

# 2020-2021 Northland Catalog

## Welcome

This online catalog can help you quickly locate and save details about undergraduate programs. Whether you are a prospective student or already enrolled, you can easily see what Northland College has to offer.

## About the Northland Catalog

Students are assigned to the catalog that is in force at the time of their first entry into Northland College. Students entering in the fall of a new catalog cycle are assigned to the new catalog. For example, a student entering in September of 2019 is assigned to the 2019 catalog, not the 2018 catalog.

Students wishing to declare a major or minor in a catalog newer than the one to which they are assigned may move forward into a newer catalog with their advisor's approval by completing a Catalog Change Form. Once a student adopts a new catalog, all rules and policies in the newer catalog go into effect for that student. Students are not allowed to move backward to adopt an older catalog.

Sometimes it becomes necessary for the faculty in a department to make changes to a major or minor as it is published in the official catalog. This may be due to a correction of a typographical error or because of changing dynamics within departments. These updates are not made in the original catalogs as they appear here. Changes are processed and made public through Academic Council and are recorded by the Registrar's Office. Students should check with the Program Coordinator to help determine how to meet the requirements of any catalog changes that may affect their status. Please do not hesitate to ask your advisor or someone in the Registrar's Office if you have any questions relating to academic policy or your academic progress.

## Disclaimer

Every effort has been made to assure the accuracy of the information in this publication. However, provisions of this publication are subject to change without notice and do not constitute an irrevocable contract between any student or applicant for admission and Northland College. The College is not responsible for any misrepresentation of its requirements or provisions that might arise as a result of errors in the preparation of this publication.

## Courses

### Art

#### **ART 106 - Intro to Visual Communication**

**3 Credits** This hands-on course examines the fundamental elements and principles of two-dimensional and three-dimensional composition and encourages students to explore traditional methods and discover new solutions to visual problems. This is a foundational course to all fields of visual study.  
Course Fee.

#### **ART 111 - Drawing I**

**3 Credits** Students explore the human impulse to make a mark on the world through an active seeing and recording of the world on a two-dimensional surface. By developing skills that allow them to work from direct observation, students establish a foundation for personal imagery that prepares them to work with a variety of techniques and media.  
Course Fee.

### **ART 112 - Drawing by Nature**

**3 Credits** This is a non-studio course where students explore the human impulse to make a mark on the world through an active seeing and recording of the world on a two-dimensional surface. By developing skills that allow them to work from direct observation, students establish a foundation for personal imagery that prepares them to work with a variety of techniques and media. On-site drawing locations chosen by the instructor will include urban and rural subjects. The student will develop an ability to make effective choices concerning media, techniques, subject matter, methods of interpretation, and compositional design.  
Course Fee.

### **ART 209 - Art + Community**

**3 Credits** Students learn the theory and history of art as social practice while planning and executing one or more community based art projects in Ashland, Wisconsin. Participants engage with the questions: What is art? What is community? And how can art function as a tool of social change?  
Course fee

**General Education Discipline:** Experiential or Humanities

### **ART 210 - Painting I**

**3 Credits** Students experience the capacities of oil and/or acrylic media on canvas. Students complete a series of studio exercises focused on color theory and direct observation leading to a personal aesthetic.  
Course Fee.

**Prerequisites:** ART 111

### **ART 212 - Drawing II**

**3 Credits** Students continue exploring and refining skills presented in Drawing I with more emphasis on the relationship between form, subject matter, and content leading to intelligent, self-directed creation. Students will be introduced to abstraction as a vehicle for expressive mark making.  
Course Fee.

**Prerequisites:** ART 111

### **ART 220 - Ceramics I**

**3 Credits** This course gives students the ability to form clay through basic hand building and beginning wheel throwing. Student also practice finishing and glazing their work while learning to assess the quality of three-dimensional forms, use basic ceramic tools and machinery, as well as develop processes for creative thinking.  
Course Fee.

**General Education Discipline:** Arts & Humanities

### **ART 222 - Ceramics Handbuilding**

**3 Credits** This ceramics course focuses on off-wheel forming methods that do not rely on the potter's wheel. Students practice structural techniques that will enable them to create unique and singular forms of expression in the clay

medium.  
Course Fee.

### **ART 225 - Introduction to Film**

**3 Credits** This course provides an introduction to American cinematic arts, its production methods, and broader cultural implications. Students develop a deeper appreciation and critical understanding of motion pictures by exploring styles, structures, techniques, aesthetic, and cultural implications of American films.

**General Education Discipline:** Humanities

### **ART 226 - 3D Printing in Clay**

**3 Credits** Students learn to use 3D modeling and slicing software to create printable objects. These objects will be designed based off of the study of the elements and principles of design. Students then take their designs and learn to print them on a clay 3D printer. Students will learn about the working and maintenance of the specialized 3D printer. Students learn to finish their pieces through ceramic firing and glazing.

Course fee.

### **ART 230 - Art History Ancient to Medieval**

**3 Credits** In this class students gain a greater understanding of Western Art History from the Neolithic to the beginning of the Renaissance. Using the text and online resources "Gardner's Art Through the Ages" students study works from the Stone Age, Ancient Egypt, Ancient Greece, Ancient Rome, the Early Christian era, the Medieval era, and the Gothic era, among others. Students will also study a brief survey of non-western art before 1200 CE. Art is as much about the cultural shifts surrounding the making as it is about the pieces themselves. In this class you will learn about great artists, art works, and the social forces that brought them about.

**General Education Discipline:** Arts and Humanities

### **ART 231 - Art History Renaissance to Modern**

**3 Credits** In this class students gain a greater understanding of Western Art History from the Renaissance to the beginning of the Modern Era. Using the text and online resources "Gardner's Art Through the Ages" students study Renaissance, Baroque, Rococo, Neoclassicism, Romanticism, Realism, and Photography, among others. Students will also study a brief survey of non-western art after 1200 CE. Art is as much about the cultural shifts surrounding the making as it is about the pieces themselves. In this class you will learn about great artists, art works, and the social forces that brought them about.

**General Education Discipline:** Arts and Humanities

### **ART 232 - Contemporary Art History**

**3 Credits** In this class students gain a greater understanding of Western Art History from Impressionism to the 21st century. In the first part of the semester, students study cubism, fauvism, expressionism, surrealism, abstract expressionism, pop art, minimalism, conceptual art, post-modernism, and environmental art. In the second part of the semester, students explore the last 30-40 years of worldwide art through eight recurring themes: identity, the body, time, memory, place, language, science, and spirituality.

**General Education Discipline:** Arts and Humanities

### **ART 262 - Digital Photography I**

**3 Credits** This studio course introduces students to the basic principles and applications of digital photography as a medium, a skill-set, and an integral part of today's digital literacy needs. Topics covered include capturing images using

digital cameras while emphasizing the manipulation of camera controls, exposure, lighting, on-and-off camera flash, essential imaging tactics, digital workflow for photography, print, web and image storage and archival. Students are required to have a digital SLR camera.

Course Fee

### **ART 270 - Printmaking: Relief and Intaglio**

**3 Credits** The focus of this studio class is on relief and intaglio processes including woodcut, linoleum cut, drypoint, hardground, softground, and aquatint. Lectures and readings put printmaking in historical and contemporary contexts to help students achieve personal aesthetic goals. Low toxic processes are used when possible.

Course Fee.

**Prerequisites:** ART 111

### **ART 271 - Printmaking: Screen Printing and Lithography**

**3 Credits** The focus of this studio class is on screen printing and lithographic processes including hand-cut stencils, photo stencils, stone and polyester plate lithography. Lectures, and readings put printmaking in historical and contemporary contexts to help students achieve personal aesthetic goals. Low toxic processes are used when possible.

Course Fee.

**Prerequisites:** ART 111

### **ART 280 - Graphic Design I**

**3 Credits** This foundational course in graphic design guides students in developing and expanding their vocabularies in visual communication. Utilizing basic design elements and principles students explore graphic solutions for communication problems through digital and traditional tools. Emphasis is placed on research and idea generation as students learn to analyze and discuss their work as well as that of others, as they become familiar with the theoretical and practical aspects of the graphic design process. Creative studio practice is combined with lectures, readings, and software training.

Course Fee

### **ART 282 - Web Design I**

**3 Credits** This course is an introduction to concepts, methods, and technologies utilized in the design of interactive media. Students study user and site requirements and address design problem solving within screen-based projects developed for various content, needs, and audiences. Creative studio practice is combined with lectures, readings, and software training.

Course Fee

### **ART 285 - Typography**

**3 Credits** This class explores creative, historical, theoretical, and applied principles of type. Creative projects and exercises guide students to explore the impact of choosing typefaces, their combinations, and the expressive possibilities of type. Students also develop skills to enhance, clarify, and support meaning through typographic choices. Creative studio practice is combined with lectures, readings, and software training.

Course Fee

**Prerequisites:** ART 106

### **ART 306 - Art Collaborations with Nature**

**3 Credits** Students create environmental and ecological art using natural materials, responding to nature and mitigating environmental problems. After surveying examples of art from indigenous peoples to recent ecologically restorative works, students create outdoor, ephemeral works of art using nature itself.

**General Education Discipline:** Humanities or Experiential

**Prerequisites:** ART 106, ART 111, or ART 260 and Junior Standing recommended

## **ART 320 - Ceramics II**

**3 Credits** This course is a continuation of ART 220. This intermediate level course gives students a stronger ability to form clay, assess the quality of three-dimensional forms, use basic ceramic tools and machinery, as well as develop processes for creative thinking. Students focus on building technical skills, time management skills, and multi-tasking while exploring concepts more in depth. Students also gain basic knowledge of kiln firing and clay and glaze formulation.

Course Fee.

**General Education Discipline:** Arts & Humanities

**Prerequisites:** ART 220

## **ART 370 - Printmaking II**

**3 Credits** Students choose one of the processes introduced in ART 270 (relief, serigraphy, lithography, or intaglio) and explore it more deeply. Coursework includes an emphasis on color registration, autographic, photographic, and digital processes that result in a personal creative statement. (This course may be repeated for credit with instructor approval.)

Course Fee.

**Prerequisites:** ART 270 or ART 271

## **ART 380 - Graphic Design II**

**3 Credits** This intermediate course in graphic design builds on the skills and concepts learned in Graphic Design I. Students have an opportunity to work on design problems with professional clients. Creative studio practice is combined with lectures, readings, and software training.

Course Fee

**Prerequisites:** ART 280

## **ART 382 - Web Design II**

**3 Credits** This advanced interactive design course allows students to put their understanding and training to use by working with clients to solve real world design problems. Creative studio practice is combined with lectures, readings, and software training.

Course Fee

**Prerequisites:** ART 282

## **ART 385 - Graphic Design History**

**3 Credits** Students explore the history and theory behind the evolution of graphic design, with a particular focus on the past 100 years.

Course Fee

**Prerequisites:** ART 280

## **ART 402 - Senior Exhibition**

**1 Credits** Students install, promote an exhibition of their work, and create a statement reflective of their development as a Northland College art student.

**Prerequisites:** Instructor Consent

### **ART 403 - Senior Seminar**

**3 Credits** Students develop standards for aesthetic judgments and gain insight into their own creative potential through the study and discussion of the theories of the character and functions of art and artists' perceptual, conceptual, and motivational processes. Students learn guidelines for portfolios, resumes, and professional display and documentation of artwork.

Course Fee.

**Prerequisites:** Art major or minor and Junior or Senior Standing

### **ART 420 - Ceramics III**

**3 Credits** This is a continuation of ART 320. In this intermediate/advanced level course students focus heavily on concept, while improving and deepening their technical skills, time management skills, and multi-tasking skills. Students also build on their knowledge of kiln firing and clay and glaze formulation.

Course Fee

**Prerequisites:** ART 320

### **ART 470 - Printmaking III**

**3 Credits** Students continue to explore and begin to develop technical mastery of a printmaking process that they worked with in ART 370 Printmaking II. Students also develop an understanding of printmaking history in fine art and of its relationship to commercial processes.

Course Fee.

**Prerequisites:** ART 370

### **ART 480 - Graphic Design III**

**3 Credits** This advanced course in graphic design builds on the skills and concepts learned in Graphic Design II while working with clients to solve real world design problems. Creative studio practice is combined with lectures, readings, and software training.

Course Fee

**Prerequisites:** ART 380

## **Biology**

### **BIO 115 - Concepts of Biology**

**4 Credits** Students learn the basic principles of biology, from basic cell chemistry, energetics, and genetics, to the broader environmental topics of evolution and ecology. The laboratory focuses on the development of skills needed by biological scientists and emphasizes analytical thinking.

Course fee

**General Education Discipline:** Natural Science

### **BIO 128 - Natural History and Conservation in the Lake Superior Watershed**

**3 Credits** Part of the Superior Connections Program, this course introduces students to the natural history, conservation, and restoration of the region's natural resources. Students begin by studying the general natural history of the Lake Superior region, and then focus on regional conservation biology issues. The course concludes with an examination of restoration from ecological, economic, and philosophical perspectives.

Course fee

**General Education Discipline:** Natural Science

**Corequisites:** ENG 126, GSC 112, IDS 120 , and NAS 160 .

### **BIO 208 - Anatomy**

**4 Credits** This course provides an overview of mammalian anatomy, with an emphasis on human anatomy. In the laboratory, students engage in dissections and work with models in order to apply what they learn in lecture.

Course Fee

**Prerequisites:** BIO 115

### **BIO 222 - Spring Flora**

**4 Credits** Students participate in a taxonomic study of plants commonly found in northern Wisconsin, with a focus on early flowering shrubs, spring wildflowers, and ferns.

Course Fee.

**Prerequisites:** BIO 115 or BIO 128

### **BIO 224 - Entomology**

**4 Credits** Students study the biology, ecology, taxonomy, and management of insects and related arthropods.

Laboratory work will focus on collection, identification, and preservation of arthropod specimens.

Course Fee

**Prerequisites:** BIO 115 or BIO 128

### **BIO 225 - Aquatic Invertebrates**

**4 Credits** This course is a survey of the natural history, ecology, and taxonomy of freshwater invertebrates, with an emphasis on local animals. Students are required to collect invertebrates, prepare a specimen collection, and gain proficiency in identifying animals by sight and keying.

Course Fee.

**General Education Discipline:** Experiential

**Prerequisites:** BIO 115 or BIO 128

### **BIO 226 - Field Parasitology**

**4 Credits** Students will study symbiotic relationships such as parasite population, life cycles, and taxonomy. The course is designed to provide a broad exposure to methods of collecting and identification of parasites, data collection and analysis, presentation of results, as well as the ecology of infectious organisms.

Course fee

**Prerequisites:** BIO 128 or BIO 115.

### **BIO 231 - Paleobiology**

**4 Credits** In this course students explore the history of life on earth, the interplay between geological and biological processes, and the tools scientists use to study the fossil record. There is one, multi-day field trip to a paleontological museum.

Course Fee

**Prerequisites:** BIO 115 or BIO 128

## **BIO 234 - Ecology**

**4 Credits** This course is an introduction to the study of ecology, including the topics of energy flow, trophic structure, nutrient cycles, population dynamics, and adaptations. Students experience the study of ecology through numerous local field experiences leading to the collection and analysis of data.

Course Fee.

**General Education Discipline:** Natural Science

**Prerequisites:** BIO 115 or BIO 128

## **BIO 235 - Biology of Organisms**

**4 Credits** This course introduces students to organismal biology, specifically focusing on plants and animals. Major topics include basic anatomy, physiology and phylogenetic relationships.

Course Fee.

**General Education Discipline:** Natural Science

**Prerequisites:** BIO 115 or BIO 128

## **BIO 236 - Microbes, Humans, and the Environment**

**3 Credits** Through an overview of microbiology, virology, immunology and biotechnology, students develop an understanding about the spread of disease-causing microbes in an environment created by a technological society, the creation of genetically engineered organisms, and the use of microbes to solve environmental problems and generate useful products.

Course Fee.

**General Education Discipline:** Natural Science

**Prerequisites:** BIO 115 or BIO 128

## **BIO 237 - Embryology**

**3 Credits** Students in this course will examine embryonic development from a comparative standpoint. Topics include gametogenesis and fertilization, cell division and growth, and shared developmental processes such as gastrulation, neurulation, morphogenesis, and organogenesis. Emphasis in lecture and lab is on classical principles of embryonic development, while also beginning to integrate more modern molecular signaling.

Course Fee

**General Education Discipline:** Natural Science

**Prerequisites:** BIO 115 or BIO 128

## **BIO 238 - Cell Biology**

**4 Credits** Students study life at the cellular and molecular levels. Lecture topics include: structure of biological molecules, metabolism, gene expression, cell signaling, the cell cycle, and cell death. Additional topics include structure, function, and dynamics of cellular components such as membranes and the cytoskeleton. The biology laboratory emphasizes cell visualization and acquisition of skills in basic molecular techniques.

Course Fee.

**General Education Discipline:** Natural Science

**Prerequisites:** BIO 115 or BIO 128

### **BIO 242 - Ichthyology**

**4 Credits** In this course students study the biology, ecology, taxonomy, and management of fish, with a focus on Great Lakes and northern Wisconsin fishes.

Course Fee.

**Prerequisites:** BIO 115 or BIO 128

### **BIO 244 - Field Ornithology**

**4 Credits** In this field-intensive course, students learn to identify birds of northern Wisconsin by sight and sound. To maximize exposure to birds in the area, the course includes daily field excursions to a variety of habitats. Discussion of the natural history of birds is also an integral part of the course.

Course Fee.

**General Education Discipline:** Natural Science or Experiential

**Prerequisites:** BIO 115 or BIO 128

### **BIO 245 - Mammalogy**

**4 Credits** Students study the biology of mammals with an emphasis on evolution, population structure, reproduction, and physiological adaptations. Lab sessions focus on morphology and general taxonomy of local mammals.

Course Fee.

**Prerequisites:** BIO 115 or BIO 128

**Corequisites:** BIO 234

### **BIO 246 - Ornithology**

**4 Credits** This course introduces students to avian anatomy, physiology, behavior, ecology, systematic, and conservation. The lab surveys the major orders of birds. Local field trips are required.

Course Fee.

**Prerequisites:** BIO 115 or BIO 128

### **BIO 309 - Evolutionary Biology**

**3 Credits** This course covers evolutionary biology from large to small scale processes. Students study population genetics, selection, speciation, coevolution, phylogenetics, and phenotypic evolution. Labs explore evolution in action.

Course Fee.

**Prerequisites:** BIO 234, BIO 235 or BIO 238

### **BIO 328 - Vegetative Communities of Northern Wisconsin**

**4 Credits** Students study the community structure, taxonomy, and natural history of woody plant species which comprise the plant communities in the Upper Great Lakes Region. Lecture and discussions are complemented by weekly field trips to various plant communities.

Course Fee.

**Prerequisites:** BIO 234 and junior standing.

### **BIO 330 - Genetics**

**4 Credits** This course integrates the classical and molecular principles of genetics. Topics include transmission, population, conservation, and quantitative genetics, as well as gene expression, regulation, and mutation. Problem solving is emphasized.

**Prerequisites:** BIO 234

### **BIO 331 - Microbiology**

**4 Credits** Students develop a solid background in microbiology and study the physiology, ecology, molecular biology, and phylogeny of microbial organisms, as well as the impact of these organisms on human health and the environment. In the laboratory, students acquire skills in culturing, characterizing, and quantifying microorganisms.

Course Fee.

**Prerequisites:** BIO 238

### **BIO 335 - Developmental Biology**

**4 Credits** A survey of animal development at the molecular, morphological, and evolutionary levels. Topics include genetic regulation, pattern formation, and morphogenesis. Lab exercises include both procedures and morphological analysis.

Course Fee.

**Prerequisites:** BIO 238

### **BIO 343 - Biology of AIDS**

**3 Credits** This course provides a survey of the biology of HIV infection. Topics include the retrovirus life cycle, the impact of HIV on the immune system, viral transmission, diagnosis of HIV and symptoms of AIDS, and epidemiology of the disease. Students also discuss the social and political dimensions of the AIDS epidemic and present on a topic of their choice.

**Prerequisites:** BIO 115 or BIO 128

### **BIO 360 - Vertebrate Physiology**

**4 Credits** This course focuses on the fundamental principles of animal physiology, such as circulation, digestion and respiration. It also emphasizes the comparative approach and interactions of the organism with its environment.

Course Fee.

**Prerequisites:** BIO 234

### **BIO 370 - Applied Conservation Biology**

**3 Credits** Part of a Round River field experience. This course introduces students to the application of scientific principles to inform interdisciplinary protection and management of biological diversity. Topics include population ecology, landscape ecology, community ecology and genetics, as well as social, economic and community-related aspects of conservation.

**General Education Discipline:** Experiential

**Prerequisites:** BIO 115 or BIO 128 and Admittance to the Round River Program

### **BIO 371 - Natural History Methodology and Application**

**3 Credits** Part of a Round River field experience. This course provides an overview of the physical and biological features of a specified habitat with an emphasis on discerning patterns and processes on the landscape. Students adhere to a rigorous field journal system to record and understand the flora and fauna of a place, and make regular use of diagnostic field guides.

**General Education Discipline:** Experiential

**Prerequisites:** BIO 115 or BIO 128 and Admittance to the Round River Program

### **BIO 372 - Biological Field Methods**

**3 Credits** Part of a Round River field experience. This course introduces students to a variety of methodologies for the study of plant and animal populations. Topics include field journal techniques, ecological field research methodologies and rationales, and field safety and risk management.

**General Education Discipline:** Experiential

**Prerequisites:** BIO 115 or BIO 128 and Admittance to the Round River Program

### **BIO 410 - Conservation Biology**

**3 Credits** Students build on ecological principles learned in other courses, with a particular emphasis on how to apply more advanced ecological theory and concepts in natural ecosystems. Primary goals of the course include understanding 1) how natural ecological systems behave in a human dominated world and 2) methods conservation biologists use to maintain and/or enhance biological diversity. Topics include population genetics, population biology, community ecology, behavioral ecology, ecosystem ecology, and conservation policy.

**Prerequisites:** BIO 234

### **BIO 420 - Methods in Molecular Biology**

**4 Credits** Students examine the laboratory techniques used to study how higher organisms maintain and express genetic information. The course emphasizes model organisms and their responses to environmental stimuli; topics include DNA and RNA isolation, PCR, gene cloning and manipulation, analysis of gene expression, conservation genetics, and bioinformatics. Laboratory only.

Course Fee.

**Prerequisites:** BIO 238 and sophomore standing.

### **BIO 473 - Limnology**

**4 Credits** Students study the functional relationships of freshwater communities as they are affected by their physical, chemical, and biological environments. Students perform limnological studies using techniques gained through field and lab experiences.

Course Fee.

**Prerequisites:** BIO 234 and CHM 103, CHM 105, CHM 108, or CHM 110.

### **BIO 480 - Biology Senior Seminar**

**3 Credits** In a seminar format, students discuss primary literature, develop a research proposal on a topic of their interest, and give an oral presentation on their proposal. Students may conduct research based on their proposal by registering for the biology capstone.

**Prerequisites:** Biology major and Senior Standing

## **Business**

### **BUS 120 - Quantitative Methods**

**3 Credits** Problem-solving approach to systems of equations, matrix algebra, mathematics of finance and optimization techniques. Modeling applications in the managerial and social sciences. Recommended three years of high school

mathematics.

**General Education Discipline:** Quantitative Reasoning

### **BUS 136 - Financial Literacy for Everyone**

**3 Credits** Students gain understanding of daily personal finance choices and decision making, including the purpose of credits cards, forms of investment, and impacts of associated risks. Students learn financial planning, budgeting, retirement plans, debt management, taxation, and investment options based on their profiles. Students further acquire knowledge of Excel formulas to create their personal financial projections through effective planning, budgeting and consistent implementation of learned strategies.

### **BUS 168 - Technology and Communication**

**3 Credits** This project-based course introduces students to contemporary business issues surrounding communication and technology. Students build a basic technical vocabulary to better understand current computing technology, as well as to develop computer literacy skills to adapt to emerging technologies in the global marketplace. Students enhance reading, writing, computing, professional communication, and reasoning skills and apply them to the business environment.

### **BUS 222 - Fundamentals of Accounting**

**4 Credits** Students acquire background in accounting, including treatment of sole proprietorship, partnership, and corporate forms of business organization. The course emphasizes accounting procedures used in interpreting, analyzing, and evaluating financial statements. Topics include accounting for assets, liabilities, owners' equity, and merchandising concerns as well as preparation of the four basic financial statements.

### **BUS 226 - Essentials of Economics**

**4 Credits** This course combines the basic aspects of macroeconomics and microeconomics to develop the fundamental skills of economic thinking. Students examine the relevance of economics to society and the interaction between politics and economics. Students complete the course understanding that economics is neither business nor finance but that knowledge of economics is vital to understanding these fields.

**General Education Discipline:** Social Science

### **BUS 228 - Marketing Management**

**3 Credits** Students study basic marketing principles and functions as well as competitive, legal, economic, and social environments and their effects on strategic planning, analysis, and decision making. Topics emphasized include market segmentation, product development and management, distribution, promotion, and pricing strategies. The focus of the course is on the application of marketing concepts in businesses and non-profit organizations and the construction of a strategic marketing plan.

**General Education Discipline:** Social Science

### **BUS 229 - Small Business Management**

**3 Credits** Students study practical approaches to the organization and management of a small business or non-profit organization. Major areas of study include starting, financing, managing, and operating a small business or non-profit organization. The focus of the course is on the application of small business management concepts and the construction of a small business plan.

**General Education Discipline:** Social Science

## **BUS 230 - Leadership: Theory and Application**

**3 Credits** This course is designed to introduce students to the theory and practice of the concept of leadership and its component elements. Students will study traditional and contemporary leadership theories, styles and practices. The course will move students from theoretical learning to practical organizational application by having them apply topical concepts to the analysis of both profit and non-profit organization as viewed through the leader's holistic perspective. Leadership skill development will be done through the use of class discussions, case analysis, problem solving exercises, and oral and written presentations. Emphasis will be placed on interpersonal communicative skill development in leadership settings.

**Prerequisites:** Sophomore standing

## **BUS 232 - Principles and Practice of Management**

**3 Credits** Students learn how to achieve desired results through efficient utilization of human and material resources in a profit or non-profit setting. The course emphasizes the history of management and the functions of planning, organizing, staffing, directing, and controlling enterprises.

**General Education Discipline:** Social Science

## **BUS 235 - Introduction to Sustainable Business**

**3 Credits** This course presents a study of the Triple Bottom Line concept; organizational profitability, environmentalism, and social responsibility. This course explores the relationship between businesses, the community, and managing the future to achieve environmental quality. It also examines the principles and practices of the sustainable organization. Liberal Education: Environmental Perspectives.

## **BUS 237 - Environmental Marketing**

**3 Credits** This course introduces general principles of marketing within the context of environmentally focused organizations. Students learn to develop integrated marketing plans that are targeted at enhancing an organization's market effectiveness through environmentally responsive marketing mix.

**Prerequisites:** Sophomore standing

## **BUS 301 - Operations Management**

**3 Credits** Students study organizational operations from various business perspectives. The course focuses on cost-effective production and delivery of goods and services. Students learn to design, operate, and improve the systems and processes that deliver goods and services through profitable operations management tools such as process flow diagrams, lean management, and decision trees.

**Prerequisites:** BUS 232, ECN 263 and sophomore standing

## **BUS 311 - Social Innovation & Impact**

**3 Credits** Students develop a conceptual and applied understanding of social impact ventures. Students learn the knowledge, skills, and attitudes required to challenge assumptions, generate and communicate innovative ideas, and ultimately provide sustainable solutions to social problems. The course examines processes and strategies of social innovation through different organizational platforms applicable to private, public and non-profit sectors.

**Prerequisites:** junior standing

## **BUS 312 - Economics for Managers**

**3 Credits** Students study the decision-making processes that involve the economic activities of a firm. They develop tools and techniques for generating cost, demand, and other information that contributes to decision making. Specific topics include consumer behavior, production, cost and pricing analysis, and market structure.

**Prerequisites:** BUS 226 and BUS 120 or MTH 107

### **BUS 320 - Intermediate Quantitative Methods**

**4 Credits** Students learn data analysis and statistical computing, equally and progressively used in the social sciences and human services. The course focuses on the application of quantitative reasoning, conception, and raw data analysis. Students are empowered with practical tools for weighing statistical prerogatives and steering their own statistical analyses. Topics includes descriptive measures, measures of relationship, sampling and sample size estimation, and simple linear regression.

**Prerequisites:** MTH 107

### **BUS 326 - Global Business Management**

**3 Credits** Students explore and analyze internal and external factors that affect a global business enterprise. The course focuses on the development of necessary changes and strategies needed in accounting, finance, marketing, management, and production for a business to be competitive in the global marketplace. Topics presented emphasize profit-making businesses, but students also study the management of non-profit organizations in other cultures and countries.

**Prerequisites:** ECN 263 and sophomore status

### **BUS 327 - Marketing for Sustainability**

**3 Credits** Students learn about the socially-conscious sub-disciplines of marketing. The course challenges the idea that marketing plays only a commercial role in the economy, emphasizing the impact of modern marketing on consumer welfare and society. Students develop integrated marketing plans that seek to shape the conservation ethic of an organization's individual members and their communities through an environmentally and socially responsive marketing mix.

**General Education Discipline:** Environmental Narratives

**Prerequisites:** BUS 232 and sophomore standing.

### **BUS 330 - Managerial Finance**

**3 Credits** Students study the theory and practice of financial management. Topics include asset management, internal financing, short-term and intermediate financing, capital budgeting, and risk analysis.

**Prerequisites:** BUS 168, BUS 222, and ECN 263

### **BUS 338 - Human Resource Management**

**3 Credits** Students focus on the various functions of HRM in profit and non-profit organizations. Topics studied include selection, training, recruiting, developing employees, wage and benefit management, unions and employee relations, performance appraisal, and employee law.

**Prerequisites:** BUS 232 and Junior Standing

### **BUS 340 - Social Media Marketing**

**3 Credits** Students study the macro-environmental issues affecting social media and the marketing application of emerging social media strategic tools. Students learn to set objectives, integrate social media into overall marketing and communication plans, measure program outcomes, and to utilize new media technologies. The class includes hands-on

development of social media tactics and may require learners to sign up for social media accounts.

**Prerequisites:** BUS 168 and BUS 228

### **BUS 342 - Business and Public Policy**

**3 Credits** Students examine the relationship between government and business, identifying the primary external factors that influence public policy choices. The course assesses how legal, regulatory, and policy changes affect business organizations and how organizations respond to such changes through public issue management and social responsibility.

**General Education Discipline:** Social Science

**Prerequisites:** ECN 263 and junior standing

### **BUS 344 - Ethical Leadership**

**3 Credits** This course examines business behavior in the context of moral philosophy. The course emphasizes philosophical theories of morality and relates these theories to leadership and decision making in business organizations.

**General Education Discipline:** Social Science

**Prerequisites:** IDS 105

### **BUS 346 - Social Entrepreneurship**

**3 Credits** This course is structured around the general field of social entrepreneurship, business structures that social entrepreneurs typically follow in starting as well as managing a social enterprise. Students examine leadership characteristics of social entrepreneurs, how social enterprises are sustained financially, and how social entrepreneurs create and spread innovation and social change.

**Prerequisites:** BUS 232

### **BUS 358 - Innovation and Creativity**

**3 Credits** Students develop a conceptual and applied understanding of organizational innovation by examining the institutional contexts that foster or impede innovation. Students also become familiar with the key organizational characteristics associated with innovation and creativity applicable to both for and not-for-profit organizations. Ultimately, students are prepared to manage innovation and foster creativity within organizations.

**Prerequisites:** Junior Standing

### **BUS 359 - Entrepreneurship**

**3 Credits** The course is designed to stimulate entrepreneurial thinking among students and help them recognize opportunities that can be converted into successful ventures using the principles and best practices of management. Students will learn application of marketing, finance, ethics, and human resource concepts. Special emphasis is placed on providing hands-on experience of developing comprehensive business plan.

**General Education Discipline:** Social Science

**Prerequisites:** Junior Standing

### **BUS 360 - Grant Writing**

**3 Credits** In this introductory course, students will learn grant writing basics. Students will develop a program in an area of personal interest; practice pre-writing exercises; write sections of a proposal and a letter of inquiry; and prepare budgets. The emphasis in the course is on grant writing for program support, program development, and operating

grants. Writing research and construction grants are touched on but not discussed in depth.

**Prerequisites:** Junior Standing or Instructor Consent

### **BUS 361 - Organizational Behavior**

**3 Credits** Students examine different types of leadership skills used to resolve organizational problems and to achieve the goals of the organization. The behavioral sciences are stressed, with emphasis on leadership and motivation theories. Includes the principles, concepts, and processes that interpret human relations in management at the individual and organizational levels.

