3187 American West (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)
- HST 3650 Environmental History (3 credits)
- HST 3799 Tudor and Stuart England, 1485-1714 (3 credits)
- HST 3800 Georgian Britain, 1688-1820 (3 credits)
- HST 4000 Historiography (3 credits)

- HST 4500 Historical Methods (3 credits)

IV POLITICAL SCIENCE COURSES

Complete the following courses:

- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)

Select 1 of the following courses (3 credits minimum):

- POL 3100 American Foreign Policy (3 credits)
- POL 3130 Asian Political Development (3 credits)
- POL 3140 Canadian Politics (3 credits)
- POL 3150 Topics in Political Science (1-3 credits)
- POL 3160 Comparative European Politics (3 credits)
- POL 3170 International Relations (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3190 International Political Economy (3 credits)
- POL 3200 Minnesota Politics (3 credits)
- POL 3210 Public Administration (3 credits)
- POL 3230 Environmental Politics (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- POL 3420 Campaigns and Elections (3 credits)
- POL 4200 Constitutional Law (3 credits)

V PSYCHOLOGY COURSE

Complete the following course:

- PSY 1100 Introductory Psychology (4 credits)

VI SOCIOLOGY COURSES

Complete the following courses:

- SOC 1104 Society and Social Issues (3 credits)
- SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)

VII SOCIAL STUDIES METHODS COURSE

Complete the following course:

- ED 3580 Teaching of Middle and Secondary School Social Studies (4 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

Complete the following courses with a minimum 2.50 GPA:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

Complete the following course:

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

Social Studies, B.A. *major* History Emphasis

Required Credits: 48

Required GPA: 2.50

Note: A minimum of 22 semester credits used to meet course requirements in I and II must be completed at Bemidji State University. No course grade below a C may be used to meet these requirements and a minimum GPA of 2.50 in this major is required for graduation. Students who desire a second field of emphasis are to consider a completion of a minor or a second major in that field. Such action may complement and increase the marketability of this major.

I REQUIRED CORE CURRICULUM

CAPSTONE COURSE

COMPLETE THE FOLLOWING COURSE:

- POL 4500 Thesis and Career Preparation (3 credits)

ECONOMICS COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)

WORLD HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2218 Medieval Europe (3 credits)
- HST 2219 Medieval European Culture (3 credits)
- HST 2228 Renaissance and Reformation Europe (3 credits)
- HST 2580 Russia (3 credits)
- HST 2600 Topics in History (3 credits)
- HST 2660 Women and History (3 credits)
- HST 2700 The History of World Religions (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)
- HST 3277 Readings and Research in European History (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)

U.S. HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2600 Topics in History (3 credits)
- HST 2610 Minnesota History (3 credits)
- HST 2667 Men and Women: Gender in America (3 credits)
- HST 3117 American Revolutionary Era, 1763-1800 (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- HST 3137 The American Civil War (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3187 American West (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 3100 American Foreign Policy (3 credits)
- POL 3130 Asian Political Development (3 credits)
- POL 3150 Topics in Political Science (1-3 credits)
- POL 3160 Comparative European Politics (3 credits)
- POL 3170 International Relations (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3190 International Political Economy (3 credits)
- POL 3200 Minnesota Politics (3 credits)
- POL 3210 Public Administration (3 credits)
- POL 3230 Environmental Politics (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- POL 3420 Campaigns and Elections (3 credits)
- POL 4200 Constitutional Law (3 credits)

SOCIOLOGY COURSES

COMPLETE THE FOLLOWING COURSES:

- SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)
- SOC 3210 Social Movements and Change (3 credits)

II REQUIRED FIELD OF EMPHASIS

SELECT 18 SEMESTER CREDITS OF ELECTIVES FROM HISTORY:

Social Studies, B.A. *major* Psychology Emphasis

Required Credits: 48

Required GPA: 2.50

Note: A minimum of 22 semester credits used to meet course requirements in I and II must be completed at Bemidji State University. No course grade below a C may be used to meet these requirements and a minimum GPA of 2.50 in this major is required for graduation. Students who desire a second field of emphasis are to consider a completion of a minor or a second major in that field. Such action may complement and increase the marketability of this major.

I REQUIRED CORE CURRICULUM

CAPSTONE COURSE

COMPLETE THE FOLLOWING COURSE:

- POL 4500 Thesis and Career Preparation (3 credits)

ECONOMICS COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)

WORLD HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2218 Medieval Europe (3 credits)
- HST 2219 Medieval European Culture (3 credits)
- HST 2228 Renaissance and Reformation Europe (3 credits)
- HST 2580 Russia (3 credits)
- HST 2600 Topics in History (3 credits)
- HST 2660 Women and History (3 credits)
- HST 2700 The History of World Religions (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)
- HST 3277 Readings and Research in European History (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)

U.S. HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2600 Topics in History (3 credits)
- HST 2610 Minnesota History (3 credits)
- HST 2667 Men and Women: Gender in America (3 credits)
- HST 3117 American Revolutionary Era, 1763-1800 (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- HST 3137 The American Civil War (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3187 American West (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 3100 American Foreign Policy (3 credits)
- POL 3130 Asian Political Development (3 credits)
- POL 3150 Topics in Political Science (1-3 credits)
- POL 3160 Comparative European Politics (3 credits)
- POL 3170 International Relations (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3190 International Political Economy (3 credits)
- POL 3200 Minnesota Politics (3 credits)
- POL 3210 Public Administration (3 credits)
- POL 3230 Environmental Politics (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- POL 3420 Campaigns and Elections (3 credits)
- POL 4200 Constitutional Law (3 credits)

SOCIOLOGY COURSES

COMPLETE THE FOLLOWING COURSES:

- SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)
- SOC 3210 Social Movements and Change (3 credits)

II REQUIRED FIELD OF EMPHASIS

COMPLETE THE FOLLOWING COURSE:

- PSY 1100 Introductory Psychology (4 credits)

SELECT 14 SEMESTER CREDITS OF ELECTIVES FROM PSYCHOLOGY:

Social Studies, B.A. *major* Economics Emphasis

Required Credits: 48

Required GPA: 2.50

Note: A minimum of 22 semester credits used to meet course requirements in I and II must be completed at Bemidji State University. No course grade below a C may be used to meet these requirements and a minimum GPA of 2.50 in this major is required for graduation. Students who desire a second field of emphasis are to consider a completion of a minor or a second major in that field. Such action may complement and increase the marketability of this major.

I REQUIRED CORE CURRICULUM

CAPSTONE COURSE

COMPLETE THE FOLLOWING COURSE:

- POL 4500 Thesis and Career Preparation (3 credits)

ECONOMICS COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)

WORLD HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2218 Medieval Europe (3 credits)
- HST 2219 Medieval European Culture (3 credits)
- HST 2228 Renaissance and Reformation Europe (3 credits)
- HST 2580 Russia (3 credits)
- HST 2600 Topics in History (3 credits)
- HST 2660 Women and History (3 credits)
- HST 2700 The History of World Religions (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)
- HST 3277 Readings and Research in European History (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)

U.S. HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2600 Topics in History (3 credits)
- HST 2610 Minnesota History (3 credits)
- HST 2667 Men and Women: Gender in America (3 credits)
- HST 3117 American Revolutionary Era, 1763-1800 (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- HST 3137 The American Civil War (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3187 American West (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 3100 American Foreign Policy (3 credits)
- POL 3130 Asian Political Development (3 credits)
- POL 3150 Topics in Political Science (1-3 credits)
- POL 3160 Comparative European Politics (3 credits)
- POL 3170 International Relations (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3190 International Political Economy (3 credits)
- POL 3200 Minnesota Politics (3 credits)
- POL 3210 Public Administration (3 credits)
- POL 3230 Environmental Politics (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- POL 3420 Campaigns and Elections (3 credits)
- POL 4200 Constitutional Law (3 credits)

SOCIOLOGY COURSES

COMPLETE THE FOLLOWING COURSES:

- SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)
- SOC 3210 Social Movements and Change (3 credits)

II REQUIRED FIELD OF EMPHASIS

SELECT 1 OF THE FOLLOWING COURSES

Note: Select the course not taken in the core.

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

SELECT 15 SEMESTER CREDITS OF ELECTIVES FROM ECONOMICS

Social Studies, B.A. *major*

Econ/ Pol Sci/ Soc/ Anth: Broad Field Emphasis

Required Credits: 48

Required GPA: 2.50

Note: A minimum of 22 semester credits used to meet course requirements in I and II must be completed at Bemidji State University. No course grade below a C may be used to meet these requirements and a minimum GPA of 2.50 in this major is required for graduation. Students who desire a second field of emphasis are to consider a completion of a minor or a second major in that field. Such action may complement and increase the marketability of this major.

I REQUIRED CORE CURRICULUM

CAPSTONE COURSE

COMPLETE THE FOLLOWING COURSE:

- POL 4500 Thesis and Career Preparation (3 credits)

ECONOMICS COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)

WORLD HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2218 Medieval Europe (3 credits)
- HST 2219 Medieval European Culture (3 credits)
- HST 2228 Renaissance and Reformation Europe (3 credits)
- HST 2580 Russia (3 credits)
- HST 2600 Topics in History (3 credits)
- HST 2660 Women and History (3 credits)

- HST 2700 The History of World Religions (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)
- HST 3277 Readings and Research in European History (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)

U.S. HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2600 Topics in History (3 credits)
- HST 2610 Minnesota History (3 credits)
- HST 2667 Men and Women: Gender in America (3 credits)
- HST 3117 American Revolutionary Era, 1763-1800 (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- HST 3137 The American Civil War (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3187 American West (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 3100 American Foreign Policy (3 credits)
- POL 3130 Asian Political Development (3 credits)
- POL 3150 Topics in Political Science (1-3 credits)
- POL 3160 Comparative European Politics (3 credits)
- POL 3170 International Relations (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3190 International Political Economy (3 credits)
- POL 3200 Minnesota Politics (3 credits)
- POL 3210 Public Administration (3 credits)
- POL 3230 Environmental Politics (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- POL 3420 Campaigns and Elections (3 credits)
- POL 4200 Constitutional Law (3 credits)

SOCIOLOGY COURSES

COMPLETE THE FOLLOWING COURSES:

- SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)
- SOC 3210 Social Movements and Change (3 credits)

II REQUIRED FIELD OF EMPHASIS

REQUIRED ELECTIVES:

SELECT 3 SEMESTER CREDITS FROM ANTHROPOLOGY:

SELECT 3 SEMESTER CREDITS FROM SOCIOLOGY:

SELECT 3 SEMESTER CREDITS FROM POLITICAL SCIENCE:

SELECT 3 SEMESTER CREDITS FROM GEOGRAPHY:

SELECT 3 SEMESTER CREDITS FROM HISTORY:

SELECT 3 SEMESTER CREDITS FROM ECONOMICS:

SELECT 3 SEMESTER CREDITS FROM PSYCHOLOGY:

Social Studies, B.A. *major*

Sociology-Anthropology Emphasis

Required Credits: 48

Required GPA: 2.50

Note: A minimum of 22 semester credits used to meet course requirements in I and II must be completed at Bemidji State University. No course grade below a C may be used to meet these requirements and a minimum GPA of 2.50 in this major is required for graduation. Students who desire a second field of emphasis are to consider a completion of a minor or a second major in that field. Such action may complement and increase the marketability of this major.

I REQUIRED CORE CURRICULUM

CAPSTONE COURSE

COMPLETE THE FOLLOWING COURSE:

- POL 4500 Thesis and Career Preparation (3 credits)

ECONOMICS COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)

WORLD HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2218 Medieval Europe (3 credits)
- HST 2219 Medieval European Culture (3 credits)
- HST 2228 Renaissance and Reformation Europe (3 credits)
- HST 2580 Russia (3 credits)
- HST 2600 Topics in History (3 credits)
- HST 2660 Women and History (3 credits)
- HST 2700 The History of World Religions (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)
- HST 3277 Readings and Research in European History (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)

- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)

U.S. HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2600 Topics in History (3 credits)
- HST 2610 Minnesota History (3 credits)
- HST 2667 Men and Women: Gender in America (3 credits)
- HST 3117 American Revolutionary Era, 1763-1800 (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- HST 3137 The American Civil War (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3187 American West (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 3100 American Foreign Policy (3 credits)
- POL 3130 Asian Political Development (3 credits)
- POL 3150 Topics in Political Science (1-3 credits)
- POL 3160 Comparative European Politics (3 credits)
- POL 3170 International Relations (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3190 International Political Economy (3 credits)
- POL 3200 Minnesota Politics (3 credits)
- POL 3210 Public Administration (3 credits)
- POL 3230 Environmental Politics (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- POL 3420 Campaigns and Elections (3 credits)
- POL 4200 Constitutional Law (3 credits)

SOCIOLOGY COURSES

COMPLETE THE FOLLOWING COURSES:

- SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)
- SOC 3210 Social Movements and Change (3 credits)

II REQUIRED FIELD OF EMPHASIS

SELECT 18 SEMESTER CREDITS OF ELECTIVES FROM SOCIOLOGY

AND ANTHROPOLOGY

Social Studies, B.A. *major*

Geography Emphasis

Required Credits: 48

Required GPA: 2.50

Note: A minimum of 22 semester credits used to meet course requirements in I and II must be completed at Bemidji State University. No course grade below a C may be used to meet these requirements and a minimum GPA of 2.50 in this major is required for graduation. Students who desire a second field of emphasis are to consider a completion of a minor or a second major in that field. Such

action may complement and increase the marketability of this major.

I REQUIRED CORE CURRICULUM

CAPSTONE COURSE

COMPLETE THE FOLLOWING COURSE:

- POL 4500 Thesis and Career Preparation (3 credits)

ECONOMICS COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)

WORLD HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2218 Medieval Europe (3 credits)
- HST 2219 Medieval European Culture (3 credits)
- HST 2228 Renaissance and Reformation Europe (3 credits)
- HST 2580 Russia (3 credits)
- HST 2600 Topics in History (3 credits)
- HST 2660 Women and History (3 credits)
- HST 2700 The History of World Religions (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)
- HST 3277 Readings and Research in European History (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)

U.S. HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2600 Topics in History (3 credits)
- HST 2610 Minnesota History (3 credits)
- HST 2667 Men and Women: Gender in America (3 credits)
- HST 3117 American Revolutionary Era, 1763-1800 (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- HST 3137 The American Civil War (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3187 American West (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 3100 American Foreign Policy (3 credits)
- POL 3130 Asian Political Development (3 credits)
- POL 3150 Topics in Political Science (1-3 credits)
- POL 3160 Comparative European Politics (3 credits)
- POL 3170 International Relations (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3190 International Political Economy (3 credits)
- POL 3200 Minnesota Politics (3 credits)
- POL 3210 Public Administration (3 credits)
- POL 3230 Environmental Politics (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- POL 3420 Campaigns and Elections (3 credits)
- POL 4200 Constitutional Law (3 credits)

SOCIOLOGY COURSES

COMPLETE THE FOLLOWING COURSES:

- SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)
- SOC 3210 Social Movements and Change (3 credits)

II REQUIRED FIELD OF EMPHASIS

SELECT 18 SEMESTER CREDITS OF ELECTIVES FROM GEOGRAPHY

Social Studies, B.A. *major*

Political Science Emphasis

Required Credits: 48

Required GPA: 2.50

Note: A minimum of 22 semester credits used to meet course requirements in I and II must be completed at Bemidji State University. No course grade below a C may be used to meet these requirements and a minimum GPA of 2.50 in this major is required for graduation. Students who desire a second field of emphasis are to consider a completion of a minor or a second major in that field. Such action may complement and increase the marketability of this major.

I REQUIRED CORE CURRICULUM

CAPSTONE COURSE

COMPLETE THE FOLLOWING COURSE:

- POL 4500 Thesis and Career Preparation (3 credits)

ECONOMICS COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)

WORLD HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2218 Medieval Europe (3 credits)
- HST 2219 Medieval European Culture (3 credits)
- HST 2228 Renaissance and Reformation Europe (3 credits)
- HST 2580 Russia (3 credits)
- HST 2600 Topics in History (3 credits)
- HST 2660 Women and History (3 credits)
- HST 2700 The History of World Religions (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)
- HST 3277 Readings and Research in European History (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)

U.S. HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2600 Topics in History (3 credits)
- HST 2610 Minnesota History (3 credits)
- HST 2667 Men and Women: Gender in America (3 credits)
- HST 3117 American Revolutionary Era, 1763-1800 (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- HST 3137 The American Civil War (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3187 American West (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 3100 American Foreign Policy (3 credits)
- POL 3130 Asian Political Development (3 credits)
- POL 3150 Topics in Political Science (1-3 credits)
- POL 3160 Comparative European Politics (3 credits)
- POL 3170 International Relations (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3190 International Political Economy (3 credits)
- POL 3200 Minnesota Politics (3 credits)
- POL 3210 Public Administration (3 credits)
- POL 3230 Environmental Politics (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- POL 3420 Campaigns and Elections (3 credits)
- POL 4200 Constitutional Law (3 credits)

SOCIOLOGY COURSES

COMPLETE THE FOLLOWING COURSES:

- SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)
- SOC 3210 Social Movements and Change (3 credits)

II REQUIRED FIELD OF EMPHASIS

SELECT 18 SEMESTER CREDITS OF ELECTIVES FROM POLITICAL SCIENCE:

Social Studies *minor*

Required Credits: 27

Required GPA: 2.00

I REQUIRED COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- GEOG 3400 Economic Geography (3 credits)

COMPLETE THE FOLLOWING 3 COURSES:

- HST 1304 World History I, Prehistory-1500 (3 credits)
- HST 1305 World History II, 1500-Present (3 credits)
- POL 1200 Introduction to American Politics (3 credits)

II REQUIRED ELECTIVES

SELECT 10 SEMESTER CREDITS FROM AT LEAST 2 OF THE FOLLOWING DISCIPLINES:

ANTHROPOLOGY

ECONOMICS

HISTORY

POLITICAL SCIENCE

SOCIOLOGY

Social Work

The social work profession is dedicated to improving the quality of life for individuals, families, groups, organizations, and communities. It addresses a variety of human needs and conditions in the context of complex personal and social situations, and promotes the positive use of resources. Social work settings include rural, suburban, and urban communities in public or private social service agencies, such as county social service agencies, schools, hospitals, nursing homes, residential youth programs, domestic abuse and sexual assault programs, adult day care, hospice, chemical dependency agencies, mental health organizations, family counseling programs, correctional programs, adoption and foster care agencies, and community outreach and social justice programs.

The Social Work Program emphasizes culturally responsive generalist social work practice and promotes an understanding of human interactions within the social environment. Content areas include social work values and ethics; diversity; promotion of social and economic justice; human behavior in the social environment, social welfare policy and services, social work practice with individuals, groups and communities; research; field placements; and a trauma-informed practice perspective. Graduates of the program are prepared for entry-level social work practice and for graduate study.

Accelerated Master's Degree

As a graduate of BSU's Social Work Program, students may qualify for advanced standing in an accredited Master of Social Work (MSW) program. Advanced standing is a graduate program designed for students who have earned a bachelor's degree in social work from a university with a CSWE (Council of Social Work Education) accredited program, such as Bemidji State University with a GPA of 3.0 or higher (requirements vary). Advanced standing MSW programs typically take just one year to complete instead of two for students without a social work undergraduate degree.

The Social Work program offers a number of special activities and opportunities, including the following:

- Child Welfare Scholars Program -- stipends
- Alcohol and Drug Counselor (LADC) certification courses Program Report
- Addictions Minor
- Mexico Consortium -- Social Work in a Latin American Context
- Social Work Program Field Expeditions
- Social Work Club

Addictions: The Social Work program offers both a minor and Licensed Alcohol and Drug Counselor certification coursework. The 18-credit Addictions minor provides students with the opportunity to expand their knowledge in addictions, but does not prepare students for educational eligibility for Alcohol and Drug Counselor licensure (LADC) application. The certificate in Chemical Dependency requires a four-year degree, 270 hour classroom training, and an 880 hour internship required for LADC application.

Licensure

For graduates with a social work degree, a license is required by law if you provide social work services as defined in Minnesota Statutes section 148E.010, subdivisions 6 or 11, or use the title social worker, unless you are employed by a county or a federally recognized tribe.

- A license may still be required even if the employer does not require a

license, the job does not require direct client contact, or if the job title is not social worker

- Only the Board of Social Work has the authority to determine whether a person is engaged in social work practice and must be licensed
- Check with the MN Board of Social Work for more information about when a license is required

The Minnesota Board of Social Work offers four levels of licensure. Graduates of Bemidji State University will apply for the LSW level of licensure.

Licensed Social Worker (LSW) - May engage in generalist social work practice: must be supervised by another social worker for the equivalent of two years of full-time practice. The LSW requires:

- Graduation with a Baccalaureate or Master's Degree from an accredited social work program, such as Bemidji State University;
- Social workers must pass the national, multiple-choice examination provided by the Association of Social Work Boards (ASWB).
- Licensure by the Board of Social Work;
- Tribal and county-employed social workers are exempt from this licensure requirement.

School Social Worker Licensure - To practice school social work in Minnesota, the following are required:

- Graduation with a Baccalaureate or Master's Degree from an accredited social work program, such as Bemidji State University;
- Social workers must pass the national, multiple-choice examination provided by the Association of Social Work Boards (ASWB)
- Licensure by the Board of Social Work;
- Licensure at Tier 3 by the Minnesota Professional Educator Licensing and Standards Board

Supervised Practice: Supervision means a professional relationship between a licensing supervisor and a social worker in which the licensing supervisor provides evaluation and direction of the services provided by the social worker to promote competent and ethical services to clients through the continuing development of the social workers knowledge, skills, and values.

A minimum of 4,000 hours of supervised practice is required for the LSW after the license is issued.

- LSW: Minnesota Statutes, Section 148E.100

Social Worker Licensing Supervisor must be an LSW; LGSW; LISW; or LICSW; and have completed 30 hours of training in supervision.

Supervision is a one-time requirement for LSW and must include:

- 100 hours of supervision over 4,000 hours of practice at the rate of 4 hours of supervision for every 160 hours of practice
 - 50 hours must be provided through one-on-one supervision, and
 - a minimum of 25 hours of in-person supervision, and
 - no more than 25 hours of supervision via eye-to-eye electronic media while maintaining visual contact, excluding e-mail
 - Remaining 50 hours must be provided through:
 - one-on-one supervision, or
 - group supervision (limited to 6 supervisees)
 - supervision may be in-person, by telephone, or via eye-to-eye electronic media while maintaining visual contact, excluding email

Minnesota Board of Social Work
2829 University Avenue SE, Suite 340
Minneapolis, MN 55414-3239
Toll free: 888-234-1320
Email: social.work@state.mn.us
Web: <https://mn.gov/boards/social-work/>

Alcohol and Drug Counselor (Minnesota Health Department, Health Occupations Program): An applicant for Alcohol and Drug Counselor licensure (LADC) in Minnesota must have completed a four-year degree, 270 hours of classroom training, and an 880 hour internship in the field as well as pass written and oral licensure tests. (See Addictions Minor and Certificate sections for contact information.)

School Social Work Preparation and Licensure: The Minnesota Professional Educator Licensing and Standards Board issues licensure for school social workers. A school social worker is authorized to provide social work services to prekindergarten through grade 12 students in a school setting. Professional Educator Licensing and Standards Board school social worker licensure is not authorization to practice as a social worker in a school setting without current Board of Social Work licensure to practice as a social worker.

The Social Work faculty encourages students to take additional courses in education along with SOWK 3620 School Social Work to be well prepared for school social work practice.

Application Process:

A school social worker is required to obtain a Tier 3 license through the MN Professional Educator Licensing and Standards Board. A Tier 3 license issued under part 8710.0313 must be issued to a school social worker if the applicant:

- holds a baccalaureate or master's degree; and
- is currently licensed in Minnesota to practice as a social worker under the Board of Social Work.
- Note: social workers are not required to pass the MTLE content and pedagogy exams for tier 3 licensure.

Maintaining Licensure: In order to retain licensure as a school social worker, current Minnesota Board of Social Work licensure must be maintained at all times. Lapse of Board of Social Work licensure is grounds for revocation of the school social worker license.

Graduates will apply online with the Minnesota Professional Educator and Standards Board.

Go to: <https://mn.gov/pelsb/aspiring-educators/apply/>

Programs

- Social Work, B.S. *major*
- Addictions *minor*
- Addictions *cert*

Career Directions

At Bemidji State University, we recognize that social work is a critical link to the health and well-being for individuals, families, and society. We prepare students to be licensed professionals, prepared to work in direct practice with children or adults, groups and organizations, and as advocates for policies to advance the common good. Our students and faculty are committed to social justice and helping people make positive changes in their lives and communities.

Social workers are found in every facet of community life, including schools, hospitals, mental health clinics, senior centers, elected office, private practices, prisons, military, corporations, and in numerous public and private agencies. Some social workers conduct research, advocate for improved services, engage in systems design or are involved in planning or policy development. Many social workers specialize in serving a particular population or working in a specific setting. Some social work specializations focus on particular demographics, like people who are:

- Aging
- Children and families
- Developmentally disabled
- LGBTQ2S
- Terminally ill
- Veterans and active military
- Women and girls

Other social workers specialize in essential functions, like:

- Addiction & recovery
- Administration and human services management
- Advocacy and community organization
- Case management
- Child welfare
- Community organizing
- Crisis intervention
- Health care & medical social work
- International social work
- Military social work
- Policy & planning
- Restorative justice & corrections
- School social work
- Social justice advocacy
- Substance use disorders
- Trauma and disaster relief

Clinical Social Work: A Master of Social Work (MSW) degree from an accredited program paves the way to becoming licensed as a clinical social worker in addition to the practice areas mentioned above. Within the mental health professions, clinical social workers are trained not only to practice counseling and therapy, but to examine and integrate entire systems to support their clients. Having the mental health training prepares social workers to maximize their potential impact on their clients, their communities and their careers.

Clinical social work is a rapidly expanding profession, with many areas of practice expected to grow by almost 20 percent in the next decade. High-growth areas include:

- Aging / Gerontology
- Child / Family / School
- Health Care
- Immigrant / Refugees
- Military / Veterans

- Mental Health & Substance Abuse

Clinical licensure is increasingly preferred or required for master's-level social work roles, even those that do not include direct treatment/therapy. Our BSW program prepares students for advanced standing in a clinical social work program, paving the way for degree completion in just one year instead of two, maximizing their advancement toward clinical career opportunities.

Also: Graduate Study

Preparation

Recommended High School Courses

Psychology
Human Development
Biology
Social Science
Sociology Health
Careers

Social Work, B.S. *major*

Required Credits: 70

Required GPA: 2.50

All individual social work courses must reflect a letter grade of a C or better. Prospective students may apply for admission to the Social Work Program during their sophomore year or when nearing completion of their liberal education coursework. Students are encouraged to enroll in supporting foundation courses as part of their liberal education coursework. In addition, students must either have completed or enrolled in three pre-BSW program courses during the semester of application. All individual social work courses must reflect a letter grade of C or better and an overall social work GPA of 2.50 or better.

I SUPPORTING FOUNDATION COURSES

Complete the following courses:

- BIOL 1110 Human Biology (4 credits)
- POL 1200 Introduction to American Politics (3 credits)
- PSY 1100 Introductory Psychology (4 credits)
- PSY 2217 Abnormal Psychology (4 credits)
- SOWK 2110 Intercultural Communication (3 credits)

Select 1 of the following courses:

- CRJS 3201 Research Methods and Statistics for Criminal Justice (3 credits)
- PSY 3401 Basic Statistics for Research (4 credits)
- SOC 3001 Social Statistics (3 credits)

II PRE-BSW ADMISSION COURSES

Complete the following courses prior to or during the semester of application for admission to the BSW program:

- SOWK 2120 Introduction to Social Welfare (3 credits)

- SOWK 2140 Field Experience in Social Work (3 credits)

Select 1 of the following diversity courses:

- COMM 3150 Gender Communication (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- GWS 3850 Sex, Gender and Power: Theories and Practice (3 credits)
- HST 2700 The History of World Religions (3 credits)
- INST 1107 Introduction to Turtle Island (3 credits)
- INST 4900 Social Justice (3 credits)
- SOC 2230 Race and Ethnic Relations (3 credits)
- SOC 3320 Social Class and Inequality (3 credits)
- SOC 4270 Intersectionality (3 credits)

III BSW PROGRAM COURSES

Complete the following after being accepted into the Social Work Program

- SOWK 2130 Interpersonal Relations (3 credits)
- SOWK 2160 Human Behavior in the Social Environment I (3 credits)
- SOWK 3160 Human Behavior in the Social Environment II (3 credits)
- SOWK 3201 Family: Dynamics and Intervention (3 credits)
- SOWK 3260 Social Welfare Policy (3 credits)
- SOWK 3551 Generalist Practice I (3 credits)
- SOWK 3552 Generalist Practice 2 (3 credits)
- SOWK 3553 Generalist Practice 3 (3 credits)
- SOWK 4450 Social Work Research Seminar (3 credits)
- SOWK 4880 Internship Orientation (1 credit)

Complete the following course for 12 credits after successful completion of all BSW program courses with a C or higher and major GPA of 2.5 or higher:

- SOWK 4970 Internship (6-12 credits)
(Complete for 12 credits)

Program Learning Outcomes | Social Work, B.S.

1. Apply & communicate understanding of the importance of diversity and difference in shaping life experiences in practice.
2. Apply self-awareness and self-regulation to manage the influence of personal biases and values in working with diverse clients.
3. Demonstrate professional demeanor in behavior, appearance, and oral, written and electronic communication.
4. Make ethical decisions by applying the standards of the NASW Code of Ethics, relevant laws and regulations, and additional codes of ethics.
5. Present self as learners and engage clients and constituencies of their own experiences.
6. Use reflection & self-regulation to manage personal values & maintain professionalism in practice situations.
7. Use supervision & consultation to guide decision-making behavior.