**General Education Discipline:** Social Science

**Prerequisites:** Junior or Senior Standing

### **BUS 362 - Non-Profit Management**

**3 Credits** The course will help students learn about the macro-environment surrounding the non-profit sector. By examining case studies drawn from social cause organizations as well as from arts and culture-promoting organizations, students will learn concepts and best practices for managing a successful non-profit organization. This course will help prepare students for managerial careers in the non-profit sector.

**Prerequisites:** Junior Standing or Instructor Consent

### **BUS 415 - The Inclusive Workplace**

**3 Credits** Students acquire knowledge and skills that prepare them to be effective managers of diverse populations. The course emphasizes the causes and consequences of organizational exclusion and introduces students to realities of the contemporary workforce, including demographic, legislative, and social policy trends. Students learn the process of organizational change and how to apply interdisciplinary theories of cross-cultural differences to increase their intercultural competence.

**General Education Discipline:** Diversity-Justice

**Prerequisites:** Junior standing

### **BUS 429 - Managing People and Conflict Resolution**

**3 Credits** Students study the practical application of management training techniques to the management of people's behavior in the workplace. Students participate in interviews as interviewer, interviewee, and critic. The course emphasizes the use of reinforcement theory and methods of giving critical feedback using performance appraisals.

**Prerequisites:** BUS 232 and PSY 110

### **BUS 431 - Legal & Ethical Environment of Business**

**3 Credits**

Students survey the legal and ethical environments in which businesses operate. The course provides students with an overview of statutory and judicial efforts to regulate business activity, as well as an introduction to ethical theory and decisionmaking models. Topics include regulation of commerce and competition, labor management relations, torts and crimes, contracts, consumer protection, environmental protection, social responsibility, formation of businesses, mergers, and acquisitions.

**Prerequisites:** Junior Standing

### **BUS 440 - Corporate Social Responsibility**

**3 Credits** Students examine the relationship between corporate governance and corporate social responsibility, critically assessing the assumptions that underlie theories of corporate governance and the expected outcomes of various board compositions and structures. The course focuses on how corporate actions serve the interests of various stakeholders, demonstrate support for social causes, and explores the issue of accountability. Emphasis is placed on balancing economic, social, individual, and communal goals.

**Prerequisites:** BUS 232, ECN 263 and junior standing

## **BUS 475 - Strategic Planning and Policy Capstone**

**3 Credits** Students analyze policy formulation and implementation from an organizational-wide standpoint. The course emphasizes integration of knowledge and planning approaches, analysis of both internal and external resources and constraints that affect organizational policies, and the role of the firm in society. Case analyses are integral to the course.

**General Education Discipline:** Writing Intensive

**Prerequisites:** BUS 222, BUS 228, BUS 232, and BUS 330

## **Chemistry**

### **CHM 103 - General Chemistry: The Chemistry of Food**

**4 Credits** While studying food, nutrition, and sustainable agriculture, students explore chemistry concepts such as unit conversions and stoichiometry, periodic properties, atomic and molecular structure, functional groups, polarity, equilibrium, acids and bases, titration, reduction and oxidation. Emphasis is placed both on classroom and laboratory investigations.

Course Fee.

**General Education Discipline:** Natural Science

**Corequisites:** ENG 140

### **CHM 110 - General Chemistry**

**4 Credits** Students explore chemistry concepts such as unit conversions and stoichiometry, periodic properties, atomic and molecular structure, functional groups, polarity, equilibrium, acids and bases, titration, reduction and oxidation. Emphasis is placed both on classroom and laboratory investigations. (Advanced Placement or CLEP credit accepted for 110)

Course Fee.

**General Education Discipline:** Natural Science

### **CHM 145 - Atmospheric Pollution**

**4 Credits** This course evaluates the many factors affecting global climate, its feedback mechanisms, and climate change. Topics include the global energy balance, the hydrological cycle, radiative transfer, general circulation, and natural and anthropogenic climate change. Students also study greenhouse warming, ozone layer depletion, acid rain, air pollution toxins, and other anthropogenically induced effects. The course is focused on basic concepts of atmospheric science but also includes principles of physics, chemistry and hydrology.

Course Fee.

**General Education Discipline:** Natural Science; Science of Environmental Issues and Communities, Policy and Management of Environmental Issues

### **CHM 210 - Chemistry of Natural Waters**

**4 Credits** Students spend time in the field and in the laboratory measuring attributes of natural water ecosystems. They explore appropriate ecological and chemical theories to help them understand how and what they might wish to measure. Students relate experimental measurements to relevant theories.

Course Fee.

**General Education Discipline:** Natural Science or Experiential

**Prerequisites:** CHM 103, CHM 105, or CHM 110

## **CHM 212 - Water Quality Lab Techniques**

**4 Credits** This laboratory based course provides hands-on experience in water quality analysis with a focus on regional water quality issues. In collaboration with Northland's Applied Research and Environmental Laboratory, students will learn quantitative methods of analysis while measuring water quality indicators such as total phosphorous, chlorophyll a, nitrate, and chloride. The course will incorporate a wide range of chemical techniques including volumetric, potentiometric, and spectrometric methods.

Course Fee

**General Education Discipline:** Experiential

**Prerequisites:** CHM 103, CHM 105, CHM 108, or CHM 110

## **CHM 213 - Soil Chemistry Lab Techniques**

**4 Credits** This field- and laboratory-based course provides hands-on experience in soil chemistry sampling and analysis. In collaboration with Northland College's Applied Research and Environmental Laboratory, students learn quantitative methods of analysis while measuring important soil nutrients such as phosphorous and nitrogen, as well as contaminants such as lead.

Course Fee

**General Education Discipline:** Experiential

**Prerequisites:** CHM 103, CHM 105, CHM 108, or CHM 110

## **CHM 220 - Organic Chemistry I**

**4 Credits** This course focuses on the properties and environmental transport of organic chemicals as well as the functional group transformations most often encountered in biological and environmental systems. Students study the following major classes of chemicals: aliphatic and aromatic hydrocarbons, alkyl halides, alcohols, carbonyl compounds, and amines. Instrumental analysis of the compounds students synthesize is also an important component of the course. With Lab.

Course Fee.

**Prerequisites:** CHM 103, CHM 105, CHM 108, or CHM 110

## **CHM 221 - Organic Chemistry II**

**4 Credits** The second semester of organic chemistry presents a comprehensive study of structures, reactions, syntheses, and spectroscopy of aliphatic and aromatic compounds. Students focus on modern mechanistic models as well as organic chemistry laboratory techniques.

Course Fee.

**Prerequisites:** CHM 220

## **CHM 225 - Quantitative Analysis**

**4 Credits** Students study error analysis, equilibrium, calibration techniques, acids and bases, and buffers. In the lab, students learn how to use quantitative methods of analysis including gravimetric, titrimetric, and spectrophotometric methods. Students also learn how to validate results with methods of quality assurance.

Course Fee.

**Prerequisites:** CHM 103, or CHM 110

## **CHM 240 - Inorganic Chemistry**

**4 Credits** This course focuses on descriptive chemistry of main group elements. Students study spectra, structure, and reactions of transition metal complexes, as well as preparation, bonding, and applications of organometallic compounds.

Course Fee.

**Prerequisites:** CHM 103 or CHM 110

## **CHM 246 - Introduction to Forensic Chemistry**

By investigating crime scenes, students learn how to analyze trace evidence of unknown materials using FT-IR, chromatography and UV-Vis spectrophotometry. Students learn the principles associated with DNA analysis and fingerprinting and investigate the validity of historical forensic techniques such as hair analysis, blood spatter, body measurements and toxicology.

Course Fee.

**General Education Discipline:** Natural Sciences

**Prerequisites:** CHM 103 or CHM 110

## **CHM 321 - Advanced Organic/Inorganic Chemistry**

**3 Credits** Students study advanced topics in organic, inorganic and polymer chemistry. These areas of chemistry apply to the majority of processes found in the chemical industry, which produces most of the goods found in our society. The content in this class will equip students to understand how these goods are made as well as what environmental implications result.

**Prerequisites:** CHM 220 , CHM 221 , and CHM 240.

## **CHM 326 - Atmospheric Chemistry**

**4 Credits** Students investigate the chemistry of the upper and lower atmosphere, including issues such as photochemical smog, acid deposition, stratospheric ozone depletion, and climate change. Along the way, students develop the necessary background in chemical kinetics, thermodynamics, and photochemistry to better understand these complex atmospheric issues.

**Prerequisites:** MTH 141 and any 100-level CHM course

## **CHM 345 - Biochemistry**

**4 Credits** This course aims to explain biological principles using chemical principles. In this course students will learn about amino acids, proteins, structures of proteins, lipids, and membranes. At the end of the semester, the course will introduce metabolism by studying glycolysis.

Course Fee.

**Prerequisites:** CHM 220

## **CHM 443 - Quantum Mechanics and Molecular Spectroscopy**

**4 Credits** This course starts by exploring the scientific discoveries that prompted the quantum revolution. Students then solve the Schrodinger equation for several important model systems such as particle in a box, harmonic oscillator, rigid rotor, and the hydrogen atom. Students also apply molecular spectroscopy to simple systems.

**Prerequisites:** MTH 141, PHY 110, and any CHM course

## **CHM 447 - Chemical Thermodynamics**

**4 Credits** Students study the laws of thermodynamics and apply these laws to chemical processes in order to develop an understanding of chemical equilibrium and the nature of spontaneity in physical and chemical processes. Students also develop an understanding of the Boltzmann distribution and analyze molecular spectra in light of the insight provided by Boltzmann.

**Prerequisites:** MTH 141, PHY 110, and CHM 225 or CHM 240

## **CHM 462 - Advanced Experimental Chemistry Capstone**

**3 Credits** Students design and carry out experiments utilizing advanced instrumentation. Specifically, students develop the expertise to interpret and analyze complex results from experiments utilizing techniques such as gas chromatography with mass spectroscopic detection, high performance liquid chromatography with varied detection including fluorescence, diode array ultra-violet spectroscopy, or conductivity detection, Fourier transform nuclear magnetic resonance spectroscopy, and electroanalytical methods.

Course Fee.

**Prerequisites:** Instructor Consent

## **Climate Science**

### **CLM 125 - Weather and Climate**

**4 Credits** This course provides students with an introduction to the general circulation of the atmosphere and the mechanisms responsible for the generation of weather and climate. Students use quantitative methods to study seasonal and daily temperatures, air pressure and wind, atmospheric moisture, cloud development, precipitation, severe weather, and climate change.

Course Fee.

**General Education Discipline:** Natural Sciences; Science of Environmental Issues

### **CLM 244 - Understanding Climate Change**

**4 Credits** This course provides an introductory exposure to the topics of regional and global climate change. Students use quantitative methods and gain scientific knowledge of concepts and relationships such as: controls of Earth's climate system, climate classification, the greenhouse effect, feedback mechanisms, natural and human factors contributing to climate change, and global climate modeling.

Course Fee.

**General Education Discipline:** Natural Sciences; Science of Environmental Issues

### **CLM 270 - Oceans and Climate**

**4 Credits** Students learn about the interaction between Earth's ocean, land, and atmosphere. Using quantitative methods, students explore major concepts of physical oceanography such as: plate tectonics, bathymetry, stratification, air-sea interaction, currents, waves, tides, coastal processes, and climate change.

Course Fee.

**General Education Discipline:** Natural Sciences; Science of Environmental Issues

### **CLM 464 - Climate Dynamics**

**4 Credits** Students explore the dynamics of the climate system and how natural laws determine the climate. Topics include the role of fluid mechanics in climate, atmospheric and oceanic circulation, the El Nino/Southern Oscillation,

and climate variability.

**Prerequisites:** PHY 111 , MTH 141 and junior standing.

### **CLM 467 - Atmospheric Physics**

**3 Credits** Students explore the fundamentals of cloud physics and selected topics in radiative transfer. Topics include moist thermodynamics, cloud condensation nuclei, nucleation and cloud formation, precipitation processes, and cloud-radiation interaction.

**Prerequisites:** PHY 330

### **CLM 480 - Seminar in Climate Science**

**3 Credits** This capstone course is intended for students with a major in climate science. The course may include reading and discussion of current topics in climate science, as well as research, writing, presentations, peer review, field experience, and preparation for employment and/or graduate school.

**General Education Discipline:** Writing Intensive; Environmental Applications

**Prerequisites:** CLM 125 or CLM 270 and junior standing

## **Computer Science**

### **CPS 220 - Computer Science**

**4 Credits** Students study software-engineering design concepts, effective problem-solving techniques, and Object-Oriented Programming.

**Prerequisites:** Any 100-level MTH course, ACT math score of 17 or higher, SAT math score of 470 or higher, successful completion of Algebra II with a grade of B or above, or instructor consent

## **Economics**

### **ECN 220 - Macroeconomics in Context**

**3 Credits** In this introductory course, students study the behavior, structure, and performance of regional, national, and global economies. Topics covered include economic growth, economic stability and stabilization, quality of employment, distributional equity, adequacy of living standards, and the role of government and policy. Students are challenged to situate macroeconomic principles in historical, social, and environmental contexts, while focusing on crucial aspects of human well-being.

### **ECN 221 - Microeconomics in Context**

**3 Credits** In this introductory course, students study the behavior and interactions of individuals, households, and firms in making decisions regarding the allocation of scarce resources. Topics covered include supply and demand, product and factor markets, regulatory and distributional issues, and market structure. Students are challenged to situate microeconomic principles in historical, social, and environmental contexts, while challenging the assumptions underlying dominant theory.

### **ECN 263 - Essentials of Economics**

**4 Credits** This course combines the basic principles of microeconomics and macroeconomics to develop the fundamental skills of economic thinking. Students examine how markets work, markets and welfare, firm behavior,

industry organization, and the economics of the public sector. Students complete the course understanding the relevance of economics to society and the decisions individuals make every day.

**General Education Discipline:** Social Science

### **ECN 310 - Environmental Economics**

**3 Credits** Students study the economics of environmental quality and tools for understanding and analyzing environmental problems. The course treats environmental quality as an economic good, and focuses on hazardous wastes, solid wastes, water quality, air quality, and social costs.

**General Education Discipline:** Social Science

**Prerequisites:** ECN 263 or BIO 234

## **Education**

### **EDU 203 - STEM for Elementary Teachers**

**3 Credits** This course is an introduction to the foundational ideas of science, technology, engineering and math teaching and learning in K-12 educational settings. Students will learn underlying philosophies and rationale for the inclusion of science and math in the K-12 curriculum and how technology and engineering have been added as focal areas to support student learning in science and math. Students will investigate the National Science Teachers Association and the National Council of Teachers of Mathematics teacher standards and K-12 student academic standards to establish a foundation for the application and teaching these topics in their future classrooms.

### **EDU 204 - Language Arts for Educators**

**3 Credits** This course will enable the student to understand and create the elementary and middle school literacy curriculum through a balanced approach of using the Common Core State Standards for English as the framework.

### **EDU 205 - Curriculum, Planning, and Assessment**

**3 Credits** Students learn to develop and deliver lessons using components of good lesson design. Students learn to design a multi-disciplinary framework and a variety of assessments to measure student learning, organize content, utilize resources to maximize student learning, all in the framework of diversity and human relations.

### **EDU 210 - Teaching Environmentally**

**3 Credits** Students will establish first-hand connections with the concepts, processes, and resources of environmental education. Through course experiences and student-led activities, participants will explore, present and evaluate environmental education concepts and curricular resources. Students will reflect upon these materials to develop their own environmental education lessons around themes and events from our region.

Course Fee

### **EDU 223 - Teaching in the Middle School**

**3 Credits** This course is designed to explore the many facets of teaching at the middle-school level. The students will work toward an understanding of characteristics of adolescents at this stage of development, examine the elements of middle-level concepts, and research current literature. Specific topics include motivating middle-level learners, advisor/advisee programs, block scheduling, classroom management strategies, exploration courses, transition programs, parent-teacher conferences, interdisciplinary teams, brain research, and middle-school level philosophy.

## **EDU 225 - Foundations of Education**

**3 Credits** Students examine philosophical, historical, and social foundations of education. Topics include teaching as a profession, human relations, history of American education, the administrative structure, legal, political, and economic issues and trends, social class, diversity, the challenges of equal educational opportunity, and the impact of technology.  
**General Education Discipline:** Social Science

## **EDU 232 - Learning, Growth and Cognition**

**3 Credits** This course will help students to develop an understanding of the cognitive, social, and emotional growth and development of the young child and adolescent. Current brain/mind research will be examined and implications for teaching and learning will be applied.

## **EDU 289 - Children and Adolescent Literature**

**3 Credits** Students read and evaluate a broad range of children's and adolescent literature focusing on both classical and contemporary works. Students evaluate literature, analyze text and artwork, discuss multiculturalism, and understand the influence of literature on the emotional and academic growth of children and adolescents.  
**General Education Discipline:** Arts & Humanities

## **EDU 315 - Classroom Management and Conflict Resolution**

**3 Credits** Students develop strategies for managing a classroom, investigate diverse classroom management and conflict resolution strategies, and design a classroom environment management action plan. This course is taken in the last fall semester prior to student teaching. Clinical experience required.  
**Prerequisites:** Formal admission to the education program

## **EDU 337 - Fall Practicum**

**1-4 Credits** This course is designed to prepare pre-service teachers for the full-time student teaching semester as well as their role as future classroom teachers. The course is divided into three parts: organization of curriculum, instruction, and assessment; an intensive clinical field experience, which deepens and strengthens the skills necessary to have a successful student teaching placement; reflection and analysis of teaching effectiveness. Clinical emphasis will be in math, classroom management, and diverse learners teaching methods.  
**Prerequisites:** Formal admission to the education program

## **EDU 338 - Winter Practicum**

**1-4 Credits** This course is designed to prepare pre-service teachers for the full time student teaching semester as well as their role as future classroom teachers. The course is divided into three parts: organization of curriculum, instruction, and assessment; an intensive clinical field experience which deepens and strengthens the skills necessary to have a successful student teaching placement; reflection and analysis of teaching effectiveness. Clinical emphasis will be in literacy, science, and social studies teaching methods.  
**Prerequisites:** Formal admission to the education program

## **EDU 341 - Science Teaching Methods**

**3 Credits** Pre-service teachers use appropriate tools, tactics, pedagogies, and technologies for teaching science content in a school setting. Pre-service teachers use the information, skills, and shared experiences to build self-confidence. Clinical experience required.

Course Fee.

**Prerequisites:** Formal admission to the education program

### **EDU 347 - Secondary Content Teaching Methods**

**4 Credits** Students will develop skills with a variety of research-based teaching strategies, which will be adapted to their particular teaching majors. Students will be matched with a secondary teacher in their major who will provide additional support for content-specific planning, teaching, and assessment.

**Prerequisites:** Formal Admission to the Education Department

### **EDU 349 - Literacy Teaching Methods I**

**3 Credits** Pre-service teachers plan, present, and assess a variety of language arts strategies--including phonics instruction--develop the ability to assess the level of materials, and diagnose student reading levels and writing proficiency as related to the content areas. Pre-service teachers explore resources, tools, and strategies to align with state and national standards in reading and writing. Clinical experience required.

**Prerequisites:** Formal admission to the education program

### **EDU 359 - Emergent Literacy**

**3 Credits**

Pre-service teachers plan, present, and assess a variety of language arts strategies, including guided reading, literature circles, focus units, and Daily 5/Café. Students develop their own reading program and corresponding curriculum. Pre-service teachers explore resources, tools, and strategies to align with state and national standards in reading and writing. Students prepare for the Foundations of Reading Test throughout this course. Clinical experience required.

Course fee.

**Prerequisites:** EDU 349 and formal admission to the Education Program.

### **EDU 360 - Instructional Strategies of Early Childhood Education**

**3 Credits** This course examines positive strategies to guide children's behavior in the ECE setting. Course competencies include integrating strategies that support diversity and anti-bias perspectives, analyzing factors that affect the behavior of children, developing guidance strategies to meet individual needs, and creating a guidance philosophy.

### **EDU 361 - Fostering Creativity in Young Children**

**2 Credits** This course focuses on curriculum development in the content areas of art, music, and language arts. Course competencies include strategies supporting the critical role of play; establishing a developmentally appropriate environment for art, music, and language arts; and creating developmentally appropriate language, literature, literacy, art, music, and movement activities.

## **EDU 363 - Home/School/Community Collaboration**

**2 Credits** This course examines the role of collaborations with family and community in ECE. Course competencies include implementing strategies that support diversity and anti-bias perspectives when working with families and community; analyzing contemporary family patterns, trends, and relationships; utilizing effective communication strategies; and advocating for children and families.

## **EDU 364 - Early Language and Literacy Development**

**2 Credits** This course focuses on infant and toddler development as it applies to an ECE setting. Course competencies include analyzing development of infants and toddlers; correlating prenatal conditions with development; analyzing the role of heredity and the environment; and examining the role of brain development in early learning.

**Prerequisites:** Formal admission to the education program

## **EDU 365 - Early Childhood Program Models**

**3 Credits** This course focuses on the ECE profession. Course competencies include investigating the history of ECE, summarizing types of ECE settings; exploring ECE curriculum models, analyzing the principles of the WI Model Early Learning Standards, applying laws and regulations related to an ECE facility, and advocating for the ECE profession.

## **EDU 366 - Curriculum Design in Early Childhood Education**

**2 Credits** This course examines the components of curriculum planning in ECE. Course competencies include integrating Developmentally Appropriate Practice (DAP) into curriculum, developing curriculum plans that promote child development and learning across all content areas, focusing on beginning level curriculum development in the specific content areas of math, science and social studies.

**Prerequisites:** Formal admission to the education department

## **EDU 368 - Assessment and Data Literacy**

**2 Credits** This course will enable pre-service teachers to analyze and interpret various forms of student assessment and data to better address student learning outcomes. By becoming data literate, pre-service teachers will be able to use data to inform and improve instruction.

**Prerequisites:** Admission to the Educator Preparation Program

## **EDU 370 - Social Studies Teaching Methods**

**3 Credits** Pre-service teachers use appropriate tools, tactics, pedagogies, and technologies for teaching social studies content in a school setting. Pre-service teachers use the information, skills, and shared experiences to build self-confidence. Clinical experience required.

**Prerequisites:** Formal admission to the education program

## **EDU 376 - Strategies for Teaching Diverse Learners**

**3 Credits** Pre-service teachers will gain an understanding of child development and the procedures used for assessing pupils with disabilities. Pre-service teachers will be able to distinguish the roles and responsibilities of regular and special education providers, and they will plan lessons and activities aimed at engaging diverse audiences, including pupils with disabilities. Course meets statutory requirements for MC-EA and EA-A (elementary/middle and secondary) education licensure. Clinical experience required.

**Prerequisites:** Formal admission to the education program

## **EDU 377 - Mathematics Teaching Methods**

**3 Credits** Pre-service teachers use appropriate tools, tactics, pedagogies, and technologies for teaching mathematics content in a school setting. Pre-service teachers use the information, skills, and shared experiences to build self-confidence. Clinical Experience: 20 hours for elementary majors and 40 hours for secondary majors.

Course Fee.

**Prerequisites:** Formal admission to the education program

## **EDU 460 - Student Teaching (EA-A) and Seminar**

**6 - 12 Credits** Students teach full days for a full semester in grades 7 through 12 following the daily schedule and semester calendar of the cooperating schools, under the direct supervision of classroom cooperating teachers and college supervisors. During the interactive seminar, students focus on curriculum, human relations, career development, and reflective practices.

**General Education Discipline:** Experiential

**Prerequisites:** Formal admission to the education program

## **EDU 471 - Student Teaching (MC-EA) and Seminar**

**6 - 12 Credits** Students teach full days for a full semester in grades 1 through 8 following the daily schedule and semester calendar of the cooperating schools, under the direct supervision of classroom cooperating teachers and college supervisors. During the interactive seminar, students focus on curriculum, human relations, career development, and reflective practices.

**General Education Discipline:** Experiential

**Prerequisites:** Formal admission to the education program

## **EDU 472 - Student Teaching in Minor**

**0 Credits** Students teach in the area of their academic minor full days for a full semester following the daily schedule and semester calendar of the cooperating schools, under the direct supervision of classroom cooperating teachers and college supervisors.

**General Education Discipline:** Experiential

**Prerequisites:** Concurrent enrollment in EDU 471 or EDU 460 and formal admission to the education program

## **EDU 479 - Student Teaching Continuation**

**1 Credits** This is a continuation of the winter semester of student teaching.

**Prerequisites:** EDU 460 or EDU 471

## **EDU 580 - Supervision of Student Teachers I**

**2 Credits** Classroom teachers complete training through a seminar format and distance learning in the supervision of student teachers and the Wisconsin educator standards. Topics include introducing student teachers to the teaching process, establishing effective personal relationships, planning, clinical supervision, legal issues, and evaluating student teachers.

## **EDU 581 - Supervision of Student Teachers II**

**2 Credits** Classroom teachers continue training in the supervision of student teachers and the Wisconsin initial educator standards from the previous course in order to meet the requirement of PI34.

**Prerequisites:** EDU 580

## English

### ENG 110 - Introduction to College Writing

**3 Credits** Students develop skills required to successfully complete writing assignments for collegiate-level courses. Particular focus is given to sentence and paragraph structure, grammar and spelling, critical analysis, thesis statements, and research techniques. Students work on assignments required for their disciplinary courses, develop strategies for effectively engaging in the writing process, and acquire knowledge required to accurately evaluate their own writing. Successful students acquire the confidence and skills required to continue improving their writing after completion of the course.

**Prerequisites:** Writing assessment score which indicates a need for this course.

### ENG 111 - Writing and Inquiry

**3 Credits** Students will develop reading, writing, and speaking skills, including elements of composition focusing on the writing of the personal essay, analytical essay, and research paper.

**General Education Discipline:** Writing Intensive; Arts & Humanities

**Prerequisites:** ENG 110 or Writing Assessment Score of 3 or above.

### ENG 126 - Confluences: Reading and Writing in the Lake Superior Watershed

**3 Credits** Part of the Superior Connections Program, in this course students gather and integrate their experiences and studies of the Lake Superior Watershed using the creative and synthetic potential of dialogue and written expression. The reading of literary and historical texts, the composition of essays, and delivery of oral presentations are integral to the course.

**General Education Discipline:** Humanities

**Corequisites:** BIO 128, GSC 112, IDS 120, and NAS 160.

### ENG 140 - Food for Thought

#### 4 Credits

Food for Thought is a literature course that uses stories, essays, and poetry to allow students to explore varied current and historical perceptions regarding the consumption of food, those who work to provide it, and how cultural, political and economic attitudes and policies influence what and how we eat. The focus of student work in this course is on written and spoken expressions of the role food and agriculture have played, and will play, in human life. The course includes field trips, guest speakers, and other projects.

Course Fee

**General Education Discipline:** Humanities

### ENG 180 - Public Speaking

**3 Credits** Students develop speech writing, presentation, and analysis skills, with concentration on the development of speech content and delivery methods.

## **ENG 209 - The Story and the Stone**

**4 Credits** The processes shaping our Earth convey a narrative rich with revolutions of subtle upheaval and moments of catastrophic change. These stories have been conveyed by numerous storytellers and various forms. In this course, students approach the science of geology from a narrative perspective, studying the ways that earth's functioning is described and appreciated through works of non-fiction, fiction, poetry, and Indigenous interpretation. This course can be taken as either ENG 209 or GSC 209.

Course fee.

## **ENG 211 - Humanity and Nature in Literature**

**3 Credits** Students read and analyze selected short stories, novels, plays, essays, and poetry that focus on human relationships with the natural world.

**General Education Discipline:** Humanities

**Prerequisites:** ENG 110, a Connections Block, or Writing Assessment Score of 3 or above

## **ENG 213 - Literature of the Western Worlds**

**3 Credits** Students study seminal Western Literature texts from the Antiquity to the Renaissance (Homer, Ovid, medieval Courtly Love, Dante, the Renaissance humanists, Machiavelli)

**General Education Discipline:** Humanities

**Prerequisites:** ENG 110 or Writing Assessment Score of 3 or above

## **ENG 216 - The Contemporary Novel**

**3 Credits** In this course, students examine the novel as a genre as well as prominent novels of the past 30 years.

**General Education Discipline:** Humanities

**Prerequisites:** ENG 110, a Connections Block, or Writing Assessment Score of 3 or above

## **ENG 217 - Contemporary Third World Literature**

**4 Credits** Study of selected novels and short stories of established authors as well as emerging young writers from Africa, Latin American, and Asia.

**General Education Discipline:** Humanities

**Prerequisites:** ENG 110, a Connections Block, or Writing Assessment Score of 3 or above

## **ENG 225 - Major American Authors**

**3 Credits** An introduction to the study of literature, in this course students study five to seven major American authors from the 19th and 20th centuries, reading representative texts by each author and learning about their contributions to American literature and our understanding of the human experience.

**General Education Discipline:** Writing Intensive; Arts & Humanities

**Prerequisites:** ENG 110 or Writing Assessment Score of 3 or above.

## **ENG 228 - Literature of the Arab World**

**4 Credits** This course emphasizes the study of selected contemporary short stories and novels written by established authors as well as emerging young writers, of both genders. It covers culture, politics, women's as well as other issues. Recent documentaries and movies accompany the course readings.

**General Education Discipline:** Humanities

**Prerequisites:** ENG 110, a Connections Block, or Writing Assessment Score of 3 or above

### **ENG 230 - Literature and Medicine**

**3 Credits** Students explore the relationship between literature, narrative, and medicine through a close and thoughtful reading of novels, short stories, memoirs, poetry, and drama. Topics of discussion may include issues related to disease, long-term illness, health and healing, trauma, and the doctor/patient relationship.

### **ENG 233 - Women of the Third World**

**3 Credits** Study of short stories and novels that explore many issues from the vantage point of women in Africa, Latin America and Asia.

**General Education Discipline:** Humanities

**Prerequisites:** ENG 110, a Connections Block, or Writing Assessment Score of 3 or above

### **ENG 234 - Dystopias: Ecology & Gender in SciFi**

**4 Credits** Focused on the themes of women, gender, and environmental & societal collapse, this course explores through science fiction (novels and short stories) the different literary dystopias of possible futures. Selected movies are viewed in conjunction with the literature of the course.

**General Education Discipline:** Humanities

**Prerequisites:** ENG 110, a Connections Block, or Writing Assessment Score of 3 or above

### **ENG 235 - Monsters, Modern and Postmodern**

**3 Credits** Students focus on how horror narratives reify, challenge, and critique cultural narratives revolving around monsters (supernatural, human, "real" and abstract) since the late 1950s. Through the reading and viewing of a variety of texts in fiction and film, students examine how the horror genre gives expression to (oftentimes contradictory) anxieties, fears, hopes, and beliefs animating contemporary culture.

### **ENG 240 - Pens and Paddles in the North Woods**

**4 Credits** This course combines literary study with wilderness fieldwork. Students read accounts of North Woods canoe journeys by authors such as Henry David Thoreau, Florence Page Jacques, and Sigurd F. Olson, and then travel to the Boundary Waters Canoe Area for a 15-day canoe trip.

Course Fee.

**General Education Discipline:** Experiential

### **ENG 241 - CLIFI: Climate Fiction**

**3 Credits** This course will explore CLIFI: the emerging field of the literature of climate change. Through fiction (short stories) and futuristic scenarios (novels), the various forms and impacts of climate change will be examined (the physical environment, the human communities, and the lives of individual characters).

**General Education Discipline:** Writing Intensive; Arts & Humanities; Environmental Narratives

**Prerequisites:** ENG 110 or Writing Assessment Score of 3 or above.

### **ENG 262 - Survey of British Literature**

**3 Credits** Students read and study major British and Irish literary works from the early Medieval period to the present day.

**General Education Discipline:** Humanities

**Prerequisites:** ENG 110, a Connections Block, or Writing Assessment Score of 3 or above

## **ENG 264 - Survey of American Literature**

**3 Credits** Students read and study representative works of American literature from its origins to the present.

**General Education Discipline:** Humanities

**Prerequisites:** ENG 110, a Connections Block, or Writing Assessment Score of 3 or above

## **ENG 318 - Nature Writers**

**3 Credits** Students read and study selected texts from the genre of non-fiction nature writing. Discussions and writing assignments help students develop an understanding of movements and trends within the genre as well as an appreciation for the achievements of individual authors.

**General Education Discipline:** Humanities

**Prerequisites:** Any 100- or 200-level ENG course.

## **ENG 332 - Major American Authors II**

**3 Credits** In this advanced study of literature, students read five to seven major American authors from the 19th and 20th centuries. In addition to reading representative texts by each author, students are responsible for identifying and engaging with published literary criticism of the texts as well as for developing and presenting their own critical analyses of texts.

**General Education Discipline:** Writing Intensive; Arts & Humanities

**Prerequisites:** Prerequisites: any 200 level ENG course and junior standing.

## **ENG 372 - Nature & Gender in Lat Am Lit**

**3 Credits** Students read and study contemporary short stories from Latin America and the Caribbean, focusing on their unique treatment of nature in both content and form. Particular attention is given to the metaphoric use of nature to treat sensitive issues: historical, political, psychological, and social -- especially with regard to women and gender.

**Prerequisites:** Any 200-level literature course

## **ENG 377 - Green Romanticism**

**3 Credits** This course focuses on British Romantic-era nature writing and explores the emergence of proto-ecological thought in period authors such as William Wordsworth, John Clare, and Charlotte Smith, with an emphasis on their use of precise physical detail, their depictions of the dynamism of natural processes, and their descriptions of the impact of human activities on local eco-systems.

**General Education Discipline:** Humanities

**Prerequisites:** ENG 110, a Connections Block, or Writing Assessment Score of 3 or above

## **ENG 384 - Literary Criticism**

**3 Credits** This is an advanced course in literary study. Students examine diverse scholarly approaches to literature, including New Critical, Feminist, Historical, Psychoanalytic, Post-Structuralist, and New Historical critical traditions.

**General Education Discipline:** Humanities

**Prerequisites:** Any ENG Course

## **ENG 387 - The English Language**

**4 Credits** Students study the origins and development of the English language and issues in contemporary linguistics.

**Prerequisites:** Junior standing or instructor consent.

## **ENG 413 - Shakespeare**

**4 Credits**

This course explores 5-6 Shakespeare plays in their literary, historical, and dramatic contexts. Students engage actively with the texts as scripts in discussion environments and watch several stage and screen adaptations (in and out of class). Coursework includes two 10-page research papers and regular reading quizzes.

Pre-2016 Connections: Humanities; 2016 Connections: Humanities and Writing Intensive

**General Education Discipline:** Humanities

**Prerequisites:** ENG 110, a Connections Block, or Writing Assessment Score of 3 or above

## **ENG 415 - Chaucer**

**4 Credits** Students gain exposure to literary form, language and pronunciation of Middle English in the Minor Poems and in-depth study of the Canterbury Tales in Modern English.

**General Education Discipline:** Humanities

**Prerequisites:** ENG 110, a Connections Block, or Writing Assessment Score of 3 or above

## **ENG 489 - English Senior Honors Thesis**

**3 Credits** Students complete a long scholarly or creative work in consultation with a thesis director. The thesis is presented to the college community in a public reading. Students may only take this course by invitation of the English Program Coordinator. This course is not a capstone option for the English or Writing majors.

**Prerequisites:** Senior Standing

## **Geographic Information Systems**

### **GIS 201 - Introduction to Geographic Information Systems**

**4 Credits** Students learn GIS concepts through studying spatial data structures, sources of data, GIS analysis tools and sample applications. Students complete hands-on computer activities using ArcGIS software.

### **GIS 260 - Global Positioning Systems**

**1 Credits** Students learn how the GPS satellite system works, accomplish GPS data collection using Trimble GPS receivers, and integrate GPS data into GIS projects.

**Prerequisites:** GIS 201

### **GIS 301 - Intermediate GIS Applications**

**4 Credits** Building on knowledge and skills learned in GIS 201, students continue to use ArcGIS to create and analyze data through numerous computer activities. ArcGIS extensions will be introduced and students will learn to apply GIS project methodology to complete a specific GIS project.

**Prerequisites:** GIS 201

## **GIS 315 - Geodatabases**

**3 Credits** Students study the elements and behaviors of spatial data within the geodatabase data model and apply their knowledge by building a relevant GIS geodatabase for a project.

**Prerequisites:** GIS 201

## **GIS 380 - Remote Sensing**

**4 Credits** Students learn the principles of remote sensing and its applications in GIS project work. Course lab work includes hands-on interpretation of aerial photography and computer analyses of different types of satellite imagery.

**Prerequisites:** GIS 201 and Sophomore standing

## **GIS 401 - Advanced GIS Applications**

**4 Credits** Students gain practical experience in designing and managing GIS projects, in addition to learning advanced GIS techniques, such as geostatistical analysis. Students complete their own GIS project encompassing all project management procedures – design, data acquisition, analysis, results, and presentation.

**Prerequisites:** GIS 201 and GIS 301

## **Geoscience**

### **GSC 107 - Geology and Agriculture**

**4 Credits** In this course students learn about the earth systems, soils, minerals, water, and energy used in agriculture and the environmental impacts caused by the use of those resources. The course focuses on how these impacts can be decreased so that agriculture can sustainably provide for the needs of society.

Course Fee.

**General Education Discipline:** Natural Science

**Corequisites:** REL 258 and XHN 115

### **GSC 112 - Geoscience Issues of Lake Superior**

**3 Credits** Part of the Superior Connections Program, students learn about the geologic processes and history of the Lake Superior basin and how past geologic events established the setting in which the current ecosystem and human society reside. Field trips and laboratory exercises develop their skills in map reading, rock identification and interpretation, and give them an appreciation for the beauty and complexity of the natural environment of the lake basin and humans' relationship to the lake.

Course fee.

**General Education Discipline:** Natural Science

**Corequisites:** BIO 128, ENG 126, IDS 120, and NAS 160.

### **GSC 120 - Physical Geology**

**4 Credits** Students study the origin and character of rocks and minerals and the geologic forces of ground water, running water, wind, and ice. Students also gain an understanding of volcanism, earthquakes, and mountain building as they relate to plate tectonics.

Course Fee.

**General Education Discipline:** Natural Science; Science of Environmental Issues

### **GSC 209 - The Story and the Stone**

**4 Credits** The processes shaping our Earth convey a narrative rich with revolutions of subtle upheaval and moments of catastrophic change. These stories have been conveyed by numerous storytellers and various forms. In this course, students approach the science of geology from a narrative perspective, studying the ways that earth's functioning is described and appreciated through works of non-fiction, fiction, poetry, and Indigenous interpretation. This course can be taken as either ENG 209 or GSC 209.

Course fee.

## **GSC 222 - Sediments and Soils**

**4 Credits** In this course students study the origin and characteristics of sediments and soils. They learn how sediments are created through rock weathering and how they are transformed into productive soils at Earth's surface. Through classes, laboratories and field trips, students learn sediment and soil classification; how water and nutrients move through soils; how soils become degraded and how they can be replenished.

Course Fee.

**General Education Discipline:** Natural Science

**Prerequisites:** GSC 107, GSC 112, or GSC 120

## **GSC 233 - Earth Resources**

**4 Credits** In this course students learn about the geological occurrence and use of water, minerals, and energy resources, as well as the environmental and social impacts resource extraction and use. The course emphasizes environmental issues and solutions to resource problems.

Course Fee.

**General Education Discipline:** Natural Science

**Prerequisites:** GSC 107, GSC 112, or GSC 120

## **GSC 260 - Geology of the Lake Superior Region**

**4 Credits** In this field course, students examine the rocks of the Lake Superior region to decipher the long, complex history of the area. The course includes travel to spectacular geologic and scenic areas for first-hand experience with the geology of the region.

Course Fee.

**General Education Discipline:** Natural Science or Experiential

**Prerequisites:** GSC 107, GSC 112, or GSC 120

## **GSC 262 - World Regional Geography**

**3 Credits** Students examine a world which is undergoing political, economic and social transformations at many different spatial scales. Current issues and events will be discussed. Students become familiar with basic concepts in geography in order to understand the place of world regions in the global system and the underlying forces of world events.

**General Education Discipline:** Social Science

## **GSC 284 - On the Trail of the Ice Age**

**4 Credits** The geology of Wisconsin tells a story of a drastically different climatic past. Throughout this course, students explore the development and demise of former ice sheets, their impact on the modern landscape, and the climate conditions that made it possible. This course provides an introduction to the geological context of the Ice Age National Scenic Trail as a useful pathway for exploring past climates and an avenue for scientific outreach. This course includes travel to many locations along the Ice Age Trail and will require moderate hiking as well as overnight field trips and camping.

Course Fee

**General Education Discipline:** Experiential

**Prerequisites:** GSC 107, GSC 112 or GSC 120

## **GSC 305 - Hydrology**

**4 Credits** This course focuses on the processes of the hydrologic cycle. Students learn about the occurrence and movement of water in the atmosphere, over land, and in the ground.

Course Fee.

**Prerequisites:** GSC 107, GSC 112, or GSC 120

## **GSC 312 - Paleoclimate: Past as Prologue**

**4 Credits** The scientific study of modern and future climate change is rooted in the geologic past. In this course, students study the record of past climate changes across a variety of timescales, the use of proxy data and general circulation models (GCMs) as tools of inquiry, and the geologic context for which modern climate change can be attributed to human activities

Course fee

**Prerequisites:** GSC 107, GSC 112, GSC 120, MET 125, MET 244, or MET 270.

## **GSC 320 - Geomorphology**

**4 Credits** Students study the earth's surface features and the processes that create and modify them.

Course Fee.

**Prerequisites:** GSC 107, GSC 112, or GSC 120

## **GSC 321 - Minerals and Rocks**

**4 Credits** In this course students study the composition and occurrence of the common minerals and rocks that make up the Earth. Through classes and laboratories that include extensive hands-on work with samples, students learn about the chemistry, structure, and importance of the rock-forming minerals, and the origin and significance of different kinds of rocks. The emphasis is on identification of rocks in the field.

Course Fee.

**Prerequisites:** GSC 120

## **GSC 370 - Glacial Geology**

**4 Credits** Students study the formation of glaciers and the processes by which glaciers flow and create landforms, the history of glaciation on Earth, and important controls on climate.

Course Fee.

**Prerequisites:** GSC 107, GSC 112, or GSC 120

## **GSC 406 - Hydrogeology and Geochemistry**

**4 Credits** In this course students study the flow of groundwater and the chemical changes that it undergoes as it moves through aquifers. Students learn what controls the chemistry of water in the environment and learn to test water-quality parameters and how to determine the rates and directions of groundwater flow. An important theme that runs through the course is how humans impact water quality and how water quality can be improved.

Course Fee.

**Prerequisites:** GSC 107, GSC 112, or GSC 120

## **GSC 474 - Tectonics and Structural Geology**

**4 Credits** In this course students learn the details of how plate tectonics operates and the huge influence it has on conditions on Earth. They study everything from small-scale structures in rocks to the largest mountain ranges on Earth, and, in the process, they learn how conditions on Earth's surface are intricately connected to what is going on deep inside the planet.

Course Fee.

**Prerequisites:** GSC 107, GSC 112, or GSC 120

## **GSC 481 - Geologic Field Methods**

**1 Credits** In this course students learn how to measure geologic structures and make geologic maps. The course prepares students for Geologic Field Camp, which is a month of field mapping in the Rocky Mountains in Wyoming or in the Great Lakes region. Students learn the geologic history of the area they will be studying at geology field camp the following semester.

Course Fee.

**Prerequisites:** GSC 474

## **GSC 482 - Wyoming Geology Field Camp**

**4 Credits** In this course students learn to make geologic maps that document the nature and distribution of earth materials in the field. Through extensive field work in the spectacular rock exposures of the Rocky Mountains, students become proficient at interpreting rocks and geologic histories.

Course Fee.

**General Education Discipline:** Experiential

**Corequisites:** GSC 481

## **GSC 483 - Great Lakes Geology Field Camp**

**4 Credits** In this field-intensive course students learn how to navigate in the wilderness, study geologic features in the field, document the nature of landforms and geologic materials, then interpret the history and significance of those geologic features. They will also gain practice in representing geologic features on maps, cross sections, stereonets, and in geologic reports. The course involves rigorous field work and camping in all types of weather.

Course fee.

**Prerequisites:** GSC 222, GSC 320, GSC 321, GSC 474, and GSC 481.

## **GSC 488 - Geoscience Senior Honors Research**

**2 Credits** Students conduct geoscience field work and gather data for an original research project. The research topic is chosen by students and completed in collaboration with a faculty mentor.

**Prerequisites:** Declared major in Water Science or Geology, GPA of 3.0 or higher, at least junior standing.

## **GSC 489 - Geoscience Senior Honors Thesis**

**2 Credits** The Geoscience Senior Honors Thesis provides students the opportunity to apply their knowledge to an original research project. The research topic is chosen by students and completed in collaboration with a faculty mentor.

**Prerequisites:** GSC 488 and GPA of 3.0 or higher.

## **GSC 498 - Senior Seminar in Geoscience**

**2 Credits** Students complete an independent research project and prepare for the Geoscience Exit Examination. The Exit Examination requires a presentation to the faculty about the research project and demonstration of competency in basic topics in geoscience. This seminar, along with required field experiences in GSC 482, constitutes the capstone experience for geoscience majors. The seminar provides preparation for career employment or graduate school.

**Prerequisites:** Water Science or Geology major and junior or senior standing.

## **Gender and Women's Studies**

### **GWS 265 - Introduction to Gender and Women's Studies**

**3 Credits** Students study major issues, debates, and challenges in contemporary feminism as a political and academic movement, including representations and experiences of women, the construction of gender and gender roles, and their impact in areas such as body image, health, sexuality, reproductive rights, work, and domestic violence.

**General Education Discipline:** Humanities

### **GWS 266 - Ecofeminism**

**3 Credits** Students examine ecofeminism as an intersection of environmentalism and feminism, focusing on relationships between nature, culture, and gender. Readings and discussions explore diverse approaches to ecofeminist concerns, including environmental ethics, spirituality, and political practice.

**General Education Discipline:** Humanities

### **GWS 331 - Feminist Theory**

**3 Credits** Students participate in an advanced study of the theory and politics of contemporary feminism, including the contributions of prominent feminist academics and activists.

**General Education Discipline:** Humanities

**Prerequisites:** Any GWS course

### **GWS 343 - Queer Ecologies**

**3 Credits** Queer Ecologies explores queer, feminist, environmentalist cultural theories that illuminate and interrogate historical and current intersections between sexualities, politics, and environments. This course asks, what do queer and feminist theories of gender, identity, power, and desire contribute to environmentalism, and likewise, how might environmentalist theories of nature and environment enrich queer and gender theory, politics, and activism?

**Prerequisites:** Any GWS course or HIS 209, HIS 260, SOC 234, SOC 236, SOC 240, SOC 242

## **History**

### **HIS 101 - United States History to 1865**

**3 Credits** Students examine major social, political, and economic developments in United States history from the origin of settlement through the Civil War. Students will pay special attention to such factors as race, class, religion, ethnicity, and gender in the shaping of the United States within this time frame.

**General Education Discipline:** Humanities

### **HIS 102 - United States History since 1865**

**3 Credits** Students examine United States political, economic, and social developments from Reconstruction to the present. They focus especially on the evolution of cities, industrial capitalism, immigration, and ethnic and women's rights in the designated time frame.

**General Education Discipline:** Humanities

### **HIS 111 - History of World Civilizations to 1500**

**3 Credits** This course surveys human history from the beginning of agriculture to 1500. Students examine how technological innovation, religious ideas, culture, social structures, economic forces, and the environment interacted to shape civilizations.

**General Education Discipline:** Humanities

### **HIS 112 - History of World Civilizations since 1500**

**3 Credits** Students examine the interactions and increasing integration of the world's civilizations in the modern era. The course covers global trade networks, the rise of the Atlantic slave trade, European hegemony, the two World Wars, the Cold War and contemporary world trade, culture and politics.

**General Education Discipline:** Humanities

### **HIS 209 - Gender in the United States Landscape**

**3 Credits** Students study the complex ways in which landscapes are constructed through ideology, commerce, and gendered understandings of nature. Students cover several American landscapes and their construction, including but not limited to cities, wilderness, frontiers, suburbs, and parks.

**General Education Discipline:** Humanities

### **HIS 221 - History of Medieval Europe**

**3 Credits** A history of the beginnings and development of Western European civilization from the later Roman Empire to the beginning of the modern era around 1500. The medieval period will be studied from the political, social, economic, and cultural perspectives of history.

**General Education Discipline:** Humanities

### **HIS 241 - American Environmental History**

**3 Credits** Students trace the cultural perceptions of nature and humanity's impact on the environment over the course of American history. Students study various sites of environmental degradation and preservation and the history and politics of environmental protection and sustainability within several crucial frames, including those of race, class, and gender.

**General Education Discipline:** Humanities

### **HIS 242 - European Environmental History**

**3 Credits** Students study the major climatic changes in Europe in the last 2000 years and the ways that these changes have impacted European society. Students also study the major ideas in European culture about human relationships with the environment, including scientific, religious, and more general cultural conceptions of nature.

**General Education Discipline:** Humanities

### **HIS 260 - Gender in Modern Europe**

**3 Credits** Students examine how gender roles for both men and women have interacted with political, social, economic, and cultural changes over the last 400 years. Specific topics include gender's relationship to psychology, work and family, science, urban space, war, and imperialism.

**General Education Discipline:** Humanities

### **HIS 263 - History of the Middle East**

**3 Credits** Students trace the history of the Middle East from the rise of Islam to the present with an emphasis on the events of the 20th century. Topics include European and American colonialism, Zionism and Arab Nationalism, the Iranian Revolution, the Persian Gulf Wars, the Israeli-Palestinian conflict, and the Arab Spring.

**General Education Discipline:** Humanities

### **HIS 266 - American Material Culture/Objects in Everyday Life and History**

**3 Credits** In this course, students uncover the cultural messages in the objects and spaces of our everyday lives. They attend to the development of American consumer culture and how physical objects construct racial, ethnic, and gendered identities. Objects of study include, among others, cemeteries, museums, architecture, clothing, and vernacular art.

**General Education Discipline:** Humanities

### **HIS 270 - The Holocaust**

**3 Credits** The course covers European anti-Semitism, racial ideology, the political crises of the early 1930s, Nazi ideology, the course of World War II, and the structures and functioning of the Nazi machinery of death. Questions regarding moral responsibility, memory, modernity, and depersonalization will figure prominently in discussions.

**General Education Discipline:** Humanities

### **HIS 315 - American Foodways**

**3 Credits** Students examine various key sites and moments of agricultural production throughout United States history. Students study land law, as well as institutions of slavery, sharecropping, seed patenting, and spaces such as the plantation, farm, and botanical garden. Students examine various implements, including the fence, plow, as well as crate labels.

**Prerequisites:** Sophomore Status

### **HIS 320 - The Enlightenment**

**3 Credits** Students examine the intellectual foundations of our culture from the Scientific Revolution to the French Revolution. The course emphasizes how the Enlightenment articulated Western civilization's understandings of science, the role of government, the nature of the individual, and rationalism. Assignments focus on placing texts in context.

**General Education Discipline:** Humanities

**Prerequisites:** Any HIS course

### **HIS 321 - The French Revolution**

**3 Credits** Students study the French Revolution, an event that marks the beginning of modern politics in the West. Topics include the ideas of the Enlightenment, the events of 1789-1794, the rise of Napoleon, the birth of political ideologies, and the fundamental questions of government, representation, and violence in politics.

**General Education Discipline:** Humanities

**Prerequisites:** Any HIS course

## **HIS 325 - Nature and Nation: Environment, Art, Ideology**

**3 Credits** This course examines the intersection of nature and nation-building in three periods: the early national period, 1950s cowboy culture, and present-day National Parks tourism. Students study the relationship of natural history to national culture, examining how empire and Enlightenment thinking come together to constitute nation-building as an imperial and Romantic art.

**Prerequisites:** Junior or Senior standing.

## **HIS 334 - Ideology in the 20th Century**

**3 Credits** Students will explore the ways that political ideologies have shaped the world since 1900. Topics include European colonialism, the rise of communism and fascism, the Russian and Chinese Revolutions, the two World Wars, the Holocaust, the Cold War, colonial independence movements, globalization and the status of ideologies such as liberalism today.

**General Education Discipline:** Humanities

**Prerequisites:** Any previous HIS course

## **HIS 357 - Gender in Total War**

**3 Credits** Students examine the transformation of gender roles during World Wars I and II and explore in particular challenges to ideals of masculine courage, valor, and military efficacy in the face of mechanized warfare as well as the ways in which the wars drew women into industrial workplaces and onto the killing fields. Illustrations of these dramatic upheavals in European and American conceptions of gender are examined in secondary histories, film, literature, and memoirs.

**General Education Discipline:** Humanities

**Prerequisites:** Any HIS course

## **Interdisciplinary Studies**

### **IDS 111 - Northland Highways**

**1 Credits** Northland Highways is a college transition-themed first-year seminar course that introduces students to the Northland College mission, acclimates them to the campus community and the northland region, and prepares them for academic, social, and personal success in college. Northland Highways builds on the foundational work of Outdoor Orientation and is part of the broader continuum of transition programming for new students.

### **IDS 115 - Strategies for Academic Success**

**1 Credits** Students will learn skills to study more effectively and efficiently. Through activities, application, and personal reflection, they will learn to support themselves, personally and academically, to maximize success in their other courses.

### **IDS 120 - Superior Connections Practicum**

**3 Credits** Field trips and colloquia discussions are central to the Superior Connections program. The trips and colloquia connect the topics of the fall semester Superior Connections courses and thus provide students with opportunities to integrate ideas from different disciplines. These experiences immerse students in observing, thinking, and communicating about their relationship to the land, water, ecosystems, history, and people of the Lake Superior Region.

Course fee.

**Corequisites:** BIO 128, ENG 126, GSC 112, and NAS 160.

### **IDS 132 - Food Preparation and Preservation**

**3 Credits** Students investigate the subtleties of cooking with local ingredients including grass fed beef, local eggs, and fresh picked fruits and vegetables while learning techniques such as seasoning, braising, barbequing, and baking. They also learn preservation methods including freezing, pickling, drying, fermentation, and canning. Priority registration is given to students who have declared the Sustainable Agriculture minor.

Course Fee.

### **IDS 141 - Sustainable Agriculture Synthesis**

**4 Credits** Students develop a holistic understanding of humanity's relationship to nature through famine and food, gain understanding of agricultural challenges through projects in the campus garden and surrounding farms, and consider how a systems perspective informs the practice of farming and advances in sustainable food production.

**General Education Discipline:** Experiential

### **IDS 154 - Fake News, Forgeries, and Frauds**

**3 Credits** How do you distinguish illusion from reality? This question lies at the heart of several contemporary issues, whether political accusations of "fake news" or the ethics surrounding reality-altering technologies. In this course, students explore historical debates over forgeries, fake identities, and fraudulent artifacts in order to develop skills in media analysis and interpretation that are increasingly useful for navigating today's ever-more-complex media landscape.

### **IDS 168 - War and Peace in Film**

**3 Credits** This Spring Term course critically considers how filmmakers, producers and executives, activists, and governments have advocated for war and peace through the medium of film in the past century. Students primarily examine the American experience in war and peace in this period, but international perspectives on the topic also receive consideration.

**General Education Discipline:** Interdisciplinary

### **IDS 180 - Lake Superior Circumnavigation**

**4 Credits** In this May-term travel course, students explore the Lake Superior Watershed as they circumnavigate the Lake by van, boat, and foot. Visits to prominent natural and historical sites as well as interactions with members of regional communities are integral to the course.

Course Fee.

**General Education Discipline:** Experiential

**Prerequisites:** Superior Connections 4-course block

### **IDS 243 - Sustainable Agriculture Practicum**

**4 Credits** In this field course, students gain hands-on experience in sustainable agriculture either by working on selected farms or by assisting organizations working on food or agricultural policy issues. Students have the opportunity to work in-depth with one farm or organization for the semester, or gain a broad experience with several farms and organizations over the semester.

Course Fee.

**General Education Discipline:** Experiential

**Prerequisites:** IDS 141

### **IDS 248 - Great Lakes Water Wars**

**3 Credits** This course delves into the history of political maneuvers and water diversion schemes that have proposed sending Great Lakes water everywhere from Akron to Arizona. Using a case study approach that examines these various water projects—past, present and proposed—the course culminates with a focus on the Great Lakes Compact, a legal document designed to keep Great Lakes water inside the Great Lakes Basin.

### **IDS 281 - Spring in Italy**

**4 Credits** Students study the great artistic, architectural, and intellectual achievements of Ancient, Medieval and Renaissance Italy as they travel in the heart of Tuscany and Umbria. While absorbing all this cultural history, students will focus on drawing the beautiful urban and rural vistas on offer. Students will begin and end their travels in Florence, with trips to several surrounding towns in between.

Course Fee.

### **IDS 284 - Central American Culture, History, and Language**

**3 Credits** Part of a Center for Ecological Living and Learning (CELL) semester abroad program, this course provides students with a hands-on introduction to the history and culture of Honduras, Nicaragua, and Costa Rica; the challenges of conservation and development facing this region; and the language of the region. Students participate in several homestay experiences, visit cultural and historical sites, and engage in discussions, lectures, and reflective writing.

**General Education Discipline:** Interdisciplinary or Experiential

**Prerequisites:** Admittance to CELL Program

### **IDS 285 - Iceland Culture, History, and Language**

**3 Credits** Part of a Center for Ecological Living and Learning (CELL) semester abroad program, this course provides students with an overview of the culture, language, and history of Iceland. Students receive instruction in conversational Icelandic and develop an understanding of the socio-cultural and environmental contexts relevant to Icelandic studies. Field trips to historical sites are integral to the course.

**General Education Discipline:** Interdisciplinary or Experiential

**Prerequisites:** Admittance to CELL Program

### **IDS 286 - Ecology, Humans, & Sustainability**

**3 Credits** This course is part of a Center for Ecological Living and Learning (CELL) program and is only available to students enrolled in the program. Students in the course explore the magnificent, intricate, and interconnected systems that support and sustain life on Earth, while also examining often unexamined worldviews that influence decisions that individuals and communities make about how they live. Grounded partly in their experience of living at the Findhorn Eco-Village, students conclude the course by developing a leadership action plan for promoting sustainable living on their campuses or home communities.

**General Education Discipline:** Environmental Narratives

**Prerequisites:** Admission to CELL program

## **IDS 315 - Comparative Race Studies**

**3 Credits** Students read history, literature, and critical theory to study connections between indigenous peoples and people of color. Students learn how systems of power, including white supremacy and settler colonialism, define who belongs in the United States. Students examine a range of issues such as indigenous sovereignty; slavery; removal; the Civil War; and debates about borders, immigration and citizenship.

**General Education Discipline:** Writing Intensive; Diversity & Justice; Arts & Humanities

**Prerequisites:** Any NAS course or Junior standing.

## **IDS 334 - Sustainable Food Production**

**4 Credits** Students explore what comprises a "sustainable" farm enterprise within an environmentally conscious, business management context. The students engage in active observation and hands-on learning through community partnerships and campus gardens. The course covers many aspects of meat, fruit, and vegetable production techniques within both scale-appropriate and ecosystem based models.

Course Fee.

**Prerequisites:** IDS 243 and sophomore standing.

## **IDS 373 - Humans and the Environment**

**3 Credits** Part of a Round River field experience, in this environmental anthropology course, students study a variety of topics that range from cultural models and narrative constructions of the natural environment to more applied, developmental issues associated with sustainability and community-based natural resource management, and the wider political and economic context of environmental issues as reflected in political-ecology and the environmental justice movement.

**General Education Discipline:** Interdisciplinary or Experiential

**Prerequisites:** Admittance to the Round River Program

## **IDS 480 - Senior Seminar**

**3 Credits** Through seminar discussions and essay assignments, students synthesize their learning from courses and experiences in the Humanity and Nature core and Environmental humanities emphasis. Specific topics of study vary in a given year.

**Prerequisites:** Senior standing and one of the following: ENG 384, GWS 331, HIS 315, HIS 320, HIS 325, NAS 315, NAS 340, REL 315, or REL 331.

## **Modern Languages**

### **MLG 105 - Elementary Spanish I**

**4 Credits** Students develop a working knowledge of modern Spanish, allowing them to speak, write, and understand the language as it is used today. Classes are taught in Spanish and consist of dialogue practice, presentation of grammatical forms, and intensive language drills. Regular attendance and steady, incremental work is essential for success in the class. Out-of-class support is provided by the instructor and a tutor. Texts for the course are carefully selected and include workbooks for drills and practice, as well as a strong focus on the different cultures of the Spanish-speaking world. Advanced Placement and CLEP credit accepted for MLG 105.

### **MLG 106 - Elementary Spanish II**

**4 Credits** This course is a continuation of MLG 105, students further develop a working knowledge of modern Spanish, allowing them to speak, write, and understand the language as it is used today. Classes are taught in Spanish and consist of dialogue practice, presentation of grammatical forms, and intensive language drills. Regular attendance and steady, incremental work is essential for success in the class. Out-of-class support is provided by the instructor and a tutor. Texts for the course are carefully selected and include workbooks for drills and practice, as well as a strong focus on the different cultures of the Spanish-speaking world. Students develop conversational skills. Advanced Placement and CLEP credit accepted for MLG 106.

**Prerequisites:** MLG 105, Advanced Placement or CLEP credit

## **MLG 205 - Intermediate Spanish I**

**4 Credits** This course continues to build a solid grammatical foundation and to reinforce the four basic skills—listening, speaking, reading, and writing— while giving more opportunities for conversation, so students can use the language freely and spontaneously. Culture is amplified with the class study of a movie script and viewing of the film, as well as various presentations on Latin America and Spain. Advanced Placement and CLEP credit accepted for MLG 205.

**Prerequisites:** MLG 106

## **MLG 206 - Intermediate Spanish II**

**4 Credits** This course represents a mix of advanced grammar and conversation as well as an Introduction to literature. Students read short stories from renowned authors: those are analyzed and discussed in class and students write position/reaction papers on the topic of their choice. There are "windows" into other cultures through documentaries and films. Advanced Placement and CLEP credit accepted for MLG 206.

**Prerequisites:** MLG 205

## **Mathematics**

### **MTH 103 - Algebraic Reasoning**

**3 Credits** Students learn algebraic techniques for working with linear and quadratic equations, polynomials, and expressions involving exponents and radicals. Specific topics include graphing and constructing equations of lines, solving systems of equations, simplifying and factoring polynomials, simplifying radical expressions, and solving quadratic equations. Emphasis is placed on mathematical reasoning, understanding, and skill development.

### **MTH 106 - Environmental Mathematics**

**4 Credits** Students explore environmental issues using the mathematics of functions and basic statistics. Techniques for working with linear and quadratic equations, polynomials, and expressions involving exponents and radicals are reviewed to cultivate students' mathematical prowess. Specific topics include explorations of measurements and units; graphs and equations of lines and quadratics; solutions to systems of equations; polynomials and radical expressions; ratios and percentages; tabular and graphical displays of data; linear, exponential, and power functions; difference equations; and statistical descriptions of data. Emphasis is placed on mathematical reasoning, skill development and problem solving in environmental contexts.

**General Education Discipline:** Quantitative Reasoning

### **MTH 107 - Statistical Concepts and Analysis**

**4 Credits** Students learn to explore questions about data and populations through the application of exploratory data analysis and inferential statistics. Specific topics include summary graphics and statistics; normal distribution

calculations; experimental design and sample collection; sampling distributions; inference concept; t-family of tests; chi-square family of tests; and regression. Students analyze data and perform tests with modern statistical software.

**General Education Discipline:** Quantitative Reasoning

**Prerequisites:** Any 100-level MTH course, ACT math score of 17 or higher, SAT math score of 470 or higher, or successful completion of Algebra II with a grade of B or above.

## **MTH 109 - Precalculus Mathematics**

**4 Credits** Students review the real number system and develop understanding of functions and graphs. Topics include polynomials and zeros, rational functions, exponential and logarithmic functions, trigonometric functions, identities and inverse functions, solution of triangles and elements of coordinate geometry.

**General Education Discipline:** Quantitative Reasoning

**Prerequisites:** ACT math score of 20 or higher, SAT math score of 515 or higher, MTH 106, or successful completion of Algebra II with a grade of B or above.

## **MTH 140 - Calculus I**

**4 Credits** Students learn the concepts of limit, continuity, derivative, and integration. Topics include Mean Value Theorem, anti-derivatives, definite integrals and their applications. Students apply the derivative concept to curve sketching and extreme value problems of optimization in the life, social, and physical sciences.

**General Education Discipline:** Quantitative Reasoning

**Prerequisites:** MTH 109, ACT math score of 25 or higher, SAT math score of 620 or higher, or successful completion of Precalculus with a grade of B or above.

## **MTH 141 - Calculus II**

**4 Credits** In this course students develop a deeper understanding of calculus and its applications. Topics include applications of the definite integral, techniques of integration, improper integrals, Taylor polynomials, sequence and series, functions of several variables, partial derivatives, and multiple integrals.

**General Education Discipline:** Quantitative Reasoning

**Prerequisites:** MTH 140

## **MTH 207 - Biometry**

**4 Credits** Students learn to explore more advanced questions about data and populations through the application of statistical models and inferential statistics. Specific topics include linear models of one- and two-way ANOVA with multiple comparisons and transformations, linear regression with transformations and indicator variables, and logistic regression. Students apply theoretical constructs to real-life situations in the life and natural sciences using modern statistical software.