Addictions *minor*

Required Credits: 20
Required GPA: 2.50

REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- CHEM 2130 Chemistry of Drugs (3 credits)
- PSY 1100 Introductory Psychology (4 credits)
- PSY 2217 Abnormal Psychology (4 credits)
- SOWK 2030 Introduction to Addictions (3 credits)
- SOWK 3201 Family: Dynamics and Intervention (3 credits)
- SOWK 3330 Assessment and Treatment of Addictions (3 credits)

Addictions *cert*

Required Credits: 51
Required GPA: 2.50

REQUIRED COURSES

Complete the following courses:

- SOWK 2270 Drugs, Brain and Behavior (3 credits)
or CHEM 2130 Chemistry of Drugs (3 credits)
- PSY 1100 Introductory Psychology (4 credits)
- PSY 2217 Abnormal Psychology (4 credits)
- SOWK 2030 Introduction to Addictions (3 credits)
- SOWK 3201 Family: Dynamics and Intervention (3 credits)
- SOWK 3330 Assessment and Treatment of Addictions (3 credits)
- SOWK 4887 Addictions Certificate Internship Orientation (1 credit)

Select 1 of the following courses:

**Non-social work majors must take PSY 3332,
Counseling and Crisis Intervention (4 credits)

- SOWK 3551 Generalist Practice I (3 credits)
- PSY 3332 Counseling and Crisis Interventions (4 credits)

Select 1 of the following courses:

**Non-social work majors must take PSY 3337,
Group Processes (3 credits)

- SOWK 3552 Generalist Practice 2 (3 credits)
- PSY 3337 Group Processes (3 credits)

Complete the following courses for 24 credits after successful completion of addiction program courses with a C or higher and a cumulative GPA of 2.5 or higher:

- SOWK 4970 Internship (6-12 credits)
- SOWK 4971 Addictions Certificate Internship I (6-12 credits)
- SOWK 4972 Addictions Certificate Internship II (6-12 credits)

Social Work Courses

SOWK 2030 Introduction to Addictions (3 credits)

This is an introductory course that provides an overview of the addictions field including: theories of substance abuse counseling, the continuum of substance abuse, ethical and legal issues in substance abuse counseling, assessment and diagnosing of substance use disorders, and the diverse treatment options available to clients. A clear emphasis will be placed on the necessity of treating each client with dignity and respect through a multicultural, strengths-based approach along with client advocacy being central to an addiction professional's role. The current and emerging substance abuse paradigm of evidence-based practices and respectful community collaboration with other fields including health care and criminal justice will be discussed.

SOWK 2110 Intercultural Communication (3 credits)

Designed to enable students to develop awareness, knowledge and skills for sensitive and effective intercultural communication on the international scene as well as with core-cultures in America. The course is particularly useful for students who are preparing to work with cultures other than their own, including: the human services field, business, marketing, languages, pre-professional programs and others. Liberal Education Goal Areas 7 & 8.

SOWK 2120 Introduction to Social Welfare (3 credits)

Introduces students to American social welfare institutions, the social problems with which these institutions deal, and the profession of social work. Considerable attention is paid to the historical and philosophical bases of various types of social welfare services. Other topics emphasized include the intervention methods used by social workers and the special needs of oppressed groups in the society. The final section of the course deals with the career paths in social work.

SOWK 2130 Interpersonal Relations (3 credits)

This course prepares students for the interpersonal relationship skills necessary for the effective use of self as a practitioner. Major course topics include building and maintaining relationships through emotional intelligence and compassionate communication; societal and interpersonal determinants of relationships including cultural, and positive personal identity; and needs and characteristics of healthy relationships and their impacts on professional relationships. Prerequisite: Admission to the Social Work program.

SOWK 2140 Field Experience in Social Work (3 credits)

Provides students with their first practical experience in the field of social work and introduces them to basic theoretical models used in social work practice, including generalist approach, ecosystems, cultural competence, and human diversity. Prerequisite: SOWK 2120 or instructor permission.

SOWK 2160 Human Behavior in the Social Environment I (3 credits)

Designed to enable students to explain and assess individual, family, and group system behavior as generalist social work practitioners, utilizing the cultural competence continuum and a strengths perspective within an ecosystems approach across the following dimensions: biological, spiritual, psychological, cognitive, socioeconomic, cultural, aesthetic, and gender. Examines traditional and alternate theories of development across the life span of individual, family, and group systems. Attention is given to the influence of paradigms on shaping human behavior. This is the first course in a two-course combination in HBSE, providing the foundation for HBSE II. Prerequisites: BIOL 1110, PSY 1100, and admission to the Social Work program.

SOWK 2270 Drugs, Brain and Behavior (3 credits)

This course has a clinical focus with a practical orientation where students will be able to examine relevant facts and fictions about psychotropic medications, articulate the basics of psychopharmacology and assist individuals with medication-related concerns. The course will begin with a brief overview of psychotropic medications, to include the historical, sociopolitical, economic and ethical context of their administration. Our emphasis will be on actively and assertively helping individuals with their concerns regarding their medications using a range of approaches, techniques and strategies in collaboration with their families and providers. Lastly, we will discuss the language of the field and practice articulating with clients, families, and other providers the basics of psychopharmacology.

SOWK 2500 Mindfulness and the Art of Living: Exploring Personal and Professional Prac (3 credits)

This course combines scholarly knowledge and experiential learning with an emphasis on process. The content examines the use of mindfulness-based practices (e.g., journaling, meditation, movement, art, listening) for professional and personal self-awareness, interventions, ethical practice, resilience, and self-care. Additional course content includes the intersection of mindfulness and values of dignity, relationships, service, social justice, integrity, and competence. Opportunities to experience practices that engage the mind, body, and spirit as well as understanding their value are an integral part of the course.

SOWK 3160 Human Behavior in the Social Environment II (3 credits)

Designed to enable students to explain and assess group, organization, and community behavior/life span from an eco-systems perspective using a generalist social work practice approach. Students integrate the cultural competence continuum and the strengths perspective across the diversity dimensions of large human systems: group, organization, community, and society. Students also critically consider and examine models of large system development - group, organization, and community - as well as the relationships and interconnections between and among micro and macro systems. Prerequisites: POL 1200 and SOWK 2160.

SOWK 3201 Family: Dynamics and Intervention (3 credits)

Introduction to knowledge, skills, and values related to working with families as small groups. Students learn and apply tools integral to assessment and intervention strategies of generalist social work practice with families, including the strengths perspective, human diversity framework, family systems, cultural competence, and the ecosystems approach. Students critically examine family systems, elements of family well being, level of need and intervention models, ethics, and practice implications particularly related to contemporary social welfare issues. Prerequisite: SOWK 2160 for majors, PSY 1100 for nonmajors.

SOWK 3260 Social Welfare Policy (3 credits)

Students develop an understanding of the history and role of public policy as related to social work practice, societal values, and issues central to the development of public policy in the United States. Students critically examine contemporary and controversial social welfare issues, assess U.S. policy development and evaluation practices, understand the global interconnectedness of U.S. policy, and develop social justice advocacy skills for vulnerable populations. Prerequisite: Admission to the Social Work program, and POL 1200.

SOWK 3330 Assessment and Treatment of Addictions (3 credits)

This course takes a student through the continuum of substance abuse treatment based on the 12 Core Functions and the 8 Practicing Principles of an addiction counselor. Students will be expected to practice and be evaluated on counseling skills, techniques, and intervention strategies used in the treatment process. For example: by participating in experiential classroom activities, role playing and/or completing skill-based small and large group assignments. Prerequisite: SOWK 2030 or consent of instructor.

SOWK 3340 Anti-Oppressive Social Work (3 credits)

The purpose of this course is to critically examine societal issues generated by systemic discrimination and explore methods for reducing discrimination. Particular focus is on social work practice with a variety of diverse populations, and strategies that generalist practitioners can employ to decrease oppression on all system levels. The course is designed to provide students with the skills required for culturally competent practice with diverse communities. Theories of oppression and discrimination will be reviewed. Historical forms of oppression will be analyzed with a connection to present-day forms of discrimination and oppression. Students will learn a process of career-long learning about culture and difference, including strategies to address systemic issues of oppression. Finally, emphasis will be placed on personal values and the complexities of integrating social work values, as well as ethical practice in working with diverse populations. Prerequisite(s): Junior and Senior Standing or instructor consent

SOWK 3551 Generalist Practice I (3 credits)

Introduces and applies models for establishing and engaging in the professional helping relationship with individuals. Students learn, practice, and critically examine knowledge, skills, and values related to generalist social work practice with individuals: assessment, engagement, crisis intervention, counseling, evaluation, and ethical practice. Emphasis is on cultural competence in social work practice. Prerequisite: Admission to the program.

SOWK 3552 Generalist Practice 2 (3 credits)

Introduces and applies models for establishing and engaging in the professional helping relationship with support and treatment groups. Students learn, practice, and critically examine knowledge, skills, and values related to group processes: planning, assessment, facilitation, leadership, evaluation, role development, and ethical practice. Emphasis is on cultural competence in social work practice with groups. Prerequisite: SOWK 2130 and SOWK 3551.

SOWK 3553 Generalist Practice 3 (3 credits)

Introduces and applies models for establishing and engaging in the professional helping relationship with task groups, organizations, and communities focusing on systems change: assessment and engagement, intervention, advocacy, leadership, community organizing and strategic planning to create change. Students learn and practice cause advocacy and grantwriting skills. Emphasis is on cultural competence and the application of ethical group practice in task groups, community organizing, and cause advocacy.

SOWK 3600 Contemplative Social Work Seminar (3 credits)

This course combines scholarly knowledge and experiential learning with an emphasis on process. The content examines the use of contemplative practices (e.g., journaling, mindfulness, movement, art, listening) for professional and personal self-awareness, interventions, ethical practice, resilience, and self-care. Additional course content includes the intersection of contemplative practices and the core social work values of dignity, relationships, service, social justice, integrity, and competence. Opportunities for contemplative practices and for understanding its value in relation to social work practice are an integral part of the course. Prerequisite(s): Junior, Senior or instructor approval.

SOWK 3610 Culturally Responsive Practice with American Indian Families (3 credits)

Introduction to historical and contemporary social work practice issues with American Indians. Students will learn about policy issues, cultural sensitivity, and practice methods with American Indian clients and communities at micro and macro levels of intervention. Prerequisite(s): Junior or senior standing or instructor consent.

SOWK 3760 Mental Health Social Work (2 credits)

Designed to enable the student to develop a knowledge base for beginning social work practice in the field of mental health. Students are introduced to theories of mental health and concepts of: mental health-illness, determination of needs, service systems, scope and variety of interventive methods, role of interdisciplinary team, evaluation, supervision, and impact of discrimination. Prerequisite: SOWK 2120 or consent of instructor. (Might not be offered every year.)

SOWK 3780 Family And Child Welfare (3 credits)

Overview of historical and contemporary child welfare practice primarily in the public sector, including supportive, supplemental, and substitute services. Emphasis is on issues such as family-centered practice, family preservation, kinship care, permanency planning, and cultural competence related to the assessment of and intervention with vulnerable families and children. Prerequisite: SOWK 2120 or consent of instructor. (Might not be offered every year.)

SOWK 3790 School Social Work (3 credits)

This course combines scholarly knowledge and experiential learning with an emphasis on process. The content is designed to enable students to develop awareness, knowledge and skills to provide culturally-responsive services in a school setting. Additional course content includes the intersection of school-based practices and the core social work values of dignity, relationships, service, social justice, integrity, and competence.

SOWK 4450 Social Work Research Seminar (3 credits)

This course is a capstone research seminar for social work majors. Students are introduced to the basic concepts and procedures of social work research and learn the quantitative and qualitative research approaches that are common to the social work profession and the social sciences. Students will critically examine, interpret, and utilize research findings in relation to everyday social work practice through the application of a research project. Prerequisite(s): CRJS 3201 or PSY 3401 or SOC 3001 or STAT 3660.

SOWK 4880 Internship Orientation (1 credit)

Prepares social work students for the internship experience. Provides students with the information needed for appropriate internship placement. This course should be taken during the semester immediately preceding the registration in SOWK 4970.

SOWK 4887 Addictions Certificate Internship Orientation (1 credit)

Assists in preparing future Addictions Certificate students for the internship experience. Provides students with the information needed for appropriate placement in the internship learning experience. This course should be taken during the semester immediately preceding Addictions Certificate internship courses. Prerequisite(s): This course should be taken the semester immediately preceding the Addictions Certificate Internship

SOWK 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

SOWK 4970 Internship (6-12 credits)

A 480-hour placement in a public or private social service organization, this internship is a senior capstone course focused on integrating practice experience with theory. Students are expected to demonstrate their social work knowledge, values, and skills through hands-on experience. Students will also participate in a seminar to discuss their internship experiences at the micro, mezzo, and macro levels of practice. Prerequisites: Completion of all courses in the major with a 2.50 GPA in the major and a C or better in all courses with a social work prefix (SOWK). Graded Satisfactory/Unsatisfactory only. When taken as Internship in Chemical Dependency the following description applies. An 880-hour internship prepares students to complete the Alcohol and Drug Counselor certificate in preparation for applying for licensure in Minnesota. Students are placed in chemical dependency agencies and are evaluated in terms of their knowledge and skills in the 12 core functions. Prerequisites: Requires completion of all courses in the certificate with a 2.50 GPA in the certificate.

SOWK 4971 Addictions Certificate Internship I (6-12 credits)

Part one of a two semester (880 clock hours) block placement in a public or private social service organization providing addictions counseling. This internship is a senior capstone course focused on integrating practice experience in the 12 Core Functions and 8 Practice Dimensions of an addictions counselor with theory. Students are expected to demonstrate skills in addictions theory, knowledge, values/ethics and skills through hands-on experience. Students will complete assignments and participate in seminars to discuss their internship experiences with peers and the faculty liaison. Prerequisite: Successful completion of all required courses in the Addictions Certificate with a C or higher and a 2.5 GPA. First semester students completing a Social Work major and the Addictions Certificate register for 6 credits. First semester students completing any other degree and the Addictions Certificate will register for 12 credits. First semester students completing only the Addictions Certificate will register for 12 credits.

SOWK 4972 Addictions Certificate Internship II (6-12 credits)

Part two of a two semester (880 clock hours) block placement in a public or private social service organization providing addictions counseling. This internship is a senior capstone course focused on integrating practice experience in the 12 Core Functions and 8 Practice Dimensions of an addictions counselor with theory. Students are expected to demonstrate skills in addictions theory, knowledge, values/ethics and skills through hands-on experience. Students will complete assignments and participate in seminars to discuss their internship experiences with peers and the faculty liaison. Prerequisite: SOWK 4971.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
 1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
 1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
 1940, 2940, 3940, 4940 IN-SERVICE COURSE
 1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
 1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
 1970, 2970, 3970, 4970 INTERNSHIP
 1980, 2980, 3980, 4980 RESEARCH
 1990, 2990, 3990, 4990 THESIS

Sociology

Sociologists explore dimensions of social life in all its cultural diversity. We explore the complexity of social interactions, communities, and focus on how social inequality is created and perpetuated. We study how all of this affects an individual's life chances.

Sociology is interdisciplinary in nature and excels at integrating knowledge from various disciplines in the social sciences and humanities. This enables us to examine the complexity of life and prepares the student to apply this critical thinking ability to various careers and life in communities.

The sociology curriculum is focused on bridging the gap between theoretical concepts and how these affect lives. A sociology major imparts skills in critical thinking, research design and analysis, communication, and synthesizing information and interpreting it for multiple audiences. Students will find such skills useful for careers such as those indicated.

Minors that complement the sociology curriculum:

Economics, Gender Studies, Political Science, Indigenous Studies, Communication Studies, History, Philosophy, Business

The Sociology curriculum will also prepare you for graduate school in Sociology, Public Policy, Public Administration, Law, Human Resource Management.

Programs

- Communication Studies, B.A. *major*
- Criminal Justice, B.S. (Victimology Emphasis) *major*
- Social Studies, B.A. (Sociology-Anthropology Emphasis) *major*
- Sociology, B.A. *major*
- Communication Studies *minor*
- Sociology *minor*

Career Directions

Human Resources
Management
Office Administration
Public Relations
Corrections
Rehabilitation
Judiciary
Market Research
Teaching
Advocacy groups and organizations
Consulting firms
Health agencies
City planning
Demography
Policy analysis
Research and statistics
Non-profit management

Preparation

Recommended High School Courses

Psychology

Social Research

Sociology

Communication Studies, B.A. *major*

Required Credits: 36

Required GPA: 2.50

I REQUIRED COURSES

Complete the following courses:

- COMM 1100 Public Speaking (3 credits)
or COMM 2100 Career and Professional Communication (3 credits)
or COMM 3100 Interviewing (3 credits)
- COMM 2000 Applied Communication Theory (3 credits)
- COMM 3000 Applied Research Methods (3 credits)
- COMM 3120 Communication in a Diverse Society (3 credits)
- COMM 4000 Capstone in Communication and Community Connections (3 credits)

II REQUIRED ELECTIVES

Select 21 credits (not used above) from the following in consultation with your advisor:

- COMM 1090 Interpersonal Communication (3 credits)

- COMM 1100 Public Speaking (3 credits)
- COMM 2100 Career and Professional Communication (3 credits)
- COMM 3100 Interviewing (3 credits)
- COMM 3110 Organizational Communication (3 credits)
- COMM 3120 Communication in a Diverse Society (3 credits)
or SOWK 2110 Intercultural Communication (3 credits)
- COMM 3130 Family Communication (3 credits)
- COMM 3150 Gender Communication (3 credits)
- COMM 3170 Health Communication (3 credits)
- COMM 3400 Environmental Communication (3 credits)
- COMM 3500 Communication and Conflict (3 credits)
- COMM 3600 Small Group Communication (3 credits)
or PSY 3337 Group Processes (3 credits)
- COMM 3700 Persuasion and Communication (3 credits)
- COMM 4100 Advanced Public Presentation (3 credits)
- COMM 4160 Business Communication (3 credits)
- COMM 4200 Special Topics in Communication Studies (3 credits)
- LEAD 3500 Theories and Contexts of Leadership (3 credits)

Criminal Justice, B.S. *major* Victimology Emphasis

For questions regarding the Criminal Justice B.S. major Victimology emphasis

please
email the Sociology and Communications Studies Department or call (218)
755.2487.

Required Credits: 48
Required GPA: 2.25

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- CRJS 1120 Criminal Justice and Society (3 credits)
- CRJS 3201 Research Methods and Statistics for Criminal Justice (3 credits)
- CRJS 3305 Judicial Process (3 credits)
- CRJS 3315 Criminology and Delinquency (3 credits)
- CRJS 3358 Criminal Law (3 credits)

COMPLETE 3 SEMESTER CREDITS FROM THE FOLLOWING COURSE:

- CRJS 4920 Directed Group Study (3 credits)

II EMPHASIS SPECIFIC COURSES

COMPLETE THE FOLLOWING COURSES:

- CRJS 3307 Victimological Theory and Practice (3 credits)
- CRJS 3377 Forensic Victimology (3 credits)
- CRJS 4407 Global Perspectives in Victimology (3 credits)
- CRJS 4477 Restorative Justice (3 credits)

REQUIRED EXTERNAL ELECTIVES

COMPLETE 9 SEMESTER CREDITS:

- INST 4900 Social Justice (3 credits)
- PSY 2217 Abnormal Psychology (4 credits)
- PSY 3332 Counseling and Crisis Interventions (4 credits)
- PSY 3367 Social Psychology (3 credits)
- SOC 1104 Society and Social Issues (3 credits)
- SOC 2230 Race and Ethnic Relations (3 credits)
- SOC 2240 Men, Women, and Society: A Sociological Interpretation (3 credits)
- SOC 3210 Social Movements and Change (3 credits)
- SOC 3300 Family and Society (3 credits)

REQUIRED ELECTIVES

COMPLETE 9 SEMESTER CREDITS:

- BIOL 3400 Fish & Wildlife Law and Administration (3 credits)
- CHEM 2210 Criminalistics (3 credits)
- CHEM 2270 Criminalistics Laboratory (1 credit)
- CRJS 2221 Comparative Justice (3 credits)
- CRJS 2225 Criminal Justice and Juveniles (3 credits)
- CRJS 3304 Police Process (3 credits)
- CRJS 3306 Corrections and Penology (3 credits)
- CRJS 3310 Introduction to Emergency Management (3 credits)
- CRJS 3319 Topics In Criminal Justice (1-2 credits)
- CRJS 3344 Criminal Justice and Domestic Violence (3 credits)
- CRJS 3355 Drugs and Criminal Justice (3 credits)
- CRJS 3356 Introduction to Homeland Security (3 credits)
- CRJS 3359 Criminal Investigation (3 credits)
- CRJS 3360 Criminal Procedure and Evidence (3 credits)
- CRJS 3380 Community Corrections (3 credits)

- CRJS 4103 Criminal Justice Diversity and Ethics (3 credits)
- CRJS 4480 Police and Community Relations (3 credits)
- CRJS 4487 Principles of Criminal Justice Supervision (3 credits)
- CRJS 4970 Internship (12 credits)
Note: CRJS 4970 must be taken for 9 or 12 credits only
- ENVR 4210 Environmental Law and Policy (3 credits)
- GWS 3850 Sex, Gender and Power: Theories and Practice (3 credits)
- INST 1107 Introduction to Turtle Island (3 credits)
- INST 4000 Nation Building and Leadership (3 credits)
- INST 4418 Federal Indian Law (3 credits)
- INST 4900 Social Justice (3 credits)
- PSY 2217 Abnormal Psychology (4 credits)
- PSY 3332 Counseling and Crisis Interventions (4 credits)
- SOC 2230 Race and Ethnic Relations (3 credits)
- SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)

Social Studies, B.A. *major* Sociology-Anthropology Emphasis

Required Credits: 48
Required GPA: 2.50

Note: A minimum of 22 semester credits used to meet course requirements in I and II must be completed at Bemidji State University. No course grade below a C may be used to meet these requirements and a minimum GPA of 2.50 in this major is required for graduation. Students who desire a second field of emphasis are to consider a completion of a minor or a second major in that field. Such action may complement and increase the marketability of this major.

I REQUIRED CORE CURRICULUM

CAPSTONE COURSE

COMPLETE THE FOLLOWING COURSE:

- POL 4500 Thesis and Career Preparation (3 credits)

ECONOMICS COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)

GEOGRAPHY COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)

WORLD HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2218 Medieval Europe (3 credits)
- HST 2219 Medieval European Culture (3 credits)
- HST 2228 Renaissance and Reformation Europe (3 credits)

- HST 2580 Russia (3 credits)
- HST 2600 Topics in History (3 credits)
- HST 2660 Women and History (3 credits)
- HST 2700 The History of World Religions (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)
- HST 3277 Readings and Research in European History (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3459 Latin America (3 credits)

U.S. HISTORY

SELECT 1 OF THE FOLLOWING COURSES

- HST 2600 Topics in History (3 credits)
- HST 2610 Minnesota History (3 credits)
- HST 2667 Men and Women: Gender in America (3 credits)
- HST 3117 American Revolutionary Era, 1763-1800 (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- HST 3137 The American Civil War (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3187 American West (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)

POLITICAL SCIENCE COURSES

SELECT 1 OF THE FOLLOWING COURSES

- POL 3100 American Foreign Policy (3 credits)
- POL 3130 Asian Political Development (3 credits)
- POL 3150 Topics in Political Science (1-3 credits)
- POL 3160 Comparative European Politics (3 credits)
- POL 3170 International Relations (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3190 International Political Economy (3 credits)
- POL 3200 Minnesota Politics (3 credits)
- POL 3210 Public Administration (3 credits)
- POL 3230 Environmental Politics (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- POL 3420 Campaigns and Elections (3 credits)
- POL 4200 Constitutional Law (3 credits)

SOCIOLOGY COURSES

COMPLETE THE FOLLOWING COURSES:

- SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)
- SOC 3210 Social Movements and Change (3 credits)

II REQUIRED FIELD OF EMPHASIS

SELECT 18 SEMESTER CREDITS OF ELECTIVES FROM SOCIOLOGY AND ANTHROPOLOGY

Sociology, B.A. *major*

Required Credits: 36

Required GPA: 2.50

Note: No course grade below a C may be used to meet these requirements and a minimum GPA of 2.50 in this major is required for graduation. At least 21 of the credits have to be taken at Bemidji State University.

I REQUIRED COURSES

Complete the following courses:

- SOC 1104 Society and Social Issues (3 credits)
- SOC 2230 Race and Ethnic Relations (3 credits)
- SOC 2240 Men, Women, and Society: A Sociological Interpretation (3 credits)
- SOC 3001 Social Statistics (3 credits)
- SOC 3003 Research Methods (3 credits)
- SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)
- SOC 3210 Social Movements and Change (3 credits)
- SOC 3320 Social Class and Inequality (3 credits)
- SOC 4600 Work and Careers (3 credits)
- SOC 4800 Capstone in Sociology (3 credits)

II REQUIRED ELECTIVES

Select 2 (6 credits) of the following courses:

- SOC 3250 Religion and Politics: A Sociological Analysis (3 credits)
- SOC 3300 Family and Society (3 credits)
- SOC 3310 Community Organizing for Social Change (3 credits)
- SOC 3330 Sociology of Health and Medicine (3 credits)
- SOC 3340 Sociology of Education (3 credits)
- SOC 4270 Intersectionality (3 credits)

Program Learning Outcomes | Sociology, B.A.

1. Analytic Ability: Students will be able to select an appropriate research method and justify its use.
2. Identify Patterns of Inequality: Students will be able to identify patterns of inequality and associated perspectives.
3. Analyze intersections and impacts of inequality: Students will be able to tease through the intersections and impacts of inequality.
4. Interpret numerical information: Students will be able to interpret the context within which numerical information is presented.
5. Differentiation of sociological concepts: Students will be able to differentiate among sociological concepts.
6. Interpreting ideas and actions: Students will be able to interpret the way in which concepts are linked to theoretical ideas and social action.
7. Interaction of institutions: Students will be able to identify and locate the interaction of institutions and how humans are positioned within institutions.
8. Connection of theory and practice: Students will be able to demonstrate the connection between theory and practice.

9. Relationship of ideas to career and community engagement: Students will be able to articulate the relationship between sociological ideas learned in the major, community engagement, and their career interest.

Communication Studies *minor*

Required Credits: 21

Required GPA: 2.00

I REQUIRED COURSES

Complete the following courses (9 credits):

- COMM 1100 Public Speaking (3 credits)
or COMM 2100 Career and Professional Communication (3 credits)
or COMM 3100 Interviewing (3 credits)
- COMM 2000 Applied Communication Theory (3 credits)
- COMM 4000 Capstone in Communication and Community Connections (3 credits)

II REQUIRED ELECTIVES

Select 12 credits (not used above) from the following:

- COMM 1090 Interpersonal Communication (3 credits)
- COMM 1100 Public Speaking (3 credits)
- COMM 2100 Career and Professional Communication (3 credits)
- COMM 3100 Interviewing (3 credits)
- COMM 3110 Organizational Communication (3 credits)
- COMM 3120 Communication in a Diverse Society (3 credits)
or SOWK 2110 Intercultural Communication (3 credits)
- COMM 3130 Family Communication (3 credits)
- COMM 3150 Gender Communication (3 credits)
- COMM 3170 Health Communication (3 credits)
- COMM 3400 Environmental Communication (3 credits)
- COMM 3500 Communication and Conflict (3 credits)
- COMM 3600 Small Group Communication (3 credits)
or PSY 3337 Group Processes (3 credits)
- COMM 3700 Persuasion and Communication (3 credits)
- COMM 4100 Advanced Public Presentation (3 credits)
- COMM 4160 Business Communication (3 credits)
- COMM 4200 Special Topics in Communication Studies (3 credits)
- LEAD 3500 Theories and Contexts of Leadership (3 credits)

Sociology *minor*

Required Credits: 21

Required GPA: 2.25

I REQUIRED COURSES

Complete the following courses:

- SOC 1104 Society and Social Issues (3 credits)
- SOC 2230 Race and Ethnic Relations (3 credits)
or SOC 2240 Men, Women, and Society: A Sociological Interpretation (3 credits)
- SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)
- SOC 3320 Social Class and Inequality (3 credits)

Choose 3 from the following courses:

- SOC 3250 Religion and Politics: A Sociological Analysis (3 credits)
- SOC 3300 Family and Society (3 credits)
- SOC 3310 Community Organizing for Social Change (3 credits)
- SOC 3330 Sociology of Health and Medicine (3 credits)
- SOC 3340 Sociology of Education (3 credits)
- SOC 4270 Intersectionality (3 credits)

Sociology Courses

SOC 1104 Society and Social Issues (3 credits)

Examines concepts and theories that describe and explain social life. Focuses on aspects of culture, social class, race relations, and gender relations as they are determined by society, and on how humans create and recreate groups, structures, and institutions. Liberal Education Goal Area 5.

SOC 2230 Race and Ethnic Relations (3 credits)

Study of dominant-subordinate relations with emphasis on racial and ethnic inequalities. Examination of privilege, prejudice and discrimination. Liberal Education Goal Areas 7 & 9.

SOC 2240 Men, Women, and Society: A Sociological Interpretation (3 credits)

Study of the construction of gender in society and the differential consequences of particular social arrangements on the lives of men and women. Examines gender, male and female sexuality, intimate relationships, gendered patterns of work and education, the gender of violence, and sociological theories of femininity and masculinity. Emphasizes changes in gendered social patterns in U.S. society in the 21st century and compares those changes to shifting patterns in other societies. Liberal Education Goal Areas 5 & 7.

SOC 3001 Social Statistics (3 credits)

Covers a conceptual understanding of basic descriptive and inferential statistics. Choice of statistic and interpretation of SPSS results is discussed. Prerequisite: Completion of Liberal Education mathematics requirement (Goal Area 4) or consent of instructor.

SOC 3003 Research Methods (3 credits)

Examines the basic methods used to study diverse social processes and to improve our understanding of social issues. Topics include the relationship of theory to research, research ethics, evaluation of qualitative and quantitative research designs and patterns of analysis, and associated concerns. Prerequisite: SOC 1104.

SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)

In this class we will explore classic and contemporary sociological theories. We will begin by examining Karl Marx, Emile Durkheim, Max Weber, Georg Simmel, and W.E.B. Du Bois, and then move toward more contemporary understandings about culture and society as discussed by symbolic interactionism, feminist theory and poststructuralism. The class is designed to help students understand how theorists think about structures and individuals, how historical time periods and intellectual environments shape theoretical understandings, and how theoretical discussions inform social research. Although much of the material in this class is designed to help students understand theory, another goal of the course is to help students critique existing theories and actually 'do theory'. Prerequisites: SOC 1104 or consent of instructor.

SOC 3050 Environmental Sociology (3 credits)

Examines the relationship between society and the environment. Emphasis on political and economic institutions and the consumer lifestyle and values. Considers how the treadmill of production affects ecosystems and discusses possible solutions to environmental problems. Prerequisites: SOC 1104 or consent of instructor.

SOC 3210 Social Movements and Change (3 credits)

Changing the world means changing the social world; we're really talking about social change, and that process involves social movements. The purpose of this course is to draw some general conclusions about what social movements are, and how social change is pursued and prevented by looking at how others have done it, how they are trying to do it now, and what can be learned from their successes and failures. This course fosters a deeper understanding of how people are persuaded to do the things they do, and how others' reasons for doing what they're doing are often as complex as our own. Liberal Education Goal Area 8.