**General Education Discipline:** Quantitative Reasoning

**Prerequisites:** MTH 107

## **MTH 230 - Mathematical Modeling**

**4 Credits** Students use deterministic and stochastic models based on difference and differential equations to draw conclusions and make predictions about natural systems. Topics include equilibrium analysis, bifurcation, chaos, hysteresis, phase plane analysis, and numerical simulation. Students apply modeling concepts to population ecology, population viability, predator-prey relationships, sustainable use of renewable resources, and global climate.

**Prerequisites:** MTH 140

## **MTH 307 - Probability and Its Applications**

**3 Credits** Students learn combinatorial analysis, axioms of probability, conditional probability, discrete, continuous and jointly distributed random variables, moment generating functions and limit theorems. Students apply theoretical concepts to inferential statistics, Bayes' Theorem, and Markov chains.

**General Education Discipline:** Quantitative Reasoning

**Prerequisites:** MTH 141 or Instructor Consent

### **MTH 312 - Advanced Calculus**

**4 Credits** Students explore multivariate functions and vector calculus. Topics include extreme values of functions of several variables, implicit functions and Jacobians, transformation of coordinates, derivatives of vector-valued functions, line integrals, surface integrals, Green's theorem, Stokes' theorem, and the divergence theorem.

**Prerequisites:** MTH 141

### **MTH 320 - Introduction to Complex Variables**

**4 Credits** Students investigate the complex number system, analytic functions, Taylor and Laurent series, integration, residues and poles, conformal mapping and applications to biological-physical science.

**Prerequisites:** MTH 140 and MTH 141.

### **MTH 328 - College Geometry**

**3 Credits** Students learn both Euclidean and non-Euclidean geometry. Topics include vector methods of proof, classical theorems, geometric transformations of the Euclidean plane, the Poincare model of hyperbolic space and non-Euclidean geometry, and introductory projective geometry.

**Prerequisites:** MTH 141 or Instructor Consent

### **MTH 330 - Differential Equations**

**4 Credits** Differential equations serve as mathematical models for displaying the interrelations between mathematics and the physical sciences engineering. Students study the methods of solutions of ordinary differential equations to represent the dynamics of physical phenomena. Topics include first and second order linear differential equations, power series, and Laplace transform solutions of differential equations.

**Prerequisites:** MTH 141

### **MTH 335 - Discrete Mathematics**

**4 Credits** Students learn fundamental discrete structures. Topics include algorithms, mathematical induction, elements of set theory, graphs, trees, combinatorics, difference equations, recursion, logic, and probability.

**General Education Discipline:** Quantitative Reasoning

**Prerequisites:** MTH 140 or Instructor Consent

### **MTH 337 - Linear Algebra**

**4 Credits** Students use matrix and generalized vector spaces to understand multi-variable functions in real-life applications. Topics include vector spaces, linear dependence/independence, properties of matrices and determinants, linear transformations, inner product spaces, and eigenvalues.

**General Education Discipline:** Quantitative Reasoning

**Prerequisites:** MTH 141 or Instructor Consent

### **MTH 380 - Methods of Applied Mathematics**

**3 Credits** Students learn selected topics from applied mathematics that may include numerical methods, iterative solution of equations, curve fitting and interpolation techniques, numerical differentiation and integration, Fourier series, and transform methods. Additional topics will reflect particular interests of student and faculty.

**Prerequisites:** MTH 141

### **MTH 470 - Advanced Topics in Mathematics**

**4 Credits** Students learn methods of rigorous proofs in analysis and algebra. Topics from analysis include sequences and series, continuous functions on metric spaces, derivatives, basic point set topology and properties of Riemann integrals. Topics from modern algebra include groups, rings, and fields. Real Analysis/Modern Algebra offered in alternate years.

**Prerequisites:** MTH 141 or Instructor Consent

### **MTH 496 - Mathematics Senior Capstone Seminar**

**1 - 4 Credits** Students select, conduct, and complete a research project. The focus of the seminar reflects particular competencies of faculty and specific interests of students. Strongly recommended for all senior mathematics majors.

## **Music**

### **MUS 121 - Chamber Music in Performance**

**1 Credits** Students rehearse and perform chamber music repertory for various standard combinations of instruments and/or voices. Repeatable for credit.

Course Fee.

### **MUS 131 - Symphonic Band**

**0 - 1 Credits** In this Northland College and community concert band, participants study traditional and contemporary band literature and participate in concerts throughout the academic year, balancing the musical and educational needs of the members with service to the cultural needs of the community. Membership is open to all qualified students. Repeatable for credit.

Course Fee.

### **MUS 141 - Northland College Choir**

**0 - 1 Credits** This is a mixed choir for students who enjoy the challenge of singing a wide variety of choral music in a range of different styles. The course is offered without audition and is repeatable for credit.

Course Fee.

### **MUS 143 - Lumberjack Chorus**

**0 - 1 Credits** This is a male choir for students and community members who enjoy the challenge of singing a wide variety of choral music in a range of different styles. The course is offered without audition and is repeatable for credit.

### **MUS 145 - Accidentals Women's Chorus**

**0 - 1 Credits** This is a female choir for students and community members who enjoy the challenge of singing a wide variety of choral music in a range of different styles. The course is offered without audition and is repeatable for credit.

## **MUS 151 - Jazz Band**

**0 - 1 Credits** The band is organized for the study and performance of jazz arrangements and composition in a variety of styles. This ensemble provides the opportunity to strengthen improvisational skills. Membership is open to all qualified students. Repeatable for credit.

Course Fee.

## **MUS 161 - Chequamegon Symphony**

**0 - 1 Credits** Students participate in a college-community orchestra that performs major orchestral repertory during a season of three or four concerts. Repeatable for credit.

Course Fee.

## **MUS 171 - Chamber Choir**

**0 - 1 Credits** The Chamber Choir explores music written for small vocal ensembles. Singers have opportunities to perform music from a number of different style periods, with an emphasis on *a cappella* music from the Renaissance to the present. Students perform regular concerts and are involved in musical outreach in the community. Open by audition. Concurrent membership in the Northland College Choir is encouraged, but not required. Repeatable for credit.

## **MUS 181 - Individual Brass Lessons**

**1 Credits** Students meet regularly with a faculty member for a specialized, one-on-one instruction in an instrument. Instruction focuses on both technical and interpretive aspects of solo performance.

Course Fee.

## **MUS 182 - Individual Guitar Lessons**

**1 Credits** Students meet regularly with a faculty member for a specialized, one-on-one instruction in an instrument. Instruction focuses on both technical and interpretive aspects of solo performance.

Course Fee.

## **MUS 183 - Individual Percussion Lessons**

**1 Credits** Students meet regularly with a faculty member for a specialized, one-on-one instruction in an instrument. Instruction focuses on both technical and interpretive aspects of solo performance.

Course Fee.

## **MUS 184 - Individual Piano Lessons**

**1 Credits** Students meet regularly with a faculty member for a specialized, one-on-one instruction in an instrument. Instruction focuses on both technical and interpretive aspects of solo performance.

Course Fee.

## **MUS 185 - Individual Strings Lessons**

**1 Credits** Students meet regularly with a faculty member for a specialized, one-on-one instruction in an instrument. Instruction focuses on both technical and interpretive aspects of solo performance.  
Course Fee.

### **MUS 186 - Individual Voice Lessons**

**1 Credits** Students meet regularly with a faculty member for a specialized, one-on-one instruction in voice. Instruction focuses on both technical and interpretive aspects of solo performance.  
Course Fee.

### **MUS 187 - Individual Woodwind Lessons**

**1 Credits** Students meet regularly with a faculty member for a specialized, one-on-one instruction in an instrument. Instruction focuses on both technical and interpretive aspects of solo performance.  
Course Fee.

### **MUS 205 - Story of Jazz**

**3 Credits** This course covers the development of jazz from its African heritage through ragtime, blues, Dixieland, swing, and bop to today's styles. Recordings support the historical-analytical approach to the subject.

## **Native American Studies**

### **NAS 100 - Introduction to Native American Studies**

**3 Credits** This course gives students an overview of the historic and contemporary experiences of Native American peoples in North America. Topics will include: Native identity, labor, politics, philosophy, religion, literature, arts, representation, law and ethics, social justice, and language preservation.

Course Fee

**General Education Discipline:** Humanities

### **NAS 121 - Introduction to Ojibwe Language I**

**3 Credits** Students develop an appreciation for the Ojibwe culture through the study of its language and basic expressions.

Course Fee.

### **NAS 122 - Introduction to Ojibwe Language II**

**3 Credits** This course is a second-semester continuation of NAS 121 Introduction to Ojibwe Language I. Students further develop their appreciation for Ojibwe culture through continued study of its language and basic expressions.

**Prerequisites:** NAS 121

### **NAS 160 - Lake Superior Ojibwe**

**3 Credits** Part of the Superior Connections Program, this course focuses on the various Ojibwe people who have resided in the Western Great Lakes region. Students study these cultures from pre-contact time to the present and develop an understanding of and appreciation for the history, culture, and traditional teachings of the indigenous people

of the Lake Superior Watershed.

**Corequisites:** BIO 128, ENG 126, GSC 112, and IDS 120

## **NAS 210 - Native American Cultures in Wisconsin**

**3 Credits** Students study Native cultures who have resided in Wisconsin from pre-history to the present. The course focuses on historical and cultural aspects of the Algonquian, Siouan, and Iroquoian language families, their relations to one another, to the European colonists, and later to the Americans. Students gain insight and understanding of cultures that are much different than that of the White American.

**General Education Discipline:** Humanities

## **NAS 211 - Native American History and Experience**

**3 Credits**

This course explores the diverse histories of Native communities from pre-contact to the present with a focus on communities from this region. Topics include traditional societies prior to European contact, the complex interactions after contact, the growing impact of colonialism on Native peoples, survival and resistance, treaties and Indian removal, Federal Indian policies, Native people in 20th century wars, Red Power activism, Indian self-determination, and the relationship between historical and contemporary issues in Native communities.

Course Fee.

**General Education Discipline:** Diversity & Justice; Arts & Humanities

## **NAS 212 - Wisconsin Indian Cultures, History, and Contemporary Issues**

**3 Credits** This course focuses on the cultures and histories of Wisconsin Native peoples and communities from pre-contact to the present. Topics include their relations to one another, their complex interactions and responses to European contact, the impact of European and American colonialism, and Native survival and resistance. Students gain insight and understanding of Native peoples of Wisconsin and the relationship between historical and contemporary issues in their communities.

## **NAS 216 - Indigenous Representations**

**3 Credits** Students are introduced to the historic and contemporary portrayals of Native and Indigenous peoples and cultures through a variety of popular media. This course emphasizes the critical examination of stereotypes and the ways in which Native and Indigenous peoples have reclaimed their cultural identities through various self-representation strategies aimed at resisting persistent negative depictions and empowering their communities.

Course Fee

**General Education Discipline:** Humanities

## **NAS 227 - Native Foodways**

**3 Credits** Students in this course explore issues in Indigenous foodways, from harvest to table, in a variety of social and cultural contexts. The course surveys how food is creatively used to shape community and identity, to transmit social values, and to mark special and ordinary time. Topics include treaty and harvesting rights, food sovereignty, gender and food production, indigenous land-use traditions and ecological worldview.

Pre-2016 Connections Curriculum: Social Science

2016 Connections Curriculum: Social Science or Human & Cultural Diversity or Needs of an Ecologically Sustainable Future; Writing Intensive course.

Course Fee

**General Education Discipline:** Social Science

### **NAS 231 - Native American Arts and Cultures**

**3 Credits** Working mostly with locally harvested natural materials, students will explore the world of weaving and handwork as it related to early peoples of North America. While emphasis will be placed on working with Black Ash splint to weave a variety of styles of baskets, other projects such as porcupine quill work, birch work, and beadwork are possible, and will depend upon the students. Through handwork, students will have a better understanding of thought processes, Indigenous lifeways, and traditional teachings.

Course Fee.

### **NAS 236 - Indigenous Film and Media**

**3 Credits** Students develop their knowledge of Indigenous film and new media by discussing and interpreting a variety of films, documentaries, graphic narratives, and new media. Drawing on foundational concepts in film and media studies, and surveying the history of global Indigenous cinema and media, students study how power, orientalism, and issues of self-representation have developed and changed in cinema and new media.

2016 Connections Curriculum: Human & Cultural Diversity; Writing Intensive course.

**General Education Discipline:** Human & Cultural Diversity

### **NAS 241 - Indigenous Museum Studies**

**3 Credits** In this service-learning course, students work with Northland's Indigenous Cultures Center and Native American Museum to create a project based on student conducted ethnographic fieldwork in a regional Native American community. Students learn about contemporary museology, about decolonizing representations of Indigenous people in museums, and about how to curate fieldwork into a final digital or physical exhibition for a public audience.

2016 Connections Curriculum: Human & Cultural Diversity and Writing Intensive.

Course Fee

**General Education Discipline:** Human & Cultural Diversity

### **NAS 260 - Indigenous Environmental Justice**

**3 Credits** Students study how environmental resource use affects Indigenous communities in order to better understand the concept of environmental justice and strategies for enacting it. Connecting contemporary environmental issues to legacies of colonialism and considering diverse cultural perceptions of land, students will be better equipped to advocate for equitable uses of the environment that promote the wellbeing of Indigenous communities.

**General Education Discipline:** Human & Cultural Diversity

### **NAS 265 - Indigenous Perceptions of Water**

**3 Credits** Students study Indigenous teachings about water and how this knowledge pertains to efforts to protect and sustain watersheds. Comparing local knowledge and advocacy—for example, Anishinaabe Water Keepers—with Indigenous perspectives on water elsewhere in the world, students enrich their understanding of how culture informs water policies and management. Visits with guest speakers and trips to local waterways will complement course topics and readings.

Course Fee

**General Education Discipline:** Human & Cultural Diversity

### **NAS 283 - American Indian Literature**

**3 Credits** Students survey literature by Native American and non-Native American writers. Coursework acquaints students with both written and oral traditions of American Indian people through reading, writing, lecture, and discussion.

**General Education Discipline:** Humanities

### **NAS 306 - Global Indigenous Politics**

**3 Credits** This course explores common themes of Indigenous political activity such as sovereignty, social movements, and sustainable development. Students examine both the global indigenous social movement as a political force of alliance, and some locally-situated movements in different parts of the world.

Course Fee

**General Education Discipline:** Social Science

**Prerequisites:** Any NAS course or junior standing

### **NAS 315 - American Indian Environmental Perspectives**

**3 Credits** Students consult a range of texts and scholarship by Native American authors to consider what constitutes an environmental perspective and how such perspectives inform social movements, policy, and research. Class discussion and assignments lead students to examine historical and contemporary perspectives and their bearing on major concepts and topics within environmental studies.

**General Education Discipline:** Diversity & Justice; Environmental Narratives

**Prerequisites:** Any NAS course or junior standing

### **NAS 333 - Native American World Views**

**3 Credits** Students study Native American world views as they are expressed in the philosophy, beliefs, and values of the people. Because Native Americans had no written language, this course emphasizes traditional teachings as they are conveyed orally by elders. Specifically, the course focuses on teachings found in natural phenomena and in the various sacred articles given to the people as gifts from the spirit world.

**Prerequisites:** Any NAS course or junior standing

### **NAS 340 - Indigenous Gender Studies**

**3 Credits** Studying a range of gender and sexuality issues within Indigenous contexts, students analyze how gender and sexuality inform larger historical contexts, especially colonization and decolonization. Students consider how political, cultural, and historical factors influence these aspects of Indigenous identities by exploring both scholarship and creative works. Topics include Indigenous feminisms, kinship, and Two-Spirit identities.

**Prerequisites:** Any NAS or GWS course or junior standing

### **NAS 342 - Gender in Indigenous Borderlands**

**3 Credits** Students investigate a variety of historical and contemporary perspectives on gender and sexuality in indigenous North American borderlands in the United States, Canada and Mexico. This course looks at the multiple definitions of "borderlands" and "borders", while examining both the development of present-day North American borders and the changing role of borders in politics from the 19th to 21st centuries.

**General Education Discipline:** Writing Intensive; Diversity & Justice; Arts & Humanities

**Prerequisites:** Any NAS course or junior standing

### **NAS 362 - Native Women's Activism**

**3 Credits** Students study key moments of Native women's activism in North America and learn to understand these moments as part of a broader pattern of responses in resistance to settler colonialism. Students investigate the ways individual Native women asserted their own vision of indigenous feminism through activism, from the 18th century to 21st century movements, including Idle No More and Standing Rock.

Course fee.

**General Education Discipline:** Writing Intensive; Diversity & Justice; Arts & Humanities; Environmental Narratives

**Prerequisites:** Any NAS course or junior standing

## **NAS 380 - Indigenous Women Writers**

**3 Credits** Students study a variety of texts by Indigenous women writers (including fiction, poetry, creative nonfiction, and drama), examining both the literary accomplishments of these writers and how they represent issues pertaining to gender and Indigenous identity. Students familiarize themselves with prominent writers as well as emerging voices, developing interpretations of literary texts using concepts from literary theory and Native American and Indigenous studies.

**Prerequisites:** Any NAS course or junior standing

## **Natural Resources**

### **NRS 101 - Fur-Bearer Ecology and Management**

**1 Credits** This hands-on learning experience with educators from the Wisconsin Department of Natural Resources and the Wisconsin Trappers' Association addresses fur-bearer trapping and management in Wisconsin. Students learn about trapping, skinning, and processing pelts as well as how to identify Wisconsin fur bearers, their ecology, and best management practices. Additionally, students engage in dialogue with trappers, biologists, and conservation wardens about the merits and ethics of trapping.

Course Fee.

### **NRS 102 - Wildland Firefighter Training**

**1 Credits** This course is a certification training course in wildland fire fighting. Certifications include I-100, S-130, S-190, and L-180. Lectures cover safety, fire weather, fire behavior, and firefighting equipment. An experiential field day focuses on map and compass use, fire line creation, fire shelter deployment, and familiarity with firefighting trucks and dozers. Students who pass the course and the federal pack test (which they must arrange on their own) are eligible to receive a red card.

Course Fee.

### **NRS 103 - Wolf Ecology & Conservation**

**1 Credits** Working with educators from Northland College, the Timber Wolf Alliance, the Wisconsin Department of Natural Resources, and other wolf biologists, students are introduced to the history, biology, ecology, monitoring methods, management, and research of wolves in Wisconsin and the Midwest. Students also explore common myths of wolves and discuss the future of wolf conservation. Through hands-on exercises, students learn the basics of wolf monitoring, such as howl surveys and radio telemetry. When offered in the fall session, this class meets one time during the semester on a Friday, Saturday, and Sunday and also requires an additional night for an independent howl survey.

Course Fee

### **NRS 108 - Chainsaw Safety and Certification**

**1 Credits** Students learn to safely operate a chainsaw according to US Forest Service operation rules. Students are eligible to complete a certification field day to earn the first step of S-212 – Wildfire Chainsaws, and work their way toward becoming a Faller Class A. Students are required to attend 2 evening sessions, and 1 full day Saturday session in the field. Typically this class occurs in Mid April. Course content includes: required safety equipment (PPE), safe saw handling and work positioning, minimizing risks, basic operation, advanced bucking and limbing, basic felling theory, advanced felling techniques, saw maintenance.

Course Fee.

**Prerequisites:** Instructor consent required.

## **NRS 215 - Natural Resources Policy**

**3 Credits** Students explore the role of state, federal, tribal, and international agencies in managing natural resources. Students also analyze the history of significant legislation and policy to determine their current impact on resource management, especially focusing on local and Great Lakes issues.

Course Fee.

**Prerequisites:** BIO 115 or BIO 128

## **NRS 225 - Fisheries and Wildlife Techniques**

**4 Credits** Students learn field techniques and use them to sample fish and wildlife populations. This is an intensive field experience that will help prepare students to function as field biologists.

Course Fee.

**General Education Discipline:** Experiential

**Prerequisites:** Natural Resource major and BIO 234

## **NRS 261 - Wildlife Handling & Chemical Immobilization**

**1 Credits** Students will be trained in wildlife handling and chemical immobilization of large carnivores (e.g., wolves or cougars). Students will gain hands-on experience chemically immobilizing wildlife, including: determining proper dosages, administering chemicals, and monitoring, handling, and measuring immobilized wildlife. At the completion of this course, students will receive certification. Class occurs over the course of one weekend (Friday-Sunday) during the May term. Travel and sleeping in rustic conditions or camping are required.

Course fee.

**Prerequisites:** BIO 234 and NRS or BIO major.

## **NRS 266 - Forest Mensuration**

**4 Credits** Students are trained on the principles and application of tree-stand inventory and measurements to estimate growth and yield of forestry resources. This course includes a significant field component.

Course Fee.

**Prerequisites:** BIO 234

## **NRS 328 - Coastal Ecology and Management**

**4 Credits** Coastal ecosystems, both marine and freshwater, are among the most complex physical, chemical, and biological habitats on earth. Accordingly, conservation and management of these ecosystems is extremely challenging given their dynamic nature. The ecology and management of both marine and freshwater coasts are explored in this course with Lake Superior coastal habitats providing the focus of multiple field experiences.

Course fee

**Prerequisites:** BIO 234

## **NRS 335 - Forest Ecology and Management**

**4 Credits** Students study forest stand establishment, composition, structure, and dynamics, with particular focus on the role of silvicultural manipulation and harvest. This field-based course focuses on silvicultural and timber harvesting practices of forest species in the Upper Great Lakes Region.

Course Fee.

**Prerequisites:** BIO 234

## **NRS 345 - Ecological Restoration**

**4 Credits** This course focuses on understanding both the relevant underlying principles of ecology and the practical nuts-and-bolts of designing and implementing restoration plans. Students study plant communities, design concepts, assessment techniques, and prescribed fire to integrate theory and practice while planning a project for an outside client.

Course Fee.

**General Education Discipline:** Experiential

**Prerequisites:** BIO 234

## **NRS 346 - Applied Ecology**

**3 Credits** Part of a Round River Conservation Studies semester program, students in this course participate in restoration activities within the site of a new national park in Patagonia. Field work is supplemented by lectures, readings, and discussion, and students learn the principles of restoration ecology, as well as the methods, planning process, evaluation criteria and challenges of applied restoration work.

**General Education Discipline:** Experiential

**Prerequisites:** Admittance to the Round River Program

## **NRS 347 - Sustainable Forest Management**

**4 Credits** Students study forest stewardship techniques and certification policies aimed at balancing long-term ecological, economic, and social needs. Students take frequent field trips to observe examples of forests being managed for multiple uses.

**Prerequisites:** BIO 234

## **NRS 348 - Wildlife Ecology and Management**

**4 Credits** This course surveys the theories and management of wildlife populations, including population dynamics, life histories, habitat management, census techniques, and endangered species. Students gain insight and experience through field trips to local areas of interest.

Course Fee.

**Prerequisites:** BIO 234

## **NRS 349 - Fisheries Science and Management**

**4 Credits** Students learn and use modern statistical methods to estimate vital parameters of exploited fish populations, including abundance, age, growth, mortality, condition, and size structure. Students also explore basic concepts and specific methods for managing fish populations and the people who use them. Concepts are reinforced by examining real issues and collecting and analyzing real data through the scientific literature and field trips with local resource agencies.

Course Fee.

**General Education Discipline:** Experiential

**Prerequisites:** BIO 234

### **NRS 358 - Wetlands**

**4 Credits** Students study the ecology, biology, conservation, and management of wetlands. A series of field trips to regional wetlands introduce students to the natural history and classification of wetlands.

Course Fee.

**General Education Discipline:** Natural Science

**Prerequisites:** BIO 234

### **NRS 363 - Fire Ecology and Management**

**3 Credits** Students study the ecology, history, and management of fire, with particular focus on the chemistry and physics of fire, fuel loads and weather influences on fire, fire suppression, prescribed fire, and fire policies.

**Prerequisites:** BIO 234

### **NRS 365 - Conservation of Large Carnivores**

**3 Credits** This interdisciplinary course focuses on the conservation and ecology of large carnivores. Students learn about large carnivore conservation around the world by examining various case-studies of current conservation initiatives and studying the natural histories of the world's large carnivores. Case-studies focus on particular carnivore species and the scientists, conservationists, and local people who strive to balance human livelihoods and carnivore conservation. Topics include: population ecology, human-wildlife conflict, conservation genetics, reintroduction, metapopulations, sociopolitical conflict over carnivore conservation, trophic cascades, conservation planning, poaching, and habitat conservation.

**Prerequisites:** BIO 234

### **NRS 370 - Community-Based Natural Resource Management**

**3 Credits** Much of southern Africa has adopted Community-Based Natural Resource Management (CBNRM) approaches to conservation, led and implemented by community organizations, traditional leaders, conservation NGO's, private-sector investors, and government authorities. The goal of CBNRM is for local communities and private landowners to benefit directly from both consumptive and non-consumptive natural resource utilization strategies. This course covers major approaches to CBNRM focusing on evaluating the success of local strategies.

**General Education Discipline:** Experiential

**Prerequisites:** Admittance to the Round River Program

### **NRS 464 - Wolf Ecology, Management, & Research**

**4 Credits** This two-part course: 1) provides students with a deep understanding of wolf ecology and management via in class lectures, guest lectures from agency, tribal, and nonprofit professionals, and field experiences, and 2) provides a hands-on opportunity for students to become engaged in applied wolf research. Throughout the course of the class students develop an applied research project focused on achieving broader effects beyond the scope of the class (i.e., impact wolf management or environmental education activities). Flexible schedules and out-of-class activities are expected. The class includes at least one mandatory weekend trip. Students may be expected to travel to remote areas of northern Wisconsin to conduct field research.

Course Fee

**General Education Discipline:** Experiential

**Prerequisites:** BIO 234 or NRS 164 with instructors consent

## **NRS 480 - Integrated Ecosystem Management**

**4 Credits** Integrated Ecosystem Management is grounded in an interdisciplinary understanding of the ecological, social and economic systems that sustain human well-being. Students apply the skills and concepts acquired in previous natural resource courses to collaboratively solve real-world management challenges from an ecosystem-based perspective. The course includes lecture, laboratory and seminar material; however, the focus of the curriculum is the development of student-directed group projects that enhance the management of regional ecosystems.

**Prerequisites:** BIO 234

## **Outdoor Education**

### **OED 105 - Introduction to Outdoor Education**

**3 Credits** Students survey the outdoor education profession and methods used by outdoor educators. Topics commonly covered in the course include adventure education, environmental education, Native American studies, therapeutic and universal programming, and the interpretation of the biological and geological land base. Field experiences are integral to the course.

Course Fee.

### **OED 107 - Basic Canoeing**

**1 Credits** This course is designed to give beginning canoeists a correct start, the tools to self-critique, and the means to continue to improve. It will emphasize strokes and boat handling skills for flat and moving water, basic rescue techniques, and principles of risk management. Fee. Offered spring and alternate fall terms.

Course Fee

### **OED 108 - Basic River Kayaking**

**1 Credits** Students practice paddling and risk management techniques for flat, moving, and whitewater boating. They develop skills in basic strokes and rolling. River practice during the course focuses on up- and down-stream ferries, the eddy turn, the peel out, wave surfing, and basic river rescues. Course fee.

Course Fee

### **OED 109 - Basic Sea Kayaking**

**1 Credits** Preparation for sea kayak expeditioning, basic strokes, rescues, hazards of the Great Lakes, navigation, equipment overview, and transportation will all be covered.

Course Fee

### **OED 110 - Wilderness Navigation**

**1 Credits**

Students will study a range orienteering and land navigation skills, including map reading, compass use, and map and compass techniques. Participants will run a progression of orienteering courses and learn the basics of orienteering course setting. Fee. Offered Spring and alternate fall terms.

Course Fee

### **OED 111 - Cross-country Skiing**

**1 Credits** Students study equipment, base preparation, waxing, and winter risk management. Regular trips provide opportunities to develop basic skills in classical and/or skating techniques, depending on snow conditions and student interest.

Course Fee

### **OED 112 - Telemark & Backcountry Skiing**

**1 Credits** In this introductory course, students learn the Telemark turn and its application in different snow conditions. Students also learn methods for backcountry travel, the basics of risk management in a winter environment, and how to use backcountry equipment in specific situations.

Course Fee

### **OED 114 - Basic Rock Climbing**

**1 Credits** Students study and practice risk management, belaying, anchor systems and set-ups, rappelling, climbing techniques, knots, and basic rescue. Top rope climbing only.

Course Fee

### **OED 116 - Backpacking**

**1 Credits** In this introductory backpacking course, students study equipment, clothing, menu planning, basic cooking skills, map and compass navigation, on-trail hiking techniques, risk management, and minimum impact camping. An off-campus trip provides an opportunity to practice basic backpacking skills.

Course Fee

### **OED 131 - Outward Bound Course**

**1 Credits** See Outdoor Education faculty or the Outward Bound website for more information.

Course Fee.

**General Education Discipline:** Experiential

### **OED 144 - Snowshoeing**

**1 Credits** Students study snowshoeing equipment, techniques, and risk management. Weekly trips provide an opportunity to develop skills and a knowledge of natural history in a winter environment.

Course Fee

### **OED 160 - Programming Lab I**

**0-1 Credits** Students meet weekly to plan recreational and leisure programming for the campus community and other groups. Students practice designing, implementing, and evaluating programs through the delivery of multiple programmatic offerings.

### **OED 180 - Outdoor Orientation Training**

**1 Credits** This course is required for students who lead Northland College Outdoor Orientation trips. Students learn trip planning, effective use of outdoor equipment, minimum-impact techniques, map and compass use, and strategies for teaching backcountry skills. Students also explore personal leadership in an outdoor setting. Participation in weekly trip-planning meetings and completion of a CPR course are required. Graded S/U. Non-repeatable.

## **OED 181 - Outdoor Orientation Leader**

**1 Credits** This academic credit is awarded to student leaders after they successfully lead their Northland College Outdoor Orientation trip. Student leaders are evaluated on the extent to which they fulfill expectations throughout the planning and implementation phases of their trips. Graded S/U. Repeatable.

**Prerequisites:** OED 180

## **OED 210 - Inclusive Outdoor Education**

**3 Credits** Students explore the inclusion of people of different ages and abilities in outdoor education. Topics may vary to take advantage of local and regional opportunities, but the primary emphasis will be on including people with impairments and disabilities in outdoor education programs.

Course Fee.

## **OED 214 - Intermediate Rock Climbing**

**1 Credits** Students study and practice additional belay techniques, site management, ascending, climber rescues, equipment care, sport history and lead climbing concepts.

Course Fee

**Prerequisites:** OED 114

## **OED 221 - Group Process and Leadership**

**4 Credits** Students learn and develop skills in group process management and leadership. Topics covered include group formation and development, norms, leadership, facilitation, conflict resolution, and evaluation.

**General Education Discipline:** Social Science

## **OED 224 - North Woods Pathways**

**4 Credits** Students explore the rich history of paths and trails in the North Woods and throughout the world. Students survey the rich literature and traditions of walking while also hiking portions of some significant regional trails. This course involves keeping a journal and contemplating one's path on the journey of life.

Course Fee.

**General Education Discipline:** Humanities

## **OED 237 - Woodcraft and Woodland Skills**

**1 Credits** This course introduces students to skills and knowledge useful for living out-of-doors with minimal equipment. Students will learn how to use edged and self-made tools to manufacture items from the immediate surroundings. Skills will include: fire by friction, shelter, edible plant identification, animal tracking, and other general woods-knowledge.

**Prerequisites:** OED 221, OED 276, and Junior or Senior Standing

## **OED 240 - Wilderness Emergency Care**

**4 Credits** This introductory foundations course focuses on the anatomy and physiology of major systems in health, injury, and disease to explain emergency care procedures in both the urban environment and the extended care context of the wilderness. Students study and practice diagnostic methods, problem solving, improvisation, risk management, and leadership.

Course Fee.

## **OED 260 - Programming Lab II**

**0-1 Credits** Students meet weekly to plan recreational and leisure programming for the campus community and other groups. Students practice designing, implementing, and evaluating programs through the delivery of multiple programmatic offerings. Course may be repeated once for credit.

**Prerequisites:** OED 160

## **OED 261 - Foundations in Environmental Education**

**3 Credits** This course provides a broad survey of environmental education activities and practice from around the world. Coursework prepares students to discuss the history, engage in current practices, and develop effective programs in environmental education. This course meets environmental education requirements for teacher licensure in Wisconsin.

Course Fee.

## **OED 262 - Outdoor Leadership**

**4 Credits** As part of the Outdoor Skills Semester, students learn and practice living with, leading, and teaching peers in the context of extended backcountry experiences.

**General Education Discipline:** Experiential

**Prerequisites:** OED 221 and OED 276

**Corequisites:** OED 263 and OED 264

## **OED 263 - Outdoor Living Skills**

**4 Credits** As part of the Outdoor Skills Semester, students learn skills and systems for living comfortably in the backcountry for extended periods of time.

Course Fee

**General Education Discipline:** Experiential

**Prerequisites:** OED 221 and OED 276

**Corequisites:** OED 262 and OED 264

## **OED 264 - Technical Outdoor Skills**

**4 Credits** As part of the Outdoor Skills Semester, students learn and practice a variety of technical skills for outdoor travel and pursuits.

**General Education Discipline:** Experiential

**Prerequisites:** OED 221 and OED 276

**Corequisites:** OED 262 and OED 263

## **OED 265 - Teaching & Facilitation Skills**

**3 Credits** Students learn and practice numerous techniques for teaching and facilitating. Students evaluate the appropriateness and effectiveness of different techniques for a variety of different educational objectives and audiences.

## **OED 270 - Facilitating Challenge Course Programs**

**4 Credits** Students will study and apply educational theories and strategies underpinning the use of initiative activities and Challenge Courses for personal growth and team building. Students will facilitate peer- and community-based programs using initiative and challenge course activities to enhance group communication, conflict resolution, and

problem-solving skills.  
Course Fee.

### **OED 276 - Foundation and Principles of Outdoor Education**

**3 Credits** Students explore the historical and philosophical foundations of the diverse emphases and uses of outdoor and experiential education. Students develop their own philosophy of education along with strengthening their educational strategies and practice.

### **OED 279 - Access and Diversity**

**3 Credits** Explore factors that affect participation in outdoor education by people of different races, ethnicities, cultures, classes, genders, and gender identities and explore possibilities for improving access and inclusion in outdoor education contexts.

Course Fee.

**General Education Discipline:** Social Science

### **OED 282 - Outdoor Education Practicum**

**4 Credits** Students lead environmental education lessons at the Audubon Center of the North Woods and for Minnesota charter schools. Lessons are developed on the basis of field investigations and environmental education techniques and strategies. Peer evaluations of lessons are integral to the course.

**General Education Discipline:** Experiential

### **OED 328 - Wilderness Writers and Philosophers**

**3 Credits** Students explore the development of the idea of wilderness from the Pleistocene to the present. Course work includes readings, discussion, wild land experience field days, guest speakers, and reflection papers.

**Prerequisites:** Any 200-level ENG, GWS, HIS, HUM, NAS, PHL, REL or WRI course.

### **OED 330 - National Outdoor Leadership School Course**

**1-4 Credits** National Outdoor Leadership School. Contact Outdoor Education faculty or see NOLS website for more information.

**General Education Discipline:** Experiential

### **OED 331 - Outward Bound Course**

**1 - 3 Credits** See Outdoor Education faculty or the Voyageur Outward Bound website for more information.

**General Education Discipline:** Experiential

### **OED 332 - Winter Travel and Living Skills**

**4 Credits** Students learn skills essential to travelling and living in winter environments, including cross-country skiing and snowshoeing techniques. In addition, students study physiology, nutrition, equipment, ice safety, avalanche awareness, snow shelters, and traditional “hot tent” and toboggan travel.

Course Fee.

**General Education Discipline:** Experiential

**Prerequisites:** OED 324, OED 326, OED 328, and OED 381

## **OED 349 - Search and Rescue**

**3 Credits** Students study and practice techniques of lost victim search, search design, high angle rescue, and swift water rescue. The course combines lecture and lab to equip students with the skills and background required to function as useful members of a search or rescue effort.

Course Fee.

**General Education Discipline:** Experiential

**Prerequisites:** OED 114 or OED 264 or instructor consent

## **OED 360 - Programming Lab III**

**0-1 Credits** Students meet weekly to plan recreational and leisure programming for the campus community and other groups. Students practice designing, implementing, and evaluating programs through the delivery of multiple programmatic offerings. May be repeated once for credit.

**Prerequisites:** OED 160 and OED 260

## **OED 361 - Interpretive Program Design**

**3 Credits** Students explore methods and strategies for designing and evaluating interpretive programs for the public. Topics include the use of firsthand experience, storytelling, displays, living history, nature trails, audio-visual materials, and publications to communicate the natural and cultural environments effectively and to interest a variety of audiences. Provides opportunities for peer teaching, individual and group presentations, and community outreach.

**Prerequisites:** One of the following courses: EDU 210 , OED 261 , OED 265 , or instructor consent

## **OED 362 - Apostle Island School Preparation**

**1 Credits** Students meet over the winter term to begin planning for the May-term course, OED 363 Apostle Islands School. The planning time is used to develop the teaching team; impart information about the schedule and logistics of Island School; inform students of the unique partnership and responsibilities associated with Northland College, Apostle Islands National Lakeshore and participating middle schools; access resources to learn more about the Apostle Islands; visit with participating schools; and, begin developing the three-day program to be implemented in May.

Course Fee.

**Prerequisites:** OED 261

**Corequisites:** OED 261

## **OED 363 - Apostle Islands School**

**4 Credits** Students work with National Park Service rangers to plan, deliver, and evaluate residential and day-long environmental education and outdoor education activities in the Apostle Islands National Lakeshore for regional 6th and 7th graders. Lessons include Lake Superior, beach ecology, Northern forest ecosystems, sustainable tourism, wilderness travel, cultural history, shipwrecks, and much more.

**General Education Discipline:** Experiential

**Prerequisites:** OED 261 and OED 362

## **OED 364 - Advanced Program Design**

**3 Credits** As part of the Professional Development Experience, students study program models relevant to diverse outdoor education contexts and refine their abilities to design, deliver, and assess programs for diverse audiences in multiple contexts.

Course Fee

**Prerequisites:** OED 210, OED 221, OED 265, OED 276, and either the OED Skills Semester or the following: OED

107, OED 109, OED 110, OED 114, OED 116 and OED 237

**Corequisites:** OED 365 , OED 366 and OED 472

### **OED 365 - Advanced Teaching Techniques**

**3 Credits** As part of the Professional Development Experience, students will study curriculum models and advanced concepts for teaching in multiple outdoor education contexts and refine their abilities to craft curricula and effectively use a variety of teaching techniques in the delivery of educational experiences.

Course Fee

**Prerequisites:** OED 210, OED 221, OED 265, OED 276, and either the OED Skills Semester or the following: OED 107, OED 109, OED 110, OED 114, OED 116, and OED 237

**Corequisites:** OED 364 , OED 366 and OED 472

### **OED 366 - Universal Design Applications**

**3 Credits** As part of the Professional Development Experience, students use concepts and principles of universal design to plan, implement, and assess accessible curricula and programs for diverse audiences in a range of outdoor education contexts.

Course Fee

**Prerequisites:** OED 210, OED 221, OED 265, OED 276, and either the OED Skills Semester or the following: OED 107, OED 109, OED 110, OED 114, OED 116, and OED 237

**Corequisites:** OED 364, OED 365 and OED 472

### **OED 385 - Urban Outdoor Education**

**3 Credits** Students visit numerous organizations that deliver outdoor education programming in an urban setting. Students get to observe, participate in, and assess urban programming for a variety of populations and in a variety of settings.

Course Fee

**General Education Discipline:** Experiential

**Prerequisites:** OED 265, OED 276, and OED 279

### **OED 409 - Paddling Instructor Development**

**3 Credits** Students refine skills needed for paddling, instructing paddling skills, managing groups on water, adapting instruction for diverse abilities, and performing rescues. Students are able, upon completion of the course, to sit for an instructor certification exam.

Course Fee

**Prerequisites:** OED 107 and OED 109 or OED Skills Semester

### **OED 414 - Climbing Instructor Development**

**3 Credits** Students refine skills and systems needed for climbing, site management, climbing instruction, and vertical rescue. Students are able, upon completion of the course, to sit for an instructor certification exam.

Course Fee

**Prerequisites:** OED 114 or OED Skills Semester

### **OED 424 - Outdoor Education Programming and Risk Management**

**4 Credits** In this course, students study the elements of quality programming and effective risk management for a wide range of outdoor education applications. When appropriate, students apply their design and risk management skills to

programs within the college's co-curriculum, ed-ventures, or the broader community.

Course Fee.

**Prerequisites:** OED 324, OED 326, OED 328, and OED 381

### **OED 425 - Advanced Topics in Natural History**

**3 Credits** Students survey the rich field of natural history. Topics include the natural history essay, educators, and the use of natural history in diverse education programs. Students also explore the use of natural history in the creation of a meaningful and sustainable human-nature relationship. Students read widely in the field, engage in research and development of natural history topics, and present their work to colleagues in the class and community.

**Prerequisites:** Junior or senior Standing, or Instructor Consent

### **OED 430 - National Outdoor Leadership School Semester**

**12 Credits** National Outdoor Leadership School. Contact Outdoor Education faculty or see NOLS website for more information.

**General Education Discipline:** Experiential

### **OED 431 - Outward Bound Semester**

**12 Credits** See Outdoor Education faculty or the Voyageur Outward Bound website for more information.

**General Education Discipline:** Experiential

### **OED 437 - Universal Design Laboratory**

**4 Credits** Students explore the application of inclusion and universal design to outdoor education in a laboratory-style course. Students engage in individual projects, designing curricula, equipment, or products to promote inclusion and to experience the practical implications of universal design within the outdoor education profession.

Course Fee.

**General Education Discipline:** Experiential

**Prerequisites:** OED 324, OED 326, OED 328, and OED 381

### **OED 439 - Therapeutic Principles and Practices**

**4 Credits** Students explore current therapeutic applications and research in the field of outdoor education. Current literature and case studies are used to teach and apply a range of therapeutic principles and practices. The primary focus is on Adventure Therapy but may vary with student interests. Students interested in working with at-risk or adjudicated adolescents in outdoor settings are encouraged to take this class.

Course Fee.

**Prerequisites:** OED 276, PSY 110, and Junior Standing or Instructor Consent

### **OED 446 - Wilderness Instructor Training**

**4 Credits** Students plan and participate in a 3-week wilderness expedition. While traveling by land or water, students study and practice navigation, cooking, campcraft, technical skills, risk management, group process, leadership, and teaching techniques.

Course Fee.

**General Education Discipline:** Experiential

**Prerequisites:** OED 237, OED 324, OED 326, OED 381, and Instructor Consent

## **OED 470 - Enduring, Emerging Issues in Outdoor Education**

**3 Credits** This course explores multiple perspectives on key debates within the field. These include the role of technology in the wilderness, the value of motorized recreation, the trend of certification and accreditation, access for individuals with disabilities, the value of "virtual" adventure programs, the rights of organizations to restrict membership based on personal characteristics, and what it means for outdoor programs to be "sustainable."

**Prerequisites:** Junior or Senior Standing or Instructor Consent

## **OED 472 - Accident Theory & Risk Management**

**3 Credits** Students explore the nature of risk and societal responses to it. Students critique various theoretical and practical models for managing risk, and apply these theories to contexts both within and external to the outdoor profession. Students practice using various risk-management models to inform the design and implementation of outdoor programming.

**Prerequisites:** OED 210 OED 221 OED 265 OED 276 , and either the OED Skills Semester or the following: OED 107 OED 109 OED 110 OED 114 OED 116 OED 237

**Corequisites:** OED 364, OED 365, and OED 366

## **OED 489 - Advanced Topics in Diversity and Inclusion**

**3 Credits**

Students read widely in the field, engage in research and development of topics in diversity and inclusion in Outdoor Education, and present their work to colleagues in the class and community.

**Prerequisites:** OED 210, OED 221, OED 276, OED 279, and OED 366

## **OED 492 - Internship**

**3 - 4 Credits**

## **OED 496 - Outdoor Education Capstone**

**3 - 4 Credits** The outdoor education capstone is a full-time, 10-12 week intensive teaching or leadership practicum within a professional outdoor education environment. It is intended to be a culminating opportunity for students nearing graduation to hone their teaching and leadership skills in a professional setting. The capstone may be taken after completion of the required Outdoor Education Professional Development Block. Capstone experiences are chosen in consultation with and require approval from faculty in the outdoor education program.

**Prerequisites:** OED 364 , OED 365 , OED 366 , and junior standing

## **Physical Education**

### **PED 202 - Sports Medicine**

**3 Credits** Students study the causes, prevention, and treatment of sports injuries. They also gain practical experience in first aid, taping, and training techniques.

### **PED 300 - Theories and Techniques of Coaching**

**3 Credits** Students develop an understanding of general coaching fundamentals as well as techniques for coaching specific sports. The course includes four hours of lab.

### **PED 301 - Musculoskeletal Anatomy**

**4 Credits** This specialized course features an in-depth study of human skeletal, articular (joint), and muscular systems, including their structure, function, and interactions. Students develop conceptual understandings and explore applications rather than memorize details.

### **PED 303 - Analysis of Human Performance**

**4 Credits** Students study the principles of Exercise Physiology and their application to physical activities. Particular attention is given to bioenergetics, the physiology of muscular contraction, neural control and feedback mechanisms, and their application.

**Prerequisites:** PED 301

### **PED 400 - Organization and Administration of Athletics**

**3 Credits** Students study the organization of athletics and athletic teams; administrative problems of athletics in relationship to individual, school, community, and state requirements; principles of officiating; the place of intramural and interscholastic athletics in the academic curriculum; and control and care of an athletic plant.

## **Philosophy**

### **PHL 225 - Ethics**

**3 Credits** Students explore contemporary moral problems and their relationship to applicable ethical concepts and theories, such as right and wrong, moral agency and responsibility, moral value, law and morality, and justification of ethical assertions.

**General Education Discipline:** Humanities

### **PHL 226 - Environmental Ethics**

**3 Credits** Students study ethical responsibility with regard to the natural world and gain practical experience by investigating the ethical dimensions of current environmental issues.

**General Education Discipline:** Humanities

### **PHL 229 - Introduction to Philosophy**

**3 Credits** Students study the fundamental questions, issues, and methods of philosophy. Specific topics include seminal ideas from philosophy of religion, philosophy of science, theories of knowledge (epistemology), ultimate reality (metaphysics), and moral philosophy (ethics).

**General Education Discipline:** Humanities

### **PHL 230 - History of Western Philosophy I**

**3 Credits** This course introduces students to the ancient Greek philosophers, the "counter-cultural" thinkers of their day whose writings formed the foundations for contemporary Western thought. Through these philosophers, we explore

questions that continue to puzzle us today: What is the nature of "nature"? How do we gain "scientific" knowledge? How can you live a happy life? Readings include selections from Plato, Aristotle, Pythagoras, and others.

### **PHL 262 - Environmental Philosophy**

**3 Credits** In this course students survey main areas of environmental philosophy, including environmental ethics, European environmental philosophy, ecofeminism, political ecology, and environmental aesthetics. Students explore and develop their own philosophical attitudes toward the environment and environmental issues.

### **PHL 266 - Environmental Aesthetics**

**3 Credits** Students explore how aesthetic values of nature inform environmental ethical decision making and how culture influences the way that individuals appreciate nature. Integral to the course is an examination of how underlying Western environmental aesthetic values compare to traditional Japanese aesthetics.

### **PHL 270 - Philosophy of Science**

**3 Credits** This course focuses on the philosophical thought associated with scientific revolutions and the scientific method specifically. Through discussions and readings, students examine the successes of modern science as well as critiques of its methods and philosophical underpinnings.

**General Education Discipline:** Humanities

### **PHL 276 - Logic**

**3 Credits**

This course will emphasize learning to use symbolic logic to diagram and analyze deductive arguments, and to carry out proofs to derive conclusions. Basic predicate logic and quantification will be covered, as well as informal fallacies. Applications to real life arguments will be stressed.

**General Education Discipline:** Quantitative Reasoning

### **PHL 282 - Contemporary Western Philosophy**

**3 Credits** A survey of the major ideas and currents in Western philosophy from the late 1800s through the 1900s. Areas will include analytic philosophy, existentialism, phenomenology, ordinary language philosophy, and neo-pragmatism.

**General Education Discipline:** Humanities

### **PHL 330 - Philosophy of Language**

**3 Credits** In this class students will explore the meaning of meaning from various philosophical perspectives. Topics include sense and nonsense, rules, metaphor, the role of context, and the alleged limits of language. We will take a theme-based rather than a chronological approach to the topic.

**General Education Discipline:** Humanities

### **PHL 360 - Concepts of Nature**

**3 Credits** An upper level seminar in which we explore conceptual frameworks surrounding the social construction of the concept of 'Nature'. We will look at the tacit assumptions that inform our attitudes, decisions, and behaviors in relation to the natural world, and we will compare European, American, and Japanese models of understanding 'Nature'.

**Prerequisites:** PHL 226, PHL 262, PHL 266, or HIS 241

## Physics

### PHY 104 - Introduction to Astronomy

**4 Credits** Students investigate general astronomical topics, including the solar system, stars, galaxies, coordinates in space- time, prediction of the position of celestial bodies, constellation identification, and celestial navigation.

**General Education Discipline:** Natural Science

### PHY 110 - General Physics I

**4 Credits** Students apply a calculus-based approach to the topics of kinematics, dynamics, gravitation, and rotation. In the laboratory portion of the course, students collect, analyze, and graph data.

Course Fee.

**General Education Discipline:** Natural Science

**Corequisites:** MTH 140

### PHY 111 - General Physics II

**4 Credits** Students apply a calculus-based approach to the topics of fluid mechanics, oscillations and waves, thermodynamics, and electromagnetism. The course requires a solid understanding of algebra, geometry, trigonometry, and calculus. In the laboratory portion of the course, students collect, analyze and graph data.

Course Fee.

**General Education Discipline:** Natural Science

**Prerequisites:** PHY 110 and MTH 140

### PHY 211 - Introductory Modern Physics

**3 Credits** Students survey the basic concepts of modern physics, including special relativity, quantum mechanics, atomic physics, and elementary particles. Students in this course should have access to calculators capable of numerical integration.

**Prerequisites:** PHY 111 and MTH 141

### PHY 306 - Classical Mechanics

**3 Credits** At an advanced level, students investigate the study of mechanics, including kinematics with non-constant acceleration, rotation of rigid bodies, motion in non-inertial reference frames, two-dimensional collisions, and Kepler's laws of gravitation. The course requires a combination of advanced mathematics and an understanding of fundamental physics.

**Prerequisites:** PHY 111 and MTH 141

### PHY 330 - Thermodynamics

**3 Credits** An advanced investigation of the laws of thermodynamics. Topics include gas laws, heat transfer, work, entropy, heat engines, the thermodynamic behavior of water and moist air.  
**Prerequisites:** PHY 111 and MTH 141

## Psychology

### PSY 110 - General Psychology

**4 Credits** Students integrate the natural and social sciences in the study of human psychology. Topics include history, systems, and methods of psychology; neuroscience; cognition, language and consciousness; lifespan development; motivation and emotion; disorders and treatment; personality and social psychology. Special emphasis is placed on incorporating research from several areas in the analysis of specific topics such as aggression, health, and sexuality.  
**General Education Discipline:** Social Science

### PSY 203 - Lifespan Developmental Psychology

**3 Credits** This course examines physical, cognitive, emotional, and social development over the lifespan, addressing theories and research on development and its influences: what changes and what remains the same, how people differ in their development, and the nature of the stages we pass through.  
**General Education Discipline:** Social Science  
**Prerequisites:** PSY 110

### PSY 225 - Experimental Psychology

**4 Credits** Students apply the scientific method in psychology, including experience in preparing, performing, and reporting psychological experiments.  
**Prerequisites:** PSY 110 and MTH 107.

### PSY 227 - Cognitive Psychology

**3 Credits** An introduction to contemporary research and theory in human learning and memory, relevant perceptual processes, and higher functions such as language.  
**Prerequisites:** PSY 110

### PSY 229 - Sport Psychology

**3 Credits** In this course, students learn the theories, concepts, and methodology of sport psychology. Topics covered include motivation theory in sport, team dynamics, psychological training, psychology of sport injury and burnout. Students gain an understanding of how psychological factors impact involvement, enjoyment, performance in sport/physical activity, and how personal behavior is influenced by sport and extreme physical exertion.  
**Prerequisites:** Sophomore standing or higher

### PSY 233 - Social Psychology

**3 Credits** Students explore the behavior and experience of the individual in a social and cultural context. Current theory and research are covered on core topics including: the self, aggression, prosocial behavior, attraction and love, attitudes, prejudice, conformity, and group dynamics. Coursework is focused on applying social psychological principles and practices to current issues related to the environment, health, politics, and the law. Students design and implement an independent research project.

**General Education Discipline:** Social Science

**Prerequisites:** PSY 110

### **PSY 234 - Theories of Personality**

**3 Credits** Students survey theory and research in the study of the individual and examine the complex concept of "personality." The course focuses on a variety of definitions for the term "personality" and their associations with traits, strengths and limitations, motivations, and experiences. Students engage in introspection and analysis as they apply personality theories to better understand their own and others' personalities.

**General Education Discipline:** Social Science

**Prerequisites:** PSY 110

### **PSY 236 - Political Psychology**

**3 Credits** Political behavior provides an excellent opportunity for applying basic psychological research and also driving that research with rich examples. This course focuses on utilizing psychology in understanding real world issues. Topics covered include social identity, group conflict, leadership, decision making, attitudes and opinions, nationalism, extremism, and international security.

**General Education Discipline:** Social Science

### **PSY 241 - Positive Psychology**

**3 Credits** Historically, psychologists have placed attention on what's *wrong* with people. Recently, focus has shifted to the positive side of human nature. In this course, students focus on scientific research centered on the nature of happiness and well-being. Topics include: nature and measurement of happiness, the biological basis of positive emotions, an overview of positive trait theories, self-esteem, gratitude, emotional intelligence, volunteerism, and characteristics of successful relationships.

**Prerequisites:** Sophomore standing or higher

### **PSY 322 - Health Psychology**

**3 Credits** Students study a holistic approach to health. This course is a comprehensive study of the bio-psycho-social approach in understanding how social, environmental, emotional, behavioral, biological, financial, and even spiritual factors influence health. Accordingly, we will cover a variety of topics including, but not limited to, environmental change, stress, finances, health care systems, addictions, nutrition, eating disorders, AIDS, coronary disease, pain, cancer, pediatric health, and aging.

**Prerequisites:** PSY 110

### **PSY 327 - Consciousness**

**3 Credits** Though we feel familiar with the nature of our own conscious experience, many problems and mysteries arise in developing philosophical or scientific accounts of the nature and functions of these experiences. In this course we will consider the problems of consciousness from an inter-disciplinary perspective. Topics include philosophical issues, neurophysiology, sleeping and dreaming, selective attention, imagery, altered states and self-awareness.

**Prerequisites:** PSY 110

### **PSY 331 - Ecopsychology**

**3 Credits** This course is an introduction to the field of ecopsychology – its theory, practice, and relevance in a time of ecological crisis. Students study the ecopsychological issues surrounding relationships to self, others, and the rest of nature. Students also explore the role of ecopsychology in promoting a transition to an ecologically sustainable self and

society through an examination of personal, economic, and societal challenges to this transition.

**General Education Discipline:** Social Science

**Prerequisites:** PSY 110, Junior Status, or Instructor Consent

### **PSY 340 - Evolutionary Psychology**

**3 Credits** Students examine how human behavior has been shaped by the processes of evolution. The course provides a brief overview of relevant psychological theories and evolutionary principles. Students spend the bulk of the term reviewing specific topics in depth: problems of survival, mating and sexuality, familial relationships, cooperation, aggression and warfare, sex differences, and social hierarchies.

**General Education Discipline:** Social Science

**Prerequisites:** PSY 110

### **PSY 342 - Psycholinguistics**

**3 Credits** A detailed examination of issues in the processing of language. The course provides a survey of research and theory in psycholinguistics, reflecting the influence of linguistic theory and experimental psychology. Spoken and written language comprehension and language production processes are examined.

**Prerequisites:** PSY 110

### **PSY 345 - Cognition in the Wild**

**4 Credits** This seminar focuses on how cognition occurs in different environments, sampling topics from psychology and several other disciplines including environmental studies, ecology, and anthropology. The coursework consists of writing assignments, short quizzes, and class presentations. Readings cover recent findings in Attention Restoration Theory as well as classical perspectives on the importance of wilderness. Students are expected to participate in a field trip.

Course Fee.

**Prerequisites:** PSY 110 and junior standing.

### **PSY 346 - Abnormal Psychology**

**3 Credits** Students study the history of abnormal psychology including classifications of deviant behavior, personality adjustment, assessment, and treatment modalities. In addition, students examine gender, social, and cross-cultural issues through critical analyses of what constitutes a psychological/psychiatric disorder.

Course Fee.

**Prerequisites:** PSY 110

### **PSY 360 - Sensation and Perception**

**3 Credits** Students study human sensory and perceptual capabilities. Topics include: sensory systems, perceptual development, perceiving color, objects, space, movement, sound, speech, touch, smell, and taste. Perceptual illusions are discussed as well.

**Prerequisites:** PSY 110 or Junior Standing

### **PSY 366 - Neuropsychology**

**3 Credits** Students study human brain-behavior relationships. Emphasis is placed on commonly used approaches in the assessment and measurement of human behavior and how the human brain is responsible for cognition, language, memory, spatial processing, emotion, and personality.

**Prerequisites:** PSY 110 or Junior standing

## **PSY 431 - Applied Ecopsychology**

**4 Credits** In this experiential course, students apply various ecopsychological techniques and participate in related activities. Both techniques and activities share the objective of precipitating closer and more intimate experiences of self, other, and the rest of nature. The implementation value and relevance of these techniques and activities is examined and critiqued from group, individual, gender, and cultural perspectives.

Course Fee.

**General Education Discipline:** Experiential

**Prerequisites:** PSY 331

## **PSY 448 - Capstone**

**4 Credits** The investigation, under guidance, of a special problem in psychology. This course includes the design of the study, the literature search, and development of the research tool, followed by data gathering, analysis, and presentation.

**Prerequisites:** Senior Status and Psychology Major

## **Religion**

### **REL 122 - Religions & Cultures in the Lake Superior Watershed**

**3 Credits** Part of the Superior Connections Program, students examine the variety of philosophies, practices, stories, institutions and objects that comprise "religion" around the globe, with a specific focus on these traditions' manifestations in the Lake Superior region. Examining traditions across history and from a variety of global regions, the course will use film, music, lectures, and readings paired with in-class discussions and field trips.

**Corequisites:** BIO 128 , GSC 112 , NAS 160 , and IDS 120.

### **REL 165 - Demons, Angels, & Ghosts**

**3 Credits** Students explore ideas and practices regarding demons, angels, and ghosts as encountered in a diverse range of cultural traditions, including "magic," Christianity, Islam, ancient "paganism," and New Age spirituality. Students also consider portrayals of supernatural entities in pop culture, with a special focus on depictions of angels and demons in contemporary cinema. Students gain familiarity with studying religion from a historical and comparative perspective.

### **REL 174 - Religion and Science**

**3 Credits** Contemporary debates about evolution, climate change, modern medicine, and sexual ethics give the impression that religion and science are constantly at odds. But has it always been this way? In this course, students explore the history and continuing significance of the relationship between science and religion. The course includes an experiential learning component through student role-playing of historical conflicts.

### **REL 210 - Exploring Religion and Spirituality**

**3 Credits** This course explores global religions and spiritualities as anthropological and historical phenomena, paying particular attention to the ways in which scholars in religious studies have discussed the definition and origins of "religion" as a human activity. Special topics include religion's intersections with the environment, mythologies, race, gender, sexuality, animals, magic, and pop culture.

### **REL 215 - Hebrew Bible and Jewish Origins**

**3 Credits** An exploration of the historical world from which the Bible emerged, the literary world of the Bible itself, and meanings the Bible has in the contemporary world. Particular attention will be given to the biblical views of nature and their environmental implications. No prior knowledge of the Bible is expected.

### **REL 216 - Jesus, Paul, and Christian Origins**

**3 Credits** Who was Jesus, and why did he attract a small band of devoted followers? How did that following end up transforming into a worldwide religious tradition? Students explore the origins of Christianity through a focus on its founding figures and scriptures within their ancient contexts. Special topics include the origins of the Bible, gender in early Christianity, and "lost" Christian movements (e.g., the Gnostics).

### **REL 219 - The Nature of Religious Experience**

**3 Credits** Students study the phenomena of religious experience, including mystical, contemplative and meditative expressions, and aesthetic and moral responses. Students read classic texts and biographies and observe a variety of worship experiences and religious expressions.

Course Fee.

**General Education Discipline:** Humanities

### **REL 220 - Myth and Ritual**

**3 Credits** Students explore the ways myths shape the human search for meaning, study the narrative foundations of religions while recounting certain myths, and examine a variety of religious rituals as representations of myths in repeated, structured practices.

**General Education Discipline:** Humanities

### **REL 225 - Magic, Medicine, and Miracle**

**3 Credits** This course explores medicinal, magical, and religious healing practices of the ancient world. Students analyze ancient Jewish, Christian, and Greco-Roman ("pagan") texts, including magical incantations, healing stories, medical case studies, magical recipes, and miracle tales, for how they conceive of these categories. Students use these explorations to interrogate contemporary understandings of religion, science, illness, healing, and the human body.

### **REL 229 - Religions of the West**

**3 Credits**

Students explore the histories, beliefs, and practices of major and minor religious traditions of the Western hemisphere, with a special focus on the significance of those religious traditions for Western history and culture. Students gain familiarity with the three major monotheistic faiths of the West (Judaism, Christianity, and Islam) in addition to less well known religious traditions (e.g., ancient "paganism," nature spirituality, Wiccanism, New Age spirituality). Students also explore the significance of religious traditions for issues of contemporary importance (e.g., religion and gender, religion and violence, religious pluralism, religion and the environment, Western colonialism).

### **REL 230 - Asian Religions and Philosophies**

**3 Credits** Students study the history, beliefs, and practices of the great religious traditions of Asia, focusing on Hinduism, Buddhism, Confucianism, Taoism, and Shinto.

**General Education Discipline:** Humanities

## **REL 231 - Buddhism**

**3 Credits** Students survey Buddhist history and philosophy, focusing on the development of Buddhist thought and practice in India, sectarian schools, and the rise of Mahayana and Tantric Buddhism, monasticism, ethics, and meditation.

**General Education Discipline:** Humanities

## **REL 234 - Japanese Religious History**

**3 Credits** Students explore the fascinating religious history of Japan. Beginning with pre-historic Japan and the early Chinese records and continuing through to the present, students use indigenous and imported religious ideas as a lens to examine aesthetics, philosophy, environmentalism, and politics in Japanese society.

**General Education Discipline:** Humanities

## **REL 235 - Daoism Seminar**

**4 Credits** In a seminar format, students conduct an in-depth study of philosophical and religious Daoism, both in its development in China and Asia, as well as its expressions in the contemporary West.

**General Education Discipline:** Humanities

## **REL 240 - Jesus in Popular Cultures**

**3 Credits** Students investigate the diverse ways in which the figure of Jesus has been understood and interpreted within the Christian tradition. Students analyze this through close "readings" of a diverse range of media, including ancient texts, Medieval art, cinema, and contemporary popular literature (e.g., comic books).

**General Education Discipline:** Humanities

## **REL 241 - Religion in America**

**3 Credits** This survey course examines the role of religion in the history of the United States. We will study the dynamic interaction of religion with other social, political and cultural forces that helped shape and still influence the American experience today. We will explore such questions as: What role have religions played in shaping a diverse American culture? What does it mean to be religious in America, and how have various faiths contributed to personal and communal identity? How have dominant forms of Christianity participated in imperial impulses throughout American history? We will also investigate religious movements that uniquely evolved out of American culture, and the contemporary challenge of evangelical and fundamentalist forms of religion.

**General Education Discipline:** Humanities

## **REL 257 - Death and Dying**

**3 Credits** This course surveys issues related to death and dying, including religious responses to mortality and the search for enduring meaning. Students also explore contemporary cultural responses to death and dying, including the phenomenon of grief and funeral practices. Study methods include field trips, film studies, and current literature.

**General Education Discipline:** Humanities

## **REL 258 - Religion and Nature**

**3 Credits** Students explore the religious dimension of our attitudes and actions regarding nature, including the idea of nature as sacred, the place of humans in the natural world, and ways religious insights seek to guide us in addressing

environmental problems today.

**General Education Discipline:** Humanities

## **REL 270 - Religion and Human Rights**

**3 Credits** Students engage in an exploration of the meaning and relevance of human rights in the world today, assisted by the use of religious systems and case studies

**General Education Discipline:** Humanities

## **REL 315 - History of Christian Cultures**

**3 Credits** This course explores the history of Christianity through an examination of its diverse manifestations throughout history and across the globe, starting with what we can know about the "historical" Jesus and his earliest followers, and moving through early Christianity, the medieval Period, Reformation, and contemporary global varieties of Christianity. Special topics include ancient Gnosticism, Christianity & magic, heaven & hell, Christian mysticism, the environment, and African-American Christianity.