SOC 3250 Religion and Politics: A Sociological Analysis (3 credits)

Religion and Politics are the things we U.S.-Americans are expected not to talk about in polite company. The U.S. appears to be deeply divided on a number of issues. But why? The goal of this course is to describe and explain. This course is not about taking partisan political positions, advocating for specific political interests, or arguing about the truth of religious worldviews. The sociological study of religion and politics involves understanding how religion as a worldview and social phenomenon is related to politics as interests and social phenomena, both in the U.S. and globally. Trends in religious identity and practice shape political behaviors, movements, and changes. They have done so in the past and will continue to do so in the future. I'm going to examine a lot of controversial stuff in this course, but I'm going to "take a big step back" to do it. Perhaps it will provide you with the tools to have difficult conversations with friends, family, and strangers; and/or help understand why people disagree on what they disagree on and respond the way they do.

SOC 3300 Family and Society (3 credits)

After a brief introduction to basic sociological concepts, frameworks, methods, and relevant historical materials, students examine several documents that address particular contemporary family issues. Students also learn how to evaluate the materials discussed. Liberal Education Goal Area 5.

SOC 3310 Community Organizing for Social Change (3 credits)

This course explores the history of community organizing and how individuals have come together to more deeply understand the rights and obligations of citizenship and how to organize for social justice for themselves and others in their communities. Students will develop deeper knowledge of the overall worldview associated with community organizing and will be able to articulate and apply the tools and tactics to effect change. They will also learn how to assess action taken and they will address how alternative approaches inform future action cycles. Liberal Education Goal Area 9.

SOC 3320 Social Class and Inequality (3 credits)

On some level, most people understand that social class matters; rarely do they grasp how by how much. The primary goal of this course is to examine social stratification, particularly focusing on social class, primarily in the contemporary United States, but also including historical and comparative information. It is only by doing so that we can understand why stratification is as it is in the United States and how and why it is different from those systems found elsewhere. Liberal Education Goal Areas 5 & 7.

SOC 3330 Sociology of Health and Medicine (3 credits)

In this course we will explore, from a sociological perspective, how health care is organized, inequalities related to health care organization, and how, as an institution, health care systems interact with other institutions. We will also be examining delivery interactions within the medical systems, the culture of medicine, professional power, and who gets to define 'wellness'. Finally, we will explore how health care is shaping individual lives and the understandings of the human.

SOC 3340 Sociology of Education (3 credits)

This course will focus not on how we learn, but why we go to school, from multiple sociological perspectives. What roles has schooling played, past and present? How is formal education connected to other social structures? How is education connected to social status, and social inequality? In this course, we will address the development and functions of public education, how and to what extent education both fosters social mobility and reproduces social inequality, how patterns of racial segregation, gender inequality, and social/class divides were, and are, related to education, the cultural dimensions and conflicts surrounding education, and future possibilities in an economy increasingly shaped by information and automation. This course focuses largely (but not exclusively) on the United States, after the Second World War.

SOC 4270 Intersectionality (3 credits)

This course will explore the complexity of the interaction of race, class, gender, sexuality, citizenship, and age with a specific focus on sexual norms in Western and non-Western societies. As part of this exploration, we will examine aspects of inequality and privilege and the social and political implications of hierarchies. We will also look at how the nature of race, sexuality, and gender can create hybrid identities and communities and cultures that resist and reinforce ethnic and national boundaries. Prerequisite(s): SOC 2230 or SOC 2240.

SOC 4600 Work and Careers (3 credits)

Students identify career avenues complementary to their chosen major and develop materials necessary for conducting a job search. In addition, students will learn what sociology has to say about work, occupations, and the organizations within which that work takes place. Prerequisites: Junior or senior standing suggested.

SOC 4800 Capstone in Sociology (3 credits)

Students decide on a research question and carry out an independent project.

SOC 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
 1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
 1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
 1940, 2940, 3940, 4940 IN-SERVICE COURSE
 1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
 1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
 1970, 2970, 3970, 4970 INTERNSHIP
 1980, 2980, 3980, 4980 RESEARCH
 1990, 2990, 3990, 4990 THESIS

Communication Studies Courses**COMM 1090 Interpersonal Communication (3 credits)**

This course is designed to help students become aware of the processes and theories of interpersonal communication within and about relationships that impact our personal and professional lives. Through self-analysis, case studies, practical application, and critique of cultural practices, students will examine the influence of communicative behaviors on personal relationships, groups, and society. Concepts include perception, ethics, emotion, conflict, cultural awareness, power, technology, language, nonverbal communication, social media, and listening. Liberal Education Goal Areas 7 & 9.

COMM 1100 Public Speaking (3 credits)

This course emphasizes the preparation and delivery of individual and group presentations. Students will learn to research, construct, and deliver informed and ethical presentations for various audiences, as well as understand the fundamental principles of written and public communication. Liberal Education Goal Area 1.

COMM 2000 Applied Communication Theory (3 credits)

This course explores the historical and contemporary theories that examine communication behaviors in various contexts including intrapersonal, interpersonal, group, organizational, media, and cultural. Students will learn how theories can be useful for understanding and critiquing events in their personal, professional, and civic lives; provide a lens through which students can make informed decisions; and help students create alternative solutions to societal issues.

COMM 2100 Career and Professional Communication (3 credits)

This course emphasizes oral and written communication, as well as relational skills utilized in professional settings. Students will learn fundamental concepts and principles of communication used in the workplace, develop skills for individual and group business presentations, learn how to generate messages for a variety of diverse and professional audiences through appropriate electronic and face-to-face communication, develop critical listening and problem-solving skills, and engage in effective and ethical interpersonal communication in the workplace. This course is designed to help individuals learn how to work productively with others and present themselves professionally in any career. Liberal Education Goal Area 1.

COMM 2925 People of the Environment: Communication Perspective (3 credits)

This course provides students with an introduction to understanding the impact of communication messages related to environmental issues. Students will examine their own environmental practices, research environmental communication practices in organizations, and make recommendations for appropriately promoting environmental issues. Liberal Education Goal Area 10

COMM 3000 Applied Research Methods (3 credits)

This class frames research as a way of knowing and provides balanced treatment to both quantitative and qualitative traditions in communication inquiry. Conceptually, this class will provide in-depth discussion about the role of reasoning in the research enterprise and how this process 'plays out' in planning and writing a research proposal and report. Students will understand the differences (and utility) of three methodological frameworks (quantitative, interpretive/systems, and critical). Prerequisite: COMM 2000 or instructor consent.

COMM 3100 Interviewing (3 credits)

This course emphasizes oral and written communication related to interview settings such as employment, job performance, information gathering, health, persuasive, and counseling. Students will learn fundamental concepts and principles of interviewing, develop skills for researching and collecting data relevant to interviews, create interview question guides, practice skills as the interviewee and interviewer in simulated and real settings, deliver presentations related to the interview process, and develop critical listening skills in interview settings. This course is designed to prepare individuals for taking part in various interviews throughout their career. Liberal Education Goal Area 1.

COMM 3110 Organizational Communication (3 credits)

This course examines historical and contemporary organizational communication models, theories, and processes within organizational environments. Students will learn how and why organizations operate the way they do by focusing on communication processes and messages such as organizational change, decision-making, socialization, gendered identities, leadership, civility, emotion, technology, and conflict management. Implications of organizational messages on employees, employers, and external publics will be explored. Overall, this course prepares students to critique social practices and develop effective communication behaviors for being successful in their organizational lives. Liberal Education Goal Area 5.

COMM 3120 Communication in a Diverse Society (3 credits)

This course is designed to help you become aware of the processes and theories of intercultural communication within and about relationships that impact our personal and professional lives. Through self-analysis, case studies, practical application, and critique of cultural practices, you will examine the influence of communicative behaviors on intercultural relationships, groups, and society. Concepts include perception, ethics, conflict, cultural awareness, cultural bias, intercultural communication competence, power, nonverbal communication, and immigration. Liberal Education Goal Areas 7 & 8.

COMM 3130 Family Communication (3 credits)

This course examines how communication functions to develop, maintain, enrich, or limit family relationships. Topics covered include the meaning of narratives and stories, family roles and rules, decision-making, conflict resolution, exploration of family types, cultural implications of family functioning, societal influences on family functioning, and examining communication changes throughout the family life cycle. Overall, this course is designed to develop understanding of, and ability to, analyze communication within families. Liberal Education Goal Area 7.

COMM 3150 Gender Communication (3 credits)

This course is designed to explore the historical and contemporary theory, research, and practice of gender communication. Students will examine communication about, and between, women and men in terms of language used, media depictions of gendered identities, and how such language influences our understanding of biological sex and gender as a cultural construction. Contexts include the impact of gender communication in a variety of relationships such as friendships, romantic partners, family life, educational, political, and workplace settings. Overall, this course introduces students to various perspectives on gender and encourages an understanding of, and respect for, all of those perspectives. Liberal Education Goal Areas 5 & 7.

COMM 3170 Health Communication (3 credits)

The course examines health communication through theory, research, and experiential application of concepts in interpersonal, public, mediated, and organizational health care contexts. The course emphasizes issues of ethics and communication variables such as verbal, nonverbal, conflict, listening, and self-disclosure between individuals, health care providers, patients, and families. Overall, this course will help students understand how personal, societal, political, and culture factors impact health communication and healthcare. Liberal Education Goal Areas 7 & 9.

COMM 3400 Environmental Communication (3 credits)

This course examines the intersections between environmental issues, communication processes, and social change. Students will explore the unique contribution that communication theory and research can bring to the study of the environment in private and public contexts such as political, legal, organizational, educational, mediated, relational, and cultural. Students will learn how to appropriately advocate for environmental change in private and public spheres. Overall, this course helps students understand how communication creates, shapes, and maintains social realities as we make sense of our decisions about how to negotiate relationships between humans and Earth. Liberal Education Goal Area 10

COMM 3500 Communication and Conflict (3 credits)

This course provides an overview of how communication is used in everyday life to create, negotiate, and resolve interpersonal and organizational conflict. Specific topics include communication conflict management theories, conflict styles, impact of sex and gender on conflict communication, listening, bullying and difficult people, collaboration, mediation, and reconciliation. Contexts of conflict will include intimate relationships, family, social media, and workplace settings. Overall, this course prepares students to use communication choices to make conflict more productive in their personal and professional lives.

COMM 3600 Small Group Communication (3 credits)

This class allows students an opportunity to discover, through participation in small groups, how to negotiate membership, resolve conflict, and maintain order through a variety of means and in a variety of venues. The academic material will be accompanied by practical, prescriptive guidance to help students become more productive members and/or leaders of small groups.

COMM 3700 Persuasion and Communication (3 credits)

This course examines historical and contemporary theories, principles, and communicative practices of persuasive messages. As persuasion is a part of our personal, organizational, and public lives, students will understand the process of persuasion, practice strategies of ethical and effective persuasion, and analyze persuasive discourse in various oral, written, and mediated contexts. Students will learn how to become responsible citizens by examining persuasive messages in our society and providing recommendations for ethical communication. Liberal Education Goal Areas 5 & 9.

COMM 4000 Capstone in Communication and Community Connections (3 credits)

As a capstone, this course provides students an opportunity to reflect and act upon their communication and academic experiences through critical thinking and experiential opportunities. Communication choices have the power to influence social reality, which impacts the communities in which we live. As communication scholars and engaged citizens, students will examine perspectives of difference in gender, race, social class, ability, sexuality, and age to uncover and challenge social injustices. Overall, the goal of this course is to embrace differences and use communication for framing public discourse toward the betterment of our communities. Prerequisite(s): COMM 2000.

COMM 4100 Advanced Public Presentation (3 credits)

The advanced course in public presentation provides students with an opportunity to enhance understanding and application of public speaking techniques, theories, and perspectives. Additionally, the primary goal of this class is to improve practical communication skills through in-class activities and ongoing assignments. Advanced Public Speaking will help students gain experience in formal speaking situations. Prerequisite: COMM 1100 or instructor consent.

COMM 4160 Business Communication (3 credits)

This course is intended to provide students with increased knowledge and communication competencies in a business setting. The course is divided into three sections, which allows students to analyze data and present recommendations to a simulated investing business committee. Students will execute higher-level excel functions, produce professional business correspondence based on excel data, and prepare and deliver individual and group presentations applicable to their findings. Overall, this course emphasizes the importance of professional communication used in business settings.

COMM 4200 Special Topics in Communication Studies (3 credits)

In-depth study of communication topics that reflect relational, organizational, societal, or cultural issues. May be retaken multiple times with different topic subtitles. Might not be offered every year. Prerequisite(s): Junior standing or instructor consent.

COMM 4910 Directed Independent Study (3 credits)

Arranged Individual Study.

COMM 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

COMM 4970 Internship (1-6 credits)

Designed to provide students an opportunity to gain valuable direct organizational experience in a wide range of communication-related fields. Students will apply principles and theories learned in the classroom; develop communication skills appropriate to their chosen profession; and experience organizational dynamics, practices, and realities in a professional environment. Position can be in a public or nonprofit organization or agency appropriate to the degree objective. Students will be required to report on their experience throughout the semester (reflective journals, final comprehensive paper, and presentation). Supervision is provided on site and on campus. The internship must be arranged at least one semester prior to registering for it and approved by the Communication Studies Coordinator. No more than 3 hours of credit may be earned at any individual internship site; internships may be repeated for up to 6 credits. Prerequisite: Senior standing and Communication Studies Major. Graded Satisfactory/Unsatisfactory only.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
 1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
 1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
 1940, 2940, 3940, 4940 IN-SERVICE COURSE
 1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
 1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
 1970, 2970, 3970, 4970 INTERNSHIP
 1980, 2980, 3980, 4980 RESEARCH
 1990, 2990, 3990, 4990 THESIS

Spanish

Studying Spanish at Bemidji State University — as a major, as a minor or through selected courses — will widen your world and expand your perspective.

The ability to speak, read and write in Spanish will open up new career opportunities, while deepening your appreciation of people, cultures and language, both in the United States and around the world.

The Spanish program at Bemidji State allows students to acquire beginning- and intermediate-level Spanish-language skills with a few courses or go further and develop a level of mastery through a minor or one of two bachelor's degrees.

Programs

- Spanish, B.A. *major*
- Spanish *minor*

Spanish, B.A. *major*

Required Credits: 34

Required GPA: 2.25

I REQUIRED CORE COURSES

Complete the following courses:

- SPAN 2212 Intermediate Spanish II (4 credits)
- SPAN 3311 Composition and Communication Skills (3 credits)
- SPAN 3312 Advanced Readings and Communication Skills (3 credits)
- SPAN 3313 Spanish Oral Proficiency Skills Workshop I (1 credit)
- SPAN 4314 Advanced Spanish Grammar Review Through Film and Literature (3 credits)
- SPAN 4315 Spanish Oral Proficiency Skills Workshop II (1 credit)

II REQUIRED ELECTIVES

Select 19 semester credits with consent of advisor:

- SPAN 3300 Study Abroad (1-18 credits)
- SPAN 3317 Topics in Latin America (3 credits)
- SPAN 3319 Spanish for the Professions (3 credits)
- SPAN 3320 Latin America and Spain Through Cinema (1-3 credits)
- SPAN 3330 Traditional Folk Art of the Spanish-speaking World (2 credits)
- SPAN 3830 Voices of Women in the Spanish-speaking World (3 credits)
- SPAN 3840 Contemporary Issues in the Spanish-speaking World (3 credits)
- SPAN 3850 Art and Conflict in Spain and Latin America (3 credits)
- SPAN 3870 Intensive Immersion Practicum: Concordia Language Villages (4 credits)
- SPAN 3971 Intercultural Immersion Internship (1-4 credits)
- SPAN 4310 Advanced Spanish Composition (3 credits)
- SPAN 4413 Hispanic Short Fiction (3 credits)
- SPAN 4414 The Hispanic Novel (3 credits)
- SPAN 4415 Hispanic Drama (3 credits)
- SPAN 4416 Hispanic Poetry (3 credits)
- SPAN 4420 Twentieth Century Literature (3 credits)
- SPAN 4421 Women in Hispanic Literature and Culture (3 credits)

- SPAN 4422 Hispanic Literature and Culture in the United States (3 credits)
- SPAN 4423 From Text to Image: Hispanic Film and Literature (3 credits)
- SPAN 4426 Latin American Culture and Civilization (3 credits)
- SPAN 4427 Spanish Culture and Civilization (3 credits)
- SPAN 4430 Spanish Linguistics (3 credits)

Program Learning Outcomes | Spanish, B.A.

1. Interpersonal Communication: Student will be able to negotiate meaning with individuals via speaking, writing, or reading at the Intermediate-High rating of the ACTFL proficiency levels.
2. Interpretive Communication: Students will be able to interpret meaning in either oral, written or visual form with no recourse to active negotiation of meaning with the writer, speaker, or producer at the Intermediate-High rating of the ACTFL proficiency levels.
3. Presentational Communication: Students will be able to create messages that can be interpreted by members of the target language with no recourse to active negotiation of meaning with the writer, speaker or producer at the Intermediate-High rating of the ACTFL proficiency levels.
4. Intercultural Knowledge and Competence: Students will become aware of the importance of understanding the complexity of elements important to members of other cultures in relation to their history, values, politics, communication styles, economy, or beliefs and practices. Besides, students will articulate insights into their own cultural rules and biases, and they will be able to interpret intercultural experiences from the perspectives of more than one worldview as well as act in a supportive manner towards other cultural groups.

Spanish *minor*

Required Credits: 18

Required GPA: 2.25

I REQUIRED CORE COURSES

Complete the following courses:

- SPAN 1111 Elementary Spanish I (4 credits)
- SPAN 1112 Elementary Spanish II (4 credits)
- SPAN 2211 Intermediate Spanish I (3 credits)
- SPAN 2212 Intermediate Spanish II (4 credits)

II REQUIRED CORE ELECTIVES

Select 3 credits:

- SPAN 3300 Study Abroad (1-18 credits)
- SPAN 3311 Composition and Communication Skills (3 credits)
- SPAN 3312 Advanced Readings and Communication Skills (3 credits)
- SPAN 3313 Spanish Oral Proficiency Skills Workshop I (1 credit)
- SPAN 3317 Topics in Latin America (3 credits)
- SPAN 3319 Spanish for the Professions (3 credits)
- SPAN 3320 Latin America and Spain Through Cinema (1-3 credits)
- SPAN 3330 Traditional Folk Art of the Spanish-speaking World (2 credits)
- SPAN 3830 Voices of Women in the Spanish-speaking World (3 credits)
- SPAN 3840 Contemporary Issues in the Spanish-speaking World (3 credits)
- SPAN 3850 Art and Conflict in Spain and Latin America (3 credits)
- SPAN 3870 Intensive Immersion Practicum: Concordia Language Villages (4 credits)
- SPAN 3971 Intercultural Immersion Internship (1-4 credits)

Spanish Courses

SPAN 1100 Hispanic Culture And Spanish Language (1-3 credits)

Students acquire a basic understanding of the Hispanic culture and language. This course is taught in English, but basic Spanish expressions and Hispanic customs are emphasized. It is particularly suitable for students who have never studied a foreign language. The multidisciplinary composition of this course complements the study of all academic areas including International Studies.

SPAN 1111 Elementary Spanish I (4 credits)

Study and practice of the four basic skills: listening, speaking, reading, and writing. Stress on pronunciation, basic grammatical forms, and language patterns. Special emphasis on the Hispanic culture and civilization. Liberal Education Goal Area 8.

SPAN 1112 Elementary Spanish II (4 credits)

Study and practice of the four basic skills: listening, speaking, reading, and writing. Stress on pronunciation, basic grammatical forms, and language patterns. Special emphasis on the Hispanic culture and civilization. Prerequisite: SPAN 1111 or consent of instructor. Liberal Education Goal Area 8.

SPAN 2211 Intermediate Spanish I (3 credits)

Continuation of practice in the development of the four basic language skills. Continued acquisition of grammatical forms. Strong emphasis on the culture and civilization of Spain and Latin America. Prerequisite: SPAN 1112 or consent of instructor. Liberal Education Goal Area 8.

SPAN 2212 Intermediate Spanish II (4 credits)

This course is a continuation of Spanish 2211. Intensive review of basic grammar. Practice in oral and written communication and proficiency. Development of fluency with idiomatic expressions. Selected readings on culture and literature. For students whose native language is not Spanish. Prerequisite(s): SPAN 2211 or consent of instructor. Liberal Education Goal Area 8.

SPAN 3300 Study Abroad (1-18 credits)

Variable semester credits up to 18 credits to be granted to students of Bemidji State University for resident study in Spanish language area.

SPAN 3311 Composition and Communication Skills (3 credits)

A course designed to refine the basic skills of understanding oral and written Spanish and improving the correct grammatical writing of Spanish. The emphasis is on Spanish composition through literature. Prerequisite: SPAN 2212 or consent of instructor. Liberal Education Goal Area 8.

SPAN 3312 Advanced Readings and Communication Skills (3 credits)

Continuation of the practice in the skills of speaking, listening, and writing, with emphasis on reading both Spanish and Latin American short stories and plays. Prerequisite: SPAN 2212 or consent of instructor. Liberal Education Goal Area 8.

SPAN 3313 Spanish Oral Proficiency Skills Workshop I (1 credit)

A course designed to refine the basic skills of understanding oral Spanish and speaking proficiency. Course may be repeated for up to 2 credits. Might not be offered every year. Prerequisite(s): SPAN 2212 or consent of instructor.

SPAN 3317 Topics in Latin America (3 credits)

An in-depth study of Latin America. Topics vary by semester. May be repeated for up to 6 credits with different topic subtitles. Prerequisite(s): SPAN 2212 or consent of instructor. Liberal Education Goal Area 8. (Might not be offered every year.)

SPAN 3319 Spanish for the Professions (3 credits)

A course designed to develop the Spanish vocabulary necessary for work in a specific field. Professional areas change as announced: medical professions, education, business and finance, social work, criminal justice, law, and the courtroom. May be retaken multiple times with different topic subtitles. Prerequisites: SPAN 2212 or consent of instructor. Might not be offered every year.

SPAN 3320 Latin America and Spain Through Cinema (1-3 credits)

Explores contemporary issues in the cultures and societies of Latin America and Spain by watching, analyzing, and critically reading film and visual texts. Includes films that address issues of ethnicity, class representation, immigration and exile, dictatorship, experiences of war and violence, globalization, gender, as well as sexual and racial identities among others. Provides opportunities to improve students' proficiency in Spanish through oral and written communication in Spanish. Prerequisite(s): SPAN 2212 or consent of instructor. Liberal Education Goal Area 8. Might not be offered every year.

SPAN 3330 Traditional Folk Art of the Spanish-speaking World (2 credits)

This course is designed for students who are interested in learning the cultures of the Spanish-speaking world from precolonial times to the present. Students will explore the intellectual history of different artisan materials and culture of Latin America and Spain. They will gain understanding of the historic significance of works of arts by investigation and creating their own art. Understanding of richness of this heritage will be fostered by reading various articles, media, and the creation of works of art. Students will also get to experience working with a variety of different mediums such as fabric, wood, paper, plastic, wood, yarn, etc. During the process of creating works of art, students will use unique (preferably recyclable) materials to create their own artworks. Through the exposure to traditional art forms, students will learn the basic concepts that will enable them to interpret images and sound to understand the richness of cultures within the Spanish-speaking world. In this course it is very important to keep an open attitude and use perception, imagination, curiosity and sensibility. Students will spend 1-2 hours on each creation, and are required to present and exhibit their artwork at the end of the semester. This course will be taught in English. Liberal Education Goal Area 6. (Might not be offered every year.)

SPAN 3830 Voices of Women in the Spanish-speaking World (3 credits)

A study of selected women writers of the Spanish-speaking world. Emphasis is given to their contributions to the development of Spanish and Latin American Literature and Culture as well as their vision of the world. This course focuses on the emergence of women's voices of Latin America and Spain through a collection of selected authentic materials such as: articles, movies, short films, documentaries, interviews, literature of testimony, from the 16th century through the present. Special attention will be given to critical thinking and interpretation, speaking, and writing skills. This course is conducted entirely bilingually. Prerequisite(s): SPAN 2212 or consent of the instructor. (No prerequisites for non-Spanish majors.) Liberal Education Goal Area 6. (Might not be offered every year.)

SPAN 3840 Contemporary Issues in the Spanish-speaking World (3 credits)

Research and discussion of selected issues that significantly contribute to and affect life in contemporary Spanish-speaking societies. Examination and use of authentic media materials. Prerequisite(s): SPAN 2212 or consent of the instructor. Liberal Education Goal Area 8. (Might not be offered every year.)

SPAN 3850 Art and Conflict in Spain and Latin America (3 credits)

Explores instances of artistic resistance to violence in Spain and Latin America. The history of Spain and Latin America abounds in episodes of conflict: dictatorships, wars, forced displacement and human exploitation. This course studies how artists, writers, musicians, and filmmakers represented and resisted censorship and repression in Spain and Latin America. Through primary sources (films, artwork, poetry, and other texts) and historical accounts, students became aware of the cultures of protest created by those artists. This course is conducted in Spanish so students strengthen their language proficiency and communicative skills. Prerequisite(s): SPAN 2212 or consent of the instructor. Liberal Education Goal Area 6. Might not be offered every year.

SPAN 3870 Intensive Immersion Practicum: Concordia Language Villages (4 credits)

Students acquire first-hand experience with the Spanish Language and Spanish-speaking cultures in the United States by participating in a practical, hands on 80 hour volunteer experience at Concordia Language Villages. Two options are available. See department for further information. Criminal background check required. Prerequisites: SPAN 2212 or ACTFL Intermediate-low proficiency in Spanish. Instructor permission required. Liberal Education Goal Area 8.

SPAN 3971 Intercultural Immersion Internship (1-4 credits)

Students can acquire first-hand experience with the Spanish Language and Spanish-speaking cultures in the U.S. or abroad by participating in an intercultural immersion internship. In this volunteer internship students will acquire intercultural soft skills, improve language skills, gain career experience in their field, and more. See department for more information. May be repeated for maximum of 4 credits. Prerequisites: SPAN 2212 or ACTFL Intermediate-low proficiency in Spanish. Instructor permission required. Liberal Education Goal Area 8.

SPAN 4310 Advanced Spanish Composition (3 credits)

A writing course designed to improve the ability to write correct idiomatic (expressions natural to a native speaker) Spanish. Emphasis on acquisition of a wider vocabulary and structural understanding of the language. Selected topics from literary and cultural materials. Includes creative and formal writing in specific genres. Includes reading, writing, comprehending and producing written expression. Prerequisite(s): SPAN 3311, SPAN 3312, or consent of instructor.

SPAN 4314 Advanced Spanish Grammar Review Through Film and Literature (3 credits)

A course designed for advanced students with emphasis on critical grammatical application through examination of specific cultural and linguistic contexts of selected film and literature of the Spanish-speaking world. Students written proficiency level will be evaluated with the ACTFL guidelines. Prerequisite(s): SPAN 2212, SPAN 3311 Pre/Co-requisite: SPAN 3312, or consent of instructor. (Might not be offered every year.)

SPAN 4315 Spanish Oral Proficiency Skills Workshop II (1 credit)

This course is designed to refine Spanish speaking and comprehension competencies through the exploration of short stories, plays, articles, debates and films. Students will attain, develop, and demonstrate skills from the intermediate through advanced proficiency levels of the ACTFL Guidelines by using a variety of readings and articles related to assigned topics. Course may be repeated for up to 2 credits. Prerequisite(s): SPAN 3311, SPAN 3312, Co-requisite: SPAN 4314; or consent of instructor. (Might not be offered every year.)

SPAN 4413 Hispanic Short Fiction (3 credits)

A study of selected works of short fiction from Spain and Latin America. Prerequisite: SPAN 3312 or consent of instructor. (Might not be offered every year.)

SPAN 4414 The Hispanic Novel (3 credits)

A study of selected novels from Spain and Latin America. Prerequisite: SPAN 3312 or consent of instructor. (Might not be offered every year.)

SPAN 4415 Hispanic Drama (3 credits)

A study of selected works. Prerequisite: SPAN 3312 or consent of instructor. (Might not be offered every year.)

SPAN 4416 Hispanic Poetry (3 credits)

A study of selected works. Prerequisite: SPAN 3312. (Might not be offered every year.)

SPAN 4420 Twentieth Century Literature (3 credits)

A study of selected works of twentieth century Spanish and Latin American authors and their social and cultural context. Prerequisite: SPAN 3312 or consent of instructor. (Might not be offered every year.)

SPAN 4421 Women in Hispanic Literature and Culture (3 credits)

A study of selected literature from a broad range of Hispanic women writers from antiquity to the present. Prerequisite: SPAN 3312 or consent of instructor. (Might not be offered every year.)

SPAN 4422 Hispanic Literature and Culture in the United States (3 credits)

A bilingual offering of selected works of authors of Hispanic literature in the United States. Prerequisite: ENGL 2152 or ENGL 3150. (Might not be offered every year.)

SPAN 4423 From Text to Image: Hispanic Film and Literature (3 credits)

A study of the relationship between narrative and cinema in the Hispanic world. (Might not be offered every year.)

SPAN 4426 Latin American Culture and Civilization (3 credits)

History of Spanish American culture and civilization from antiquity to the present. Prerequisite: SPAN 3312 or consent of instructor. [Might not be offered every year.]

SPAN 4427 Spanish Culture and Civilization (3 credits)

History of Spanish culture and civilization from antiquity to the present. Prerequisite: SPAN 3312 or consent of instructor. (Might not be offered every year.)

SPAN 4430 Spanish Linguistics (3 credits)

The application of knowledge of ML 3430 Linguistics to the Spanish language. An introductory course of Spanish topics of phonology, morphology, syntax, lexicography, semantics, and language acquisition theory. Includes the study of the origins and evolution of Spanish and its current use. Prerequisite(s): SPAN 3311 and SPAN 3313 Pre/Co-requisite(s): ML 3430; or consent of instructor.

SPAN 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
1940, 2940, 3940, 4940 IN-SERVICE COURSE
1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
1970, 2970, 3970, 4970 INTERNSHIP
1980, 2980, 3980, 4980 RESEARCH
1990, 2990, 3990, 4990 THESIS

Sport Management

The vision of the Department of Human Performance, Sport, and Health is “preparing and empowering future professionals to promote physical activity, health, and sport.”

The mission of the Department of Human Performance, Sport, and Health is to provide students with experiences to develop leadership, communication, and technological skills for learning, for citizenship, and for work. Our programs foster an appreciation of the contributions of physical activity, wellness, and sport to society.

Sport Management offers specialized training and education for individuals seeking careers in the sport business industry. The Sport Management curriculum is designed to meet the Common Professional Component (CPC) as outlined by COSMA:: social, psychological, and international foundations of sport, management, ethics in sport management, sport marketing & communication, finance/accounting/economics, legal aspects of sport, integrative experience.

Students have the opportunity to gain valuable work experience by completing a 400-hour internship in a sport management setting of their choice. This required internship provides an opportunity to apply management principles and concepts learned in the classroom.