## **REL 330 - History of Islamic Cultures**

**3 Credits** Students study the origins and history of Islam and closely examine religious practices, philosophical and intellectual developments, and the social and cultural dimensions of this major world religion. Students also discuss the relationship of the religion to historical and contemporary conflicts.

## **REL 331 - Zen Buddhism**

**3 Credits** In this advanced, undergraduate seminar, students participate in a close, critical study of Zen Buddhist philosophy. The approach is to examine selected Zen Buddhist works in English and to compare and contrast the Zen Buddhist philosophical perspective with certain selected Western religious philosophies.

**General Education Discipline:** Humanities

## **REL 340 - Sex and Religion**

**3 Credits** Students investigate the intersection of religious beliefs/practice and cultural constructions of gender/sex/sexuality, with a special focus on how new theoretical approaches in the fields of gender/sexuality and religious studies might help better understand the intersection of these two important aspects of modern culture. Students put these theories to work in their own readings of sources through special "Theory in Practice" class sessions.

**Prerequisites:** Any GWS course or one of the following courses: SOC 236 , SOC 234 , HIS 209 , HIS 260 , or NAS 215 .

## **Sustainable Community Development**

### **SCD 110 - Introduction to Sustainable Community Development**

**4 Credits** This introductory lecture course offers a comprehensive survey of the interdisciplinary field of sustainable community development. Over the course of the semester, and through readings, visual material, and discussions that complement the lecture, students examine historical conceptions of community, explore current trends in sustainable development, and theorize future ways of living.

**General Education Discipline:** Social Science

### **SCD 160 - Renewable Energy & Sustainable Design**

**3 Credits** This course offers an introduction to the science of renewable energy and green building design. Topics include an overview of the principles of energy production, an in-depth investigation of various forms of renewable energy and their associated environmental impacts, and design considerations for creating affordable, energy-efficient, environmentally-sound buildings.

**General Education Discipline:** Interdisciplinary

### **SCD 205 - Introduction to Local Economies**

**3 Credits** Students are introduced to the historical changes, theoretical conceptions, and contemporary opportunities and challenges of local economies, with a focus on rural areas in the U.S. and in other parts of the world. Through readings, lectures, and analysis, students explore how social, economic, and environmental forces shape quality of life in small communities.

### **SCD 220 - Sustainable Community Planning**

**3 Credits** This course introduces students to the community planning process. Topics covered include the components of long- and short-term plans for communities, how to optimize land use, how to deal with proposed facilities for a community, transportation systems in communities, urban and rural community design, among others.

**General Education Discipline:** Social Science

### **SCD 225 - Sustainable Development in the Lake Superior Watershed**

**4 Credits** This project-based course utilizes applied research practices in order to prepare Superior Connections students for the Lake Superior Circumnavigation. In addition to receiving a basic survey of the field of sustainable community development, students develop an original research project based on a watershed community and within an SCD-related discipline of their choice.

**General Education Discipline:** Social Science

**Prerequisites:** XHI 200

### **SCD 230 - The Political Process**

**3 Credits** This course introduces students to the political process. Students will examine how demands are formulated and conducted through the political system. Areas at issue in this course are political culture, socialization and public opinion formation, interest group and social movement activism, electoral processes, political parties and partisan politics, bureaucracy, and the policy process.

**General Education Discipline:** Social Science

### **SCD 235 - Forces of Change**

**3 Credits** History is the study of change over time, and it is the duty of the historian and the social scientist in general to identify and evaluate how and why change happens. With the goal of developing holistic agents of change, this liberal education survey considers the variety of social, cultural, political, economic, and environmental forces that have transformed American life.

**General Education Discipline:** Social Science

### **SCD 270 - Crossroads Thinking: Problem Solving for the 21st Century**

**3 Credits** Part of the Center for Ecological Living and Learning (CELL) semester abroad programs, this course combines elements of critical and creative thinking and helps students to develop skills in questioning, imagining possibilities, exploring opportunities, analyzing alternatives, synthesizing ideas, and evaluating thought. Through a variety of course activities, students identify essential intellectual traits, question long-held assumptions or biases,

evaluate ideas, reason honestly and open-mindedly, problem-solve, and form objective conclusions.

**General Education Discipline:** Interdisciplinary

**Prerequisites:** Admittance to CELL program

### **SCD 271 - Service Learning: Sustainability Through Community**

**3 Credits** Part of a Center for Ecological Living and Learning (CELL) semester abroad program, students apply learning from their academic studies to real-life sustainable solutions adopted by their host communities. Students work with community partners to create appropriate and innovative solutions to environmental, economic, cultural, and social challenges. Specific projects are determined by the needs of the local community.

**General Education Discipline:** Experiential

**Prerequisites:** Admittance to CELL Program

### **SCD 272 - Sustainability: Secrets of Simplicity**

**3 Credits** Part of a Center for Ecological Living and Learning (CELL) semester abroad program, this interdisciplinary course focuses on innovative strategies and programs that address issues threatening global sustainability. Through the study of these strategies and programs, students explore how they might incorporate sustainable practices into their own lives as well as how the principles of voluntary simplicity might contribute to sustainability. The course includes service-learning experiences with organizations such as Heifer International, Grupo Fenix, Association ANAI, and Kekoldi.

**General Education Discipline:** Interdisciplinary

**Prerequisites:** Admittance to CELL Program

### **SCD 274 - Human Ecology: Relations Between Humans and the Environment**

**3 Credits** Part of a Center for Ecological Living and Learning (CELL) semester abroad program, this course explores the question, "What is the appropriate relationship of human beings to the earth?" To facilitate this exploration, students study specific human and ecological issues facing the people and environments of Costa Rica, Honduras, and Nicaragua. Field trips, inquiry-based learning, and service learning are integral to the course.

**General Education Discipline:** Interdisciplinary

**Prerequisites:** Completion of a two-course block or SCD 110 and Admittance to CELL Program

### **SCD 276 - Global Warming Change Course: Lesson from Iceland**

**3 Credits** Part of a Center for Ecological Living and Learning (CELL) semester abroad program, this course surveys the complexities of global warming, examines human participation in this ecological crisis, and explores personal and collective actions that might shape effective responses to climate change. The course also introduces students to Iceland's unique geology and provides inspiring examples of how Iceland is utilizing carbon-free geothermal resources for heating and electricity production.

**General Education Discipline:** Interdisciplinary

**Prerequisites:** Admittance to CELL Program

### **SCD 320 - The History of Planning and Development**

**4 Credits** From ancient urban societies through the innovative sustainable communities of today, urban development – how lives were/are ordered spatially – has been an ever-evolving process. With special attention to the nineteenth and twentieth centuries, this course considers how cities worked, how intellectuals imagined cities could function, and what innovations succeeded and what ideas failed, thus providing greater understanding of how places should be planned in the future.

**General Education Discipline:** Social Science

**Prerequisites:** Sophomore Status

### **SCD 328 - Globalization and the Environment**

**3 Credits** This course considers how global economic activity impacts the environment and human well-being. Students explore how factors such as distance, increased competition and international lending conditions influence how natural capital is owned, managed and used, for what purposes and for whom. Students also explore global initiatives and examples of community-level collective action aimed at achieving environmental sustainability. Topics include privatization of water, electronic waste, the global timber industry, agricultural land grabbing and climate change.

### **SCD 332 - Rethinking Economic Development**

**4 Credits** In this course students explore the interaction between conceptions of economic development and measures of progress and well-being. Students learn the evolution of development theory – from classic theories of growth, to human development, to sustainable development – and the application of these theories at local and international scales. Students analyze trends of both traditional and innovative indicators of development.

**General Education Discipline:** Social Science

**Prerequisites:** BUS 226 or ECN 263

### **SCD 335 - Organizing Communities**

**3 Credits** People working to maintain, reform, and revolutionize their community of place play a critical role in organizing community and community change. This course addresses community, community organizing, and community change and demonstrates the power individuals and groups hold in shaping community through thoughtful and methodical collective action.

**General Education Discipline:** Social Science

**Prerequisites:** Junior or Senior Standing or Instructor Consent

### **SCD 338 - Comparative Economic Thought**

**3 Credits** Students will critically examine contending economic theories as they developed out of the Industrial Revolution to today. In this reading-intensive course, students situate seminal works in historical context, analyze the logical and ethical grounds on which theories compete, and engage with contemporary ecological, feminist, and human development perspectives. The course will focus on how economic ideas inform understandings of progress and development. Prerequisite: Any 200-level SCD or SOC course.

**Prerequisites:** Any 200-level SCD or SOC course.

### **SCD 340 - Gender & Economic Development**

**3 Credits** This course applies feminist theory to economics and seeks to understand issues confronting women in the developing world. Students explore the link between the social construction of gender and the evolution of capitalism and examine relationships between development and women's empowerment in the areas of gender relations, income equality, access to labor and credit markets, property ownership and the impacts of climate change.

**Prerequisites:** ECN 263, GWS 265, GWS 266, HIS 260, SCD 230, or SOC 234

### **SCD 342 - Policy and Econ of Climate Change**

**3 Credits** Students investigate the political and economic forces that have shaped past efforts to address climate change, and explore policy options including international treaties, national regulations, and municipal

efforts. Students analyze the benefits and pitfalls of market based solutions, and utilize the tools of economics to evaluate the impacts of alternative policies in order to develop a vision for a sustainable climate future.

**Prerequisites:** One of the following: SCD 230, ECN 263, BUS 226, MET 125, MET 244, MET 270, BIO 234, or GSC 120.

### **SCD 355 - The Just City in Practice**

**3 Credits** This Spring Term experiential travel course offers Sustainable Community Development majors an intensive examination of the "just city" concept. A week of seminar readings and discussion is followed by ten days of fieldwork in an international "just city." In the process, this course demonstrates how sustainable community development is a global phenomenon, and familiarizes students with the relationship between theory and practice.

Course Fee

**General Education Discipline:** Experiential

**Prerequisites:** SCD 110, SCD 220, SCD 230, SCD 235, or Instructor Consent

### **SCD 360 - International Development**

**3 Credits** This course begins by exploring the evolution of economic development theory from the post WWII era to the present. Using contemporary theories of human economic development and sustainability, students consider the diversity of development paths across nations, along with a variety of policy approaches aimed at improving well-being.

**Prerequisites:** ECN 263

### **SCD 365 - Workforce Development**

**3 Credits** Students explore the current and future state of the labor market and the programs that leverage federal, state, and local financial resources to support workforce development. Through case studies and practical examples, this course addresses the difficulties experienced by the long-term unemployed, senior and youth workers, minorities, individuals with disabilities and individuals with limited formal education, as well as strategies designed to improve opportunities for job seekers.

**Prerequisites:** ECN 263 or BUS 226

### **SCD 412 - Advanced Community Planning Studio**

**4 Credits** Under the supervision of a faculty member and in collaboration with a local municipality, community development organization, or non-profit group, students help research, design, and present an applied sustainable plan for a site, neighborhood, or community. The planning studio allows students to gain experience in the practice of planning in an applied way, collaborating at both the classroom and community level.

**Prerequisites:** Instructor consent required

### **SCD 422 - Capitalism, Justice, and Sustainability**

**3 Credits** This course explores the ways that capitalism, as it is currently practiced, is unsustainable. Additionally, students explore alternative models of economic development.

**General Education Discipline:** Social Science

**Prerequisites:** ECN 263

### **SCD 430 - Sustainable Development Theory**

**4 Credits** This intensive reading course offers Sustainable Community Development majors a comprehensive survey of the discipline's theoretical underpinnings. In a seminar setting, students read, discuss, analyze, and critique a diverse

array of community planning, economic development, and ecology theorists from the past century, ultimately synthesizing and enhancing sustainable development theory for applied practice in the field.

**Prerequisites:** SCD 110 or SCD 225 and Senior standing

## **SCD 481 - Applied Research Practicum**

**4 Credits** Under the supervision of faculty researchers and in collaboration with a community organization or group, students help design, administer, and analyze an applied research project. All applied research projects engage students in the process of creating original research (e.g., design, data collection, analysis, and report) and develop skills needed to work collaboratively with community based organizations and stakeholders.

**Prerequisites:** Instructor Consent

## **Sociology and Social Justice**

### **SOC 111 - Introduction to Sociology**

**4 Credits** Students learn concepts and methods of sociology by studying the basic structure of social life, culture, group interaction, social institutions, stratification, power, and social problems.

**General Education Discipline:** Social Science

### **SOC 215 - Sociology of Community**

**3 Credits** Students in this course utilize a sociological perspective to explore the social forces that shape communities in the 21st Century. Focusing on rural, urban, and suburban areas, students examine how market forces intersect with race, class, and gender in shaping communities throughout the U.S. In addition, students participate in direct community engagement activities at the College and in the Chequamegon Bay region as a way of enhancing their classroom work with hands on experience.

### **SOC 225 - Social Problems**

**3 Credits** Students critically analyze the structural sources of American and global social problems through an examination of wealth, power, and the institutional arrangements that perpetuate poverty, injustice, war, environmental degradation, and racial and social inequality.

**General Education Discipline:** Social Science

### **SOC 234 - Sociology of Gender**

**3 Credits** Students study the development, operation, and consequences of gender socialization, both male and female. The course focuses on comparisons of gender roles in various cultures and societies, and on the effects of gender on inequality, sexual orientation, values, and belief.

**General Education Discipline:** Social Science

### **SOC 236 - Sociology of Sexuality**

**4 Credits** This course provides an overview of sexualities from a sociological perspective within the context of the United States, with some cross cultural comparisons. Students study how sexuality is socially constructed and focus on how people become sexual beings, understanding sexual identities, sexual subcultures, sexual “deviance”, and the sex-for-profit industry.

**General Education Discipline:** Social Science

## **SOC 240 - Cultural Ecology**

**3 Credits** This course focuses on how humans have gathered and distributed food throughout history. Students examine the consequences of various methods of food production on the other aspects of culture such as religion, politics, and inequality. They also examine human-nature interactions and conceptions of nature found in various cultures that are a result of human food production methods.

**General Education Discipline:** Social Science

## **SOC 242 - Sociology of the Environment**

**3 Credits** Students study the challenges, societal impact, and organization of environmental groups and movements, with an emphasis on contemporary issues, tactics, and ideologies.

## **SOC 260 - Introduction to Sociology - Superior Connections**

**4 Credits** Students learn concepts and methods of sociology by studying the basic structure of social life, culture, group interaction, social institutions, stratification, power, and social problems. As part of a block in the Superior Connections program, this course utilizes sociological concepts to understand life in and around the Lake Superior Watershed as students consider the relationship between sustainability and social justice

**General Education Discipline:** Social Science

**Prerequisites:** Enrollment in Superior Connections

**Corequisites:** XSS 215

## **SOC 302 - Sociology of Culture**

**3 Credits** Students examine the links between culture, modernity, and post modernity through the analysis of cultural productions, power, moral discourse, and the audience in a variety of Western and non-Western societies.

**Prerequisites:** SOC 111

## **SOC 320 - Health, Medicine, and Justice**

**3 Credits** This course is an introduction to the Sociology of Medicine. The Sociology of Medicine is centered around the theme that health and illness cannot be understood by simply looking at biological phenomena and medical knowledge. Rather, it is also necessary to situate health and illness in the larger political, cultural, economic, and social forces within a society. The course will be divided into three sections: the social construction of health and illness, the structure of the American health care system, and the medical profession and medical ethics. Special emphasis will be placed on the role of environmental factors in these three areas.

**Prerequisites:** SOC 111 and junior standing

## **SOC 325 - Environmental Health and Sustainability**

**3 Credits** Students in this course will use social epidemiological methods to explore the relationship between environmental health and sustainability issues with the goal of developing socially just solutions. This class will focus on social determinants of environmental health, measures and methods of studying health, exposures and impacts, and sustainable strategies. These concepts will be applied to sustainable and healthy cities, transportation, food, energy, and social justice issues.

**General Education Discipline:** DivJustice; Env: Science or Applications

**Prerequisites:** SOC 111

## **SOC 332 - Crime, Deviance, and Social Justice**

**3 Credits** Students examine the social construction of the law, the courts, crime, imprisonment, and justice. The course emphasizes the differential application of the law, the myths of crime and deviant behavior, and the uses of the legal system for political and social ends.

**Prerequisites:** SOC 111 or SOC 260

### **SOC 336 - The Nature of Social Inequality**

**4 Credits** Students analyze the major forms of socially structured inequality in American society, emphasizing how wealth, power, and life chances affect different racial, ethnic, indigenous, gender, and national groups.

**General Education Discipline:** Social Science

### **SOC 368 - Global Inequality**

**4 Credits** Students study the forms, causes and consequences of global inequalities. Globalization produces winners and losers, and this course explores those individuals, companies, and countries that benefit from globalization as well as those who are harmed by it. Additionally, the course will analyze how demographic trends play a role in the globalization process.

**General Education Discipline:** Social Science

**Prerequisites:** SOC 111 or Instructor Consent

### **SOC 370 - Social Science Research Methods**

**4 Credits** Students study methods used in social science research, including surveys, interviewing, ethnography, participatory action, content analysis, and secondary analysis. Students also apply basic statistical concepts to real social issues through the use of computer-assisted statistical packages such as R and SPSS. Finally, students apply their new knowledge and skills by completing research projects and presenting them to the class.

**Prerequisites:** MTH 107

### **SOC 374 - Human Rights and Social Justice**

**3 Credits** Through written texts, videos, and personal life stories, students explore how groups have been denied basic human rights. Additionally, students learn about the numerous methods groups have used to gain human rights. Finally, students research, using the case study method, one group and its struggle to achieve human rights.

**General Education Discipline:** Social Science

**Prerequisites:** SOC 111 or SOC 260

### **SOC 381 - Undoing Racism**

**3 Credits** This course teaches students how to understand race and racism from a sociological perspective. American culture teaches us that we should not pay attention to race because it only makes inequality worse. This leaves us ill-prepared to interact with difference or understand inequality. In this course, students become familiar with the data that examine how race and ethnicity are tied to inequality and privilege, and they develop skills for dealing with racial / ethnic differences in a variety of contexts.

**General Education Discipline:** Social Science

**Prerequisites:** SCD 110 or SOC 111

### **SOC 448 - Sociological Theory**

**4 Credits** In this course students learn classic and contemporary social theories and consider their impact on current sociological research. By reading primary texts from a wide variety of social theorists, students not only engage directly with the ideas and assumptions embedded in social theory, they are also able to consider how socio-political

forces shape which writers were excluded from the field in its early formations. This perspective deepens students' critical awareness of ideas and assumptions within sociology and other social sciences, leaving them better equipped to understand the complexity of social research.

**Prerequisites:** Any SOC course.

## **SOC 472 - Advanced Justice Studies**

**4 Credits** Students read, discuss, and debate numerous theoretical perspectives concerning justice and apply them to specific topical areas related to the instructor's expertise.

**Prerequisites:** SOC 111 or SOC 260

## **SOC 481 - Qualitative Research Methods**

**4 Credits** Students learn research methodologies and analysis in a range of qualitative methods including ethnography, in-depth interviewing, focus group moderating, and content analysis. By reading theory, reviewing existing research, and developing hands-on skills through working on data collection and analysis, students gain a thorough understanding of the theory and practice of qualitative methodologies.

**Prerequisites:** SOC 111 and Junior Status or higher

## **SOC 488 - Capstone in Sociology and Social Justice**

**4 Credits** This course provides students with the necessary skills to complete a social science research project of their choosing, with the guidance of the professor and other students in class. This is a seminar in which students read and discuss social science research.

**Prerequisites:** SOC 370

## **Writing**

### **WRI 224 - News Writing & Reporting**

**3 Credits** This course introduces students to the essentials of journalism necessary for any storytelling format: news and information gathering; constructing stories; editing and presentation; avoiding libel and other legal pitfalls. It drills students in basic skills and deadline reporting and writing.

**Prerequisites:** ENG 110, or writing assessment score of 3 or higher, or completion of any ENG or WRI course.

### **WRI 260 - Introduction to Creative Writing**

**3 Credits** This course is a workshop in writing poetry and short fiction. Students explore their creative potential in the genres through exercises, writing/revision of poems and stories, peer review, and reading the work of prominent poets and writers.

### **WRI 273 - Writing the Environmental Essay**

**3 Credits** Workshop in writing the creative nature essay.

**Prerequisites:** ENG 110, a Connections Block, or Writing Assessment Score of 3 or above

### **WRI 361 - Creative Writing: Fiction**

**3 Credits** This course focuses on the study and practice of short story writing. Students are given in- and out-of-class exercises to facilitate story ideas; the course also involves small and large group workshops, with discussions of student work. At the end of term, students present their stories in a public venue.

**Prerequisites:** WRI 260

### **WRI 362 - Creative Writing: Poetry**

**3 Credits** In this workshop course, students practice the art and craft of writing poetry, as well as reading the work of established contemporary poets.

**Prerequisites:** WRI 260

### **WRI 363 - Writing Literary NonFiction**

**3 Credits** This course is a workshop in writing literary nonfiction. Reading, writing assignments, and discussion explore the wide mix of memoir, travel writing, literary journalism, and personal essay that comprises the genre of literary nonfiction.

**Prerequisites:** WRI 260

### **WRI 461 - Seminar in Fiction Writing**

**4 Credits** This seminar is an advanced workshop in fiction writing. Students write 3-4 medium length short stories (30-40 pages total), which are read and critiqued by the class as a whole. The course is a capstone option for Writing majors.

**Prerequisites:** WRI 260

### **WRI 462 - Seminar in Poetry Writing**

**4 Credits** This course is an advanced workshop in writing poetry and is a capstone option for writing majors.

**Prerequisites:** WRI 260

### **WRI 489 - Senior Honors Thesis**

**3 Credits** Students complete a long scholarly or creative work with a thesis director. The thesis is presented to the College community in a public reading. Students may only take this course by invitation of the English Program Coordinator. This course is not a capstone option for Writing majors.

**Prerequisites:** Instructor Consent

## **Connections Curriculum**

### **XHS 232 - Gender, Society & Change**

**0 Credits** This block examines intersections between the social construction of gender, its consequences within various social structures, and the branches and concerns of feminism, with a particular focus on body politics.

**General Education Discipline:** Humanities and Social Science

## **Majors and Minors**

### **Art**

The BA program in Art at Northland College is designed to foster creativity and critical thinking through an understanding of the practice and history of the studio arts and graphic design. Students develop visual literacy and problem-solving skills to explore confidently the many avenues of technical and creative expression, and to develop an appreciation for craftsmanship and communication. Students will be prepared for entry-level career positions or graduate study.

## **Art Major (B.A.)**

### **Major Requirements:**

- ART 106 - Intro to Visual Communication **3 Credits**
- ART 212 - Drawing II **3 Credits**
- ART 230 - Art History Ancient to Medieval **3 Credits**
- ART 231 - Art History Renaissance to Modern **3 Credits**
- ART 232 - Contemporary Art History **3 Credits**
- ART 403 - Senior Seminar **3 Credits**

### **One of the following:**

- ART 111 - Drawing I **3 Credits**
- ART 112 - Drawing by Nature **3 Credits**

### **Emphases:**

To complete a major in Art, choose one of the following emphases:

#### **Graphic Design Emphasis:**

- ART 262 - Digital Photography I **3 Credits**
- ART 280 - Graphic Design I **3 Credits**
- ART 282 - Web Design I **3 Credits**
- ART 285 - Typography **3 Credits**
- ART 380 - Graphic Design II **3 Credits**
- ART 382 - Web Design II **3 Credits**
- ART 385 - Graphic Design History **3 Credits**
- ART 480 - Graphic Design III **3 Credits**
- 292/492 Internship **3 Credits**

### **One of the following:**

- ART 270 - Printmaking: Relief and Intaglio **3 Credits**
- ART 271 - Printmaking: Screen Printing and Lithography **3 Credits**

#### **Studio Art Emphasis**

- ART 402 - Senior Exhibition **1 Credits**

Four of the following:

- ART 210 - Painting I **3 Credits**
- ART 220 - Ceramics I **3 Credits**
- ART 222 - Ceramics Handbuilding **3 Credits**
- ART 226 - 3D Printing in Clay **3 Credits**
- ART 262 - Digital Photography I **3 Credits**
- ART 270 - Printmaking: Relief and Intaglio **3 Credits**
- ART 271 - Printmaking: Screen Printing and Lithography **3 Credits**
- ART 280 - Graphic Design I **3 Credits**
- ART 282 - Web Design I **3 Credits**
- Additional Art History **3 Credits**

Four of the following:

- ART 306 - Art Collaborations with Nature **3 Credits**
- ART 320 - Ceramics II **3 Credits**
- ART 370 - Printmaking II **3 Credits**
- ART 420 - Ceramics III **3 Credits**
- ART 470 - Printmaking III **3 Credits**
- ART 390/490 Independent Study **3 Credits**

**Total Art Major: 46 - 51 Credits**

## **Art Minor**

Minor Requirements:

- ART 106 - Intro to Visual Communication **3 Credits**
- ART 403 - Senior Seminar **3 Credits**

One course from the following:

- ART 111 - Drawing I **3 Credits**
- ART 112 - Drawing by Nature **3 Credits**

Two courses from the following:

- ART 230 - Art History Ancient to Medieval **3 Credits**
- ART 231 - Art History Renaissance to Modern **3 Credits**
- ART 232 - Contemporary Art History **3 Credits**
- ART 385 - Graphic Design History **3 Credits**

Two courses from the following:

- ART 210 - Painting I **3 Credits**
- ART 212 - Drawing II **3 Credits**
- ART 220 - Ceramics I **3 Credits**
- ART 222 - Ceramics Handbuilding **3 Credits**
- ART 226 - 3D Printing in Clay **3 Credits**
- ART 262 - Digital Photography I **3 Credits**
- ART 270 - Printmaking: Relief and Intaglio **3 Credits**
- ART 271 - Printmaking: Screen Printing and Lithography **3 Credits**
- ART 280 - Graphic Design I **3 Credits**
- ART 282 - Web Design I **3 Credits**

Two courses from the following:

- ART 306 - Art Collaborations with Nature **3 Credits**
- ART 320 - Ceramics II **3 Credits**
- ART 370 - Printmaking II **3 Credits**
- ART 380 - Graphic Design II **3 Credits**
- ART 382 - Web Design II **3 Credits**
- ART 420 - Ceramics III **3 Credits**
- ART 470 - Printmaking III **3 Credits**
- ART 480 - Graphic Design III **3 Credits**

**Total Art Minor: 27 Credits**

## **Biology**

The Biology Program is an exciting blend of a traditional biology curriculum with an emphasis on ecology and environmental studies.

Hands-on experience is an integral part of the program. Many courses use our 90-acre field station as well as local national forests, national and state parks, and numerous wetlands as natural classrooms. Our laboratory experiences link modern molecular techniques with environmental and conservation issues. Internships with various state and federal agencies and professionals offer students on-the-job knowledge and experience.

The program helps students prepare for employment in the fields of bioresearch, natural resources, environmental consulting, and education. It also helps prepare students for graduate and professional programs, including medical school and veterinary school.

### **Biology Major (B.S.)**

**Major Requirements:**

One of the following:

- BIO 115 - Concepts of Biology **4 Credits**
- BIO 128 - Natural History and Conservation in the Lake Superior Watershed **3 Credits**

One of the following:

- MTH 107 - Statistical Concepts and Analysis **4 Credits**
- MTH 140 - Calculus I **4 Credits**

One of the following:

- CHM 103 - General Chemistry: The Chemistry of Food **4 Credits**
- CHM 110 - General Chemistry **4 Credits**

One of the following:

- CHM 220 - Organic Chemistry I **4 Credits**
- CHM 225 - Quantitative Analysis **4 Credits**
- CHM 240 - Inorganic Chemistry **4 Credits**

Two of the following:

- BIO 222 - Spring Flora **4 Credits**
- BIO 225 - Aquatic Invertebrates **4 Credits**
- BIO 242 - Ichthyology **4 Credits**
- BIO 244 - Field Ornithology **4 Credits**
- BIO 245 - Mammalogy **4 Credits**
- BIO 224 - Entomology **4 Credits**
- BIO 226 - Field Parasitology **4 Credits**

All Courses below:

- BIO 234 - Ecology **4 Credits**
- BIO 235 - Biology of Organisms **4 Credits**
- BIO 238 - Cell Biology **4 Credits**
- BIO 309 - Evolutionary Biology **3 Credits**
- BIO 330 - Genetics **4 Credits**

One of the following:

- BIO 480 - Biology Senior Seminar **3 Credits**
- BIO 496 Senior Capstone **3 Credits**

Additional Requirements

- **12 additional credits** are required, at least 8 of which must be from courses at the 300-level or above. These credits can be satisfied by additional BIO courses at any level, up to 8 NRS credits at the 300-level or above, and up to 4 credits from BIO or NRS internships, research or teaching assistantships, or independent Study experiences.

Total Biology Major: 59 Credits

## **Biology Minor**

Minor Requirements:

- BIO 115 - Concepts of Biology **4 Credits**  
**OR**
- BIO 128 - Natural History and Conservation in the Lake Superior Watershed **3 Credits**
- BIO 234 - Ecology **4 Credits**
- BIO 235 - Biology of Organisms **4 Credits**
- BIO 238 - Cell Biology **4 Credits**
- BIO 330 - Genetics **4 Credits**

One of the following:

- CHM 103 - General Chemistry: The Chemistry of Food **4 Credits**
- CHM 110 - General Chemistry **4 Credits**

Additional Requirements

- Additional BIO or NRS courses **6 - 8 Credits**

Total Biology Minor: 30-32 Credits

## **Business**

The business major offers students the opportunity to pursue two different areas of concentration within business administration. Both tracts share core courses that provide you with a foundational understanding of economics, finance, marketing, strategic planning, and social responsibility to prepare you for a successful career. Elective course work also gives opportunity to complement the major with studies such as graphic or web design and community development.

## **Business Administration Major (B.S.)**

## Major Requirements:

- MTH 107 - Statistical Concepts and Analysis **4 Credits**
- BUS 168 - Technology and Communication **3 Credits**
- BUS 222 - Fundamentals of Accounting **4 Credits**
- BUS 228 - Marketing Management **3 Credits**
- BUS 232 - Principles and Practice of Management **3 Credits**
- ECN 263 - Essentials of Economics **4 Credits**
- BUS 326 - Global Business Management **3 Credits**
- BUS 330 - Managerial Finance **3 Credits**
- BUS 431 - Legal & Ethical Environment of Business **3 Credits**
- BUS 475 - Strategic Planning and Policy Capstone **3 Credits**

## Concentration Requirements:

Students choose between one of two concentrations. If they want to complete both, they will take 4 additional courses.

### Business Management:

Four of the following:

- BUS 301 - Operations Management **3 Credits**
- BUS 338 - Human Resource Management **3 Credits**
- BUS 340 - Social Media Marketing **3 Credits**
- BUS 359 - Entrepreneurship **3 Credits**
- BUS 361 - Organizational Behavior **3 Credits**
- BUS 415 - The Inclusive Workplace **3 Credits**

### Sustainable Business:

Four of the following:

- ECN 310 - Environmental Economics **3 Credits**
- BUS 311 - Social Innovation & Impact **3 Credits**
- BUS 327 - Marketing for Sustainability **3 Credits**
- SCD 328 - Globalization and the Environment **3 Credits**
- BUS 342 - Business and Public Policy **3 Credits**
- BUS 440 - Corporate Social Responsibility **3 Credits**

## Elective Requirements:

**Any 9 credits** of BUS or ECN course not already taken to meet core and concentration requirements, or any non- BUS or ECN course from the following list:

- ART 280 - Graphic Design I **3 Credits**
- ART 282 - Web Design I **3 Credits**

- ART 380 - Graphic Design II **3 Credits**
- ART 382 - Web Design II **3 Credits**
- IDS 334 - Sustainable Food Production **4 Credits**
- MTH 140 - Calculus I **4 Credits**
- MTH 230 - Mathematical Modeling **4 Credits**
- OED 221 - Group Process and Leadership **4 Credits**
- SCD 160 - Renewable Energy & Sustainable Design **3 Credits**
- SCD 205 - Introduction to Local Economies **3 Credits**
- SCD 342 - Policy and Econ of Climate Change **3 Credits**
- SCD 360 - International Development **3 Credits**
- SCD 365 - Workforce Development **3 Credits**

**Total Business Major: 54 Credits**

## **Business Management Minor**

**Minor Requirements:**

- MTH 107 - Statistical Concepts and Analysis **4 Credits**
- BUS 222 - Fundamentals of Accounting **4 Credits**
- BUS 232 - Principles and Practice of Management **3 Credits**
- ECN 263 - Essentials of Economics **4 Credits**
- BUS 326 - Global Business Management **3 Credits**

**Two of the following:**

- BUS 228 - Marketing Management **3 Credits**
- BUS 330 - Managerial Finance **3 Credits**
- BUS 338 - Human Resource Management **3 Credits**
- BUS 359 - Entrepreneurship **3 Credits**
- BUS 361 - Organizational Behavior **3 Credits**
- BUS 362 - Non-Profit Management **3 Credits**

**Total Business Management Minor: 24 credits**

## **Sports Management Minor**

**Minor Requirements:**

- BUS 228 - Marketing Management **3 Credits**
- BUS 230 - Leadership: Theory and Application **3 Credits**
- PED 202 - Sports Medicine **3 Credits**
- PED 400 - Organization and Administration of Athletics **3 Credits**
- PED 492 - Internship **4 credits**

- PSY 229 - Sport Psychology **3 Credits**
- SOC 111 - Introduction to Sociology **4 Credits**

**Total Sports Management Minor: 23 Credits**

## **Chemistry**

The Chemistry program provides students with a solid foundation in chemistry theory and methods that they can use in careers immediately after graduating or in medical school, veterinary school, and other graduate and professional programs. In addition the Chemistry program offers a unique opportunity to use chemistry as a tool for studying the environment. Courses and projects include such topics as acid rain, groundwater contamination, airborne pollution and toxic waste cleanup.