Programs

- Sport Management, B.A. *major*
- Sport Management *minor*

Career Directions

Campus Recreation
International Sport
Interscholastic/Intercollegiate/Professional Sport Organizations
Physical Fitness Industry
Sport Communications
Sport Event and Facility Management
Sport Management and Marketing Agencies
Sport Marketing and Promotion
Sport Tourism
Also: Graduate Study

Preparation

Recommended High School Courses

Business
Coaching
Computers
Health and Fitness
Mathematics
Physical Education
Psychology
Sociology
Speech
Writing

Recommended Activities

Athletic Team Participation

Sport Management, B.A. *major*

Required Credits: 69

Required GPA: 2.25

I REQUIRED CORE COURSES

Complete the following courses:

- ACCT 2101 Principles of Accounting I (3 credits)
- BUAD 2280 Computer Business Applications (3 credits)
- ECON 2000 Markets and Resource Allocation (3 credits)
- HLTH 2100 First Aid and CPR/AED (1 credit)
- PHED 2109 Introduction to Sport Management (3 credits)
- PHED 3120 Psychology of Sport (2 credits)
- PHED 3219 Sport Economics (2 credits)
- PHED 3449 Socio-Culture and Ethical Issues in Sport (3 credits)
- PHED 3509 Sport Event Management (2 credits)
- PHED 3519 Sport Facility Management (2 credits)
- PHED 3600 Sport Marketing (3 credits)
- PHED 4209 Sport Finance (3 credits)
- PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)
- PHED 4409 Sport Business Management (3 credits)

Complete the following course:

- PHED 2970 Internship: Sport Management Practicum (2 credits)

Complete the following course:

- PHED 4920 DGS: (1 credit)

Complete the following course, 12 credits:

- PHED 4971 Internship: Sport Management (1-12 credits)

II. REQUIRED MINOR

REQUIRED MINOR Students are to select a minor that will contribute to their professional aspirations. The minors listed below are recommended, though students have the option to select any minor offered by the University. Students are encouraged to work with their faculty advisor to select an appropriate minor.

- Accounting
- Business Administration
- Economics
- Mass Communication

Program Learning Outcomes | Sports Management, B.A.

1. Ethics: Students will become familiar with: theories of ethics; concepts of morality; professional ethics, rights and responsibilities; the importance in developing personal and management values; the importance in developing a

personal philosophy regarding social responsibility.

2. Finance, Accounting & Economics: Students will become familiar with: 1) The financial status of the sport industry; sources of income to finance sport; with alternative sources of revenue to finance sport; the justifications using public and private sources of revenue to finance sport. 2) Basic accounting principles; financial statements; the different types of budgeting; developing budgets when financing sport; spreadsheet utilization. 3) The economic growth of the sport industry; the concepts of competitive strategy as it applies to the sport industry; economic impact principles as they are applied to the sport industry; economic theories as they apply to the sport industry; how the media has economically impacted the sport industry; the economic impact of venues and events; economic perspectives in labor relations within the sport industry.

3. Integrative Experience: Students will: 1) Establish professional goals; develop a professional philosophy; engage in service learning activities; and develop an electronic portfolio (that include goals, philosophy, and activities) that will serve as a communication and marketing tool when searching for an internship and / or job position in the sport management industry. 2) Adequately demonstrated knowledge and skills while completing their internship: a) communication; oral & written, b) economics, c) ethics, d) event & facility management, f) finance & budgeting, g) governance, h) legal issues, i) management, and j) marketing.

4. Legal Issues: Students will become familiar with: tort law; risk management procedures; the concept of product liability; constitutional law; contract law; administrative and statutory law; the legal system; crowd control and security issues.

5. Social, Psychological and International Foundations: Students will become familiar with: 1) Internal and external factors that shape sport in a culture; how sport mirrors society; how sport is used as a medium for integrating gender, ethnic, religious, and disabilities interests; how social phenomena affect participation and behavior; how individuals enter and leave sport involvement; how mainstream values are inherent in contemporary society. 2) Personality, individual and group performances, competitiveness, goal setting, psychosocial influences, motivation, and violence within the context of sport psychology. 3) International cultures in sport; the similarities and differences with Ancient and modern Olympics; early American games and sports and their origination; world and international sports.

6. Sport Management Principles, Leadership, Operations, and Gov: Students will become familiar with: 1) Various functions of management; the strategic planning process; various management theories; the decision-making process; the problem-solving process; human resource management; organizational structure and staffing. 2) Theories of sport leadership; leadership styles; skills & competencies required of sport leaders; motivation theories. 3) The process in planning & designing sport facilities; venue and event management, operations, maintenance, programming and scheduling logistics. 4) Governing bodies in professional and amateur sport; the organizational structure of a variety of sport governing bodies; the authority and functions of various sport governing bodies; the requirements for membership in sport governing bodies; the sanction and appeal processes utilized by sport governing bodies.

7. Sport Marketing: Students will become familiar with: Definitions of marketing and sport marketing; unique aspects of sport marketing; consumer demographics & psychographics information; the marketing mix; the process of developing marketing goals & objectives; the segmentation process and identifying target markets; the process of developing a sport marketing proposal.

Suggested Semester Schedule for | SPORT MANAGEMENT MAJOR, B.A.

The following is a list of required Sport Management B.A. courses arranged by year. This schedule is intended to help students plan their courses in an orderly

fashion; however, these are only suggestions and this schedule is flexible.

Freshman

- ACCT 2101 Principles of Accounting I (3 credits)
- HLTH 2100 First Aid and CPR/AED (1 credit)
- PHED 2109 Introduction to Sport Management (3 credits)
- Core Curriculum requirements

Sophomore

- BUAD 2280 Computer Business Applications (3 credits)
- ECON 2000 Markets and Resource Allocation (3 credits)
- PHED 2970 Internship: Sport Management Practicum (2 credits)
- PHED 3449 Socio-Culture and Ethical Issues in Sport (3 credits)
- Major Required Electives
- Complete Core Curriculum requirements

Junior

- PHED 3509 Sport Event Management (2 credits)
- PHED 4209 Sport Finance (3 credits)
- PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)
- Major Required Electives

Senior

- PHED 4409 Sport Business Management (3 credits)
- PHED 4920 DGS: (1 credit)
Complete Internship for 12 credits
- PHED 4971 Internship: Sport Management (1-12 credits)
- Complete Major Required Electives

Sport Management *minor*

Required Credits: 22

Required GPA: 2.00

REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- PHED 2109 Introduction to Sport Management (3 credits)
- PHED 3120 Psychology of Sport (2 credits)
- PHED 3449 Socio-Culture and Ethical Issues in Sport (3 credits)
- PHED 3509 Sport Event Management (2 credits)
or PHED 3519 Sport Facility Management (2 credits)
- PHED 3600 Sport Marketing (3 credits)
- PHED 4209 Sport Finance (3 credits)
- PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)
- PHED 4409 Sport Business Management (3 credits)

Physical Education Courses

PHED 1114 Skills For Life: Beginning Swimming (1 credit)

An activity course for non-swimmers. Emphasis will be on personal adjustment to the water, basic strokes, and fundamentals of water safety. Liberal Education Goal Area 11.

PHED 1115 Intermediate Swimming (1 credit)

An activity course for swimmers who have the ability to jump into deep water, swim a front stroke 25 yards, and swim on the back 25 yards. Emphasis will be on five basic strokes, elementary diving, and related aquatic skills. Course may lead to American Red Cross Learn to Swim Certification Level 4 or 5. May not be offered every year.

PHED 1116 Advanced Swimming (1 credit)

An activity course for swimmers who can swim in satisfactory form 25 yards of each of the five basic strokes (back crawl, breaststroke, front crawl, elementary backstroke, sidestroke). Emphasis will be on developing and refining thirteen strokes, diving and other advanced aquatic skills. Course leads to American Red Cross Learn to Swim Certification Level 6 - Fitness Swimmer. This course is preparatory for the Water Safety Instructor course.

PHED 1120 Introduction to Sea Kayaking (1 credit)

An activity course that introduces the basics of kayak history, design, skills, and equipment. Taught through lecture, demonstration, and both on- and off-the-water skills practice.

PHED 1139 Beginning Scuba Diving (1 credit)

Upon completion of this course, students will understand and be able to demonstrate the safe scuba diving practices of the Professional Association of Dive Instructors (PADI) curriculum. Focuses on classroom knowledge development and confined-water skill development. Equipment and supplies are provided. This course is phase 1 of the PADI certification course. Students wishing to complete the certification as an Open Water Diver will need to take additional instruction. Liberal Education Goal Area 11.

PHED 1180 Canoeing (1 credit)

An activity course that introduces the fundamental skills of canoeing. Emphasis is on safety and on tandem and solo paddling techniques. Prerequisite: swimming test or consent of instructor. Liberal Education Goal Area 11.

PHED 1190 Skills for Life: Sailing (1 credit)

An activity course that introduces the fundamental skills of sailing. Development of skills and knowledge of safety, nomenclature, designs, rigging, handling, maintaining, and racing for sailboats. Prerequisite: swimming test or consent of instructor. Liberal Education Goal Area 11.

PHED 1200 Introduction To Rock Climbing (1 credit)

Introduction to the basics of Top Rope Rock Climbing and Rappelling through practice at the BSU Climbing Wall and/or other sites. Also includes climbing communication, "leave no trace" climbing techniques, techniques for setting anchors, and discussion of environmental values. Liberal Education Goal Area 11.

PHED 1230 Yoga (1 credit)

This course introduces students to basic yoga techniques and allows practice and development of the physical skills needed to perform approximately 40 basic exercises and postures. Liberal Education Goal Area 11.

PHED 1240 Skills for Life: Techniques of Neuromuscular Relaxation (1 credit)

An introduction to skill development in Jacobson's techniques to improve awareness of muscular tension and procedures for enhanced neuromuscular relaxation. Origins of stress and the body's responses to stress and stress management techniques will be included. Liberal Education Goal Area 11.

PHED 1260 Skills for Life: Cycling (1 credit)

Introduction to and practice in bicycling either off-road or road riding. Basic maintenance skills such as adjusting derailleurs, brakes and changing tires will be presented. Information on cycling for fitness, racing and bicycle touring will be presented. Liberal Education Goal Area 11.

PHED 1300 Skills for Life: Weight Training (1 credit)

An activity course that consists of an individualized or group weight program dealing with the fundamentals and practice of resistance exercise techniques for the development of the human body. Liberal Education Goal Area 11.

PHED 1380 Skills for Life: Self Defense (1 credit)

An activity course that examines and applies preventative and precautionary measures, assault awareness information, and most commonly needed personal self-defense skills and techniques. Liberal Education Goal Area 11.

PHED 1430 Skills for Life: Archery (1 credit)

An activity course that examines and applies the fundamentals and skills of archery. Selection and care of equipment, instruction and practice of shooting skills and scoring in target archery will be included. Liberal Education Goal Area 11.

PHED 1454 Skills for Life: Golf (1 credit)

An activity course that examines and applies the fundamentals and skills of golf. Selection and care of equipment, history and rules of the game, safety, etiquette, instruction and practice will be included. Liberal Education Goal Area 11.

PHED 1474 Skills for Life: Bowling (1 credit)

An activity course that examines and applies the fundamentals and skills of bowling. Students will demonstrate a knowledge of bowling history, scoring, handicapping and skills in bowling and etiquette. Liberal Education Goal Area 11.

PHED 1490 Skills for Life: Badminton (1 credit)

An activity course that examines and applies the fundamentals and skills of badminton. Students will demonstrate a knowledge of badminton history, scoring, and rules and regulations in singles and doubles play. Racket grips, strokes, footwork and tactics will be discussed and practiced. Liberal Education Goal Area 11.

PHED 1500 Skills for Life: Ice Skating (1 credit)

An activity course that examines and applies the fundamentals and skills of ice skating. Forward and backward stroking, crossovers and stops will be part of the evaluation. Liberal Education Goal Area 11.

PHED 1520 Downhill Skiing (1 credit)

An activity course that introduces the basic skills of beginning downhill skiing. Technique and skill development in traversing, turning, speed control and stopping will be included. The language of ski safety will also be discussed. (May not be offered every year.)

PHED 1530 Snowboarding (1 credit)

An activity course that introduces the basic skills of snowboarding, including toe turns, heel turns, carving, skating, stopping, and various forms of "riding." Includes an overview of snowboard equipment and how to select appropriate equipment. Liberal Education Goal Area 11.

PHED 1540 Skills for Life: Curling (1 credit)

An activity course that introduces the skills of curling, including techniques of throwing rocks and sweeping as well as strategies, rules, and scoring. (May not be offered every year) Liberal Education Goal Area 11.

PHED 1554 Skills for Life: Cross Country Skiing (1 credit)

An activity course that introduces the basic skills of cross country skiing including downhill turns and stopping. The student may choose to learn either skate skiing skills or the traditional skills of diagonal stride skiing. Some trail skiing will be included. Liberal Education Goal Area 11.

PHED 1574 Skills for Life: Tennis (1 credit)

An activity course that introduces the basic skills of tennis including techniques of basic grips, strokes and footwork. Entry level strategies for singles and doubles, history and rules of the game, etiquette, and scoring will be taught. Liberal Education Goal Area 11.

PHED 1604 Skills for Life: Social Dance I (1 credit)

This beginner-level activity course examines and applies the fundamentals and skills of contemporary, popular, and club style partner dances not typically included in a classic ballroom syllabus. Liberal Education Goal Area 11.

PHED 1605 Social Dance II (1 credit)

This intermediate- to advanced-level activity course examines and applies the fundamentals and skills of contemporary, popular, and club style partner dances not typically included in a classic ballroom syllabus. Prerequisite: PHED 1604 or consent of instructor. (Might not be offered every year.)

PHED 1606 Skills for Life: American Style Ballroom Dance I (1 credit)

An activity course that examines and applies the fundamentals and skills of classic ballroom dance. The steps taught are from the Dance Vision International Dance Association (DVIDA) American Bronze syllabus. Liberal Education Goal Area(s): 11.

PHED 1607 Skills for Life: American Style Ballroom Dance II (1 credit)

An activity course that examines and applies the fundamentals and skills of classic ballroom dance at an intermediate to advanced level. The steps taught are from the Dance Vision International Dance Association (DVIDA) American Bronze syllabus. Prerequisite: PHED 1606 or consent of instructor.

PHED 1608 Skills for Life: International Style Ballroom Dance (1 credit)

An activity course that examines and applies the fundamentals and skills of classic international style ballroom dance. The steps taught are from the Dance Vision International Dance Association (DVIDA) International Bronze syllabus. Liberal Education Goal Area 11.

PHED 1764 Skills for Life: Basketball (1 credit)

An activity course that examines and applies the fundamentals and skills of basketball. History and rules of the game, safety, drills, entry level strategies, conditioning, individual and group instruction and practice will be included. Liberal Education Goal Area 11.

PHED 1784 Skills for Life: Volleyball (1 credit)

An activity course that examines and applies the fundamentals and skills of volleyball. History and development, basic team systems, rules and strategies of the game will be included. Liberal Education Goal Area 11.

PHED 1814 Skills for Life: Softball (1 credit)

An activity course that examines and applies the fundamentals and skills of slow and fast pitch softball. History and rules of the game, terminology, score keeping, safety, field playing areas, drills, and entry level game strategies will be included. Liberal Education Goal Area 11.

PHED 1840 Skills for Life: Racquetball (1 credit)

An activity course that examines and applies the fundamentals and skills of racquetball. Components such as safety, serving and volleying will be emphasized. Singles, cutthroat, and doubles play will be introduced. Liberal Education Goal Area 11.

PHED 1854 Skills for Life: Soccer (1 credit)

An activity course that examines and applies the fundamentals and skills of soccer. The history of the game, rules and regulations and entry level drill and game strategies will be examined. Liberal Education Goal Area 11.

PHED 1890 Lifetime Fitness (2 credits)

This personal fitness class will allow students to develop their own aerobic and possibly strengthening program. They will receive some instruction in the development of fitness, use of equipment, etc., but the focus will be active participation in walking, jogging, rowing, stepping, etc. Liberal Education Goal Area 11.

PHED 2100 Foundations of Physical Education, Exercise Science, and Sport (3 credits)

A critical examination of the history, people, events, programs and philosophical positions that have led to the current status of physical education, fitness and sport in the United States. Students will be provided with up-to-date information about physical education and its diverse sub-fields as well as an introduction to career roles and preparation for professional service in all areas of physical education, kinesiology and exercise science.

PHED 2109 Introduction to Sport Management (3 credits)

This course will help and assist the prospective sport management major to discover specialized training personnel positions in the rapidly growing sport management field. Concentration will be on the duties and tasks performed, and the competencies needed for a career in sport management.

PHED 2200 A Lifestyle for Wellness (2 credits)

An examination of the social, emotional, mental, spiritual and physical dimensions of wellness. Students will examine their own lifestyles and learn how to make behavioral changes. Emphasis on self-esteem, nutritional habits, exercise habits and the importance of self-responsibility. Liberal Education Goal Area 9.

PHED 2630 Lifeguard Training (3 credits)

A lecture course with laboratory activity that examines and applies the fundamentals and skills of supervising swimming pool and water front activities. American Red Cross Certification may be earned for: Lifeguard Training and First Aid, CPR/AED for the Professional Rescuer, and Waterfront Lifeguarding. Good swimming skills are needed to succeed in this course.

PHED 2640 Water Safety Instructor (3 credits)

A lecture course with laboratory activity that constitutes all the aspects for the training of American Red Cross Water Safety Instructors. American Red Cross Water Safety Instructor Certification may be earned. Contact professor for further details. (May not be offered every year.)

PHED 2925 People of the Environment: Outdoor Ethics/Recreational Activity Perspective (3 credits)

This class will explore the concepts of wilderness and recreation and how these relate to practices that protect or enhance the environment. May not be offered every year. Liberal Education Goal Area 10.

PHED 2970 Internship: Sport Management Practicum (2 credits)

When taken as Sport Management Practices, the following description applies: A study of various skills, roles, and functions of sport managers in managing people, the workplace, and day-to-day operations. Topics include definitions; management theories; functions of management; time management skills; effective decision making and problem solving; motivational theories, morale, and strategies; leadership theories; personal styles of leadership; and skills and competencies of sport leaders. Also includes practical experience in the organization and administration of sporting events or related areas. Prerequisite: PHED 2109 or consent of instructor.

PHED 3090 Sport Physiology (2 credits)

Emphasis on conditioning athletes including body composition, nutrition, cardiovascular fitness, flexibility, strength and other conditioning issues as related to sport training and participation. This course is designed primarily for non-PE majors who are interested in the coaching specialist program.

PHED 3100 Motor Development (2 credits)

An introduction to motor development and related motor theories. Application of these basic motor principles to the teaching of physical education and activity at all levels.

PHED 3110 Motor Learning (2 credits)

An introductory class in motor control and learning that gives an overview of the processes and mechanisms involved in generating, acquiring, and refining motor skills and of factors that foster or hinder the acquisition and refinement of these skills.

PHED 3120 Psychology of Sport (2 credits)

Study of the general relationship between individuals and sports behavior. Covers competitiveness, goal setting, peak performance, psychosocial influences, and rehabilitation. Also includes guides to show how teaching and learning may be applied to the coaching of sport and to bring out the relationship of meaningful learning to successful athletic coaching.

PHED 3190 Athletic Training (2 credits)

A lecture course with laboratory activity introducing the five practice domains of athletic training that include: prevention, recognition and evaluation, rehabilitation, reconditioning of athletic injuries, administration and professional development. Other topics include the theory and practice of athletic taping and risk management.

PHED 3200 Introduction to Sport Biomechanics (3 credits)

Introduction to biomechanical concepts and principles. Application of these principles to evaluating and improving performance in physical activities. Introduction to methods for qualitative movement analysis. Prerequisite(s): BIOL 1111 (or BIOL 3250) and PHED 3100 or consent of instructor.

PHED 3219 Sport Economics (2 credits)

This course will provide the student an understanding of theories and concepts related to economics of sport. Topics covered: economic growth of the sport industry, concepts of competitive strategy, economic impact principles, economic theory applied to various levels of sport, labor relations, stadium and arenas, venues and events, manufacturing, and service industries. Prerequisite: ECON 2000 or consent of instructor.

PHED 3300 Physiology of Exercise and Nutrition (3 credits)

An examination of the effects of exercise on the systems of the body as they relate to health and performance. Nutritional concepts of weight control, ergogenic aids and fluid replacement will be discussed. Techniques for developing, prescribing, and assessing fitness components will be presented. Prerequisite(s): BIOL 1111 or BIOL 3250 or consent of instructor.

PHED 3449 Socio-Culture and Ethical Issues in Sport (3 credits)

Study of the general relationship between individuals and sport, and sport and society. Examine the ways sport is linked to other spheres of social life, the organization and behavior patterns of both individuals and groups within sport settings, and the cultural, structural, and situational factors affecting sport and sport experiences.

PHED 3504 Teaching Rhythms and Dance (2 credits)

Methods and materials for teaching various forms of rhythms and dance. Components include effective individual and group instruction; cultural and historical implications; dance steps, fundamentals, and a variety of traditional, creative and contemporary dance forms applicable to the K-12 setting. Prerequisite: entrance into the teacher education program or consent of instructor.

PHED 3505 Teaching Elementary Physical Education (2 credits)

An introduction to the developmental physical education program at the elementary school level. Components include learner characteristics, program content and organization and methods of teaching physical education. Prerequisite: PHED 3504 and entrance into the teacher education program or consent of instructor.

PHED 3509 Sport Event Management (2 credits)

This course will provide the student with an understanding of the responsibilities in managing sport facilities, administering, organizing and producing sporting events. The topics will range from personnel issues, facility protocol and procedures, and emergency plans. Prerequisite: BUAD 2280 or consent of instructor.

PHED 3519 Sport Facility Management (2 credits)

This course provides an understanding of sport facility management, facility planning, site and design development, systems and operations, and facility administration. Prerequisite: BUAD 2280 or consent of instructor.

PHED 3600 Sport Marketing (3 credits)

Study of fundamental marketing principles utilized in sport. Topics include definitions, marketing planning process, goals and objectives of marketing, marketing mix, target markets, consumer behavior, sponsorship, endorsement, merchandising, fundraising, and mass communication. Prerequisite(s): BUAD 2280 or consent of instructor.

PHED 3604 Teaching Team Sports (2 credits)

Activities and teaching methods for team sport activities included in current physical education programs at all levels. Prerequisite: entrance into the teacher education program or consent of instructor.

PHED 3605 Teaching Individual Sports (2 credits)

Methods of teaching and the practice of the skills such sports as tennis, golf, pickleball, archery, badminton, bowling, and racquetball are the focus. Development of lesson plan, unit plans and application of teaching methods is emphasized. Prerequisite: entrance into the teacher education program or consent of instructor.

PHED 3607 Teaching Fitness (2 credits)

Methods of teaching and the practice in the development of physical fitness, including development of the health related fitness components of strength, cardiovascular endurance, muscular endurance, and flexibility with activities such as cross country skiing, exercise walking, orienteering, cycling, yoga, and weight training. Prerequisite: Entrance into the Teacher Education program or consent of instructor.

PHED 3690 Coaching Principles (2 credits)

The fundamental concepts and basic trends in the field of coaching. The history, present philosophies, psychology, pedagogy, physiology, sports medicine and objectives will be analyzed and examined. Topics that are universal to all coaching disciplines like scheduling, risk management, sport law, dealing with media, parents, peer pressure, and academic requirements will be covered.

PHED 3710 Basketball Coaching (2 credits)

The study of the game of basketball and the instructional techniques of individual and team play. Organizational procedures, practice preparation, scouting, rules and regulations, skill sequence and development, offensive, defensive and transitional systems, coaching philosophies and public relations will be examined.

PHED 3720 Football Coaching (2 credits)

A comprehensive study of developing a successful football team with an emphasis on teaching appropriate techniques and skills of the game. Practice and game organization, delegation of staff responsibilities and public relations will also be examined.

PHED 3740 Ice Hockey Coaching (2 credits)

In depth lectures and discussion concerning offensive and defensive skills and tactics, power play and penalty killing. Skilled positional play of goalies, defensemen, centers, and wings (forwards). Coaching techniques, motivational and leadership development, theory, rules, and regulations. Additional assignments involve planning and evaluating practices, games and athletic talent. Rules, budgets, and equipment repair will be discussed. (May not be offered every year.)

PHED 3750 Soccer Coaching (2 credits)

Organization and preparation for interscholastic competition. Emphasis will be on teaching specific soccer skills, individual player structures, practice preparation, and management. Strategies, conditioning and psychology of coaching issues will be examined. (May not be offered every year.)

PHED 3770 Swimming Coaching (2 credits)

Emphasis will be on developing knowledge and understanding of the applications of various laws of motion, leverage and flotation in the teaching of advanced swimming and diving skills. Emphasis on pool operation, swimming meet organization and swimming meet rules is included. Class participation includes classroom and laboratory experiences. (May not be offered every year.)

PHED 3790 Track and Field Coaching (2 credits)

Discussion and application of fundamental concepts required for effective teaching of the events in track and field. Event enrollment and management along with the aspects of practice and event coaching will be discussed.

PHED 3800 Volleyball Coaching (2 credits)

Provides information and training for teaching and coaching volleyball with an emphasis on the high school level. Class lecture and application activities on the court included. (May not be offered every year.)

PHED 4160 Advanced Fitness Assessment & Prescription-Aerobic (3 credits)

Theory and practice of physical fitness assessment for the purpose of prescribing aerobic exercise to adults, both healthy populations and those with special conditions, such as obesity, diabetes, osteoporosis, asthma, hypertension, and heart disease. Prepares students for American College of Sports Medicine (ACSM) Health Fitness Specialist exam as well as other personal trainer certifications. Prerequisite: PHED 3300 or consent of instructor.

PHED 4170 Advanced Principles for Strength and Speed Training Exercise (3 credits)

Theory and practice of strength and speed training with emphasis on technique analysis and instructional methods for strength training. Includes facility design and equipment purchasing and maintenance. Prepares students for National Strength and Conditioning Association Certified Strength and Conditioning Specialist (CSCS). Prerequisite: PHED 3300 or consent of instructor.

PHED 4200 Methods of Teaching Elementary Physical Education to Classroom Teachers (1 credit)

Organization and conduct of the physical education program in the elementary school.

PHED 4209 Sport Finance (3 credits)

This course will provide the student an understanding of theories and concepts used in financial resource management for the operation of programs in both public and private sectors of sport. Topics include ethical concerns, decision making, principles of budgeting, budget development, financial statements, spread sheet utilization, and sources of revenue for financing sport. Prerequisites: ACCT 2101 or consent of instructor.

PHED 4250 Teaching Secondary Physical Education (2 credits)

An online methods course designed specifically for physical education teacher licensure candidates in the FasTrack program. Students utilize national physical education standards, appropriate management protocols and pedagogical best practice to plan and deliver physical education lessons for students in grades 6-12. Students design learning and assessment activities that align with current national standards and learning outcomes.

PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)

An overview of the field of sports law, with applications to amateur sport, professional sport, recreation, health, healthcare, and fitness settings. Key areas of the law are identified, and applications within the sport, health and fitness industries are studied. Provides information about legal issues that may help professionals avoid litigation by foreseeing and preventing problems. Prerequisite: Junior or Senior status.

PHED 4360 Adventure Programming (3 credits)

Nuts and bolts of planning educational outdoor adventure experiences. Also reviews theory, literature, and program types.

PHED 4400 Curriculum and Assessment in Physical Education (3 credits)

Focus on the curricular process and its evaluation to determine if the curriculum is meeting community and individual student needs. A second focus will be on assessment goals, objectives and outcomes of the cognitive, affective and motor aspects of physical education. Prerequisites: PHED 2100, PHED 3200, and PHED 3300 or consent of instructor.

PHED 4409 Sport Business Management (3 credits)

Study of the structures and processes of sport organizations, as well as examine principles and concepts as they apply to sport businesses. Topics include definitions; and internal processes such as social responsibility and ethics, organizational behavior and structure, organizational philosophy, mission statements, goals and objectives, chain of command, strategic plans, adapting to change, and so on. Prerequisite(s): PHED 2970 or consent of instructor.

PHED 4500 Inclusive Physical Education (3 credits)

An introduction to the study and practice of teaching physical education to children with disabilities in the public schools. Prerequisites: PHED 3100, PHED 3110, PHED 3200, PHED 3504, PHED 3505, PHED 3604, PHED 3605, PHED 3607, or consent of instructor.

PHED 4514 DAPE Program Planning (3 credits)

First in a series of three courses, DAPE Program Planning provides knowledge necessary to develop, organize, and administer DAPE programs supported by DAPE historical and philosophical foundations, legal bases, the IEP process, resources, and an understanding of health-related physical and motor fitness, assistive technology, and adapted equipment. Students assess fitness, motor and behavioral skills of three K-12 students with identified disabilities at a local school. Using assessment information, students develop DAPE programs for elementary, middle, and secondary school levels. Programs reflect individual student goals and objectives. The course includes 15 hours of required field experience. Prerequisites: SPED 3600, SPED 3650, co-requisite SPED 3655.

PHED 4515 DAPE Teaching Strategies (3 credits)

Second in a series of three courses, DAPE Teaching Strategies provides knowledge and practical experiences necessary for future teachers to develop individual DAPE lessons based on typical and atypical motor development patterns, to deliver lesson plan content using best practice instructional strategies, behavioral interventions, safe learning environments and methods of communicating with nonverbal students. Students will teach the lesson plans to K-12 DAPE students. The course includes 30 hours of required field experience. Prerequisites: SPED 3600, SPED 3650, SPED 3655; PHED 4514.

PHED 4516 The DAPE Professional (3 credits)

Third in a series of three courses, The DAPE Professional: provides students with opportunities to combine content, theory and research with practical experiences in DAPE programming and teaching strategies. This capstone course allows students to cultivate and maintain positive, collaborative relationships with students, families, and other professional, and the community to support student development and educational process. This course includes 20 hours of required field experience. Prerequisites: SPED 3600, SPED 3650, SPED 3655; PHED 4514, PHED 4515.

PHED 4870 Practicum in Physical Education Teaching (1 credit)

A supervised experience in teaching K-12 students in physical education. Emphasis is on meeting the requirements for physical education majors by the Minnesota Professional Education Licensing and Standards Board (PELSB). Required: A minimum of 30 practicum hours per credit. Prerequisite(s): PHED 3505 and PHED 3604.

PHED 4879 Athletic Coaching Practicum (1 credit)

Application of the principles and practices in athletic coaching. A 30-hour practical coaching experience under the guidance and supervision of a licensed coach. This practicum must be conducted at the high school level. Appropriate forms must be filed with the department chairperson. Prerequisite(s): Completion of at least 70 percent of Physical Education Major or Coaching Specialist Program or consent of instructor.

PHED 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

PHED 4920 DGS: (1 credit)

When taken as Exercise Science Seminar the following description applies: Intended as a capstone course to prepare the Exercise Science major for employment, internship/job procurement, or continuing education in a graduate program. This course integrates discussion of strategies for professional development, as well as providing quality written composition on employment/graduate program goals and objectives. Prerequisite: Senior status or consent of instructor. When taken as Physical Education Seminar the following description applies: Intended as a capstone course to prepare the physical education major for employment, student teaching/job procurement, or continuing education in a graduate program. This course integrates discussion of strategies for professional development, as well as providing quality written composition on employment/graduate program goals and objectives. Prerequisite: Senior status or consent of instructor. When taken as Sport Management Seminar the following description applies: Intended as a capstone course to prepare the sport management major for employment; internship/job procurement, or continuing education in a graduate program. This course integrates discussion of strategies for professional development, as well as providing quality written composition on employment/graduate program goals and objectives. Prerequisite: Senior status or consent of instructor.

PHED 4921 Varsity Sport: (1 credit)

Varsity Sport - Participation credit, may be taken once per year of eligibility.

PHED 4970 Internship (1-12 credits)

Internship

PHED 4971 Internship: Sport Management (1-12 credits)

Sport management majors are required to complete a field experience that is relevant to their career goals. The internship needs to provide an opportunity for the student to apply the different theories and concepts learned from class in a practical setting through: observation, planning, decision-making, committee work, leadership, operation management, individual projects, and group projects. Required: 400 hours for 12-credit internship to meet accreditation guidelines. Prerequisite(s): consent of instructor

PHED 4972 Internship: Exercise Science (2-6 credits)

This course is for the purpose of providing a supervised field internship experience in an exercise, fitness, and/or wellness-related setting, including hospitals, corporations, private fitness-facilities, and governmental agencies. Or, the internship may take the form of a special project or research on a topic relevant to exercise science. Prior approval must be obtained from the student's internship advisor. A journal, written paper, and/or oral presentation is to be presented following the learning experience. The student is expected to complete 30 hours per credit. Prerequisite(s): PHED 4160 and PHED 4170 or consent of instructor.

PHED 4975 Internship: Human Performance (1-3 credits)

This course is for the purpose of providing a supervised field internship experience in an exercise, fitness, and/or wellness-related setting, including university or high school athletics, corporations, private fitness-facilities, governmental agencies. Internship setting is dependent on coursework taken within selected Required Option. Prior approval must be obtained from the student's internship advisor. A journal, written paper and/or oral presentation is to be presented following the learning experience. The student is expected to complete 30 hours per credit. Prerequisite(s): senior status or consent of instructor.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Technology, Art & Design

The Department of Technology, Art & Design offers a variety of programs that span the application of technology, art and design in response to a range of human wants and needs. Courses nurture the development of individual creative expression, critical thinking and problem solving skills. Degree programs foster the development of knowledge and skills to design and develop creative solutions that address operations and future needs in an array of cultural, design, business, technological and industrial settings.

The department offers a nationally accredited* Bachelor of Science program in Engineering Technology, with specializations in Construction Management and Manufacturing Management. Along with the associated Bachelor of Applied Science programs in Applied Engineering and Technology Management, these degree options offer both four-year and transfer students the opportunity to prepare for leadership roles in a wide range of technologically based enterprises including but not limited to the fields of construction, energy, manufacturing and sustainability.

Transfer students have the option to enroll in either the Bachelor of Applied Science program in Applied Engineering or Technology Management. Both degrees are offered as "2 + 2**" programs online or on campus for working professionals who have either an Associate of Science degree, Associate of Applied Science degree, diploma or certificate and wish to complete a Bachelor's degree.

The Bachelor of Science in Design offers students a unique and exciting opportunity to pursue careers that demand excellence in a combination of technical, creative, and artistic capabilities. Students can pursue specializations in Studio Arts, Graphic Design or Exhibit Design. All Design students benefit from a portfolio review process, a graduation requirement that offers them the opportunity to present their professional portfolios to leaders in their industries from across the nation. Students transferring from a Minnesota State Community and/or Technical College with an Associate degree in a related design field may be eligible for articulated transfer into the Design program.

The Department of Technology, Art & Design offers five exhibition spaces that present local, regional, national and international exhibits. The gallery program also maintains permanent collections in ceramics and prints.

*The BS in Engineering Technology is accredited by the Association of Technology, Management, and Applied Engineering (<http://atmae.org>).

**May vary based on the individual's degree being transferred to the university, and the number of general education (Liberal Education) credits and technical or professional credits.

Programs

- Applied Engineering, B.A.S. *major*
- Applied Management, B.A.S. *major*
- Art: New Studio Practice, B.F.A. (3-D Arts Emphasis) *major*
- Art: New Studio Practice, B.F.A. (Illustration Emphasis) *major*
- Engineering Technology, B.S. *major*
- Project Management, B.S. (Construction and Facility Management Emphasis) *major*
- Project Management, B.S. (Product Development Emphasis) *major*
- Project Management, B.S. (Operations Management Emphasis) *major*
- Technology, Art and Design, B.S. (Exhibit & Experience Design Emphasis) *major*
- Technology, Art and Design, B.S. (Event Planning & Project Management Emphasis) *major*
- Technology, Art and Design, B.S. (Creativity & Innovation Emphasis) *major*
- Technology, Art and Design, B.S. (Prototype Engineering & Model Making Emphasis) *major*
- Technology, Art and Design, B.S. (Interactive Multimedia Design Emphasis) *major*
- Technology, Art and Design, B.S. (Graphic Design Emphasis) *major*
- Technology, Art and Design, B.S. (Digital Illustration & Animation Emphasis) *major*
- Art *minor*
- Design *minor*
- Engineering Technology *minor*
- Event Design *minor*
- Event Planning *minor*
- Interactive Multimedia Design *minor*
- Maker Space Technology *minor*
- Project Management *minor*
- Technology, Art & Design *minor*
- 2-D Art & Design Technology *cert*
- 3-D Art & Design Technology *cert*
- Educational Technology *cert*
- Lean Six Sigma *cert*
- Maker Space Technology *cert*
- Making Money As A Maker *cert*
- Technology Manager *cert*

Career Directions

Applications Engineering
Art Director
Artist/Technician
Construction Management
Construction Management Engineer
Engineer
Exhibit Designer
Field Engineer
Graphic Designer
Industrial/Architectural Rendering
Management
Manufacturing Engineering
Model Building
Multimedia Specialist/Designer
Pre-press Production
Print Production
Process Planning
Quality Control Engineering
Research and Development
Safety Engineer
Teaching
Technical Sales
Web Page Development
Also: Graduate Study

Preparation

Recommended High School Courses

Project Lead the Way classes
Drafting
Graphic Arts
Production
Construction
Manufacturing
Electronics
Robotics
Art/Fine Arts
CADD/Computer Programming

Applied Engineering, B.A.S. *major*

Required Credits: 78

Required GPA: 2.25

I TADT COMMON CORE

COMPLETE THE FOLLOWING COURSES:

- TADT 3111 Project Management Methodology (3 credits)
- TADT 3267 Economic and Cost Analysis (3 credits)
- TADT 4385 Sustainability and Emerging Technologies (3 credits)
- TADT 4873 Emphasis Related Capstone (3 credits)
- TADT 4878 Quality Assurance (3 credits)

II APPLIED ENGINEERING CORE

COMPLETE THE FOLLOWING COURSES:

- TADT 3100 Principles of Professional Development (3 credits)
- TADT 3217 Materials Science and Metallurgy (3 credits)

- TADT 3537 Industrial Design/Innovation (3 credits)
- TADT 3700 Operations Planning and Control (3 credits)
- TADT 3887 Safety and Risk Management (3 credits)
- TADT 4867 Lean Principles and Practices (3 credits)
- TADT 4879 Service Process/Improvement (3 credits)

III TRANSFER TECHNICAL BLOCK

Requires 38 technical credits transferred from an A.S. or A.A.S. degree, or a diploma (e.g., Manufacturing Technology, Automation Technology)

IV REQUIRED TADT ELECTIVES

SELECT 4 CREDITS OF UPPER DIVISION (3000/4000) TADT ELECTIVES WITH ADVISOR APPROVAL.

PROGRAM LEARNING OUTCOMES | APPLIED ENGINEERING, B.A.S.

1. Readiness for Career: Students will apply resource management skills to address real world problems.
2. Higher Order Thinking: Students will analyze, design, and implement solutions to current industry needs.
3. Communication & Leadership: Students will demonstrate professional communication skills, ethical behavior, and effective team participation.
4. Knowledge, Values, & Abilities: Students will employ value-added skills in real world applications that reflect the needs of industry.

SUGGESTED SEMESTER SCHEDULE APPLIED ENGINEERING, B.A.S.

Freshman

- TADT3100
- TADT3267
- TADT3111
- TADT3700
- Liberal Education Requirements

Sophomore

- TADT3217
- TADT3537
- TADT3887
- TADT4385
- Liberal Education Requirements

Junior

- TADT4867
- TADT4879
- Upper Division TADT Elective with Advisor Approval
- Liberal Education Requirements

Senior

- TADT4873
- TADT4878
- Liberal Education Requirements

Applied Management, B.A.S. *major*

The Applied Management program is designed to prepare individuals to pursue a variety of technology-related management career paths in business or industry. **The program is designed specifically for individuals who possess a two-year technical degree and are interested in advancing their professional career.** The program permits students to apply their 2-year technical degree credits toward a baccalaureate degree. Coupled with a two-year technical/applied degree providing a focused foundation, students complete junior and senior-level courses covering a broad range of technology and applied management concepts and applications. This breadth provides maximum flexibility for graduates to pursue diverse employment opportunities. Completion of the degree is available through a web-based distance delivery format. Students should work closely with an advisor to obtain program and course selection information.

Required Credits: 60
Required GPA: 2.25

TRANSFER DEGREE CREDITS

A minimum of 30 credits must be transferred from an AS degree, AAS degree, diploma or certificate. Additional transfer credits will be accepted as general elective credits and will count toward the 120 credit requirement for a bachelor's degree.

I REQUIRED FOUNDATION CORE

COMPLETE THE FOLLOWING COURSES:

- ACCT 1100 Financial Literacy (3 credits)
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)
- MATH 1100 Mathematical Reasoning (3 credits)
- TADT 2100 Impact Of Technology, Art & Design (2 credits)
- TADT 2211 Introduction to Cost Management (3 credits)

II REQUIRED MAJOR CORE

COMPLETE THE FOLLOWING COURSES:

- TADT 3100 Principles of Professional Development (3 credits)
- TADT 3111 Project Management Methodology (3 credits)
- TADT 3112 Leadership in a Team Environment (3 credits)
- TADT 3267 Economic and Cost Analysis (3 credits)
- TADT 3700 Operations Planning and Control (3 credits)
- TADT 4385 Sustainability and Emerging Technologies (3 credits)
- TADT 4873 Emphasis Related Capstone (3 credits)
- TADT 4875 Facilities Management (3 credits)
- TADT 4878 Quality Assurance (3 credits)
- TADT 4880 Total Quality Management (3 credits)

III ADVISOR APPROVED CAREER RELATED ELECTIVE COURSES

SELECT 13 CAREER RELATED OR LIBERAL EDUCATION/MNTC CREDITS WITH ASSISTANCE FROM A FACULTY ADVISOR TO COMPLETE GRADUATION REQUIREMENTS. (10 OF THESE MAY NEED TO BE UPPER DIVISION CREDITS)

PROGRAM LEARNING OUTCOMES | APPLIED MANAGEMENT, B.A.S.

1. Readiness for Career: Students will apply resource management skills to address real world problems.
2. Higher Order Thinking: Students will analyze, design, and implement solutions to current industry needs.
3. Communication & Leadership: Students will demonstrate professional communication skills, ethical behavior, and effective team participation.
4. Knowledge, Values, & Abilities: Students will employ value-added skills in real world applications that reflect the needs of industry.

SUGGESTED SEMESTER SCHEDULE FOR: APPLIED MANAGEMENT, B.A.S.

Semester 1 Fall

- ACCT1100
- MATH1100
- TADT2100
- TADT2211

Semester 2 Spring

- ECON2000
- ECON2100
- TADT3112
- Advisor Approved Career Related Elective Courses (6 credits)

Semester 3 Summer

- TADT3700
- TADT4385
- TADT4880

Semester 4 Fall

- TADT3100
- TADT3111
- TADT3267
- Advisor Approved Career Related Elective Courses (6 credits)

Semester 5 Spring

- TADT4873
- TADT4875
- TADT4878
- Advisor Approved Career Related Elective Courses (5 credits)

Art: New Studio Practice, B.F.A. *major* 3-D Arts Emphasis

Required Credits: 78

Required GPA: 2.00

Required TAD Core Courses

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 3090 Leadership in Creative Industries (2 credits)
- TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)

Culmination Core

Complete the following courses:

- TADD 3899 Junior Culmination: Internship Planning (2 credits)
- TADD 4899 Senior Culmination: Career Planning (2 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

Art & Design Core

Complete the following courses:

- TADD 1150 Drawing Fundamentals (2 credits)
- TADD 2100 History, Philosophy, and Application of Color (3 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 3350 History of Modern Art & Design: 1820-1950 (3 credits)

3D Core

Complete the following courses:

- TADD 3200 Introduction to Model Making (2 credits)
- TADD 3380 Designing for Experiences (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)

TAD Lab Core

Complete 6 credits from the following courses:

- TADD 2670 Painting (4 credits)
- TADD 3557 TAD LAB: Molding & Casting (2 credits)
- TADD 3558 TAD LAB: Machining (2 credits)
- TADD 3559 TAD LAB: Traditional Woods (2 credits)
- TADD 3660 TAD LAB: Welding (2 credits)
- TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)
- TADD 3678 TAD LAB: CNC Woods (2 credits)
- TADD 3679 TAD LAB: CNC Metals (2 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

3D ARTS EMPHASIS

3D Arts Core

Complete the following courses:

- ARTH 2551 Art History Survey I (4 credits)
- ARTH 2552 Art History Survey II (4 credits)
- TADD 3400 Sculpture: Experimental (2 credits)
- TADD 3410 Sculpture: Traditional (2 credits)
- TADD 3448 Tech Toolbox II: Fusion 360 (2 credits)
- TADD 3480 Ceramics: Hand & Wheel (4 credits)
- TADD 3700 Materials, Lighting, and Structures (2 credits)
- TADD 4430 Sculpture: CNC (2 credits)
- TADD 4870 Advanced 3D Arts (2 credits)
- TADD 4897 Senior Exhibition (0 credit)

Art: New Studio Practice, B.F.A. *major* Illustration Emphasis

Required Credits: 78

Required GPA: 2.00

Required TAD Core Courses

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)

- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 3090 Leadership in Creative Industries (2 credits)
- TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)

Culmination Core

Complete the following courses:

- TADD 3899 Junior Culmination: Internship Planning (2 credits)
- TADD 4899 Senior Culmination: Career Planning (2 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

Art & Design Core

Complete the following courses:

- TADD 1150 Drawing Fundamentals (2 credits)
- TADD 2100 History, Philosophy, and Application of Color (3 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 3350 History of Modern Art & Design: 1820-1950 (3 credits)

2D Core

Complete the following courses:

- TADD 2200 Introduction to Graphic Design (2 credits)
- TADD 2550 Tech Toolbox II: InDesign (2 credits)
- TADD 3020 Typography: Hand Lettering (2 credits)

TAD Lab Core

Complete 2 credits from the following courses:

- TADD 2670 Painting (4 credits)
- TADD 3557 TAD LAB: Molding & Casting (2 credits)
- TADD 3558 TAD LAB: Machining (2 credits)
- TADD 3559 TAD LAB: Traditional Woods (2 credits)
- TADD 3660 TAD LAB: Welding (2 credits)
- TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)
- TADD 3678 TAD LAB: CNC Woods (2 credits)
- TADD 3679 TAD LAB: CNC Metals (2 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

ILLUSTRATION EMPHASIS

Illustration Core

Complete the following courses:

- ARTH 2551 Art History Survey I (4 credits)
- ARTH 2552 Art History Survey II (4 credits)
- TADD 3100 Digital Illustration: Vector Art (2 credits)
- TADD 3140 Figure Illustration (2 credits)
- TADD 3160 Spatial Illustration (2 credits)
- TADD 3180 Digital Painting: Raster Art (2 credits)

- TADD 3340 Branding & Identity Design (2 credits)
- TADD 3460 Printmaking: Traditional (2 credits)
- TADD 3470 Printmaking: Experimental (2 credits)
- TADD 4120 Illustrative Storytelling (2 credits)
- TADD 4190 Animated Illustration (2 credits)
- TADD 4880 Advanced Illustration (2 credits)
- TADD 4897 Senior Exhibition (0 credit)

Engineering Technology, B.S. *major*

Required Credits: 79

Required GPA: 2.25

I TADT COMMON CORE

Complete the following courses:

- TADT 1111 Introduction to Project Management (3 credits)
- TADT 3267 Economic and Cost Analysis (3 credits)
- TADT 4385 Sustainability and Emerging Technologies (3 credits)
- TADT 4873 Emphasis Related Capstone (3 credits)
- TADT 4878 Quality Assurance (3 credits)

Complete the following course for 1 credit:

- TADT 3970 Internship (1-3 credits)

Complete the following course for 2 credits:

- TADT 4970 Internship (1-12 credits)

II ENGINEERING TECHNOLOGY CORE COURSES

Complete the following courses:

- MATH 1470 Precalculus (5 credits)
- PHYS 1101 General Physics I (4 credits)
- PHYS 1102 General Physics II (4 credits)
- TADT 1210 Introduction to Manufacturing Processes I (3 credits)
- TADT 1220 Introduction to Manufacturing Processes II (3 credits)
- TADT 1460 2D Graphics And Laser Etching (3 credits)
- TADT 1464 Engineering Technology Project I (3 credits)
- TADT 2100 Impact Of Technology, Art & Design (2 credits)
- TADT 2217 Strength of Materials (3 credits)
- TADT 2461 Parametric 3D Modeling (3 credits)
- TADT 2465 Engineering Technology Project II (3 credits)
- TADT 2877 Engineering Problem Solving (3 credits)
- TADT 3217 Materials Science and Metallurgy (3 credits)
- TADT 3277 Programmable Logic Controllers (3 credits)
- TADT 3462 Computer Controlled Machining (3 credits)
- TADT 3537 Industrial Design/Innovation (3 credits)
- TADT 4778 Advanced Topics in Technology (3 credits)

III REQUIRED FOUNDATION COURSES

Select 7 credits from the following or any 3000/4000 level TADD course:

- TADT 3250 Print Reading and Project Documentation (3 credits)
- TADT 4589 Advanced Prototype Project (3 credits)
- TADT 4880 Total Quality Management (3 credits)

Program Learning Outcomes | Engineering Technology, B.S.

1. Readiness for Career: Students will apply resource management skills to address real world problems.
2. Higher Order Thinking: Students will analyze, design, and implement solutions to current industry needs.
3. Communication & Leadership: Students will demonstrate professional communication skills, ethical behavior, and effective team participation.
4. Knowledge, Values, & Abilities: Students will employ value-added skills in real world applications that reflect the needs of industry.

Project Management, B.S. *major* Construction and Facility Management Emphasis

The Project Management degree prepares graduates for planning and managing resources under the constraints of scope, cost and time to successfully achieve a specific, unique objective. This program addresses the tools, skills and knowledge necessary to initiate, plan, implement and evaluate projects to deliver solutions. Program disciplines include: safety and risk management, leadership, quality assurance, technical sales, training, sustainability, engineering economics and cost analysis. Project Management majors have the option to select from three distinct technology related emphases: Construction and Facility Management, product Development or Operations Management. Technical credits may be transferred in with the help of an advisor.

Required Credits: 72

Required GPA: 2.25

I TADT COMMON CORE

COMPLETE THE FOLLOWING COURSES:

- TADT 1111 Introduction to Project Management (3 credits)
- TADT 3267 Economic and Cost Analysis (3 credits)
- TADT 4385 Sustainability and Emerging Technologies (3 credits)
- TADT 4873 Emphasis Related Capstone (3 credits)
- TADT 4878 Quality Assurance (3 credits)

COMPLETE THE FOLLOWING COURSE FOR 1 CREDIT:

- TADT 3970 Internship (1-3 credits)

COMPLETE THE FOLLOWING COURSE FOR 2 CREDITS:

- TADT 4970 Internship (1-12 credits)

II PROJECT MANAGEMENT CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- BUAD 2220 Legal Environment (3 credits)
- TADT 1109 Computer Applications for Project Managers (3 credits)
- TADT 1460 2D Graphics And Laser Etching (3 credits)
- TADT 2211 Introduction to Cost Management (3 credits)
- TADT 2877 Engineering Problem Solving (3 credits)
- TADT 3112 Leadership in a Team Environment (3 credits)
- TADT 3885 Technical Sales, Service and Training (3 credits)
- TADT 4875 Facilities Management (3 credits)
- TADT 4893 Applied Project Management (3 credits)

CONSTRUCTION AND FACILITY MANAGEMENT EMPHASIS

COMPLETE THE FOLLOWING COURSES:

- BUAD 3677 Real Estate (3 credits)
- TADT 1210 Introduction to Manufacturing Processes I (3 credits)
- TADT 1220 Introduction to Manufacturing Processes II (3 credits)
- TADT 2250 Built Environment (3 credits)
- TADT 2252 Construction Materials and Methods (3 credits)
- TADT 3250 Print Reading and Project Documentation (3 credits)
- TADT 3260 Project Bidding and Estimating (3 credits)
- TADT 3887 Safety and Risk Management (3 credits)
- TADT 4259 Construction Management (3 credits)

Program Learning Outcomes | Project Management, B.S.

1. Readiness for Career: Students will apply resource management skills to address real world problems.
2. Higher Order Thinking: Students will analyze, design, and implement solutions to current industry needs.
3. Communication & Leadership: Students will demonstrate professional communication skills, ethical behavior, and effective team participation.
4. Knowledge, Values, & Abilities: Students will employ value-added skills in real world applications that reflect the needs of industry.

Project Management, B.S. *major* Product Development Emphasis

The Project Management degree prepares graduates for planning and managing resources under the constraints of scope, cost and time to successfully achieve a specific, unique objective. This program addresses the tools, skills and knowledge necessary to initiate, plan, implement and evaluate projects to deliver solutions. Program disciplines include: safety and risk management, leadership, quality assurance, technical sales, training, sustainability, engineering economics and cost analysis. Project Management majors have the option to select from three distinct technology related emphases: Construction and Facility Management, product Development or Operations Management. Technical credits may be transferred in with the help of an advisor.

Required Credits: 72

Required GPA: 2.25

I TADT COMMON CORE

COMPLETE THE FOLLOWING COURSES:

- TADT 1111 Introduction to Project Management (3 credits)
- TADT 3267 Economic and Cost Analysis (3 credits)
- TADT 4385 Sustainability and Emerging Technologies (3 credits)
- TADT 4873 Emphasis Related Capstone (3 credits)
- TADT 4878 Quality Assurance (3 credits)

COMPLETE THE FOLLOWING COURSE FOR 1 CREDIT:

- TADT 3970 Internship (1-3 credits)

COMPLETE THE FOLLOWING COURSE FOR 2 CREDITS:

- TADT 4970 Internship (1-12 credits)

II PROJECT MANAGEMENT CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- BUAD 2220 Legal Environment (3 credits)
- TADT 1109 Computer Applications for Project Managers (3 credits)
- TADT 1460 2D Graphics And Laser Etching (3 credits)
- TADT 2211 Introduction to Cost Management (3 credits)
- TADT 2877 Engineering Problem Solving (3 credits)
- TADT 3112 Leadership in a Team Environment (3 credits)
- TADT 3885 Technical Sales, Service and Training (3 credits)
- TADT 4875 Facilities Management (3 credits)
- TADT 4893 Applied Project Management (3 credits)

PRODUCT DEVELOPMENT EMPHASIS

COMPLETE THE FOLLOWING COURSES:

- TADT 1210 Introduction to Manufacturing Processes I (3 credits)
- TADT 1220 Introduction to Manufacturing Processes II (3 credits)
- TADT 1450 Introduction to Product Development (3 credits)
- TADT 2450 Product Finishing & Aesthetics (3 credits)
- TADT 2461 Parametric 3D Modeling (3 credits)
- TADT 3462 Computer Controlled Machining (3 credits)
- TADT 3470 Concept to Prototype Model (3 credits)
- TADT 3537 Industrial Design/Innovation (3 credits)
- TADT 4589 Advanced Prototype Project (3 credits)

Program Learning Outcomes | Project Management, B.S.

1. Readiness for Career: Students will apply resource management skills to address real world problems.
2. Higher Order Thinking: Students will analyze, design, and implement solutions to current industry needs.
3. Communication & Leadership: Students will demonstrate professional communication skills, ethical behavior, and effective team participation.
4. Knowledge, Values, & Abilities: Students will employ value-added skills in real world applications that reflect the needs of industry.

SUGGESTED SEMESTER SCHEDULE PROJECT MANAGEMENT, B.S. PRODUCT DEVELOPMENT EMPHASIS

Freshman

- TADT1109
- TADT1111
- TADT1210
- TADT1220
- TADT1450
- TADT1460
- TADT2211
- Liberal Education Requirements

Sophomore

- BUAD2220
- TADT2450

- TADT2461
- TADT2877
- TADT3462
- Liberal Education Requirements

Sophomore - Summer

- TADT3970
Internship for 1 Credit

Junior

- TADT3112
- TADT3267
- TADT3470
- TADT3537
- TADT3885
- Elective
- Liberal Education Requirements

Junior - Summer

- TADT4970
Internship for 2 Credits

Senior

- TADT4385
- TADT4589
- TADT4873
- TADT4875
- TADT4878
- TADT4893
- Elective
- Liberal Education Requirements

Project Management, B.S. *major*
Operations Management Emphasis

The Project Management degree prepares graduates for planning and managing resources under the constraints of scope, cost and time to successfully achieve a specific, unique objective. This program addresses the tools, skills and knowledge necessary to initiate, plan, implement and evaluate projects to deliver solutions. Program disciplines include: safety and risk management, leadership, quality assurance, technical sales, training, sustainability, engineering economics and cost analysis. Project Management majors have the option to select from three distinct technology related emphases: Construction and Facility Management, product Development or Operations Management. Technical credits may be transferred in with the help of an advisor.

Required Credits: 72
Required GPA: 2.25

I TADT COMMON CORE

COMPLETE THE FOLLOWING COURSES:

- TADT 1111 Introduction to Project Management (3 credits)
- TADT 3267 Economic and Cost Analysis (3 credits)
- TADT 4385 Sustainability and Emerging Technologies (3 credits)
- TADT 4873 Emphasis Related Capstone (3 credits)
- TADT 4878 Quality Assurance (3 credits)

COMPLETE THE FOLLOWING COURSE FOR 1 CREDIT:

- TADT 3970 Internship (1-3 credits)

COMPLETE THE FOLLOWING COURSE FOR 2 CREDITS:

- TADT 4970 Internship (1-12 credits)

II PROJECT MANAGEMENT CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- BUAD 2220 Legal Environment (3 credits)
- TADT 1109 Computer Applications for Project Managers (3 credits)
- TADT 1460 2D Graphics And Laser Etching (3 credits)
- TADT 2211 Introduction to Cost Management (3 credits)
- TADT 2877 Engineering Problem Solving (3 credits)
- TADT 3112 Leadership in a Team Environment (3 credits)
- TADT 3885 Technical Sales, Service and Training (3 credits)
- TADT 4875 Facilities Management (3 credits)
- TADT 4893 Applied Project Management (3 credits)

OPERATIONS MANAGEMENT EMPHASIS

COMPLETE THE FOLLOWING COURSES:

- TADT 1210 Introduction to Manufacturing Processes I (3 credits)
- TADT 1220 Introduction to Manufacturing Processes II (3 credits)
- TADT 2461 Parametric 3D Modeling (3 credits)
- TADT 3100 Principles of Professional Development (3 credits)
- TADT 3700 Operations Planning and Control (3 credits)
- TADT 3887 Safety and Risk Management (3 credits)
- TADT 4867 Lean Principles and Practices (3 credits)
- TADT 4879 Service Process/Improvement (3 credits)
- TADT 4880 Total Quality Management (3 credits)

Program Learning Outcomes | Project Management, B.S.

1. Readiness for Career: Students will apply resource management skills to address real world problems.
2. Higher Order Thinking: Students will analyze, design, and implement solutions to current industry needs.
3. Communication & Leadership: Students will demonstrate professional communication skills, ethical behavior, and effective team participation.
4. Knowledge, Values, & Abilities: Students will employ value-added skills in real world applications that reflect the needs of industry.

SUGGESTED SEMESTER SCHEDULE PROJECT MANAGEMENT, B.S. OPERATIONS MANAGEMENT EMPHASIS

Freshman

- TADT1109
- TADT1111
- TADT1460
- TADT1210
- TADT1220
- TADT2211
- Liberal Education Requirements

Sophomore

- BUAD2220
- TADT2461
- TADT2877
- Liberal Education Requirements

Junior

- TADT3100
- TADT3112
- TADT3267
- TADT3700
- TADT3885
- TADT3887
- Elective 01
- Elective 02
- Liberal Education Requirements

Senior

- TADT4385
- TADT4867
- TADT4873
- TADT4875
- TADT4878
- TADT4879
- TADT4880
- TADT4893

Technology, Art and Design, B.S. *major* Exhibit & Experience Design Emphasis

Required Credits: 78

Required GPA: 2.00

Required TAD Core Courses

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 3090 Leadership in Creative Industries (2 credits)
- TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)

Culmination Core

Complete the following courses:

- TADD 3899 Junior Culmination: Internship Planning (2 credits)
- TADD 4899 Senior Culmination: Career Planning (2 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

Art & Design Core

Complete the following courses:

- TADD 1150 Drawing Fundamentals (2 credits)
- TADD 2100 History, Philosophy, and Application of Color (3 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 3350 History of Modern Art & Design: 1820-1950 (3 credits)

2D Core

Complete the following courses:

- TADD 2200 Introduction to Graphic Design (2 credits)
- TADD 2550 Tech Toolbox II: InDesign (2 credits)
- TADD 3020 Typography: Hand Lettering (2 credits)

3D Core

Complete the following courses:

- TADD 3200 Introduction to Model Making (2 credits)
- TADD 3380 Designing for Experiences (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)

Creative Core

Complete the following courses:

- TADD 3040 Typography: Digital Typefaces (2 credits)
- TADD 3300 Wayfinding & Signage Design (2 credits)
- TADD 3340 Branding & Identity Design (2 credits)
- TADD 3449 Tech Toolbox II: Premiere Pro (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)

TAD Lab Core

Complete 2 credits from the following courses:

- TADD 2670 Painting (4 credits)
- TADD 3557 TAD LAB: Molding & Casting (2 credits)
- TADD 3558 TAD LAB: Machining (2 credits)
- TADD 3559 TAD LAB: Traditional Woods (2 credits)
- TADD 3660 TAD LAB: Welding (2 credits)
- TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)
- TADD 3678 TAD LAB: CNC Woods (2 credits)
- TADD 3679 TAD LAB: CNC Metals (2 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

Exhibit & Experience Design Emphasis

Complete the following courses:

- TADD 3700 Materials, Lighting, and Structures (2 credits)
- TADD 3750 Tradeshow Exhibit Design (2 credits)
- TADD 3780 Museum Experience Design (2 credits)
- TADD 4700 Pop-up Shop & Visual Merchandising Design (2 credits)
- TADD 4750 Event Design (2 credits)
- TADD 4820 Advanced Experience Design (2 credits)

Program Learning Outcomes | Technology, Art & Design, B.S.