Northland's 21st century facility, the Larson-Juhl Center for Science and the Environment, is home to state-of-the-art laboratories. Starting with their first chemistry classes, students become familiar with sophisticated analytical technology such as atomic absorption spectrophotometry, Fourier transform nuclear magnetic resonance spectroscopy, Fourier transform infrared spectroscopy, high performance liquid chromatography and gas chromatography/mass spectroscopy. Using advanced instrumentation early in their education prepares chemistry majors to apply these instruments in increasingly more sophisticated analysis as they progress in their studies. As a result students are prepared to use these techniques to conduct senior research projects.

Northland's hands-on approach and small class size provide an intense, challenging, and exciting educational environment. The combination of dedicated faculty, modern facilities and an environmental emphasis gives Northland students a distinctive education in chemistry.

## **Chemistry Major (B.S.)**

### **Major Requirements:**

- CHM 220 - Organic Chemistry I **4 Credits**
- CHM 221 - Organic Chemistry II **4 Credits**
- CHM 225 - Quantitative Analysis **4 Credits**
- CHM 240 - Inorganic Chemistry **4 Credits**
- CHM 345 - Biochemistry **4 Credits**
- CHM 443 - Quantum Mechanics and Molecular Spectroscopy **4 Credits**
- CHM 496 - Senior Thesis/Research **4 Credits**
- MTH 140 - Calculus I **4 Credits**
- MTH 141 - Calculus II **4 Credits**
- PHY 110 - General Physics I **4 Credits**
- PHY 111 - General Physics II **4 Credits**

### **One of the following:**

- CHM 447 - Chemical Thermodynamics **4 Credits**
- PHY 330 - Thermodynamics **3 Credits**

### **One of the following:**

- CHM 210 - Chemistry of Natural Waters **4 Credits**
- CHM 212 - Water Quality Lab Techniques **4 Credits**
- CHM 246 - Introduction to Forensic Chemistry **Credits**

One of the following:

- CHM 103 - General Chemistry: The Chemistry of Food **4 Credits**
- CHM 110 - General Chemistry **4 Credits**

Total Chemistry Major: 55 or 56 Credits

## Chemistry Minor

Minor Requirements:

One of the following:

- CHM 103 - General Chemistry: The Chemistry of Food **4 Credits**
- CHM 110 - General Chemistry **4 Credits**

Five of the following, totaling at least 20 credits:

- MTH 140 Calculus I **4 Credits**
- PHY 110 General Physics I **4 Credits**
- Any 200 level or higher CHM course

Total Chemistry Minor: 24 Credits

## Climate Science

An understanding of the climate system will be crucial as we navigate this century's challenges with climate change. In the climate science major you will study the interactions between Earth's atmosphere, hydrosphere, cryosphere, lithosphere, and biosphere and learn how these interactions drive climate. You'll also learn how climate is modeled and gain a better understanding of policy and economics associated with climate change. Finally, you'll consider what citizens can do to minimize and mitigate climate change.

## Climate Science (B.S.)

Major Requirements:

- MTH 140 - Calculus I **4 Credits**
- MTH 141 - Calculus II **4 Credits**
- PHY 110 - General Physics I **4 Credits**

- PHY 111 - General Physics II **4 Credits**
- MTH 230 - Mathematical Modeling **4 Credits**
- CLM 244 - Understanding Climate Change **4 Credits**
- GSC 312 - Paleoclimate: Past as Prologue **4 Credits**
- PHY 330 - Thermodynamics **3 Credits**
- SCD 342 - Policy and Econ of Climate Change **3 Credits**
- CLM 464 - Climate Dynamics **4 Credits**
- CLM 467 - Atmospheric Physics **3 Credits**
- CLM 480 - Seminar in Climate Science **3 Credits**

One of the following:

- CLM 125 - Weather and Climate **4 Credits**
- CLM 270 - Oceans and Climate **4 Credits**

One of the following:

- CHM 103 - General Chemistry: The Chemistry of Food **4 Credits**
- CHM 110 - General Chemistry **4 Credits**

One of the following:

- CHM 145 - Atmospheric Pollution **4 Credits**
- CHM 326 - Atmospheric Chemistry **4 Credits**

One of the following:

- CPS 220 - Computer Science **4 Credits**
- MTH 107 - Statistical Concepts and Analysis **4 Credits**
- MTH 312 - Advanced Calculus **4 Credits**
- MTH 330 - Differential Equations **4 Credits**
- BIO 234 - Ecology **4 Credits**
- GSC 305 - Hydrology **4 Credits**

Total Climate Science Major: 60 Credits

## **Climate Change Studies Minor**

Minor Requirements:

- GSC 312 - Paleoclimate: Past as Prologue **4 Credits**
- MET 125 - Weather and Climate **4 Credits**
- MET 244 - Understanding Climate Change **4 Credits**
- MET 270 - Ocean and Climate **4 Credits**
- MET 282 - Microclimate Field Camp **3 Credits**

- MET 282 - Microclimate Field Camp **3 Credits**
- SCD 160 - Renewable Energy & Sustainable Design **3 Credits**
- SCD 342 - Policy and Econ of Climate Change **3 Credits**

One of the following:

- MTH 107 - Statistical Concepts and Analysis **4 Credits**
- MTH 140 - Calculus I **4 Credits**

**Total Climate Change Studies Minor: 29 Credits**

## **Education**

The mission of the Education Department is to provide a holistic, experiential major that creates effective teachers and lifelong learners while empowering students to make connections with others, the earth, and ideas by thinking and teaching ecologically, collaboratively, critically, and compassionately.

Successful graduates are certified by Northland College and eligible for licensure by the Wisconsin Department of Public Instruction. Each education major involves hands-on experiences both in and out of the traditional classroom that are performance-based and correlate with state requirements.

As an element of best practice, the Education Department provides all undergraduate majors with a unique, experiential learning research opportunity. Education courses bring a vibrant, diverse group of students together with caring, attentive professors. This creates a learning environment in which students develop close relationships with faculty, explore personal styles, practice positive classroom interactions, and learn from one another. A dedication to environmental awareness combined with the liberal arts tradition gives our prospective teachers the versatility, confidence, and skills needed for the challenges of their chosen career and for lifelong learning.

Students pursuing a degree in elementary or secondary education are encouraged to obtain a copy of the Teacher Education Program Student Handbook of Policies, Procedures, and Forms from the Northland College website for specific details on the requirements for both the academic majors and state licensure information.

## **Secondary (Early Adolescence to Adolescence) Education Major (B.S.)**

Major Requirements:

- EDU 205 - Curriculum, Planning, and Assessment **3 Credits**
- EDU 210 - Teaching Environmentally **3 Credits**
- EDU 223 - Teaching in the Middle School **3 Credits**
- EDU 232 - Learning, Growth and Cognition **3 Credits**
- EDU 315 - Classroom Management and Conflict Resolution **3 Credits**
- EDU 337 - Fall Practicum **1-4 Credits**
- EDU 338 - Winter Practicum **1-4 Credits**
- EDU 376 - Strategies for Teaching Diverse Learners **3 Credits**
- EDU 460 - Student Teaching (EA-A) and Seminar **6 - 12 Credits**
- NAS 212 - Wisconsin Indian Cultures, History, and Contemporary Issues **3 Credits**

- SOC 225 - Social Problems **3 Credits**

One content teaching methods course appropriate to the major:

- EDU 341 - Science Teaching Methods **3 Credits**
- EDU 370 - Social Studies Teaching Methods **3 Credits**
- EDU 377 - Mathematics Teaching Methods **3 Credits**

A major in one of the following disciplines:

- Biology (59 Credits)
- Chemistry (56 Credits)
- Geology (54 Credits)
- History (45-46 Credits)
- Mathematical Sciences (55-56 Credits)

Total Secondary Education and discipline Majors: 86-100 Credits

## **Broad Field Science Education Major (B.S)**

Major Requirements:

- EDU 205 - Curriculum, Planning, and Assessment **3 Credits**
- EDU 210 - Teaching Environmentally **3 Credits**
- EDU 223 - Teaching in the Middle School **3 Credits**
- EDU 232 - Learning, Growth and Cognition **3 Credits**
- EDU 315 - Classroom Management and Conflict Resolution **3 Credits**
- EDU 337 - Fall Practicum **1-4 Credits**
- EDU 338 - Winter Practicum **1-4 Credits**
- EDU 341 - Science Teaching Methods **3 Credits**
- EDU 376 - Strategies for Teaching Diverse Learners **3 Credits**
- EDU 460 - Student Teaching (EA-A) and Seminar **6 - 12 Credits**
- GSC 120 - Physical Geology **4 Credits**
- GSC 262 - World Regional Geography **3 Credits**
- NAS 212 - Wisconsin Indian Cultures, History, and Contemporary Issues **3 Credits**
- SOC 225 - Social Problems **3 Credits**

One of the following:

- MET 125-Weather and Climate
- MET 270-Ocean and Climate

A major in one of the following disciplines:

- Biology (59 Credits)

- Chemistry (56 Credits)
- Geology (54 Credits)

Total Broad Field Science Education Major: 101-106 Credits

## **Elementary/Middle Education (Middle Childhood to Early Adolescence) Major (B.S.)**

### Major Requirements:

- EDU 203 - STEM for Elementary Teachers **3 Credits**
- EDU 204 - Language Arts for Educators **3 Credits**
- EDU 205 - Curriculum, Planning, and Assessment **3 Credits**
- EDU 210 - Teaching Environmentally **3 Credits**
- EDU 223 - Teaching in the Middle School **3 Credits**
- EDU 232 - Learning, Growth and Cognition **3 Credits**
- EDU 315 - Classroom Management and Conflict Resolution **3 Credits**
- EDU 337 - Fall Practicum **1-4 Credits**
- EDU 338 - Winter Practicum **1-4 Credits**
- EDU 341 - Science Teaching Methods **3 Credits**
- EDU 349 - Literacy Teaching Methods I **3 Credits**
- EDU 359 - Emergent Literacy **3 Credits**
- EDU 370 - Social Studies Teaching Methods **3 Credits**
- EDU 376 - Strategies for Teaching Diverse Learners **3 Credits**
- EDU 377 - Mathematics Teaching Methods **3 Credits**
- EDU 471 - Student Teaching (MC-EA) and Seminar **6 - 12 Credits**
  
- NAS 212 - Wisconsin Indian Cultures, History, and Contemporary Issues **3 Credits**
- SOC 225 - Social Problems **3 Credits**

### Minors:

Dependent upon current Wisconsin Department of Public Instruction licensure requirements, one of the following minors may be required:

#### Early Childhood Education Minor

- EDU 360 - Instructional Strategies of Early Childhood Education **3 Credits**
- EDU 361 - Fostering Creativity in Young Children **2 Credits**
- EDU 363 - Home/School/Community Collaboration **2 Credits**
- EDU 364 - Early Language and Literacy Development **2 Credits**
- EDU 365 - Early Childhood Program Models **3 Credits**
- EDU 366 - Curriculum Design in Early Childhood Education **2 Credits**
- EDU 472 - Student Teaching in Minor **0 Credits**

Total Elementary/Middle Education Major with Early Childhood Education Minor: 67-79 Credits

### English Language Arts Teaching Minor

- EDU 472 - Student Teaching in Minor **0 Credits**
- ENG 180 - Public Speaking **3 Credits**
- ENG 211 - Humanity and Nature in Literature **3 Credits**
- ENG 387 - The English Language **4 Credits**
- WRI 260 - Introduction to Creative Writing **3 Credits**
- WRI 361 - Creative Writing: Fiction **3 Credits**
- WRI 362 - Creative Writing: Poetry **3 Credits**

Total Elementary/Middle Education Major with English Language Arts Teaching Minor: 75-87 Credits

### Mathematics Teaching Minor

- EDU 472 - Student Teaching in Minor **0 Credits**
- MTH 106 - Environmental Mathematics **4 Credits**
- MTH 107 - Statistical Concepts and Analysis **4 Credits**
- MTH 140 - Calculus I **4 Credits**
- MTH 141 - Calculus II **4 Credits**
- MTH 328 - College Geometry **3 Credits**
  
- MTH 207 - Biometry **4 Credits**
- **OR**
- MTH 230 - Mathematical Modeling **4 Credits**

Total Elementary/Middle Education Major with Mathematics Teaching Minor: 76-88 Credits

### Natural Science Teaching Minor

- BIO 115 - Concepts of Biology **4 Credits**
- **OR**
- BIO 128 - Natural History and Conservation in the Lake Superior Watershed **3 Credits**
  
- CHM 110 - General Chemistry **4 Credits**
- EDU 472 - Student Teaching in Minor **0 Credits**
- GSC 120 - Physical Geology **4 Credits**
- MET 125-Weather and Climate **4 Credits**
- **OR**
- MET 270-Ocean and Climate **4 Credits**
  
- MTH 107 - Statistical Concepts and Analysis **4 Credits**
- **OR**

- MTH 109 - Precalculus Mathematics **4 Credits**
- PHY 104 - Introduction to Astronomy **4 Credits**  
**OR**
- PHY 110 - General Physics I **4 Credits**

Total Elementary/Middle Education Major with Natural Science Teaching Minor: 77-89 Credits

### Social Studies Teaching Minor

- BUS 226 - Essentials of Economics **4 Credits**
- EDU 472 - Student Teaching in Minor **0 Credits**
- GSC 262 - World Regional Geography **3 Credits**
- PSY 110 - General Psychology **4 Credits**
- SCD 230 - The Political Process **3 Credits**
- Any NAS history course **3 Credits**
- Any U.S. history course **3 Credits**
- Any non-U.S. history course **3 Credits**

Total Elementary/Middle Education Major with Mathematics Teaching Minor: 76-88 Credits

## **Broad Field Social Studies Education Major (B.S.)**

### Major Requirements:

- EDU 205 - Curriculum, Planning, and Assessment **3 Credits**
- EDU 210 - Teaching Environmentally **3 Credits**
- EDU 223 - Teaching in the Middle School **3 Credits**
- EDU 232 - Learning, Growth and Cognition **3 Credits**
- EDU 315 - Classroom Management and Conflict Resolution **3 Credits**
- EDU 337 - Fall Practicum **1-4 Credits**
- EDU 338 - Winter Practicum **1-4 Credits**
- EDU 370 - Social Studies Teaching Methods **3 Credits**
- EDU 376 - Strategies for Teaching Diverse Learners **3 Credits**
- EDU 460 - Student Teaching (EA-A) and Seminar **6 - 12 Credits**
- ECN 263 - Essentials of Economics **4 Credits**
- GSC 262 - World Regional Geography **3 Credits**
- NAS 212 - Wisconsin Indian Cultures, History, and Contemporary Issues **3 Credits**
- PSY 110 - General Psychology **4 Credits**
- SCD 230 - The Political Process **3 Credits**
- SOC 225 - Social Problems **3 Credits**

### Additional Requirement:

History Major (B.A.) (45-46 Credits)

**Total Broad Field Social Studies Education Major: 95 Credits**

## **Early Childhood Minor**

### **Minor Requirements**

- EDU 360 - Instructional Strategies of Early Childhood Education **3 Credits**
- EDU 361 - Fostering Creativity in Young Children **2 Credits**
- EDU 363 - Home/School/Community Collaboration **2 Credits**
- EDU 364 - Early Language and Literacy Development **2 Credits**
- EDU 365 - Early Childhood Program Models **3 Credits**
- EDU 366 - Curriculum Design in Early Childhood Education **2 Credits**

**Total Early Childhood Minor: 14 Credits**

## **Engineering (Dual Degree)**

The dual degree engineering program provides students with a professional engineering education and a well-rounded environmental liberal arts education. Northland College cooperates with Washington University in St. Louis, Missouri, to provide the dual degree program.

Dual degree students attend Northland for three academic years and Washington University for two academic years. Students must successfully complete the pre-engineering program and the general education program during their three years at Northland. Upon completion of the five-year program, students earn a Bachelor of Science degree from Northland and a Bachelor of Science degree from Washington University. Students earn a B. S. in Biomedical, Chemical, Computer, Computer Science, Electrical, Mechanical, or Systems Science Engineering.

For more information about the dual degree engineering program, contact Young Kim, the Engineering Program Coordinator.

*Note: In order to receive a Northland degree, students must present the Registrar's Office with a transcript of courses completed at Washington University. With the approval of the Academic Dean of the College, students may choose other engineering schools accredited by the Accreditation Board of Engineering and Technology.*

## **Engineering (Dual Degree) (B.S.)**

### **Major Requirements:**

- BUS 226 - Essentials of Economics **4 Credits**
- CHM 240 - Inorganic Chemistry **4 Credits**
- CPS 220 - Computer Science **4 Credits**
- MTH 140 - Calculus I **4 Credits**
- MTH 141 - Calculus II **4 Credits**
- MTH 312 - Advanced Calculus **4 Credits**

- MTH 330 - Differential Equations **4 Credits**
- MTH 337 - Linear Algebra **4 Credits**
- PHY 110 - General Physics I **4 Credits**
- PHY 111 - General Physics II **4 Credits**
- Completion of a *Connections Curriculum* **30-40 Credits**
  
- BIO 115 - Concepts of Biology **4 Credits**  
**OR**
- BIO 128 - Natural History and Conservation in the Lake Superior Watershed **3 Credits**

One of the following:

- CHM 103 - General Chemistry: The Chemistry of Food **4 Credits**
- CHM 110 - General Chemistry **4 Credits**

### Additional Requirements

- Two additional years of study at Washington University in St. Louis
- A minimum of 90 semester hours of transferable college credit are required for admission to the program at Washington University (courses with grades below C- do not transfer).

**Total Engineering (Dual Degree) Major: 77-88 Credits**

## English

The English program reflects the overall tenor of the College in its emphasis on the development of critical thinking and communication skills, the importance of integrated cross-disciplinary studies, and concern for the relationship between humans and the natural world. Courses in the English program represent the American and British literary traditions, approaches to creative writing, and a variety of specialty studies, including third world literature, science fiction, nature writing, and women's studies. The English major also grounds students in the study of historical periods and movements.

Graduates of the English program go on to graduate programs and to careers in teaching, publishing, technical writing, public relations, or other occupations that emphasize the ability to write well, read perceptively, speak clearly, and listen carefully.

### English Major (B.A.)

Major Requirements:

- ENG 262 - Survey of British Literature **3 Credits**
- ENG 264 - Survey of American Literature **3 Credits**
- ENG 384 - Literary Criticism **3 Credits**
- ENG 387 - The English Language **4 Credits**
- ENG 213 - Literature of the Western Worlds **3 Credits**
- ENG 377 - Green Romanticism **3 Credits**

- HIS 221 - History of Medieval Europe **3 Credits**
- IDS 480 - Senior Seminar **3 Credits**

One of the following:

- ENG 211 - Humanity and Nature in Literature **3 Credits**
- ENG 216 - The Contemporary Novel **3 Credits**
- ENG 228 - Literature of the Arab World **4 Credits**

One of the following:

- HIS 101 - United States History to 1865 **3 Credits**
- HIS 102 - United States History since 1865 **3 Credits**
- HIS 263 - History of the Middle East **3 Credits**

Capstone Course:

- ENG 413 - Shakespeare **4 Credits**  
**OR**
- ENG 415 - Chaucer **4 Credits**

Additional Requirements

- Additional courses in ENG or WRI **12 - 15 Credits**  
Note: A maximum of 6 credits may come from WRI

Total English Major: 47-51 Credits

## English Minor

Minor Requirements:

- ENG 264 - Survey of American Literature **3 Credits**
- ENG 384 - Literary Criticism **3 Credits**
- ENG 387 - The English Language **4 Credits**
- ENG 413 - Shakespeare **4 Credits**  
**OR**
- ENG 415 - Chaucer **4 Credits**

Additional Requirements

- Two additional ENG courses **6 Credits**
- Two additional WRI courses **6 Credits**

Total English Minor: 26 Credits

## **Environmental Education**

The field and practice of Environmental Education refers to both formal and non-formal efforts to teach about how natural environments function, how human behaviors shape and influence those natural functions and how we can change our behaviors in order to sustain a healthy environment for the future of all living things.

Students with an Environmental Education minor are prepared to effectively teach participants of all ages and abilities, in outdoor as well as indoor settings.

## **Environmental Education Minor**

### **Minor Requirements:**

- OED 261 - Foundations in Environmental Education **3 Credits**
- PHL 226 - Environmental Ethics **3 Credits**
- HIS 241 - American Environmental History **3 Credits**
- OED 328 - Wilderness Writers and Philosophers **3 Credits**

### **One of the following:**

- NAS 315 - American Indian Environmental Perspectives **3 Credits**
- NAS 333 - Native American World Views **3 Credits**

### **One of the following:**

- SCD 220 - Sustainable Community Planning **3 Credits**
- SCD 230 - The Political Process **3 Credits**
- SOC 240 - Cultural Ecology **3 Credits**

### **One of the following:**

- OED 282 - Outdoor Education Practicum **4 Credits**
- OED 362 - Apostle Island School Preparation **1 Credits**
- OED 363 - Apostle Islands School **4 Credits**
- OED 492 - Internship **3 Credits**

Total Environmental Education Minor: 20-24 Credits

## **Environmental Geosciences**

The environmental geosciences major provides students with the opportunity to study geologic and hydrologic processes as well as how people are influenced by and impact earth systems. The physical earth—its minerals, rocks,

soils, water, and landscapes—form the foundation on which all ecosystems exist, so understanding geologic and hydrologic processes helps students understand environmental issues and their relationship to the earth.

The environmental geosciences major at Northland emphasizes field work, hands-on experiences, and the interdisciplinary nature of the geosciences. Students become proficient at gathering field data and using state-of-the-art equipment to produce maps that illustrate the distribution and nature of Earth's features. The curriculum provides students the broad foundation required in earth science and prepares them to be successful as professional geoscientists immediately after graduation or to continue their studies in graduate school.

Students majoring in the environmental geosciences are required to take all the courses in the list of core courses and to choose an emphasis in geology or water science. The program also supports minors in geology and GIS (Geographic Information Systems).

## **Geology Major (B.S.)**

### **Geology Courses:**

#### **One of the following:**

- GSC 107 - Geology and Agriculture **4 Credits**
- GSC 112 - Geoscience Issues of Lake Superior **3 Credits**
- GSC 120 - Physical Geology **4 Credits**

#### **All of the following:**

- GSC 222 - Sediments and Soils **4 Credits**
- GSC 320 - Geomorphology **4 Credits**
- GSC 321 - Minerals and Rocks **4 Credits**
- GSC 474 - Tectonics and Structural Geology **4 Credits**
- GSC 481 - Geologic Field Methods **1 Credits**
- GSC 498 - Senior Seminar in Geoscience **2 Credits**

#### **One of the following GSC water courses:**

- GSC 305 - Hydrology **4 Credits**
- GSC 406 - Hydrogeology and Geochemistry **4 Credits**

#### **One of the following GSC field camps:**

- GSC 482 - Wyoming Geology Field Camp **4 Credits**
- GSC 483 - Great Lakes Geology Field Camp **4 Credits**

**One additional 4 Credit GSC course at the 200-level or higher**

### **Chemistry Courses:**

One of the following:

- CHM 103 - General Chemistry: The Chemistry of Food **4 Credits**
- CHM 110 - General Chemistry **4 Credits**

Required:

- CHM 240 - Inorganic Chemistry **4 Credits**

GIS Courses:

- GIS 201 - Introduction to Geographic Information Systems **4 Credits**
- GIS 301 - Intermediate GIS Applications **4 Credits**

Mathematics Courses:

- MTH 107 - Statistical Concepts and Analysis **4 Credits**

One of the following:

- MTH 140 - Calculus I **4 Credits**
- MTH 207 - Biometry **4 Credits**
- MTH 230 - Mathematical Modeling **4 Credits**

Total Geology Major: 59-62 Credits

## **Geology Minor**

Minor Requirements:

- GSC 107 - Geology and Agriculture **4 Credits**  
or
- GSC 112 - Geoscience Issues of Lake Superior **3 Credits**  
or
- GSC 120 - Physical Geology **4 Credits**
- **And** additional GSC courses, 200-level or above **24 Credits**

Total Geology Minor: 27-28 Credits

## **Water Science Major (B.S.)**

Major Requirements:

## Geoscience Courses

One of the following:

- GSC 107 - Geology and Agriculture **4 Credits**
- GSC 112 - Geoscience Issues of Lake Superior **3 Credits**
- GSC 120 - Physical Geology **4 Credits**

All of the following:

- GSC 498 - Senior Seminar in Geoscience **2 Credits**
- GSC 305 - Hydrology **4 Credits**
- GSC 406 - Hydrogeology and Geochemistry **4 Credits**
- GSC 222 - Sediments and Soils **4 Credits**

## Biology Courses

One of the following:

- BIO 115 - Concepts of Biology **4 Credits**
- BIO 128 - Natural History and Conservation in the Lake Superior Watershed **3 Credits**

Both of the following:

- BIO 234 - Ecology **4 Credits**
- BIO 473 - Limnology **4 Credits**

## Mathematics Courses:

- MTH 107 - Statistical Concepts and Analysis **4 Credits**

One of the following:

- MTH 140 - Calculus I **4 Credits**
- MTH 207 - Biometry **4 Credits**
- MTH 230 - Mathematical Modeling **4 Credits**

## Chemistry Courses:

One of the following:

- CHM 103 - General Chemistry: The Chemistry of Food **4 Credits**
- CHM 110 - General Chemistry **4 Credits**

## Climate-related Courses:

One of the following:

- CLM 125 - Weather and Climate **4 Credits**
- CLM 244 - Understanding Climate Change **4 Credits**
- CLM 270 - Oceans and Climate **4 Credits**
- GSC 312 - Paleoclimate: Past as Prologue **4 Credits**

**Emphases:**

To complete a major in Water Science, choose one of the following emphases:

**Water Chemistry Emphasis:**

- CHM 210 - Chemistry of Natural Waters **4 Credits**
- CHM 212 - Water Quality Lab Techniques **4 Credits**
- CHM 220 - Organic Chemistry I **4 Credits**
- CHM 225 - Quantitative Analysis **4 Credits**
- CHM 240 - Inorganic Chemistry **4 Credits**

**Water Resources Emphasis:**

- GIS 201 - Introduction to Geographic Information Systems **4 Credits**
- GIS 301 - Intermediate GIS Applications **4 Credits**
- GSC 233 - Earth Resources **4 Credits**

One of the following:

- BIO 225 - Aquatic Invertebrates **4 Credits**
- BIO 242 - Ichthyology **4 Credits**

One of the following:

- IDS 248 - Great Lakes Water Wars **3 Credits**
- NRS 215 - Natural Resources Policy **3 Credits**

**Total Water Science Major with Emphasis: 65 - 68 Credits**

## **Environmental Studies**

To earn an environmental studies minor, students must complete the following requirements from the "Environmental Curriculum" component of the Liberal Education for the Environment & Society program:

\* HIS 241 American Environmental History or HIS 242 European Environmental History (the course used to satisfy this requirement may not be used to satisfy other requirements for the minor);

\* two courses representing different disciplines from the "Environmental Narratives" category;

\* two courses representing different disciplines from "The Science of Environmental Issues" category;

\*two courses representing different disciplines from the "Communities, Policies, and Management of Environmental Issues" category;

\* two courses or experiences representing different disciplines from the "Environmental Applications" category.

In addition, at least two of the courses or experiences completed for the minor must be at the 300-level or higher, and no courses may be used to satisfy requirements in more than one category. Students must complete at least 27 credits for this minor.

## **Environmental Studies Minor**

To earn an environmental studies minor, students must complete the following requirements from the "Environmental Curriculum" component of the Liberal Education for the Environment & Society program:

\* HIS 241 American Environmental History or HIS 242 European Environmental History (the course used to satisfy this requirement may not be used to satisfy other requirements for the minor);

\* two courses representing different disciplines from the "Environmental Narratives" category;

\* two courses representing different disciplines from "The Science of Environmental Issues" category;

\*two courses representing different disciplines from the "Communities, Policies, and Management of Environmental Issues" category;

\* two courses or experiences representing different disciplines from the "Environmental Applications" category.

In addition, at least two of the courses or experiences completed for the minor must be at the 300-level or higher, and no courses may be used to satisfy requirements in more than one category. Students must complete at least 27 credits for this minor.

## **Gender and Women's Studies**

The Gender and Women's Studies major at Northland offers students the chance to explore the significance of gender- as well as other categories of identity-in social systems across the world. As an interdisciplinary major, Gender and Women's Studies asks questions such as how women and men learn and perform gender; how gender is constructed and represented through language, individual behavior, and social/cultural institutions; how ideas of gender and gender roles have influenced human interactions with the natural world; and how people can recognize and work to transform the gender ideologies that shape our knowledge and action.

Gender and Women's Studies at Northland is distinguished by its interdisciplinary nature. By taking courses that are grounded in similar assumptions and that raise similar questions regarding gender, but that examine these assumptions and questions within different disciplines, students achieve an understanding of the complexity of the world around them and are more equipped to change it toward equality and ecological sustainability.

## **Gender and Women's Studies Major (B.A.)**

### **Major Requirements:**

- IDS 480 - Senior Seminar **3 Credits**

Six of the following core courses:

- ENG 233 - Women of the Third World **3 Credits**
- GWS 265 - Introduction to Gender and Women's Studies **3 Credits**
- GWS 266 - Ecofeminism **3 Credits**
- GWS 331 - Feminist Theory **3 Credits**
- GWS 343 - Queer Ecologies **3 Credits**
- HIS 209 - Gender in the United States Landscape **3 Credits**
- HIS 260 - Gender in Modern Europe **3 Credits**
- NAS 340 - Indigenous Gender Studies **3 Credits**
- NAS 362 - Native Women's Activism **3 Credits**
- NAS 380 - Indigenous Women Writers **3 Credits**
- REL 340 - Sex and Religion **3 Credits**
- SOC 234 - Sociology of Gender **3 Credits**
- SOC 236 - Sociology of Sexuality **4 Credits**
- SOC 381 - Undoing Racism **3 Credits**

Eight of the following courses not previously taken:

- BIO 343 - Biology of AIDS **3 Credits**
- ENG 216 - The Contemporary Novel **3 Credits**
- ENG 228 - Literature of the Arab World **4 Credits**
- ENG 233 - Women of the Third World **3 Credits**
- ENG 234 - Dystopias: Ecology & Gender in SciFi **4 Credits**
- ENG 372 - Nature & Gender in Lat Am Lit **3 Credits**
- GWS 265 - Introduction to Gender and Women's Studies **3 Credits**
- GWS 266 - Ecofeminism **3 Credits**
- GWS 331 - Feminist Theory **3 Credits**
- GWS 343 - Queer Ecologies **3 Credits**
- HIS 209 - Gender in the United States Landscape **3 Credits**
- HIS 260 - Gender in Modern Europe **3 Credits**
- HIS 266 - American Material Culture/Objects in Everyday Life and History **3 Credits**
- HIS 357 - Gender in Total War **3 Credits**
- NAS 211 - Native American History and Experience **3 Credits**
- NAS 260 - Indigenous Environmental Justice **3 Credits**
- NAS 283 - American Indian Literature **3 Credits**
- NAS 340 - Indigenous Gender Studies **3 Credits**
- NAS 342 - Gender in Indigenous Borderlands **3 Credits**
- NAS 362 - Native Women's Activism **3 Credits**
- NAS 380 - Indigenous Women Writers **3 Credits**
- OED 279 - Access and Diversity **3 Credits**
- OED 385 - Urban Outdoor Education **3 Credits**
- REL 340 - Sex and Religion **3 Credits**
- SOC 234 - Sociology of Gender **3 Credits**
- SOC 236 - Sociology of Sexuality **4 Credits**
- SOC 336 - The Nature of Social Inequality **4 Credits**
- SOC 368 - Global Inequality **4 Credits**

- SOC 374 - Human Rights and Social Justice **3 Credits**
  - \* 490 - Independent Study
  - \* 491 - Field Experience
- \*A 490 Independent Study or 491 Field Experience can be taken in any discipline as long as the focus is relevant to gender and women's studies. Approval of the Gender and Women's Studies Program Coordinator and course instructor is required.