1. Students will communicate effectively in oral, written and visual forms.

2. Demonstrate knowledge in diverse cultural and historical perspectives and apply them to their art and design practice.

3. Students will develop and demonstrate competence in implementing art and/or design principles.

4. Students will demonstrate the ability to implement the creative process independently and/or interdependently.

5. Students will exhibit the ability to seek, give and accept constructive criticism.

Technology, Art and Design, B.S. *major* Event Planning & Project Management Emphasis

Required Credits: 78

Required GPA: 2.00

Required TAD Core Courses

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 3090 Leadership in Creative Industries (2 credits)
- TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)

TAD Lab Core

Complete 2 credits from the following courses:

- TADD 2670 Painting (4 credits)
- TADD 3557 TAD LAB: Molding & Casting (2 credits)
- TADD 3558 TAD LAB: Machining (2 credits)
- TADD 3559 TAD LAB: Traditional Woods (2 credits)
- TADD 3660 TAD LAB: Welding (2 credits)
- TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)
- TADD 3678 TAD LAB: CNC Woods (2 credits)
- TADD 3679 TAD LAB: CNC Metals (2 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

EVENT PLANNING & PROJECT MANAGEMENT EMPHASIS

Project Management Core

Complete the following courses:

- TADT 1109 Computer Applications for Project Managers (3 credits)
- TADT 1111 Introduction to Project Management (3 credits)
- TADT 1220 Introduction to Manufacturing Processes II (3 credits)
- TADT 2211 Introduction to Cost Management (3 credits)
- TADT 2250 Built Environment (3 credits)
- TADT 2252 Construction Materials and Methods (3 credits)
- TADT 3112 Leadership in a Team Environment (3 credits)

- TADT 3250 Print Reading and Project Documentation (3 credits)
- TADT 3260 Project Bidding and Estimating (3 credits)
- TADT 3885 Technical Sales, Service and Training (3 credits)

Event Planning Core

Complete the following courses:

- TADD 2200 Introduction to Graphic Design (2 credits)
- TADD 3240 Prototype Engineering & Detailing (2 credits)
- TADD 3380 Designing for Experiences (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)
- TADD 3700 Materials, Lighting, and Structures (2 credits)
- TADD 3750 Tradeshow Exhibit Design (2 credits)
- TADD 4700 Pop-up Shop & Visual Merchandising Design (2 credits)
- TADD 4750 Event Design (2 credits)
- TADD 4830 Advanced Event Planning & Project Management (2 credits)

Program Learning Outcomes | Technology, Art & Design, B.S.

1. Students will communicate effectively in oral, written and visual forms.
2. Demonstrate knowledge in diverse cultural and historical perspectives and apply them to their art and design practice.
3. Students will develop and demonstrate competence in implementing art and/or design principles.
4. Students will demonstrate the ability to implement the creative process independently and/or interdependently.
5. Students will exhibit the ability to seek, give and accept constructive criticism.

Technology, Art and Design, B.S. *major* Creativity & Innovation Emphasis

Required Credits: 78
Required GPA: 2.00

Required TAD Core Courses

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 3090 Leadership in Creative Industries (2 credits)
- TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)

Creativity & Innovation

Once students successfully complete the TAD Common Core

(26 credits), they must work with their academic advisor to build their educational plan. To earn the Creativity and Innovation emphasis, this educational plan must consist of an additional 52 credits mutually agreed upon from the School of Technology, Art & Design.

In other words, these remaining 52 credits can be any TADD or TADT courses offered by the School of Technology, Art & Design.

Program Learning Outcomes | Technology, Art & Design, B.S.

1. Students will communicate effectively in oral, written and visual forms.
2. Demonstrate knowledge in diverse cultural and historical perspectives and apply them to their art and design practice.
3. Students will develop and demonstrate competence in implementing art and/or design principles.
4. Students will demonstrate the ability to implement the creative process independently and/or interdependently.
5. Students will exhibit the ability to seek, give and accept constructive criticism.

Technology, Art and Design, B.S. *major* Prototype Engineering & Model Making Emphasis

Required Credits: 78
Required GPA: 2.00

Required TAD Core Courses

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 3090 Leadership in Creative Industries (2 credits)
- TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)

Culmination Core

Complete the following courses:

- TADD 3899 Junior Culmination: Internship Planning (2 credits)
- TADD 4899 Senior Culmination: Career Planning (2 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

3D Core

Complete the following courses:

- TADD 3200 Introduction to Model Making (2 credits)
- TADD 3380 Designing for Experiences (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)

TAD Lab Core

Complete 14 credits from the following courses:

- TADD 2670 Painting (4 credits)
- TADD 3557 TAD LAB: Molding & Casting (2 credits)
- TADD 3558 TAD LAB: Machining (2 credits)
- TADD 3559 TAD LAB: Traditional Woods (2 credits)
- TADD 3660 TAD LAB: Welding (2 credits)
- TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)
- TADD 3678 TAD LAB: CNC Woods (2 credits)
- TADD 3679 TAD LAB: CNC Metals (2 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

PROTOTYPE ENGINEERING & MODEL MAKING EMPHASIS

Complete the following courses:

- TADD 3220 Conceptual Prototype Engineering (2 credits)
- TADD 3240 Prototype Engineering & Detailing (2 credits)
- TADD 3250 Product Model Making (2 credits)
- TADD 3260 Architectural Model Making (2 credits)
- TADD 3280 Furniture Design & Model Making (2 credits)
- TADD 3320 Package Design (2 credits)
- TADD 3400 Sculpture: Experimental (2 credits)
- TADD 3410 Sculpture: Traditional (2 credits)
- TADD 3448 Tech Toolbox II: Fusion 360 (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)
- TADD 3700 Materials, Lighting, and Structures (2 credits)
- TADD 4430 Sculpture: CNC (2 credits)
- TADD 4860 Advanced Prototype Engineering & Model Making (2 credits)

Program Learning Outcomes | Technology, Art & Design, B.S.

1. Students will communicate effectively in oral, written and visual forms.
2. Demonstrate knowledge in diverse cultural and historical perspectives and apply them to their art and design practice.
3. Students will develop and demonstrate competence in implementing art and/or design principles.
4. Students will demonstrate the ability to implement the creative process independently and/or interdependently.
5. Students will exhibit the ability to seek, give and accept constructive criticism.

Technology, Art and Design, B.S. *major* Interactive Multimedia Design Emphasis

Required Credits: 78
Required GPA: 2.00

Required TAD Core Courses

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 3090 Leadership in Creative Industries (2 credits)
- TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)

Culmination Core

Complete the following courses:

- TADD 3899 Junior Culmination: Internship Planning (2 credits)
- TADD 4899 Senior Culmination: Career Planning (2 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

Art & Design Core

Complete the following courses:

- TADD 1150 Drawing Fundamentals (2 credits)
- TADD 2100 History, Philosophy, and Application of Color (3 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 3350 History of Modern Art & Design: 1820-1950 (3 credits)

2D Core

Complete the following courses:

- TADD 2200 Introduction to Graphic Design (2 credits)
- TADD 2550 Tech Toolbox II: InDesign (2 credits)
- TADD 3020 Typography: Hand Lettering (2 credits)

3D Core

Complete the following courses:

- TADD 3200 Introduction to Model Making (2 credits)
- TADD 3380 Designing for Experiences (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)

Creative Core

Complete the following courses:

- TADD 3040 Typography: Digital Typefaces (2 credits)
- TADD 3300 Wayfinding & Signage Design (2 credits)
- TADD 3340 Branding & Identity Design (2 credits)
- TADD 3449 Tech Toolbox II: Premiere Pro (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)

TAD Lab Core

Complete 2 credits from the following courses:

- TADD 2670 Painting (4 credits)
- TADD 3557 TAD LAB: Molding & Casting (2 credits)
- TADD 3558 TAD LAB: Machining (2 credits)

- TADD 3559 TAD LAB: Traditional Woods (2 credits)
- TADD 3660 TAD LAB: Welding (2 credits)
- TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)
- TADD 3678 TAD LAB: CNC Woods (2 credits)
- TADD 3679 TAD LAB: CNC Metals (2 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

Interactive Multimedia Design Emphasis

Complete the following courses:

- TADD 3800 Tech Toolbox III: After Effects (2 credits)
- TADD 3850 Digital Signage (2 credits)
- TADD 4020 Web & Social Media Design (2 credits)
- TADD 4040 UX Design (2 credits)
- TADD 4810 Advanced Extended Reality (2 credits)
- TADD 4840 Advanced Interactive Multimedia Design (2 credits)

Program Learning Outcomes | Technology, Art & Design, B.S.

1. Students will communicate effectively in oral, written and visual forms.
2. Demonstrate knowledge in diverse cultural and historical perspectives and apply them to their art and design practice.
3. Students will develop and demonstrate competence in implementing art and/or design principles.
4. Students will demonstrate the ability to implement the creative process independently and/or interdependently.
5. Students will exhibit the ability to seek, give and accept constructive criticism.

Technology, Art and Design, B.S. *major* Graphic Design Emphasis

Required Credits: 78

Required GPA: 2.00

Required TAD Core Courses

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 3090 Leadership in Creative Industries (2 credits)
- TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)

Culmination Core

Complete the following courses:

- TADD 3899 Junior Culmination: Internship Planning (2 credits)
- TADD 4899 Senior Culmination: Career Planning (2 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

Art & Design Core

Complete the following courses:

- TADD 1150 Drawing Fundamentals (2 credits)
- TADD 2100 History, Philosophy, and Application of Color (3 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 3350 History of Modern Art & Design: 1820-1950 (3 credits)

2D Core

Complete the following courses:

- TADD 2200 Introduction to Graphic Design (2 credits)
- TADD 2550 Tech Toolbox II: InDesign (2 credits)
- TADD 3020 Typography: Hand Lettering (2 credits)

3D Core

Complete the following courses:

- TADD 3200 Introduction to Model Making (2 credits)
- TADD 3380 Designing for Experiences (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)

Creative Core

Complete the following courses:

- TADD 3040 Typography: Digital Typefaces (2 credits)
- TADD 3300 Wayfinding & Signage Design (2 credits)
- TADD 3340 Branding & Identity Design (2 credits)
- TADD 3449 Tech Toolbox II: Premiere Pro (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)

TAD Lab Core

Complete 2 credits from the following courses:

- TADD 2670 Painting (4 credits)
- TADD 3557 TAD LAB: Molding & Casting (2 credits)
- TADD 3558 TAD LAB: Machining (2 credits)
- TADD 3559 TAD LAB: Traditional Woods (2 credits)
- TADD 3660 TAD LAB: Welding (2 credits)
- TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)
- TADD 3678 TAD LAB: CNC Woods (2 credits)
- TADD 3679 TAD LAB: CNC Metals (2 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

Graphic Design Emphasis

Complete the following courses:

- TADD 3320 Package Design (2 credits)
- TADD 3460 Printmaking: Traditional (2 credits)
- TADD 3470 Printmaking: Experimental (2 credits)
- TADD 4800 Advanced Typography (2 credits)
- TADD 4850 Advanced Branding & Identity Design (2 credits)

- TADD 4898 Advanced Graphic Design (2 credits)

Program Learning Outcomes | Technology, Art & Design, B.S.

1. Students will communicate effectively in oral, written and visual forms.
2. Demonstrate knowledge in diverse cultural and historical perspectives and apply them to their art and design practice.
3. Students will develop and demonstrate competence in implementing art and/or design principles.
4. Students will demonstrate the ability to implement the creative process independently and/or interdependently.
5. Students will exhibit the ability to seek, give and accept constructive criticism.

Technology, Art and Design, B.S. *major* Digital Illustration & Animation Emphasis

Required Credits: 78

Required GPA: 2.00

Required TAD Core Courses

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 3090 Leadership in Creative Industries (2 credits)
- TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)

Culmination Core

Complete the following courses:

- TADD 3899 Junior Culmination: Internship Planning (2 credits)
- TADD 4899 Senior Culmination: Career Planning (2 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

Art & Design Core

Complete the following courses:

- TADD 1150 Drawing Fundamentals (2 credits)
- TADD 2100 History, Philosophy, and Application of Color (3 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 3350 History of Modern Art & Design: 1820-1950 (3 credits)

TAD Lab Core

Complete 2 credits from the following courses:

- TADD 2670 Painting (4 credits)
- TADD 3557 TAD LAB: Molding & Casting (2 credits)
- TADD 3558 TAD LAB: Machining (2 credits)
- TADD 3559 TAD LAB: Traditional Woods (2 credits)
- TADD 3660 TAD LAB: Welding (2 credits)
- TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)
- TADD 3678 TAD LAB: CNC Woods (2 credits)
- TADD 3679 TAD LAB: CNC Metals (2 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

Digital Illustration Core

Complete the following courses:

- TADD 2200 Introduction to Graphic Design (2 credits)
- TADD 2550 Tech Toolbox II: InDesign (2 credits)
- TADD 3020 Typography: Hand Lettering (2 credits)
- TADD 3100 Digital Illustration: Vector Art (2 credits)
- TADD 3140 Figure Illustration (2 credits)
- TADD 3160 Spatial Illustration (2 credits)
- TADD 3180 Digital Painting: Raster Art (2 credits)
- TADD 3449 Tech Toolbox II: Premiere Pro (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)
- TADD 3800 Tech Toolbox III: After Effects (2 credits)
- TADD 3850 Digital Signage (2 credits)
- TADD 4020 Web & Social Media Design (2 credits)
- TADD 4040 UX Design (2 credits)
- TADD 4120 Illustrative Storytelling (2 credits)
- TADD 4190 Animated Illustration (2 credits)
- TADD 4880 Advanced Illustration (2 credits)

Program Learning Outcomes | Technology, Art & Design, B.S.

1. Students will communicate effectively in oral, written and visual forms.
2. Demonstrate knowledge in diverse cultural and historical perspectives and apply them to their art and design practice.
3. Students will develop and demonstrate competence in implementing art and/or design principles.
4. Students will demonstrate the ability to implement the creative process independently and/or interdependently.
5. Students will exhibit the ability to seek, give and accept constructive criticism.

Art *minor*

Required Credits: 30

Required GPA: 2.00

I REQUIRED COURSES

Note: The Art minor is not available to students pursuing the Technology, Art and Design major with the Creativity and Innovation emphasis.

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1150 Drawing Fundamentals (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 2670 Painting (4 credits)
- TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)

II ELECTIVE BLOCK

Complete 11 credits from the following:

- ARTH 2551 Art History Survey I (4 credits)
- ARTH 2552 Art History Survey II (4 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 2100 History, Philosophy, and Application of Color (3 credits)
- TADD 3100 Digital Illustration: Vector Art (2 credits)
- TADD 3140 Figure Illustration (2 credits)
- TADD 3160 Spatial Illustration (2 credits)
- TADD 3180 Digital Painting: Raster Art (2 credits)
- TADD 3350 History of Modern Art & Design: 1820-1950 (3 credits)
- TADD 3400 Sculpture: Experimental (2 credits)
- TADD 3410 Sculpture: Traditional (2 credits)
- TADD 3480 Ceramics: Hand & Wheel (4 credits)
- TADD 4120 Illustrative Storytelling (2 credits)
- TADD 4190 Animated Illustration (2 credits)

Design *minor*

Required Credits: 30

Required GPA: 2.00

I REQUIRED COURSES

Note: The Design minor is not available to not available to students pursuing the Technology major with the Creativity and Innovation emphasis.

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 2200 Introduction to Graphic Design (2 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 2550 Tech Toolbox II: InDesign (2 credits)
- TADD 3020 Typography: Hand Lettering (2 credits)
- TADD 3040 Typography: Digital Typefaces (2 credits)
- TADD 3320 Package Design (2 credits)
- TADD 3340 Branding & Identity Design (2 credits)
- TADD 4800 Advanced Typography (2 credits)
- TADD 4850 Advanced Branding & Identity Design (2 credits)
- TADD 4898 Advanced Graphic Design (2 credits)

Engineering Technology *minor*

Required Credits: 18

Required GPA: 2.00

COMPLETE THE FOLLOWING COURSES 15 credits must be unique from major:

- TADT 1210 Introduction to Manufacturing Processes I (3 credits)
- TADT 1220 Introduction to Manufacturing Processes II (3 credits)
- TADT 1450 Introduction to Product Development (3 credits)
- TADT 1460 2D Graphics And Laser Etching (3 credits)
- TADT 3267 Economic and Cost Analysis (3 credits)
- TADT 3537 Industrial Design/Innovation (3 credits)

Event Design *minor*

Required Credits: 30

Required GPA: 2.00

I REQUIRED COURSES

Note: The Event Design minor is not available to students pursuing the Technology, Art and Design major with the Creativity and Innovation emphasis.

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 3300 Wayfinding & Signage Design (2 credits)
- TADD 3380 Designing for Experiences (2 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)
- TADD 3700 Materials, Lighting, and Structures (2 credits)
- TADD 3750 Tradeshow Exhibit Design (2 credits)
- TADD 3780 Museum Experience Design (2 credits)
- TADD 4700 Pop-up Shop & Visual Merchandising Design (2 credits)
- TADD 4750 Event Design (2 credits)
- TADD 4820 Advanced Experience Design (2 credits)

Event Planning *minor*

Required Credits: 30

Required GPA: 2.00

I REQUIRED COURSES

Note: The Event Planning minor is not available to students pursuing the Technology, Art and Design major with the Creativity and Innovation emphasis.

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 3380 Designing for Experiences (2 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

- TADD 3750 Tradeshow Exhibit Design (2 credits)
- TADD 4750 Event Design (2 credits)
- TADT 1109 Computer Applications for Project Managers (3 credits)
- TADT 1111 Introduction to Project Management (3 credits)
- TADT 2252 Construction Materials and Methods (3 credits)
- TADT 3260 Project Bidding and Estimating (3 credits)

Interactive Multimedia Design *minor*

Required Credits: 30

Required GPA: 2.00

I REQUIRED COURSES

Note: The Interactive Multimedia Design minor is not available to students pursuing the Technology, Art and Design major with the Creativity and Innovation emphasis.

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 2550 Tech Toolbox II: InDesign (2 credits)
- TADD 3380 Designing for Experiences (2 credits)
- TADD 3449 Tech Toolbox II: Premiere Pro (2 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)
- TADD 3800 Tech Toolbox III: After Effects (2 credits)
- TADD 3850 Digital Signage (2 credits)
- TADD 4020 Web & Social Media Design (2 credits)
- TADD 4040 UX Design (2 credits)
- TADD 4840 Advanced Interactive Multimedia Design (2 credits)

Maker Space Technology *minor*

Required Credits: 30

Required GPA: 2.00

I REQUIRED COURSES

Note: The Maker Space Technology minor is not available to students pursuing the Technology, Art and Design major with the Creativity and Innovation emphasis. This minor is not available to students pursuing the Maker Space Technology certificate.

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 3448 Tech Toolbox II: Fusion 360 (2 credits)
- TADD 3480 Ceramics: Hand & Wheel (4 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

II ELECTIVE BLOCK

Complete 14 credits from the following:

- TADD 2670 Painting (4 credits)

- TADD 3557 TAD LAB: Molding & Casting (2 credits)
- TADD 3558 TAD LAB: Machining (2 credits)
- TADD 3559 TAD LAB: Traditional Woods (2 credits)
- TADD 3660 TAD LAB: Welding (2 credits)
- TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)
- TADD 3678 TAD LAB: CNC Woods (2 credits)
- TADD 3679 TAD LAB: CNC Metals (2 credits)
- TADD 4867 Advanced Studio Practice (2 credits)

Project Management *minor*

Required Credits: 18

Required GPA: 2.00

SELECT 1 OF THE FOLLOWING:

- TADT 1111 Introduction to Project Management (3 credits)
- TADT 3111 Project Management Methodology (3 credits)

COMPLETE THE FOLLOWING COURSES:

- TADT 3112 Leadership in a Team Environment (3 credits)
 - TADT 3267 Economic and Cost Analysis (3 credits)
 - TADT 3885 Technical Sales, Service and Training (3 credits)
 - TADT 4878 Quality Assurance (3 credits)
 - TADT 4893 Applied Project Management (3 credits)
- (Note: TADT 4893 only offered on-campus)

Technology, Art & Design *minor*

Required Credits: 30

Required GPA: 2.00

I REQUIRED COURSES

Note: The Technology, Art and Design minor is not available to students pursuing the Technology, Art and Design major with the Creativity and Innovation emphasis.

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1800 Creativity in Action (2 credits)

II REQUIRED ELECTIVES

Complete 16 credits from the following:

- TADD 2200 Introduction to Graphic Design (2 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 2550 Tech Toolbox II: InDesign (2 credits)
- TADD 3020 Typography: Hand Lettering (2 credits)
- TADD 3040 Typography: Digital Typefaces (2 credits)
- TADD 3300 Wayfinding & Signage Design (2 credits)
- TADD 3320 Package Design (2 credits)
- TADD 3340 Branding & Identity Design (2 credits)

- TADD 3380 Designing for Experiences (2 credits)
- TADD 3449 Tech Toolbox II: Premiere Pro (2 credits)
- TADD 3460 Printmaking: Traditional (2 credits)
- TADD 3470 Printmaking: Experimental (2 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)
- TADD 3700 Materials, Lighting, and Structures (2 credits)
- TADD 3750 Tradeshow Exhibit Design (2 credits)
- TADD 3780 Museum Experience Design (2 credits)
- TADD 3800 Tech Toolbox III: After Effects (2 credits)
- TADD 3850 Digital Signage (2 credits)
- TADD 4020 Web & Social Media Design (2 credits)
- TADD 4040 UX Design (2 credits)
- TADD 4700 Pop-up Shop & Visual Merchandising Design (2 credits)
- TADD 4750 Event Design (2 credits)
- TADD 4800 Advanced Typography (2 credits)
- TADD 4850 Advanced Branding & Identity Design (2 credits)

2-D Art & Design Technology *cert*

Required Credits: 18
Required GPA: 2.00

REQUIRED COURSES

Note: The 2D Art and Design Technology certificate is not available to students pursuing the Technology, Art and Design major with the Creativity and Innovation emphasis.

Complete the following courses:

- TADD 1150 Drawing Fundamentals (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 2550 Tech Toolbox II: InDesign (2 credits)
- TADD 3449 Tech Toolbox II: Premiere Pro (2 credits)
- TADD 3800 Tech Toolbox III: After Effects (2 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

3-D Art & Design Technology *cert*

Required Credits: 18
Required GPA: 2.00

REQUIRED COURSES

Note: The 3D Art and Design Technology certificate is not available to students pursuing the Technology, Art and Design major, Creativity and Innovation emphasis. This certificate is also not available to students pursuing the Art: New Studio Practice major with the 3D Arts emphasis.

Complete the following courses:

- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 3448 Tech Toolbox II: Fusion 360 (2 credits)
- TADD 3449 Tech Toolbox II: Premiere Pro (2 credits)
- TADD 3551 Tech Toolbox I: 3ds Max (2 credits)
- TADD 3552 Tech Toolbox II: 3ds Max (2 credits)
- TADD 3553 Tech Toolbox III: 3ds Max (2 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

Educational Technology *cert*

Required Credits: 19
Required GPA: 2.00

REQUIRED COURSES

Note: The Educational Technology certificate is not available to students pursuing the Technology, Art and Design major with the Creativity and Innovation emphasis.

Complete the following courses:

- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 3449 Tech Toolbox II: Premiere Pro (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)
- TADD 3678 TAD LAB: CNC Woods (2 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

Lean Six Sigma *cert*

Required Credits: 30
Required GPA: 2.00

I REQUIRED COURSES

Complete the following courses:

- TADT 3111 Project Management Methodology (3 credits)
- TADT 3112 Leadership in a Team Environment (3 credits)
- TADT 3267 Economic and Cost Analysis (3 credits)
- TADT 3700 Operations Planning and Control (3 credits)
- TADT 3887 Safety and Risk Management (3 credits)
- TADT 4867 Lean Principles and Practices (3 credits)
- TADT 4873 Emphasis Related Capstone (3 credits)
- TADT 4878 Quality Assurance (3 credits)
- TADT 4879 Service Process/Improvement (3 credits)
- TADT 4880 Total Quality Management (3 credits)

II GRADUATION REQUIREMENTS You must pass the Lean Six Sigma (LSS) certification exam that is administered by the Association of Technology Management & Applied Engineering (ATMAE) with green belt level. The

ATMAE Lean Six Sigma (LSS) certification exam covers 12 main content areas and is further divided into 88 subcategories. The exam is divided into two main parts: the first part consists of 100 multiple choice questions that are worth one point each. The second part of the exam is composed of 25 multiple choice questions that require an examinee to solve a production or statistical problem that may take several minutes.

I REQUIRED COURSES

Complete the following course:

- TADT 4800 Lean Six Sigma exam (0 credit)

Maker Space Technology *cert*

Required Credits: 30

Required GPA: 2.00

REQUIRED COURSES

Note: The Maker Space Technology certificate is not available to students pursuing the Technology, Art and Design major with the Creativity and Innovation emphasis. This certificate is not available to students pursuing the Maker Space Technology minor.

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 3448 Tech Toolbox II: Fusion 360 (2 credits)
- TADD 3480 Ceramics: Hand & Wheel (4 credits)
- TADD 3680 TAD LAB: AutoCAD (2 credits)

Complete 14 credits from the following courses:

- TADD 2670 Painting (4 credits)
- TADD 3557 TAD LAB: Molding & Casting (2 credits)
- TADD 3558 TAD LAB: Machining (2 credits)
- TADD 3559 TAD LAB: Traditional Woods (2 credits)
- TADD 3660 TAD LAB: Welding (2 credits)
- TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)
- TADD 3668 TAD LAB: Laser (2 credits)
- TADD 3677 TAD LAB: 3D Printing (2 credits)
- TADD 3678 TAD LAB: CNC Woods (2 credits)
- TADD 3679 TAD LAB: CNC Metals (2 credits)
- TADD 4867 Advanced Studio Practice (2 credits)

Making Money As A Maker *cert*

Required Credits: 25

Required GPA: 2.00

REQUIRED COURSES

Note: The Making Money as a Maker certificate is not available to students pursuing the Technology, Art and Design major with the Creativity and Innovation emphasis.

Complete the following courses:

- TADD 1400 The Art of Napkin Sketching (2 credits)

- TADD 1500 Tech Toolbox I: Illustrator (2 credits)
- TADD 1550 Tech Toolbox I: Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1700 Presentation Planning, Design, and Delivery (3 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 2200 Introduction to Graphic Design (2 credits)
- TADD 3090 Leadership in Creative Industries (2 credits)
- MUS 3150 Arts Organization Management (3 credits)
- MUS 3170 Arts Organization Fundraising and Grant Writing (3 credits)

Complete the following course for 2 credits:

- TADD 4867 Advanced Studio Practice (2 credits)

Technology Manager *cert*

Required Credits: 15

Required GPA: 2.00

I REQUIRED COURSES

Complete the following courses:

- TADT 3111 Project Management Methodology (3 credits)
- TADT 3112 Leadership in a Team Environment (3 credits)
- TADT 3700 Operations Planning and Control (3 credits)
- TADT 3887 Safety and Risk Management (3 credits)
- TADT 4878 Quality Assurance (3 credits)

II GRADUATION REQUIREMENTS You must pass the Certified Technology Manager (CTM) exam that is administered by the Association of Technology Management & Applied Engineering (ATMAE). The Certified Technology Manager (CTM) exam is a multiple choice examination with questions on Leadership/Self-Management, Systems, Processes, Operations, People, Project, Quality and Risk.

I REQUIRED COURSES

Complete the following course:

- TADT 4600 Technology Manager exam (0 credit)

Technology, Art and Design - Design Courses

TADD 1100 Orientation to Technology, Art, and Design (2 credits)

The purpose of the Orientation to Technology, Art, and Design course at Bemidji State University is to introduce the School of Technology, Art & Design (The TAD School). Students will explore majors and minors, career options, and salary data for technology, art, and design-related careers. Students will also meet faculty and learn about available resources, clubs, and the junior and senior screening process. Students will become familiar with the facilities in The TAD School.

TADD 1150 Drawing Fundamentals (2 credits)

This course introduces students to classical and contemporary observational drawing techniques and drawing strategies. This class has an emphasis on the understanding of the formal language and the fundamentals of artistic expression. Projects direct observation of nature, still life, and the human form. Assignments are designed to improve drawing skills, engage creative problem-solving, as well as broaden students' knowledge of the cultural/historical relevance of drawing. Students will discuss, analyze, and critique their original drawings and 2D design work with a group of their peers using standard critique procedures. Liberal Education Goal Areas 6 & 11.

TADD 1200 Two-Dimensional Visual Foundations (2 credits)

This course is a foundation-level study of the elements of art and principles of design related to two-dimensional visual literacy. Students will explore the concepts of composition through guided projects and demonstrations, discovering a working creative process, an awareness of design in our culture, and awareness of current art and design issues. Students will experience both traditional and digital studio practices. Students will discuss, analyze, and critique their original drawings and 2D design work with a group of their peers using standard critique procedures. Liberal Education Goal Area 6 and 11.

TADD 1300 Three-Dimensional Visual Foundations (2 credits)

This course is a foundation level study of the elements of art and principles of three-dimensional design. Students will use a variety of media and art techniques to explore three-dimensional design; form, line, plane, volume, mass, space, texture, light, and time. Projects emphasize a creative process for problem-solving in three dimensions, as well as a general knowledge of historical and contemporary design issues. Students will discuss, analyze, and critique their original drawings and 2D design work with a group of their peers using standard critique procedures. Liberal Education Goal Area 6 & 11.

TADD 1400 The Art of Napkin Sketching (2 credits)

This course introduces the idea of rough sketching as a communication tool rather than a fine art. Designers can easily find inspiration at any moment. Napkin sketches represent the visualization of spur of the moment inspiration, allowing for the rapid exploration of thoughts and ideas. This approach to drawing aids the expression of feelings, ideas, and even philosophies to others. It is a process that illustrates how people think, what is important to them, and the spirit of their thoughts. This communication tool is often the basis for turning ideas into more meaningful works of art and design. Liberal Education Goal Area 6.

TADD 1500 Tech Toolbox I: Illustrator (2 credits)

In this course students will use Adobe Illustrator for the creation and manipulation of vector graphics. Topics will include: file formats, resolution, illustration and color systems. This course introduces and explains software skills where they would naturally fall into a project workflow. The project-based approach employed in this course gets students an in-depth understanding of the software through step-by-step instructions through every phase of a project.. When students complete the projects in this class, they will have a substantial body of work that should express their understanding of the Adobe Illustrator software.

TADD 1550 Tech Toolbox I: Photoshop (2 credits)

In this course students will use Adobe Photoshop for the creation and manipulation of raster graphics. Topics will include: file formats, resolution, illustration and color systems. This course introduces and explains software skills where they would naturally fall into a project workflow. The project-based approach employed in this course gets students an in-depth understanding of the software through step-by-step instructions through every phase of a project. When students complete the projects in this class, they will have a substantial body of work that should express their understanding of the Adobe Photoshop software.

TADD 1600 Fundamentals of Digital Photography (2 credits)

This course will explore digital photography and imaging techniques with special application to art, design and communication, with an emphasis put on understanding the control and effects of light. Projects will address a range of design, aesthetics, and conceptual issues fundamental to the art of digital photography. Strong emphasis is on the development of both a technical foundation and a critical awareness of the medium as a creative tool. Students will discuss, analyze, and critique their original drawings and 2D design work with a group of their peers using standard critique procedures. Liberal Education Goal Area 6 & 11.

TADD 1700 Presentation Planning, Design, and Delivery (3 credits)

Students will learn to thoroughly plan, design, and deliver a successful live presentation that is human-centered and effective. This course focuses on delivering meaningful presentations with self-awareness, creativity, intentionality, and an authentic personal voice. Students investigate motivation and self-expression. Students will learn to organize, prepare, practice, and deliver short and long-form presentations. This course will introduce students to the theory and practice of visual rhetoric, the art of creating persuasive presentations and delivering them with confidence. Liberal Education Goal Area 1.

TADD 1800 Creativity in Action (2 credits)

Creativity in Action is a course that explores an understanding of creativity and innovation, including leading theorists and the generation of ideas. Questions investigated include who is creative, and why? What does it mean to be creative? Is creativity a general attribute, or is it discipline-specific? Students will learn how creative juices flow and how such creative flow materializes into meaningful ideas. Sure, some ideas are wacky, and some are slightly humorous, but we are looking to develop creativity into solving revolutionary challenges. This course values creativity in action, which goes beyond merely risk-taking and solving problems. Liberal Education Goal Area 6.

TADD 2100 History, Philosophy, and Application of Color (3 credits)

This course is an exploration into the nature and meaning of color using methods of historical, philosophical, and experimental inquiry. Beyond discovering the history and philosophy of color, students in this course will learn how to apply color through creative projects. Learners will study hue, value, and chroma/saturation. Students will discover color systems that allow them to communicate color effectively. By the completion of this course, students will be able to combine colors with technology, art, design, and life. Students will discuss, analyze, and comprehend cultural meanings of color and its experience globally. Liberal Education Goal Areas 6 and 8.

TADD 2200 Introduction to Graphic Design (2 credits)

This course introduces students to the profession of graphic design as a conceptual, visual, and commercial discipline. Through lectures, demonstration, research, and studio experiences, students become familiar with the theoretical and processes of the working graphic designer. Topics include: (1) developing a visual vocabulary, (2) essential elements of art, (3) principles of design, (4) visual communication problem solving, (5) employing a creative design process to create designs that meet clients' needs, and (6) understanding the appropriate software to produce works of graphic design. Prerequisite(s): TADD 1500, TADD 1550.

TADD 2300 Introduction to Typography (2 credits)

Great typography is timeless. While technology is inevitably going to change, setting great type has more to do with creativity and aesthetics than technology. This hands-on course explains clearly how typography works and is an introduction to the expressive and functional use of typography. Topics include typographic terms and techniques, early writing systems as well as computer-generated type and fonts. Activities help students learn the essential concepts and skills needed to use and create type.

TADD 2550 Tech Toolbox II: InDesign (2 credits)

This course is intended to familiarize students with the majority of Adobe InDesign tools, so students can apply the design process in building their design portfolio. Understanding the robust publishing application, Adobe InDesign, will allow students to become more productive by integrating what was learned about vector graphics, raster images, and typography. The relevance of Adobe InDesign to design for traditional print media, screen media, interactive multimedia, and web-based media platforms will be introduced and discussed in this course. The software will be used to create, export, and present all design tutorials and individual projects. The project-based approach employed in this course gets students an in-depth understanding of the software through step-by-step instructions through every phase of a project. The projects in this class reflect a range of different types of work represented in the various academic pathways students may choose to pursue in The School of Technology, Art & Design. When students complete the projects in this class, they will have a substantial body of work that should express their understanding of the Adobe InDesign software. Prerequisite(s): TADD 1500, TADD 1550.

TADD 2670 Painting (4 credits)

This course is an Introduction to the medium of oil painting and to the processes involved in perceptual and conceptual exploration. Liberal Education Goal Areas 6 & 11.

TADD 2925 People of the Environment: Technology, Art, and Design Perspective (3 credits)

Discussion and evaluation of current environmental topics related to technology, art, and design. Liberal Education Goal Area 10.

TADD 3020 Typography: Hand Lettering (2 credits)

In this course, students incorporate hand lettering into their illustration process. They explore lettering as free gestural expression, outside of the confines of the computer, made by hand using a variety of traditional media. Students gain an appreciation for hand lettering as an art form, as well as learn how to incorporate hand lettering into their illustrations. Hand lettering is the synthesis of typography and illustration. Prerequisite(s): TADD 2300.

TADD 3040 Typography: Digital Typefaces (2 credits)

This course will provide a theoretical and practical study of the visual nature and expressive potential of digital type forms as a fundamental tool of the graphic designer. Students will practice the preparation and production of digital typographic and graphic assets. Work will include digital illustration, layout, and export for online use as well as for print production with current technologies. Prerequisite(s): TADD 2300

TADD 3090 Leadership in Creative Industries (2 credits)

Whether a student wants to become a Bootstrapping Freelancer, Art Director, or Creative Cottage Industrialist, this Leadership in Creative Industries course effectively matches artists, designers, and makers creative skills and interests with the developing marketplace. Through case studies, guest lectures, and presentations, students will develop creative solutions that support and expand their artistic capacity. Students will learn the theory and practice of the innovative leadership skills essential to lead effectively in creative fields. Through this learning experience, students will understand the creative process, creativity, and the range of variables to lead creative people more effectively.

TADD 3100 Digital Illustration: Vector Art (2 credits)

Vector art is art made with vector illustration software like Adobe Illustrator. Vector artwork is built from vector graphics, which are images created with mathematical formulas. In comparison, raster art (also referred to as bitmaps or raster images) is created with colorized pixels. Enlarge pixel-based art in a raster file too much and it looks jaggy, whereas you can enlarge vector art to any size without negatively affecting its appearance. This resolution independence allows vector art to be used in a variety of forms, from small illustrations to massive billboards. This course is an exploration of digital illustration using vector graphics. Prerequisite(s): TADD 1150, TADD 1500. Liberal Education Goal Area 6.

TADD 3140 Figure Illustration (2 credits)

In this course students will study of the figure and its relationship and application in contemporary Illustration. Course work and assignments will focus on an understanding of anatomy through observation, expressive gesture, and practical applications. Traditional and non-traditional drawing methods will be introduced and explored. Prerequisite(s): TADD 1150. Liberal Education Goal Area 6.

TADD 3160 Spatial Illustration (2 credits)

This course introduces students to the illustrative graphic presentation of spaces, ideas and products. Sketching and refining techniques are practiced in various media including graphite, ink, colored pencils, marker pens, and collage. Perspective drawing tools and techniques are demonstrated and practiced. Conceptualization, production, and presentation techniques are discussed. Prerequisite(s): TADD 1150. Liberal Education Goal Area 6.

TADD 3180 Digital Painting: Raster Art (2 credits)

Raster artwork is any digital art composed of horizontal and vertical rows of pixels. In comparison, vector artwork is digital art composed of mathematical lines and curves. This hands-on course allows students to get creative and productive with brushes and other pixel-based digital tools. This course will explore how to manage layers, effects, selection techniques, working with text, and maximizing colors. This course includes several projects to help students learn how to use digital tools effectively. Once students have completed the course, he or she will be fully capable of using the pixel-based tools to create meaningful digital artwork. Prerequisite(s): TADD 1150, TADD 1550. Liberal Education Goal Area 6.

TADD 3200 Introduction to Model Making (2 credits)

This course exposes students interested in technology, art, and design to learn more about model making. Prior model making experience is helpful, but not required. The course provides a basic introduction to methods of constructing with sheet materials, shaping soft materials to achieve complicated forms, and achieving realistic textures. Students are guided through demonstrations each day. Introduction to Model Making leverages a variety of hand tools and fabrication techniques. Emphasis is on shop safety, hand skills, accuracy, professionalism, and working within specified tolerances to build three-dimensional models.

TADD 3220 Conceptual Prototype Engineering (2 credits)

This course will explore the various steps needed to create a concept/mockup prototype model. Models are design tools and are employed greatly in all aspects of industry. This creative process will include brainstorming, research, sketching, and creation of the model. It aids clients in visualizing and understanding their products' characteristics prior to creation of a high-level prototype. The course will have an emphasis on shop safety, project management and professionalism.

TADD 3240 Prototype Engineering & Detailing (2 credits)

This course is an in-depth look into the finishing and detailing process required of professional prototype models. A finished model must accurately resemble the final prototype in every aspect. Prototype Finishing and Detailing will cover project preparation using various materials, surface finishes/textures and the paints required for the finishing process such as primer, basecoat, single stage and clear coat. The technique of spray finishing will be explored and demonstrated utilizing aerosol, air brush and spray guns. The course will have a strong emphasis on shop safety, project management and professionalism.

TADD 3250 Product Model Making (2 credits)

This course will explore the processes utilized in the creation of a consumer product model by means of a product redesign or new design. This will include an introduction to the basics of form, fit and function and its relationship to the creation of a 3D model. The process will include a scaled 3D drawing to be utilized in the construction of a physical model. The course will require students to utilize many processes, including traditional machining (woods/metals), 3D printing, CNC and other shop equipment. Emphasis will be on shop safety, accuracy, professionalism, project management, problem solving and working within specified tolerances.

TADD 3260 Architectural Model Making (2 credits)

Course Description: This course is the study of architectural model-making techniques, processes, and materials needed to construct a scaled version of a real building project. This model is used as a visual design tool to communicate a client's idea. This course will utilize 2D & 3D software, traditional & non-traditional machining, laser cutter, and various hand skills to construct a professional model. Emphasis will be on shop safety, accuracy, professionalism, project management, and problem-solving.

TADD 3280 Furniture Design & Model Making (2 credits)

This course is the study of model-making techniques, processes, and materials needed to construct a scaled version of furniture. This model is used as a visual design tool to communicate a client's idea. This course will utilize 2D & 3D software, traditional & non-traditional machining, laser cutter, and various hand skills to construct a professional model. Emphasis will be on shop safety, accuracy, professionalism, project management, problem-solving, and working within specified tolerances.

TADD 3300 Wayfinding & Signage Design (2 credits)

Our need to communicate with our fellow humans is fundamental to our well-being and, indeed, our survival. We have long made marks on objects and in our surrounding environment to communicate information visually. These marks communicate meaning, and over time has become a shared language among the people who made and understood them. Signage and wayfinding design are essential and most commonly expressed in unified signs that informationally and visually knit together a site, a collection of related sites, such as regional parks or global corporate facilities, or networks, such as a transportation system. This course focuses on understanding wayfinding and designing signage to communicate our surrounding environment better visually. Prerequisite(s): TADD 2300.

TADD 3320 Package Design (2 credits)

In Packaging Design, as well as Display Design, students are introduced to the process of designing three-dimensional containers, individually, or as systems for the mutual benefit of the end-user and the manufacturer. Emphasis is placed on symbols, shape, color, illustration, and typography and how they relate to three-dimensional problems. Prerequisite(s): TADD 1500.

TADD 3340 Branding & Identity Design (2 credits)

An introduction to the visual and conceptual problems related to branding. Students also practice digital print production management techniques for all digital assets, and digital layout assembly to create marketing materials in relation to branding. Prerequisite(s): TADD 2200, TADD 2300.

TADD 3350 History of Modern Art & Design: 1820-1950 (3 credits)

This course is a survey of major movements, period tendencies, and key figures in the development of art, graphic design, craft, and industrial design between the early-19th century and 1950. Examination of technological advancements, world historical and art historical trends that surround these movements will also be an important goal in order to gain an effective understanding of this period. Course material seeks to articulate a global perspective of art and design in this era, including Asian, India, African, and South American models. Liberal Education Goal Areas 6 and 8.

TADD 3360 History of Contemporary Art & Design: Present-1950 (3 credits)

This course is a survey of the major movements, period tendencies, and key figures in art, graphic design, craft, and industrial design that affect us today. Starting from our current (contemporary) point of view, we discuss existing influences while reviewing the precedents that have been set in the last one hundred years. Students will examine recent, current, and predicted future technologies, as well as current political and economic trends' effects on design trends. Importance will be placed on the influence of historical perspective and future predictions on our current design practice. Course material seeks to articulate a global perspective of art and design in this era, including Asian, India, African, and South American models. Liberal Education Goal Areas 6 and 8.

TADD 3380 Designing for Experiences (2 credits)

Experience design is the collection of intentional strategies, touchpoints, and activities chosen to deliver constructions of meaning through engaging interactions. Experiences are what drive the economy. What distinguishes okay companies from truly great companies is the experiences that they provide their customers, as well as their employees. Designing for experiences is about making individuals feel alive and helping organizations take their business to the next level. In this introductory course, students will be exposed to the design, build, execution, evaluation, and management of meaningful experiences. Liberal Education Goal Area 11.

TADD 3400 Sculpture: Experimental (2 credits)

This course introduces students to a variety of methods for combining materials and processes to create sculptural forms. Hands-on projects expand 3D design concepts to include non-traditional media and encourage students to develop their creative ideas. Students will explore contemporary trends and applications, as well as research cultural traditions throughout history. Coursework includes access to a variety of labs and equipment to enhance projects. Students will discuss, analyze, and critique their original drawings and 2D design work with a group of their peers using standard critique procedures. Liberal Education Goal Area 6 and 11.

TADD 3410 Sculpture: Traditional (2 credits)

This course introduces students to a variety of traditional materials and processes common to sculpture. Hands-on projects expand 3D design concepts and encourage students to develop their creative ideas through additive, subtractive and casting methods. Students will explore contemporary trends and applications, as well as research cultures throughout history. Students will discuss, analyze, and critique their original drawings and 2D design work with a group of their peers using standard critique procedures. Liberal Education Goal Area 6 and 11.

TADD 3448 Tech Toolbox II: Fusion 360 (2 credits)

This course introduces students to the use and application of Autodesk Fusion 360 software, which is the key to instant 3D creativity, used by designers, model makers, engineers, and other makers. Students will learn to use Fusion 360 to turn ideas into designs that flow into 3D printing, CNC milling, or injection molding.

TADD 3449 Tech Toolbox II: Premiere Pro (2 credits)

This course is an introduction to video-editing techniques using Adobe Premiere Pro, the industry-leading application for video-editing. This course utilizes and expands student designers' skillset. Students will learn: to transform raw footage into impactful stories, how to edit video and audio, correct color, add titles and effects, and more. Prerequisite(s): TADD 1550.

TADD 3460 Printmaking: Traditional (2 credits)

An introduction to the concepts and techniques of relief printmaking and the aesthetic issues within traditional printmaking practices. Students will evaluate visual art within historical and contemporary contexts. Students will develop image-making and studio processes skills through several printmaking projects. Reading, discussions, and demonstrations will support this development. Students will discuss, analyze, and critique their original drawings and 2D design work with a group of their peers using standard critique procedures. Liberal Education Goal Area 6 and 11.

TADD 3470 Printmaking: Experimental (2 credits)

This course will introduce students to the concepts and techniques of silkscreen and related stencil printing forms. Demonstration, discussion, sketching, art production, and critique will support development of students' skills. Students will practice working in a shared studio environment, solving layered design issues, and evaluating silkscreen art within historical and contemporary contexts. Students will discuss, analyze, and critique their original drawings and 2D design work with a group of their peers using standard critique procedures. Liberal Education Goal Area 6 and 11.

TADD 3480 Ceramics: Hand & Wheel (4 credits)

Three-dimensional visual design and problem-solving is integrated with the introduction to basic hand-forming methods, glazing, and firing of ceramic forms. This course is an introduction to the functional and sculptural process of ceramics using various hand-building techniques. Students will explore processes including pinch, coil, and slab building, as well as gain an understanding of the tools and methods involved in hand building. Students will learn about glazing and how color and surface design can bring life to their unique works of art. Liberal Education Goal Area 6 & 11.

TADD 3551 Tech Toolbox I: 3ds Max (2 credits)

This course is an introductory software-based course focusing on the 3ds Max design workflow as it relates to basic modeling, necessary materials, and essential lighting techniques. Students will learn how to use this software related to architectural exhibits and spaces, as well as model making, graphic design, and motion graphics. This course is just the beginning of learning dozens of features and techniques that students will someday master, from sculpting and texturing to lighting and rendering.

TADD 3552 Tech Toolbox II: 3ds Max (2 credits)

This course is a level two software-based course focusing on the 3ds Max design workflow as it relates to advanced materials, lighting and modeling techniques. Prerequisite(s): TADD 3551.

TADD 3553 Tech Toolbox III: 3ds Max (2 credits)

This course is a level three software-based course focusing on the 3ds Max design workflow as it relates to advanced output options. Course also serves as an introduction to 3D game engines, augmented and virtual reality. Prerequisite(s): TADD 3552.

TADD 3557 TAD LAB: Molding & Casting (2 credits)

In this course, students will learn how to make molds that will allow them to cast multiples of practically any object using a variety of materials. Students will gain a solid understanding of fundamental techniques that will empower them to tackle almost any mold-making project. Students will discover what undercuts are and how to recognize them on their models; they will determine what kind of mold and mold material to use and how to build and adequately seal mold walls. Mold and cast your way to a customized world!

TADD 3558 TAD LAB: Machining (2 credits)

This course introduces students to the basics of operating a lathe and a milling machine. Students will learn essential machine and lab safety procedures, use of bench tools, layout tools, drill presses, precision measurement tools, and various hand tools related to the machine shop. Students will study the vertical milling machine and the horizontal lathe as well as their components and controls. They will gain an understanding of speeds and feeds, utilizing various tools and tool holders. They will identify basic tool geometry, and the use of standard lathe spindle tooling.

TADD 3559 TAD LAB: Traditional Woods (2 credits)

In this foundational woodworking course, students will learn the basics of the traditional woodshop. This course serves as the prerequisite for makers to reach their full potential. Students will go through a learning process grounded in understanding hand tools and grow into learning more high-tech woodshop processes. Once students complete this foundational course, they will have the skills and confidence to continue excelling as a maker in the woodshop.

TADD 3660 TAD LAB: Welding (2 credits)

This course will provide students with entry-level skills in Welding. This course includes basic welding theory, safety in welding, introduction to oxygen, basic weld symbols for blueprint reading. Students will learn oxyacetylene welding using the cutting torch and brazing, electric arc and other welding techniques, and stick welding with a variety of electrodes in the flat and horizontal fillet positions.

TADD 3667 TAD LAB: Finishing & Aesthetics (2 credits)

The purpose of this course is to provide the student an understanding of materials, principles, and techniques of spray finishing required to complete a professional form. Processes may include model construction, surface preparation, materials selection and paint application.

TADD 3668 TAD LAB: Laser (2 credits)

There has never been a better time to learn about and try Laser cutting and etching. This course draws a roadmap for getting started with Laser, which is also known as additive manufacturing). This course will discuss the different Laser operations used for Vector graphics (cutting) and Raster graphics (etching). Students will learn how to properly prepare digital files for projects of their own creation and operate laser equipment. Knowledge of materials and how to apply them is also an important part of this course. This TAD Lab is a hands-on production-based course that walks students through a step-by-step process of Laser cutting.

TADD 3677 TAD LAB: 3D Printing (2 credits)

There has never been a better time to learn about and try 3D printing. This course draws a roadmap for getting started with 3D printing, which is also known as additive manufacturing). This course will discuss the different 3D Printers used for 3D modeling (filament-based, laser sintering, and more). This TAD Lab is a hands-on production-based course that walks students through a step-by-step process of 3D printing.

TADD 3678 TAD LAB: CNC Woods (2 credits)

This course is designed to introduce students to vector-based cutting operations in wood and paper products. Students will apply knowledge gained in the classroom to sketch, create measured files in various software and execute their assignments using a variety of CNC equipment available to them. Laser cutting/etching, cardboard cutting/folding, and wood CNC milling are basic operations we will cover.

TADD 3679 TAD LAB: CNC Metals (2 credits)

This course is designed to introduce students to vector-based cutting operations in metal. Students will apply knowledge gained in the classroom to sketch, create measured files in various software and execute their assignments using a variety of CNC equipment available to them.

TADD 3680 TAD LAB: AutoCAD (2 credits)

This course introduces students to the use and application of Autodesk AutoCAD software. AutoCAD is used by architects, designers, model makers, engineers, and other makers. Students will learn to use AutoCAD to turn ideas into designs that flow into 3D modeling and other output formats.

TADD 3700 Materials, Lighting, and Structures (2 credits)

This course is an overview of the materials, lighting, and structures used in the exhibit industry. Students will explore fabric, aluminum extrusion systems, printing substrates, sustainable options, lighting technologies, and building techniques.

TADD 3750 Tradeshow Exhibit Design (2 credits)

This course aims to help make students better understand the art of creating immersive experiences that tell a story. Tradeshows are not new but designing meaningful experiences with intentionality is an entirely new industry. This form of spatial storytelling takes guests through meaningful experiences that incorporate graphics, spatial planning, architecture, modern media, theatrical arts, interaction, entertainment, marketing, learning, lighting, engineering, networking, personal growth, and more. This course focuses on designing immersive and experiential tradeshow exhibits for meaningful social interaction. This class will assume that students have had some experience design coursework under their belt and exposed to the basics of Two and Three- Dimensional Design. This course will move students into more advanced levels of experience design. Above all, this course encourages students to think about design by putting the tradeshow attendee at the center of their constructed experience. Prerequisite(s): TADD 3552.

TADD 3780 Museum Experience Design (2 credits)

In this course, students will gain a comprehensive understanding of the different kinds of museums (permanent, temporary, and travel), their various missions, and their experiential characteristics (visitors, research, theories, history, techniques, institutional challenges, educational vision, and public service) common to museums. Students will also explore the various technical and aesthetic approaches for designing museum experiences. The primary focus will be the importance of quality signage, graphics, and engaging media for museums. Prerequisite(s): TADD 3380, TADD 3552.

TADD 3800 Tech Toolbox III: After Effects (2 credits)

This course builds off the video-editing techniques learned in Adobe Premiere Pro, the industry-leading application for video-editing. After Effects adds visual effects, motion graphics, and compositing capabilities to the video-editing skillset. Students will learn: to enhance videographic storytelling with techniques such as keying, tracking, compositing, animation and more. Prerequisite(s): TADD 3449.

TADD 3850 Digital Signage (2 credits)

Every day new digital screens are being installed at locations in every industry. However, the process of developing and deploying engaging digital signage is much more complicated than simply hanging a screen and turning it on. This production-based course will guide students through the process of creating an effective digital signage strategy, from understanding the user and the environment to building experiential content. Learning will focus on storytelling and effective communication through the creation of digital signage and motion graphics. Students will explore the software, tools, and techniques needed to start designing meaningful digital signs in 2D and 3D. Prerequisite(s): TADD 2300.

TADD 3899 Junior Culmination: Internship Planning (2 credits)

In this course, students learn the importance of the internship game, which will give the tools needed to get an internship and the necessary actions for turning that internship into an eventual career. This course will give student artists and designers professional guidance to them to where they want to be after graduation. Students will learn how to apply entrepreneurial strategies to their own life, their internship decisions, and their eventual career. Whether students want to work for a giant multinational corporation, a small local business, or launch their own business, this course will provide vital information and help them develop a personalized plan for their future. Prerequisite(s): Instructor consent.

TADD 4020 Web & Social Media Design (2 credits)

In this course, students will discover how to communicate creatively through websites and social media platforms. Students will learn about the key features on Facebook, Twitter, Instagram, and other platforms to grow an online presence. This course examines how to design websites and social media platforms to extend experiences beyond the face-to-face world and into the virtual world. By the end of this course, students will have a solid introduction to these key platforms so that they can design a virtual strategy that increases brand awareness and maximizes opportunities for meaningful experiences. Prerequisite(s): TADD 2300.

TADD 4040 UX Design (2 credits)

A good user experience design (UX Design) keeps visitors engaged. A bad one will make them go somewhere else. This class teaches students how to apply simple UX design principles to make users behave in the way that designers want and expect when creating compelling digital experiences. Students will learn Adobe XD's capabilities and features to go from concept to interactive prototype. Prerequisite(s): TADD 3850.

TADD 4120 Illustrative Storytelling (2 credits)

The course will integrate image and text within a design context to promote a comprehensive understanding of the role of the illustrator, the art director, and the designer. Students are required to think beyond the content and aesthetics of an image and consider the formal and conceptual context of its application. Prerequisite(s) TADD 3100, TADD 3140, TADD 3160, TADD 3180.

TADD 4190 Animated Illustration (2 credits)

This course allows students to get creative and transform concepts into meaningful 2D animations. Students will investigate the concepts and tools used for creating time and motion-based animations. Prerequisite(s): TADD 3100, TADD 3140, TADD 3160, TADD 3180.

TADD 4430 Sculpture: CNC (2 credits)

This course introduces students to a variety CNC processes common to sculpture/design. Hands-on projects expand 3D design concepts through the use of design software and a variety of machines. Students will explore contemporary trends and applications, as well as research cultural traditions throughout history. Coursework includes access to TAD Lab facilities. TADD 3448 recommended.

TADD 4630 Topics in Technology, Art & Design (1-4 credits)

Research, advanced exploration, and/or applied study of various topics related to technology, art & design.

TADD 4700 Pop-up Shop & Visual Merchandising Design (2 credits)

Pop-up shops are the temporary use of physical space to create a meaningful experience with current or potential customers. A pop-up shop allows an organization to communicate brand promises through the use of a unique and engaging physical environment while creating an immersive shopping experience. Designing pop-up shops and visual merchandising displays into unforgettable experiences is what this course is all about. Prerequisite(s): TADD 3552.

TADD 4750 Event Design (2 credits)

Event design is the application of form and experience processes to invent festivals, conferences, ceremonies, weddings, formal parties, concerts, tradeshows, or large conventions. It involves studying the brand, identifying its target audience, devising the event concept, and imagining all aspects before actually building and launching the event. In this course, students will learn a systematic visual approach to event design grounded in experience and based on stakeholder needs. Prerequisite(s): TADD 3380, TADD 3552.

TADD 4800 Advanced Typography (2 credits)

This class is an advanced exploration of the elements and forms of typography. We will address the role of these elements as highly abstracted symbols that nevertheless function as the vehicle for the most literal and expressive communication. This class is an opportunity for advanced design students to develop portfolio quality pieces which demonstrate their breadth of expression as well as their personal aesthetic of type. Prerequisite(s): TADD 3020, TADD 3040.

TADD 4810 Advanced Extended Reality (2 credits)

This course turns student's understanding of Virtual Reality (VR), Augmented reality (AR), and Mixed Reality (MR) into advanced knowledge of Extended Reality (XR). This course goes beyond the latest developments in hardware, software, equipment, and computing and their impact on creating meaningful human-centered experiences. Students will learn how knowledge in XR can be maximized and applied in the real world, ultimately making students more employable after graduation. Prerequisite(s): TADD 3553.

TADD 4820 Advanced Experience Design (2 credits)

This course aims to help students create immersive experiences that tell meaningful stories. Designing such meaningful experiences with intentionality is an advanced art form. This advanced form of spatial storytelling takes guests through meaningful experiences that incorporate graphics, spatial planning, architecture, modern media, theatrical arts, interaction, entertainment, marketing, learning, lighting, engineering, networking, personal growth, and more. This advanced course assumes that students have had most other design-related coursework under their belt. Above all, this course prepares students for employment and encourages them to put the guest at the center of the experience. Prerequisite(s): TADD 3750, TADD 3780.

TADD 4830 Advanced Event Planning & Project Management (2 credits)

Advanced Event Planning & Project Management is a culminating course that provides students with the opportunity to apply the skills and knowledge learned from previous courses. Students will increase their level of expertise and confidence through the planning and managing of a simulated educational project. Students in this class will learn to work in a team to develop the conceptualization of an event and manage it to its completion. Successful students in this class will be expected to employ all the communication, design, management, and planning skills learned in previous courses. Students will understand deadlines as an essential component in this course and to utilize external vendors to ensure a successful and enjoyable event that meets goals and expectations. Prerequisite(s): TADD 1111.

TADD 4840 Advanced Interactive Multimedia Design (2 credits)

The future of typography and motion graphics is here. Type is conquering motion, space, and interaction to play across all media. Imagine type that is alive and dynamic, that adapts to the environment. This Advanced Interactive Multimedia course provides students with this form of storytelling expressed in a variety of visual media and environments, including screen-based, print-based, and emerging media. This course explores the new ecosystems that typography now resides in and the tools that designers can use to develop meaningful interactive content and experiences. Students will also learn about the exciting career opportunities in this cutting-edge space. The goal of this course is for students to build from previous interactive and multimedia coursework and develop professional portfolio pieces through a production-based learning experience. Prerequisite(s): TADD 4040.

TADD 4850 Advanced Branding & Identity Design (2 credits)

This course is an advanced theoretical study of the visual and conceptual problems related to branding. Students also practice digital print production management techniques for all digital assets, and digital layout assembly to create full visual identity systems, and related marketing materials. Prerequisite(s): TADD 3340.

TADD 4860 Advanced Prototype Engineering & Model Making (2 credits)

In this course the student will work in collaboration with an industry professional to construct a physical architectural or prototype model. This project will be determined by the student's desired career path. This project will require a culmination of skill sets learned to complete the project as well as the appropriate use of materials, processes and interpretation of client documentation. Emphasis will be on shop safety, accuracy, and professionalism, and project management, problem solving and working within specified tolerances. Prerequisite(s): Senior status.

TADD 4867 Advanced Studio Practice (2 credits)

This Studio-based course is project-based. This format is grounded in sound adult learning theory (andragogy) and is often more popular with students than traditional lecture-based format. In this course, students will work on a complex and demanding project for the entire semester or predetermined timeline. The goal of this course is for students to explore an advanced topic of personal interest. The student will guide much of the coursework and the direction of the project. Therefore, this format requires students to take responsibility for their learning and their time. The course facilitator is there to help students start the project, provide essential resources, and be on hand as a resource for students to use. The course facilitator is a mentor in the process, acting as a learning guide, not an authority. Course is repeatable for up to 12 credits. Prerequisite(s): TAD Common Core or instructor consent.

TADD 4870 Advanced 3D Arts (2 credits)

This course is an advanced level exploration of conceptual approaches to the creation of sculptural forms in addition to continued exploration of processes and techniques on an advanced level. This course will also give students the opportunity to create significant works to add to a senior portfolio. Prerequisite(s): TADD 4430, Instructor consent.

TADD 4880 Advanced Illustration (2 credits)

This course is an advanced level exploration of conceptual approaches to the creation of illustration in addition to continued exploration of processes and techniques on an advanced level. This course will also give students the opportunity to create significant works to add to a senior portfolio. Prerequisite(s): TADD 4120.

TADD 4897 Senior Exhibition (0 credit)

Students will work with the professor to create a solo or team art exhibition.

TADD 4898 Advanced Graphic Design (2 credits)

This course is an opportunity for students to achieve and become creative graphic design professionals. Before students take this course, they should have learned all the foundational skills in Graphic Design. The intention of this course is to take those foundational skills to the next level and become a unique design professional that stands out in a seemingly overcrowded industry. From day one of this course, students will hit the ground running, and ignite their inspiration into creative ideas. This course focuses on becoming a design professional that utilizes and expands students' design skills and abilities through a professionally crafted portfolio. Prerequisite(s): TADD 4800.

TADD 4899 Senior Culmination: Career Planning (2 credits)

In this course, students will explore the volatile, and sometimes scary, employment landscape. Students will learn the importance of creating a career plan that allows them to pursue their future. An effective career plan will allow students to determine essential goals, articulate a pathway reach goals, and assemble a body of work (portfolio) to market themselves to key stakeholders. This course will give student artists and designers professional guidance to land their next opportunity, whether students want to work for a giant multinational corporation, a small local business, or launch their own business. Topics will include dream jobs, graduate school, lifelong learning, career planning, negotiation, interviewing, monetization of passion, personal branding, networking, presentation skills, and how to build a compelling portfolio. Prerequisite(s): Instructor consent.

TADD 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
 1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
 1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
 1940, 2940, 3940, 4940 IN-SERVICE COURSE
 1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
 1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
 1970, 2970, 3970, 4970 INTERNSHIP
 1980, 2980, 3980, 4980 RESEARCH
 1990, 2990, 3990, 4990 THESIS

Technology, Art and Design -Technology Courses

TADT 1109 Computer Applications for Project Managers (3 credits)

This course is an overview of computer applications that are used by Technology, Operations, and Project Managers. The focus of this class is placed on Microsoft Project, Microsoft Excel, and Procore. The course will also provide a review on the basics of Microsoft word and PowerPoint. In this course, students will use these applications to practice spreadsheet using excel, presentation software using PowerPoint, and database using Procore. Students will be familiar with all aspects of project management including project definition, methods and strategy, resource scheduling and allocation, leadership, managing teams, partnering, minimizing risks, benchmarking project progress and performance and project termination and review.

TADT 1111 Introduction to Project Management (3 credits)

Introduction to the principles and practices associated with project management in a professional environment, to include the utilization of project management methodology in support of planning the participants academic career as a student at Bemidji State University. In further support of the participants academic career, the course will also emphasize professional communications in various written and electronic formats.

TADT 1210 Introduction to Manufacturing Processes I (3 credits)

An introduction to manufacturing processes including; welding, metal forming, centrifugal casting, injection/blow molding, silicone molding/resin casting, and vacuum forming. This course will utilize various types of metals, plastic, and resin materials to construct projects.

TADT 1220 Introduction to Manufacturing Processes II (3 credits)

A comprehensive study of the separating processes which occur in manufacturing production. Traditional and non-traditional processes are introduced, along with the primary materials which are utilized in the separation processes.

TADT 1227 Fabricating Fundamentals (3 credits)

Overview of fundamental lab processes related to extremely diversified industry that produces products in a production environment. Traditional and Non-Traditional processes are introduced along with theories, rules and practices associated with fabrication.

TADT 1315 Energy and Power Technology (3 credits)

Survey of types and sources of energy. Addresses the transmission and application of energy and power systems in a variety of construction and industrial applications, including mechanical, fluid, and renewable technologies such as solar, wind and geothermal.

TADT 1350 Electrical/Electronic Technology (3 credits)

Fundamental principles of electricity and electronics. Various topics are explored including basic circuits, transformers and motors.

TADT 1450 Introduction to Product Development (3 credits)

This course is an introduction to three-dimensional communication techniques for the model making profession. Utilizing hand tools, project construction will include an awareness of attention to detail, design and technical problem solving. Prerequisite: TADT 1210, TADT 1220.

TADT 1460 2D Graphics And Laser Etching (3 credits)

An introduction to the principles and practices of technical drawing. The course provides a working familiarity with computer-aided design and drafting through the study of multi-view, pictorial drawing systems, and their applications to laser etching.

TADT 1464 Engineering Technology Project I (3 credits)

This is a project based course that introduces fundamental concepts of engineering design, effective teams, lab safety, and engineering ethics. Basic mechanical systems and simple machines will also be covered. Students are required to demonstrate competency in scheduling, applying fabrication techniques, and documentation. Projects are presented at the end of the semester. Prerequisite: TADT 1210, PHYS 1101.

TADT 2100 Impact Of Technology, Art & Design (2 credits)

Defines technology and examines the relationship between technology, human civilization, and other disciplines. Course includes a focus on the related social, cultural, environmental and economic impacts of technology and encourages students to understand the development of technology from the earliest civilizations to implications for the 21st Century. This course is designed primarily for the liberal education program. Liberal Education Goal Areas 5 & 9.

TADT 2211 Introduction to Cost Management (3 credits)

This course is an overview of the application of cost management in Technology, Operations, and Project Management fields. The emphasis of this course is on project operations budgeting and costs control. The process of financial decision making will be discussed in this course. Topics include project costing methodologies, value and non-value added cost analysis, breakdown structure cost analysis, service industry costing, and project cost evaluation.

TADT 2217 Strength of Materials (3 credits)

An introduction to stress, strain, and deformation analysis of materials subjected to axial, torsional, and bending loads. Basic mechanics concepts such as defects, elasticity, plasticity, and failure are introduced. Prerequisite: PHYS 1101.

TADT 2250 Built Environment (3 credits)

A broad study of the built environment and the technology that was used to create it. Emphasis is given to residential and light commercial applications of print-reading, materials, and methods, while exploring past and present construction technologies. Prerequisite: TADT 1220.

TADT 2252 Construction Materials and Methods (3 credits)

This course is a broad study of materials and methods used in the building and the construction industry. Emphasizing common construction systems such as light wood frame, masonry bearing wall, steel frame, and reinforced concrete construction, including information on building materials properties; "pre-engineered" building components; sustainability issues; and the latest building codes and standards. Prerequisite: TADT 1460, TADT 2250 or consent of the instructor.

TADT 2310 Small Gasoline Engines (3 credits)

The theory and operation of small 2 cycle and 4 cycle engines. Laboratory exercises and rebuilding of components and engines. Prerequisite: TADT 1315. (Might not be offered every year.)

TADT 2370 Automation Technology (3 credits)

An introduction to the field of automation as found in the industrial environment. Concepts of CNC, CAM PLC's, vision systems, bar coding and robotics are explored.

TADT 2450 Product Finishing & Aesthetics (3 credits)

The purpose of this course is to provide the student an understanding of materials, principles and techniques of spray finishing required to complete a professional model. Processes may include model construction, surface preparation, materials selection and paint application. Prerequisites: TADT 1210, TADT 1220, TADT 1460.

TADT 2461 Parametric 3D Modeling (3 credits)

Examines current topics, research, exploration, testing, and evaluation of computer-aided drafting and design programs for Windows computers. Prerequisites: TADT 1460 or consent of instructor.

TADT 2465 Engineering Technology Project II (3 credits)

This is a project based course that builds on topics covered in Engineering Project 1. Students will be introduced to electrical safety, electrical schematics, electrical circuits, various electrical components, and electrical measuring equipment. Students are required to demonstrate competency in applying fabrication and analysis techniques and setting performance specifications, meeting these specifications, and documenting their designs. Projects are presented at the end of the semester. Prerequisite: PHYS 1102, TADT 1220, TADT 1460 and TADT 1464.

TADT 2877 Engineering Problem Solving (3 credits)

Investigates the terminology, concepts, and analytical techniques essential to solving complex problems which occur in manufacturing.

TADT 2931 Experimental Course (3 credits)

A course proposed for inclusion in the University curriculum. May not be offered more than two times as an experimental course.

TADT 3100 Principles of Professional Development (3 credits)

An overview for professionals in the fields of Technology & Management. The student will research and report on such topics as historical and future technological developments, personality inventories, trade and professional organizations, professional publications, and personal professional development plans. Educational degree requirements and policies to meet development plans are also reviewed. Prerequisites: Junior status or consent of instructor.

TADT 3111 Project Management Methodology (3 credits)

This course is intended to provide the learner with the understanding, tools and techniques necessary to effectively plan, coordinate and manage the combination of people, systems and other resources required to complete a project in alignment with established goals, standards and deadlines. In addition, elements of leadership principles and practices will be studied to support team development and project success.

TADT 3112 Leadership in a Team Environment (3 credits)

This course is intended to provide engineering and technology management students with the understanding, strategies, and methods necessary to engage, influence, and empower followers in the successful accomplishment of organizational goals in a team-based environment. Prerequisites: TADT1111 or TADT 3111.

TADT 3217 Materials Science and Metallurgy (3 credits)

This course focuses on the properties of materials and is intended as an introduction to materials science. Materials are used in everything and many major engineering problems are materials problems. This course will provide students with the skills and knowledge necessary to solve many of these problems. This is primarily a lab based course that focuses on mechanical testing and structural analysis of polymers, metals, and ceramics. Prerequisites: TADT 2217, TADT 2877, MATH 1470, and junior status.

TADT 3240 Construction Materials and Practices (3 credits)

Comprehensive study of construction materials, their characteristics, applications and testing. Prerequisite(s): Junior status or consent of instructor.

TADT 3250 Print Reading and Project Documentation (3 credits)

An introductory course in production specifications and contract documentation usage. The course includes the study of materials, methods and labor functions as they relate to use of specifications, documentation and drawings in construction related industries. Prerequisite: TADT 2252 or consent of instructor.

TADT 3260 Project Bidding and Estimating (3 credits)

A foundational course in the analysis and determination of construction and manufacturing project costs. Bidding strategies and proposals; material, equipment and labor estimates, as well as overhead and profit are examined. Prerequisite: TADT 3250 or consent of instructor.

TADT 3267 Economic and Cost Analysis (3 credits)

Introduction to the methods for determining costs related to developing and producing a product, for analyzing the present and future value of liquid and physical assets, and for analyzing the present and future value of a time series of payments. Other topics include basic accounting practices, cost estimating, and forecasting. Prerequisite: Junior status or consent of instructor.

TADT 3277 Programmable Logic Controllers (3 credits)

This course offers students an in depth exposure to programmable logic controller (PLC) devices, the main components of PLC systems, and DC/AC motor and fluid power. The course will cover configuration and programming of PLCs for motor and hydraulic system control using various programming tools. Prerequisite: PHYS 1102 and junior status.

TADT 3330 Industrial Automation (3 credits)

The integration of robotics and automated controls into manufacturing operations. Topics include planning for, specifying, and integrating sensors, actuators, part feeding devices, fixtures, material handling equipment, robotics, and programmable logic controllers in an automated environment, such as a work cell or an assembly line. Two hours lecture and two hours lab per week. Prerequisite(s): Junior status or consent of instructor.

TADT 3350 General Power (3 credits)

Theory and operating principles of internal combustion engines with over fifty cubic inches of displacement. Laboratory experiences include rebuilding procedures and related technical specifications and data. Prerequisite(s): Junior status or consent of instructor.

TADT 3462 Computer Controlled Machining (3 credits)

Introduction to computer-controlled machining operations including manual programming and programming using CAM application for CNC (computer controlled machining). Emphasis on tools and materials are applied in a wide variety of manufacturing and modeling operations. Prerequisite: TADT 2461.

TADT 3470 Concept to Prototype Model (3 credits)

Construct a prototype model with emphasis on 3D parametric drawing, 3D printing technology and various machining processes. Project will concentrate on form, fit, function, structural integrity and optimization of the design needed to shape concepts and test ideas. Prerequisite: TADT 1450, TADT 2450, TADT 3462.

TADT 3537 Industrial Design/Innovation (3 credits)

Exploration of the history, philosophy and application of industrial design. Includes defining specific customer needs and the research, identification, testing, assessment and implementation of effective solutions to technological problems. Also included is the development of a design proposal, written and graphic documentation, and the ethical, environmental, social and economic impacts of design solutions. Incorporates the role, purpose and relationship of innovation in business and industry with the design process. Prerequisite(s): Junior status or consent of instructor.

TADT 3570 Commercial Architecture (3 credits)

Planning and design of commercial buildings and their structural systems, city and industrial planning, and landscaping. Might not be offered every year. Prerequisite(s): Junior status or consent of instructor.

TADT 3610 Industrial Prototypes (3 credits)

Development of industrial quality prototypes from engineering or designer prints. Includes the selection of materials and processes for production feasibility and market testing prototypes. Prerequisites: Junior status or consent of instructor.

TADT 3700 Operations Planning and Control (3 credits)

The concepts, tools, techniques, and quantitative methods used to plan for and control operations in the production of goods and services. Topics include, but are not limited to, traditional inventory management, just-in-time inventory, materials- and enterprise-resource planning, facilities location and layout, process strategies, aggregate planning, scheduling, maintenance and reliability, project management, and supply chain management. Prerequisite: Junior status or consent of instructor.

TADT 3850 Foundation of Technology Education (2 credits)

Survey of the history, philosophy, curriculum, and instructional practices of the industrial technology education field. Emphasizes the goals and objectives of technology education programs in the K-12 public school system. Includes current issues, career options, professional organizations, and licensure requirements. Prerequisite(s): Junior status or consent of instructor.

TADT 3857 Methods of Teaching Industrial Technology/Vocational Education (3 credits)

Approaches to teaching technology education included the philosophy, innovative approaches, classroom and laboratory strategies and methodology. Includes program visitation, evaluation and micro-teaching.

TADT 3878 Industrial/Engineering Production Studies (3 credits)

Study and visitations/assessments of the various aspects of industry, particularly in the engineering and technology management fields. The strategy of benchmarking will be used as a primary tool to complete course research. Prerequisites: Junior status or consent of instructor.

TADT 3879 Performance Measurement (3 credits)

The establishment of time standards essential to the decision making, forecasting, and process control efforts of manufacturing engineering groups and operations management. Prerequisites: Junior status or consent of instructor.

TADT 3885 Technical Sales, Service and Training (3 credits)

The philosophy and practice of sales and service in a technical environment, including the methodology, planning and design of sales activity, and developing technical proposals and presentations. Course also examines aspects of assessing, designing and implementing human resource training programs. Prerequisites: Junior status or consent of instructor.

TADT 3887 Safety and Risk Management (3 credits)

Introduction to the general principles, regulations, responsibilities, policies and practices associated with Safety and Risk Management from the perspective of a manager in operations, facilities and/or construction. Prerequisites: Junior status or consent of the instructor

TADT 3897 Ergonomics and Human Factors (3 credits)

Students learn how to apply human-centered design principles to minimize the risk of harm while simultaneously facilitating the use of man-made artifacts. These principles may be applied in the work environment to design or improve work methods and work environments. They may also be used in the design of consumer goods. Includes a course project and lab activities. Two hours lecture and two hours lab per week. Prerequisites: Junior status or consent of instructor.

TADT 3970 Internship (1-3 credits)

Internship

TADT 4259 Construction Management (3 credits)

An advanced study of construction project planning, contracting, and supervision. The management functions of a construction business environment are emphasized. Attention is given to the differences between construction management and construction contracting as well as a focus on the concept of green building. Prerequisites: Junior status or consent of instructor.

TADT 4260 Computerized Construction Estimating (3 credits)

An exploration and study of computerized construction estimating methods, software, and approaches for estimating, planning, and documenting construction projects. Prerequisite: TADT 3260 or consent of instructor.

TADT 4340 Industrial Controls (4 credits)

A study of industrial controls including electromechanical devices, programmable logic controllers and computer control. Prerequisites: Junior status or consent of instructor.

TADT 4349 Principles of Technology (3 credits)

A laboratory based study of electrical, mechanical, thermal and optical systems which combines theory and practice to develop an understanding of technological systems based on mathematical and physical models. Prerequisites: Junior status or consent of instructor.

TADT 4370 Computer Integrated Manufacturing (3 credits)

Study of how to synchronize operations in an environment that incorporates automated production equipment, material handling systems, plant control systems, design engineering functions, production- and inventory-control systems, and various management functions. Prerequisites: Junior status or consent of instructor.

TADT 4385 Sustainability and Emerging Technologies (3 credits)

A study of sustainability and the emerging technologies that support its major concepts in a laboratory-based course. Students will experience a variety of emerging technologies and understand how such content may be applied in design, engineering, manufacturing and/or the construction industries. Prerequisites: Junior status or consent of instructor.

TADT 4460 Design for Manufacturability (3 credits)

A study of the tools, techniques, and guidelines used to design parts and products, while minimizing costs, facilitating manufacturing operations, maximizing quality and functionality, and supporting modern production management techniques. Prerequisites: Junior status or consent of instructor.

TADT 4464 Machine Element Design (3 credits)

Application of mechanical principles, such as physics, stress analysis, motion analysis, mechanical power, fluid power, fastening and joining techniques, and electric motor selection/control to the design of components and mechanisms. Prerequisites: Junior status or consent of instructor.

TADT 4465 Mechanical Analysis of Parametric 3D Models (3 credits)

The use of a parametric 3D CAD package, in conjunction with either add-on or third-party software applications, to create virtual part and assembly models, and to analyze their physical performance using computer simulation techniques. Topics include shape optimization, and stress-, fatigue-, and kinematic-analysis, plus additional analysis techniques as planned by the instructor. Prerequisites: Junior status or consent of instructor.

TADT 4589 Advanced Prototype Project (3 credits)

Capstone Project: Construct a highly detailed professional model utilizing a culmination of skills including traditional, non-traditional and 3D printing technologies. Project documentation will be a high priority. This project may be constructed in collaboration with an industry professional. Prerequisites: TADT 3470 and Senior level status or consent of instructor.

TADT 4600 Technology Manager exam (0 credit)

A course designed to document a student's successful completion of the Technology Manager Certificate exam. The exam is the final requirement for the certificate.

TADT 4778 Advanced Topics in Technology (3 credits)

Current topics, or emerging research or exploration and assessment of topics in the applied engineering, industrial technology, and/or technology management fields, or any related field. Prerequisites: Junior status or consent of the instructor.

TADT 4800 Lean Six Sigma exam (0 credit)

A course designed to document a student's successful completion of the Association of Technology, Management, and Applied Engineering (ATMAE) Lean Six Sigma Certificate exam. The exam is the final requirement for the certificate. Students should pass the exam with a green belt level.

TADT 4812 Leadership Mentoring (1 credit)

Introduction to leadership principles in practice through the shadowing of a volunteer mentor currently working in a senior leadership role of a local private sector organization. The student will observe how leadership provides direction and guidance in alignment of their respective organizations toward a common goal and in support of specific performance objectives. Prerequisites: Junior status or consent of the instructor.

TADT 4820 Engineering Case Study (3 credits)

Study and development of a solution to a new or existing engineering-related problem. Students propose an appropriate case within their field of interest to be given approval by the instructor. Based on instructor approval, students submit a case study which documents the proposal, implementation strategy, and results of the proposal.

TADT 4830 Foundations in Career and Technical Education (2 credits)

Students will research learning theory and demonstrate basic instructional competencies unique to career & technical education, including philosophy, methods of teaching, and student assessment. Course also addresses the inclusion of teaching strategies in reading, reading comprehension and writing. Prerequisites: Junior status or consent of instructor.

TADT 4837 Evaluation in Career and Technical Education (2 credits)

A study of testing and measurement techniques and applications in occupational programs. The construction of teacher-made performance test, written tests, rating scales and checklists is emphasized. Vendor and standardized are included. Prerequisites: Junior status or consent of instructor.

TADT 4839 Industrial/Career and Technical Education Student Organization (2 credits)

Acquaints students with the issues of planning and implementation of student organizations. Also includes student organizations at the secondary and post-secondary levels and their relationship to state and federal policy and legislation. Prerequisites: Junior status or consent of instructor.

TADT 4847 Methods of Teaching Career and Technical Education (2 credits)

Instructional methodology used in the implementation of occupationally and technically orientated curriculum. Prerequisites: Junior status or consent of instructor.

TADT 4849 Classroom Management in Career and Technical Education (2 credits)

Managing the career and technical education learning classroom, including impact on effective teaching approaches, laboratory safety, material purchase and inventory, equipment purchase and maintenance, and program budgeting. Prerequisites: Junior status or consent of instructor.

TADT 4850 Philosophy of Career and Technical Education (2 credits)

A study of the history, philosophy, and practices of career and technical education. Includes a survey of curriculum characteristics, certification requirements, professional organizations, and career options. Prerequisites: Junior status or consent of instructor.

TADT 4858 Curriculum Development in Technology Education & Career & Technical Ed (2 credits)

The philosophy of curriculum and course construction. Gives special attention to the formulation of purposes, selection and sequence of activities and learner outcomes and assessment. Prerequisites: Junior status or consent of instructor.

TADT 4859 Special Needs in Career and Technical Education (2 credits)

Objectives, materials, and methods of developing and modifying curriculum in the various vocational fields for students with special needs. Prerequisites: Junior status or consent of instructor.

TADT 4860 Management In Industrial Technology Education (4 credits)

Managing the learning environment, budget, equipment and student projects in the technology education setting. Also covers safety considerations and investigates strategies for learning within the technological clusters and for accommodating special needs students. Prerequisites: Junior status or consent of instructor.

TADT 4867 Lean Principles and Practices (3 credits)

This course teaches the principles and practical application of Lean methods and tools as they would apply in various types of organizational value streams to continually reduce waste and support improvements to operational performance and value creation; organizationally inclusive for all stakeholders. Prerequisites: Junior status or consent of the instructor.

TADT 4873 Emphasis Related Capstone (3 credits)

A multifaceted project that utilizes the students culminating academic and intellectual experience to think critically, solve a challenging problem, and develop a solution using oral communication, public speaking, research skills, media literacy, teamwork, planning, self-sufficiency, or goal setting. Prerequisites: Senior status or consent of the instructor.

TADT 4875 Facilities Management (3 credits)

This course is an exploration of the concepts and organization of an integrated approach to operating, maintaining, improving and adapting the buildings and infrastructure of an organization/institution in order to create an environment that strongly supports the primary objectives of the organization. Prerequisite: Junior status or consent of instructor. Prerequisites: Junior status or consent of instructor.

TADT 4878 Quality Assurance (3 credits)

The course teaches the theory and applications of statistical analysis, quality problem solving and implementation. Prerequisites: Junior status or consent of instructor.

TADT 4879 Service Process/Improvement (3 credits)

The design and improvement of work processes in the service industries and in the service functions of manufacturing organizations. Topics include, but are not limited to, the tools and techniques required for designing, setting up, and managing service systems; improving service quality; the impacts of technology on service management; managing nonprofit service organizations; services strategies; and the positioning and marketing of services. Prerequisites: Junior status or consent of instructor.

TADT 4880 Total Quality Management (3 credits)

Total Quality Management is the latest evolutionary culmination of strategies for meeting customer expectations in terms of quality. Besides the traditional tools of quality, this course also investigates how developing an inclusive organizational culture, internal and external partner relationships, and truly understanding the needs and wants of the customer can be leveraged in today's globally competitive environment. Prerequisites: TADT 1111 or TADT 3111.

TADT 4887 Career Development Theory and Practice (2 credits)

A course designed to acquaint professionals with the various phases of lifetime career development. Strategies are reviewed to provide a comprehensive understanding of career awareness and the role that it plays in the life of each individual and society. Prerequisites: Junior status or consent of instructor.

TADT 4888 Work/Occupational Assessment of Learners (2 credits)

An investigation of the use of informal and formal techniques used in the design and implementation of occupational assessment with school systems. Prerequisites: Junior status or consent of instructor.

TADT 4889 Coordination Techniques of Career and Technical Education (2 credits)

The course involves the role of teacher-coordinators in the design and implementation of internships and other cooperative experimental learning methods. Prerequisites: Junior status or consent of instructor.

TADT 4893 Applied Project Management (3 credits)

This course is intended to provide the learner with the opportunity to apply project management principles and methodology to complete a real-world project in alignment with established objectives, standards, and deadlines. In addition, elements of leadership principles and practices will be applied to support team development and project success. Prerequisite(s): (TADT 1111 or TADT 3111) and TADT 3112 or consent of instructor.

TADT 4898 Simulation of Industrial Processes (3 credits)

Application of computer-based, discrete event simulation to improve or design work processes in business and industry. Emphasizes building mathematical systems models of work processes to be analyzed and optimized using simulation software such as, but not limited to, Promodel or Arena. Two hours lecture and two hours computer lab per week. Prerequisites: Junior status or consent of instructor.

TADT 4899 Design of Experiments (3 credits)

Planning, execution, and analysis of factorial-based industrial experiments. Topics include, but are not limited to, analysis of variance, fitting of regression models, two-level factorial designs, blocking strategies and confounding of variables, fractional factorial designs, response surface methods, nested and split-plot designs, three-level and mixed-level designs, and experiments with random factors. Prerequisites: Junior status or consent of instructor.

TADT 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

TADT 4970 Internship (1-12 credits)

Prerequisites: Junior status or consent of instructor.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the

completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

University Studies

University Studies consists of various courses whose subject content is too interdisciplinary to be considered part of any one discipline. These courses not only serve to complement other course offerings, but also may play an important part in various majors and minors.

University Studies Courses

UNIV 1180 TRIO/SSS College Orientation (1 credit)

For TRIO/SSS eligible students, this course offers a complete orientation to the university, including academic, personal, and social concerns. Through departmental tours, guest lectures, and various other assignments, students gain a sense of community and knowledge that will help them become a successful college student.

UNIV 1190 First Year Experience Seminar (1 credit)

Designed to support the freshman transition to college, this seminar establishes the core academic skills, social competencies, and values that enable students to excel within the university community. The seminar's ultimate goal is to enhance and enrich the student experience so that students may develop a sense of citizenry and derive the maximum benefit from the intellectual and social opportunities of college life. This is achieved through integrating extracurricular, curricular, and co-curricular offerings within the course content. Faculty lectures, professional staff presentations, and diverse field experiences supplement seminar topic areas.

UNIV 1199 Critical Reading and Analysis (2 credits)

A course designed to provide students with the opportunity to apply their reading skills in the analysis, synthesis, and evaluation of content and other reading material.

UNIV 1200 TRIO/SSS Life Career Planning (2 credits)

Designed to give students an opportunity to use critical thinking skills, group interaction, and assignments and presentations to explore and analyze their values, skills, interests, and career goals. This course enables students to explore areas of interest or to focus on an already established area of interest by providing time to research national and regional employment trends, salaries, and employment outlooks. Key elements of the course include values clarification exercises, ethics on the job, job shadowing, a service learning component, and interest and personality inventories. Several career assessments are administered and analyzed, including ACT Discover, Self-Directed Search (SDS), Myers Briggs Type Indicator (MBTI), and Fundamental Interpersonal Response Orientation-Behavior (FIRO-B). Upon completion of the course, students can describe the process of career development, discuss the role that their values, interests, and abilities play in their career decision making, and focus their academic career toward an area of interest worthy of continued exploration.

UNIV 1995 Northern Connect (0 credit)

For NCTC students that would allow access to rec center, library, DII games, OPC prior to matriculating. Part of Northern Connect program (dual admission)

UNIV 1996 Athletic Fee (0 credit)

For BSU/NTC students wanting access to BSU Athletic Events at the student rate. Students automatically have access to Athletic Events at the student rate if registered for 3 or more on-campus credits.

UNIV 1997 Health Services Fee (0 credit)

For BSU/NTC students wanting access to BSU Health Services. Students automatically have access to Health Services if registered for 3 or more on-campus BSU credits.

UNIV 1998 Student Activity Fee (0 credit)

For BSU/NTC students wanting access to BSU Activities. Students automatically have access to Activities if registered for 3 or more on-campus BSU credits.

UNIV 1999 Super Fee (0 credit)

For BSU/NTC students wanting access to BSU Health Services, Activities, and Athletic Events. Students automatically have access to these services if registered for 3 or more on-campus BSU credits.

UNIV 3000 Interdisciplinary Research Methods (3 credits)

An introduction to research methods, including development of research proposals, theory of research, data acquisition, and analysis within multiple disciplines. Prerequisites: Junior status and consent of instructor.

UNIV 3010 Effective Presentation of Research Results (3 credits)

Methods of effectively presenting research results in oral, written, and poster formats. Prerequisites: UNIV 3000, Junior status, and consent of instructor.

UNIV 3100 College to Career (1 credit)

Focus on career and internship development, and enhancement of job seeking skills. Emphasizes resume and cover letter writing, the art of interviewing, negotiating salaries, dressing for success, dining etiquette, and the overall transition from student to professional. Open to all majors seeking internships and applying for full-time employment or graduate/professional school. Prerequisite: Junior or senior status; sophomore status with consent of instructor.

UNIV 3200 Capstone for TRIO students (3 credits)

This course is designed to assist students in obtaining positions consistent with their career goals. Time will be spent on exploring job search strategies, applying, and obtaining positions that play to their strengths and expand their professional skill sets. Emphasis is put on career readiness by practicing the job search process. The topics of networking, professional resume writing, successful interview techniques and follow-up strategies are topics covered during the course. Exploring online sites for job searching and ideas regarding the management of your future career path will also all be addressed.

UNIV 3910 Directed Independent Study (1-2 credits)

Arranged individual study

UNIV 3931 Experimental Course (3 credits)

A course proposed for inclusion in the University curriculum. May not be offered more than two times as an experimental course.

UNIV 3970 Internship (3 credits)

Internship

UNIV 4910 Independent Study (1-2 credits)

Arranged individual study.

UNIV 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

UNIV 4970 Internship (3 credits)

Internship

All-University Courses

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