Total Gender and Women's Studies Major: 45-48 Credits

## Gender and Women's Studies Minor

Minor Requirements:

Four of the following core courses:

- ENG 233 - Women of the Third World **3 Credits**
- GWS 265 - Introduction to Gender and Women's Studies **3 Credits**
- GWS 266 - Ecofeminism **3 Credits**
- GWS 331 - Feminist Theory **3 Credits**
- GWS 343 - Queer Ecologies **3 Credits**
- HIS 209 - Gender in the United States Landscape **3 Credits**
- HIS 260 - Gender in Modern Europe **3 Credits**
- NAS 340 - Indigenous Gender Studies **3 Credits**
- NAS 362 - Native Women's Activism **3 Credits**
- NAS 380 - Indigenous Women Writers **3 Credits**
- REL 340 - Sex and Religion **3 Credits**
- SOC 234 - Sociology of Gender **3 Credits**
- SOC 236 - Sociology of Sexuality **4 Credits**
- SOC 381 - Undoing Racism **3 Credits**

Four of the following elective courses:

- BIO 343 - Biology of AIDS **3 Credits**
- ENG 216 - The Contemporary Novel **3 Credits**
- ENG 228 - Literature of the Arab World **4 Credits**
- ENG 233 - Women of the Third World **3 Credits**
- ENG 234 - Dystopias: Ecology & Gender in SciFi **4 Credits**
- ENG 372 - Nature & Gender in Lat Am Lit **3 Credits**
- GWS 265 - Introduction to Gender and Women's Studies **3 Credits**
- GWS 266 - Ecofeminism **3 Credits**
- GWS 331 - Feminist Theory **3 Credits**
- GWS 343 - Queer Ecologies **3 Credits**
- HIS 209 - Gender in the United States Landscape **3 Credits**
- HIS 260 - Gender in Modern Europe **3 Credits**

- HIS 266 - American Material Culture/Objects in Everyday Life and History **3 Credits**
  - HIS 357 - Gender in Total War **3 Credits**
  - NAS 211 - Native American History and Experience **3 Credits**
  - NAS 260 - Indigenous Environmental Justice **3 Credits**
  - NAS 283 - American Indian Literature **3 Credits**
  - NAS 340 - Indigenous Gender Studies **3 Credits**
  - NAS 342 - Gender in Indigenous Borderlands **3 Credits**
  - NAS 362 - Native Women's Activism **3 Credits**
  - NAS 380 - Indigenous Women Writers **3 Credits**
  - OED 279 - Access and Diversity **3 Credits**
  - OED 385 - Urban Outdoor Education **3 Credits**
  - REL 340 - Sex and Religion **3 Credits**
  - SOC 234 - Sociology of Gender **3 Credits**
  - SOC 236 - Sociology of Sexuality **4 Credits**
  - SOC 336 - The Nature of Social Inequality **4 Credits**
  - SOC 368 - Global Inequality **4 Credits**
  - SOC 374 - Human Rights and Social Justice **3 Credits**
  - \* 490 - Independent Study
  - \* 491 - Field Experience
- \*A 490 Independent Study or 491 Field Experience can be taken in any discipline as long as the focus is relevant to gender and women's studies. Approval of the Gender and Women's Studies Program Coordinator and course instructor is required.

**Total Gender and Women's Studies Minor: 24-27 Credits**

## **Geographic Information Systems**

The Geographic Information Systems (GIS) minor introduces students to the concepts and theory of GIS, and helps them to develop the practical skills necessary when using basic GIS software in a variety of applications.

Courses include three in using ArcGIS software, in addition to remote sensing, GPS, and geodatabases. Each course in the minor is a combination of both lecture and lab. In the lectures, conceptual elements are explained. Labs provide students with first-hand experience in critical thinking, data input and management, methods of analyses, and final map and report presentations.

## **Geographic Information Systems Minor**

### **Minor Requirements:**

- GIS 201 - Introduction to Geographic Information Systems **4 Credits**
- GIS 260 - Global Positioning Systems **1 Credits**
- GIS 301 - Intermediate GIS Applications **4 Credits**
- GIS 315 - Geodatabases **3 Credits**
- GIS 380 - Remote Sensing **4 Credits**
- GIS 401 - Advanced GIS Applications **4 Credits**
- GIS 492 - Internship **1 Credits**

## Total Geographic Information Systems Minor: 21 Credits

### **Geology**

See Environmental Geosciences for Geology major and minor requirements.

### **History**

The history major teaches students how to see and understand the world around them as the result of a complex set of dynamic interactions between culture, economics, politics, the environment, ideas, ideologies, and social trends. Students in this major learn how to read critically, write clearly and authoritatively, and think comprehensively about the course of human events.

The history major offers students crucial skills for the job market, and prepares students for the pursuit of careers in journalism, writing, diplomacy, law, technical writing, ministry, public relations, public administration, and non-profit work as well as graduate studies in history, law or international relations.

### **History Major (B.A.)**

#### Major Requirements:

##### Non-Western courses

Two of the following non-Western courses:

- HIS 111 - History of World Civilizations to 1500 **3 Credits**
- HIS 112 - History of World Civilizations since 1500 **3 Credits**
- HIS 263 - History of the Middle East **3 Credits**
- ENG 228 - Literature of the Arab World **4 Credits**
- ENG 233 - Women of the Third World **3 Credits**
- ENG 372 - Nature & Gender in Lat Am Lit **3 Credits**
- REL 230 - Asian Religions and Philosophies **3 Credits**
- REL 231 - Buddhism **3 Credits**
- REL 330 - History of Islamic Cultures **3 Credits**

##### Ancillary Discipline courses

Three of the following ancillary discipline courses:

- Additional History (HIS) courses
- ART 230 - Art History Ancient to Medieval **3 Credits**
- ART 231 - Art History Renaissance to Modern **3 Credits**
- ART 232 - Contemporary Art History **3 Credits**
- ENG 213 - Literature of the Western Worlds **3 Credits**
- ENG 262 - Survey of British Literature **3 Credits**
- ENG 264 - Survey of American Literature **3 Credits**

- GWS 265 - Introduction to Gender and Women's Studies **3 Credits**
- GWS 331 - Feminist Theory **3 Credits**
- NAS 211 - Native American History and Experience **3 Credits**
- NAS 212 - Wisconsin Indian Cultures, History, and Contemporary Issues **3 Credits**
- REL 219 - The Nature of Religious Experience **3 Credits**
- SCD 230 - The Political Process **3 Credits**
- SCD 235 - Forces of Change **3 Credits**
- SCD 320 - The History of Planning and Development **4 Credits**
- SOC 225 - Social Problems **3 Credits**
- SOC 234 - Sociology of Gender **3 Credits**
- SOC 381 - Undoing Racism **3 Credits**

## Additional History Courses

Ten additional History courses with at least 9 credits at the 300-level or higher.

- HIS 101 - United States History to 1865 **3 Credits**
- HIS 102 - United States History since 1865 **3 Credits**
- HIS 209 - Gender in the United States Landscape **3 Credits**
- HIS 221 - History of Medieval Europe **3 Credits**
- HIS 241 - American Environmental History **3 Credits**
- HIS 242 - European Environmental History **3 Credits**
- HIS 260 - Gender in Modern Europe **3 Credits**
- HIS 266 - American Material Culture/Objects in Everyday Life and History **3 Credits**
- HIS 270 - The Holocaust **3 Credits**
- HIS 315 - American Foodways **3 Credits**
- HIS 320 - The Enlightenment **3 Credits**
- HIS 321 - The French Revolution **3 Credits**
- HIS 325 - Nature and Nation: Environment, Art, Ideology **3 Credits**
- HIS 334 - Ideology in the 20th Century **3 Credits**
- HIS 357 - Gender in Total War **3 Credits**

## Capstone course

- IDS 480 - Senior Seminar **3 Credits**

**Total History Major: 48-49 Credits**

## **History Minor**

### Minor Requirements:

- 21 HIS credits with at least 9 credits at the 300-level or above \*

Note:

\*Students are also strongly encouraged to select both western and non-western history courses for their minor.

## Total History Minor: 21 Credits

### **Humanities**

The Humanities major is an interdisciplinary major that focuses on exploring the human condition through the ideas, artistic movements, religions, ideologies, and intellectual structures that humans use, and have used, to understand and give meaning to their world. At the heart of this endeavor is the commitment to use multiple disciplinary perspectives from the humanities to understand ideas across multiple eras, regions, and cultures.

Students in this major will gain a strong foundation in critical thinking; reading and interpretive skills; comparative study; and effective writing in several disciplines. This major prepares students for any number of careers in the humanities, publishing, writing, journalism, government and diplomatic service, and also effectively prepares them for graduate study in law, journalism, English, History, Religious Studies, Seminary, Government and Diplomacy, Cultural Studies and Humanities.

### **Humanities Major (B.A.)**

#### Humanities Major Requirements:

1. Students must take at least 15 courses with ART, ENG, GWS, HIS, HUM, MLG, MUS, NAS, PHL, REL, or WRI prefixes (at least 45 credits). Three 1 credit courses can be substituted for a 3 credit humanities course.
2. Among these courses, students must take at least three 3 credit courses in each of three different programs (e.g. three HIS, three GWS and three ART courses, or three REL, three PHL and three ENG courses).
3. Among these courses, students must take at least three 3 credit courses at the 300 level or higher (not including IDS 480).
4. Among these courses, students may count credits from no more than four 1 credit courses toward the minimum of 45 credits.
5. Students must take IDS 480 : Senior Seminar (3 credits)

## Total Required Credits for Major: 48-55

### **Humanity and Nature Studies**

Humanity & Nature Studies is a major designed for students who want to understand the complex relationships that people have with nature and, through this understanding, to make a difference in the world.

Integral to the courses in the major are three fundamental questions: Who am I? What is Nature? And, How do I interact with the world after my attempts to answer the first two questions?

The major emphasizes an interdisciplinary exploration of human-nature relationships that prepares students to weave together insights and methodologies from the humanities, social sciences, and natural sciences. Through these insights & methodologies, students broaden and deepen their understanding of how humans have conceived of their

relationships to nature over time. Students who complete the Humanity & Nature Studies major develop a sophisticated understanding of how humans continue to conceive, construct, and fulfill their relationships to the natural world.

The major prepares students to pursue graduate or professional studies in fields, such as Environmental Law and Environmental Humanities, or for a variety of environmentally focused careers in business, education, government, industry, advertising, public policy, community planning, nature therapy, or the non-profit sector.

The Environmental Humanities minor provides students with a foundational understanding of how people have thought about their relationship to nature over time and across a variety of cultures. The minor is especially relevant for students who hope to pursue careers, such as Natural Resource management, environmental consulting, sustainable community development, or political organizing, that require them to understand and appreciate the values and attitudes that influence the decisions and actions of others in relationship to the natural world. The minor also offers a valuable course of study for students interested in exploring and better understanding the roots of their own relationships to nature.

## **Humanity and Nature Studies Major (B.A.)**

### **Major Requirements:**

- **BIO 115 - Concepts of Biology 4 Credits**  
**OR**
- **BIO 128 - Natural History and Conservation in the Lake Superior Watershed 3 Credits**
  
- **BIO 234 - Ecology 4 Credits**
- **ENG 211 - Humanity and Nature in Literature 3 Credits**
- **HIS 241 - American Environmental History 3 Credits**
- **HIS 325 - Nature and Nation: Environment, Art, Ideology 3 Credits**
- **IDS 480 - Senior Seminar 3 Credits**
- **NAS 227 - Native Foodways 3 Credits**
- **NAS 315 - American Indian Environmental Perspectives 3 Credits**
- **PHL 262 - Environmental Philosophy 3 Credits**
- **PSY 331 - Ecopsychology 3 Credits**
- **REL 258 - Religion and Nature 3 Credits**
- **SOC 242 - Sociology of the Environment 3 Credits**

### **One of the following:**

- **ENG 318 - Nature Writers 3 Credits**
- **ENG 372 - Nature & Gender in Lat Am Lit 3 Credits**
- **ENG 377 - Green Romanticism 3 Credits**
- **OED 328 - Wilderness Writers and Philosophers 3 Credits**

### **One of the following:**

- **ART 280 - Graphic Design I 3 Credits**
- **ART 306 - Art Collaborations with Nature 3 Credits**
- **ENG 240 - Pens and Paddles in the North Woods 4 Credits**
- **OED 224 - North Woods Pathways 4 Credits**

- OED 361 - Interpretive Program Design **3 Credits**
- OED 385 - Urban Outdoor Education **3 Credits**

## Emphases:

To complete a major in Humanity and Nature Studies, choose one of the following emphases:

### Global Humanities Emphasis - Choose 4 courses

- ART 231 - Art History Renaissance to Modern **3 Credits**
- ENG 217 - Contemporary Third World Literature **4 Credits**
- ENG 233 - Women of the Third World **3 Credits**
- GWS 266 - Ecofeminism **3 Credits**
- HIS 242 - European Environmental History **3 Credits**
- NAS 342 - Gender in Indigenous Borderlands **3 Credits**
- PHL 226 - Environmental Ethics **3 Credits**
- REL 174 - Religion and Science **3 Credits**

### Social Science and Leadership Emphasis - Choose 4 courses

- OED 221 - Group Process and Leadership **4 Credits**
- OED 279 - Access and Diversity **3 Credits**
- SCD 235 - Forces of Change **3 Credits**
- SCD 335 - Organizing Communities **3 Credits**
- SOC 215 - Sociology of Community **3 Credits**
- SOC 325 - Environmental Health and Sustainability **3 Credits**

### Natural History Emphasis:

Two of the following:

- BIO 222 - Spring Flora **4 Credits**
- BIO 224 - Entomology **4 Credits**
- BIO 225 - Aquatic Invertebrates **4 Credits**
- BIO 242 - Ichthyology **4 Credits**
- BIO 244 - Field Ornithology **4 Credits**
- BIO 245 - Mammalogy **4 Credits**

Two of the following:

- BIO 328 - Vegetative Communities of Northern Wisconsin **4 Credits**
- BIO 473 - Limnology **4 Credits**
- NRS 345 - Ecological Restoration **4 Credits**
- NRS 347 - Sustainable Forest Management **4 Credits**
- NRS 348 - Wildlife Ecology and Management **4 Credits**
- NRS 349 - Fisheries Science and Management **4 Credits**

- NRS 358 - Wetlands **4 Credits**

Total Humanity and Nature Studies Major with Emphasis: 56-63 Credits

## **Environmental Humanities Minor**

Minor Requirements:

- ENG 211 - Humanity and Nature in Literature **3 Credits**
- ENG 318 - Nature Writers **3 Credits**
- HIS 325 - Nature and Nation: Environment, Art, Ideology **3 Credits**
- NAS 315 - American Indian Environmental Perspectives **3 Credits**
- PHL 262 - Environmental Philosophy **3 Credits**
- REL 258 - Religion and Nature **3 Credits**
  
- HIS 241 - American Environmental History **3 Credits**  
**OR**
- HIS 242 - European Environmental History **3 Credits**

Total Environmental Humanities Minor: 21 Credits

## **Mathematical Sciences**

Mathematics, at the core of a liberal arts education and the foundation of a science curriculum, is uniquely positioned as a program at Northland College. Students in the Mathematics program develop collaborative relationships with the Mathematics faculty that allow in-depth exploration of traditional mathematical concepts. These concepts are then broadened and applied in courses taught by faculty from other disciplines.

Thus, students who graduate with a Mathematical Sciences degree have a solid foundation in mathematical concepts, and knowledge and experience in applying those concepts to model environmental, social, or physical phenomena and to solve complex problems. This dual training prepares Northland graduates to gain admission to graduate schools in mathematics, engineering, and other fields and to secure employment in a wide variety of disciplines including teaching, business, and government.

## **Mathematical Sciences Major (B.S.)**

Major Requirements:

- MTH 107 - Statistical Concepts and Analysis **4 Credits**
- MTH 140 - Calculus I **4 Credits**
- MTH 141 - Calculus II **4 Credits**
- MTH 207 - Biometry **4 Credits**
- MTH 230 - Mathematical Modeling **4 Credits**
- MTH 312 - Advanced Calculus **4 Credits**

- MTH 330 - Differential Equations **4 Credits**
- MTH 337 - Linear Algebra **4 Credits**
- MTH 470 - Advanced Topics in Mathematics **4 Credits**
- PHY 110 - General Physics I **4 Credits**

### Additional Requirements:

- Additional courses with a quantitative focus **15-16 Credits**

**Note:** These courses must be chosen from within mathematical sciences or other programs in consultation with a mathematical sciences professor and should be selected to augment one's interests in mathematical sciences (e.g., College Geometry and Discrete Mathematics) or in support of one's combined interests in mathematics and another discipline (e.g., advanced physics or computer science). Note that some other courses of a quantitative nature may require pre-requisites in addition to those required above.

**Total Mathematical Sciences Major: 55-56 Credits**

## Mathematical Sciences Minor

### Minor Requirements:

- MTH 107 - Statistical Concepts and Analysis **4 Credits**
- MTH 140 - Calculus I **4 Credits**
- MTH 141 - Calculus II **4 Credits**

### Additional Requirements:

- Additional MTH courses at the 200-level or higher **15-16 Credits**

**Total Mathematical Sciences Minor: 27-28 Credits**

## Music

Music ensemble and lesson courses are offered for students who wish to participate in musical activities for credit.

## Native American Studies

The Native American studies major focuses on indigenous cultures and traditional teachings at the core of the program, with particular attention given to Lake Superior regional native history. The program includes first-hand contact with local tribes and native Ojibwe communities alongside a rigorous academic curriculum. The curriculum includes native worldviews and indigenous ways of knowing as a rich compliment to the environmental mission of the College.

This major also helps students understand the social, economic, and environmental situations related to the everyday lives of Native communities today. Graduates will be well prepared for work in tribal government and related businesses, careers in living history centers and museums, outdoor recreation and interpretation programs, social-service agencies, and advanced academic work in Native culture studies.

# **Native American Studies Major (B.A.)**

## **Major Requirements:**

### **One of the following:**

- NAS 100 - Introduction to Native American Studies **3 Credits**
- NAS 160 - Lake Superior Ojibwe **3 Credits**

### **Two of the following:**

- NAS 121 - Introduction to Ojibwe Language I **3 Credits**
- NAS 122 - Introduction to Ojibwe Language II **3 Credits**
- NAS 290/490 - Indigenous Language Independent Study **3-6 Credits**

### **Twelve of the following:**

- IDS 315 - Comparative Race Studies **3 Credits**
- NAS 211 - Native American History and Experience **3 Credits**
- NAS 212 - Wisconsin Indian Cultures, History, and Contemporary Issues **3 Credits**
- NAS 216 - Indigenous Representations **3 Credits**
- NAS 227 - Native Foodways **3 Credits**
- NAS 231 - Native American Arts and Cultures **3 Credits**
- NAS 236 - Indigenous Film and Media **3 Credits**
- NAS 241 - Indigenous Museum Studies **3 Credits**
- NAS 260 - Indigenous Environmental Justice **3 Credits**
- NAS 265 - Indigenous Perceptions of Water **3 Credits**
- NAS 283 - American Indian Literature **3 Credits**
- NAS 306 - Global Indigenous Politics **3 Credits**
- NAS 315 - American Indian Environmental Perspectives **3 Credits**
- NAS 333 - Native American World Views **3 Credits**
- NAS 340 - Indigenous Gender Studies **3 Credits**
- NAS 342 - Gender in Indigenous Borderlands **3 Credits**
- NAS 362 - Native Women's Activism **3 Credits**
- NAS 380 - Indigenous Women Writers **3 Credits**

### **One of the following:**

- IDS 480 - Senior Seminar **3 Credits**
- NAS 490 - Native American Independent Study **3 Credits**
- NAS 492 - Internship **3 Credits**

**Total Native American Studies Major: 48-50 Credits**

## **Native American Studies Minor**

### **Minor Requirements:**

- 21 NAS credits (includes IDS 315) with at least 9 credits at the 300-level or above

**Total Native American Studies Minor: 21 Credits**

## **Natural Resources**

The natural resources program provides students with a liberal arts education and ecological, economic, regulatory, and management foundations necessary to use, protect, and enhance natural resources. Students address the complexities inherent in evaluating the needs of different user groups and understand the multiple demands on natural resources.

Students acquire the knowledge and skills necessary to communicate effectively, manage resources, and solve problems and conflicts. Practical experience is gained from field activities, working in groups, preparing plans and budgets, and analyzing data. The natural resources major prepares students for graduate school and careers in government, tribal agencies, not-for-profit organizations, and the private sector.

## **Natural Resources Major (B.S.)**

### **Major Requirements:**

- BIO 115 - Concepts of Biology **4 Credits**  
**OR**
- BIO 128 - Natural History and Conservation in the Lake Superior Watershed **3 Credits**
  
- BIO 234 - Ecology **4 Credits**
- BIO 330 - Genetics **4 Credits**
- ECN 310 - Environmental Economics **3 Credits**
- GIS 201 - Introduction to Geographic Information Systems **4 Credits**
- MTH 107 - Statistical Concepts and Analysis **4 Credits**
- NRS 215 - Natural Resources Policy **3 Credits**
- NRS 480 - Integrated Ecosystem Management **4 Credits**

### **One of the following:**

- CHM 103 - General Chemistry: The Chemistry of Food **4 Credits**
- CHM 110 - General Chemistry **4 Credits**

### **Emphases:**

To complete a major in Natural Resources, choose one of the following emphases:

#### **Ecological Restoration Emphasis:**

- BIO 328 - Vegetative Communities of Northern Wisconsin **4 Credits**
- GSC 120 - Physical Geology **4 Credits**
- NRS 345 - Ecological Restoration **4 Credits**

One of the following:

- BIO 473 - Limnology **4 Credits**
- NRS 358 - Wetlands **4 Credits**

One of the following:

- NRS 335 - Forest Ecology and Management **4 Credits**
- NRS 347 - Sustainable Forest Management **4 Credits**
- NRS 348 - Wildlife Ecology and Management **4 Credits**
- NRS 365 - Conservation of Large Carnivores **3 Credits**
- BIO 410 - Conservation Biology **3 Credits**

One of the following:

- BIO 222 - Spring Flora **4 Credits**
- BIO 224 - Entomology **4 Credits**
- BIO 225 - Aquatic Invertebrates **4 Credits**
- BIO 242 - Ichthyology **4 Credits**
- BIO 244 - Field Ornithology **4 Credits**
- BIO 245 - Mammalogy **4 Credits**

One of the following:

- GSC 222 - Sediments and Soils **4 Credits**
- GSC 305 - Hydrology **4 Credits**
- GSC 320 - Geomorphology **4 Credits**

Fisheries and Wildlife Ecology Emphasis:

- BIO 360 - Vertebrate Physiology **4 Credits**
- MTH 207 - Biometry **4 Credits**
- NRS 225 - Fisheries and Wildlife Techniques **4 Credits**

One of the following:

- BIO 224 - Entomology **4 Credits**
- BIO 225 - Aquatic Invertebrates **4 Credits**
- BIO 242 - Ichthyology **4 Credits**
- BIO 244 - Field Ornithology **4 Credits**
- BIO 245 - Mammalogy **4 Credits**

One of the following:

- NRS 348 - Wildlife Ecology and Management **4 Credits**
- NRS 349 - Fisheries Science and Management **4 Credits**

One of the following:

- BIO 328 - Vegetative Communities of Northern Wisconsin **4 Credits**
- BIO 473 - Limnology **4 Credits**
- NRS 335 - Forest Ecology and Management **4 Credits**
- NRS 358 - Wetlands **4 Credits**

One of the following (if not taken above):

- BIO 410 - Conservation Biology **3 Credits**
- NRS 348 - Wildlife Ecology and Management **4 Credits**
- NRS 349 - Fisheries Science and Management **4 Credits**
- NRS 365 - Conservation of Large Carnivores **3 Credits**
- NRS 464 - Wolf Ecology, Management, & Research **4 Credits**

**Forestry Emphasis:**

- BIO 222 - Spring Flora **4 Credits**
- BIO 328 - Vegetative Communities of Northern Wisconsin **4 Credits**
- NRS 266 - Forest Mensuration **4 Credits**
- NRS 335 - Forest Ecology and Management **4 Credits**
- NRS 347 - Sustainable Forest Management **4 Credits**
- NRS 363 - Fire Ecology and Management **3 Credits**

One of the following:

- GIS 260 - Global Positioning Systems **1 Credits**
- NRS 102 - Wildland Firefighter Training **1 Credits**

One of the following:

- GSC 107 - Geology and Agriculture **4 Credits**
- GSC 222 - Sediments and Soils **4 Credits**

**Total Natural Resources Major with Emphasis: 61-62 Credits**

## **Outdoor Education**

The Outdoor Education program provides students with the skills, knowledge, experience, and confidence to enter the profession as an educator and a leader. At Northland, students work with faculty who are redefining the role of outdoor

education in environmental and social sustainability, gain experience providing outdoor and environmental education to children and adults, and engage people of all ages and abilities in establishing sustainable relationships with nature and humanity.

While in the program, students gain an understanding of the principles that guide effective outdoor education experiences, read the works of leading outdoor educators, gain perspective from historical expeditions, and embark on their own experiences within the woods, waters, and wilderness of our region. Students also develop advanced professional skills and knowledge during their junior and senior years under the close supervision and support of program faculty. Finally, students join a family of graduates who are experienced educators of universally designed outdoor and environmental education and skilled in sustainable outdoor living and travel principles and practices.

## **Outdoor Education's Embedded Curricula**

Northland College leads the Outdoor Education profession in the development of environmentally sustainable and universally designed practices for outdoor education programs. To provide our students with the best professional-level knowledge and skill, we embed cutting-edge curricula throughout our courses in the areas of Access and Diversity and Responsible Environmental Impact in the following ways.

### **Access and Diversity in Outdoor Education**

Students explore ways to include under-represented and marginalized populations in outdoor education. In select courses each semester, faculty and students work together to incorporate universal design into outdoor education activities, programs, and professional skill development. When congruent with course intent, students apply skills and knowledge in community-based experiences in support of under-served populations.

### **Responsible Environmental Impact in Outdoor Education**

In select courses each semester, faculty and students work together to study popular practices of the outdoor education profession and to identify and apply alternatives that reduce adverse impacts on our natural environments and human societies by using the As Sustainable as Possible (ASAP) model developed by Northland College Students and faculty.

## **Outdoor Education Major (B.S.)**

### **Major Requirements:**

#### **Philosophical and Theoretical Foundations**

- OED 221 - Group Process and Leadership **4 Credits**
- OED 261 - Foundations in Environmental Education **3 Credits**
- OED 265 - Teaching & Facilitation Skills **3 Credits**
- OED 276 - Foundation and Principles of Outdoor Education **3 Credits**
- OED 279 - Access and Diversity **3 Credits**
- OED 470 - Enduring, Emerging Issues in Outdoor Education **3 Credits**

One of the following Environmental Foundations courses:

- ENG 211 - Humanity and Nature in Literature **3 Credits**
- HIS 241 - American Environmental History **3 Credits**
- HIS 325 - Nature and Nation: Environment, Art, Ideology **3 Credits**
- OED 328 - Wilderness Writers and Philosophers **3 Credits**
- PHL 226 - Environmental Ethics **3 Credits**
- PHL 262 - Environmental Philosophy **3 Credits**
- PHL 266 - Environmental Aesthetics **3 Credits**

One of the following Diverse Perspective courses:

- GWS 266 - Ecofeminism **3 Credits**
- NAS 333 - Native American World Views **3 Credits**
- REL 258 - Religion and Nature **3 Credits**

Programming Labs (3 Credits)

- OED 160 - Programming Lab I **0-1 Credits**
- OED 260 - Programming Lab II **0-1 Credits**
- OED 360 - Programming Lab III **0-1 Credits**

Semester of Outdoor Leadership, Education and Skills (taken concurrently)

- OED 237 - Woodcraft and Woodland Skills **1 Credits**
- OED 262 - Outdoor Leadership **4 Credits**
- OED 263 - Outdoor Living Skills **4 Credits**
- OED 264 - Technical Outdoor Skills **4 Credits**

Professional Development Experience (taken concurrently)

- OED 364 - Advanced Program Design **3 Credits**
- OED 365 - Advanced Teaching Techniques **3 Credits**
- OED 366 - Universal Design Applications **3 Credits**
- OED 472 - Accident Theory & Risk Management **3 Credits**

Capstone/Internship (one of the following):

- OED 496 - Outdoor Education Capstone **3 - 4 Credits**
- OED 492 - Internship **3 - 4 Credits**

Emphases:

To complete a major in Outdoor Education, choose one of the following emphases:

## Adventure Leadership Emphasis

- OED 180 - Outdoor Orientation Training **1 Credits**
- OED 181 - Outdoor Orientation Leader **1 Credits**
- OED 240 - Wilderness Emergency Care **4 Credits**

One of the following:

- OED 409 - Paddling Instructor Development **3 Credits**
- OED 414 - Climbing Instructor Development **3 Credits**

Two of the following:

- OED 330 - National Outdoor Leadership School Course **1-4 Credits**  
**OR**
- OED 331 - Outward Bound Course **1 - 3 Credits**
  
- OED 332 - Winter Travel and Living Skills **4 Credits**
- OED 446 - Wilderness Instructor Training **4 Credits**

Note: Though OED 330 and OED 331 can be taken for 1-4 credits, at least 3 credits are needed to fulfill the requirement in the OED major.

## Equity and Inclusion Emphasis

- OED 385 - Urban Outdoor Education **3 Credits**
- OED 439 - Therapeutic Principles and Practices **4 Credits**
- OED 489 - Advanced Topics in Diversity and Inclusion **3 Credits**

Two of the following not previously taken:

- GWS 266 - Ecofeminism **3 Credits**
- GWS 343 - Queer Ecologies **3 Credits**
- HIS 209 - Gender in the United States Landscape **3 Credits**
- NAS 315 - American Indian Environmental Perspectives **3 Credits**
- NAS 333 - Native American World Views **3 Credits**
- REL 258 - Religion and Nature **3 Credits**
- SOC 225 - Social Problems **3 Credits**
- SOC 336 - The Nature of Social Inequality **4 Credits**
- SOC 374 - Human Rights and Social Justice **3 Credits**
- SOC 381 - Undoing Racism **3 Credits**

Note: The following courses require prerequisites: GWS 343, NAS 315, SOC 336, SOC 374, and SOC 381

## Natural History Emphasis

- OED 361 - Interpretive Program Design **3 Credits**
- OED 362 - Apostle Island School Preparation **1 Credits**
- OED 363 - Apostle Islands School **4 Credits**

Two of the following:

- BIO 222 - Spring Flora **4 Credits**
- BIO 224 - Entomology **4 Credits**
- BIO 225 - Aquatic Invertebrates **4 Credits**
- BIO 231 - Paleobiology **4 Credits**
- BIO 234 - Ecology **4 Credits**
- BIO 244 - Field Ornithology **4 Credits**
- GSC 120 - Physical Geology **4 Credits**
- GSC 284 - On the Trail of the Ice Age **4 Credits**
- NRS 101 Fur-Bearer Ecology and Management and NRS 103 Wolf Ecology & Conservation **2 Credits Total**

Note: BIO 115 or BIO 128 is a prerequisite for BIO 222, BIO 224, BIO 225, BIO 231, BIO 234, and BIO 244. GSC 284 has a prerequisite of GEO 107, 112, or 120

## Outdoor Program Management Emphasis

- BUS 222 - Fundamentals of Accounting **4 Credits**
- BUS 228 - Marketing Management **3 Credits**
- BUS 232 - Principles and Practice of Management **3 Credits**
- BUS 359 - Entrepreneurship **3 Credits**

Total Outdoor Education Major with Emphasis: 66-75 Credits

## Outdoor Education Minor

### Minor Requirements

- OED 221 - Group Process and Leadership **4 Credits**
- OED 265 - Teaching & Facilitation Skills **3 Credits**
- OED 276 - Foundation and Principles of Outdoor Education **3 Credits**
- OED 279 - Access and Diversity **3 Credits**

### Technical Skills

Complete one of the following options:

#### Option One (7-8 credits)

- OED 261 - Foundations in Environmental Education **3 Credits**  
or
- EDU 210 - Teaching Environmentally **3 Credits**

AND

Any four 1 credit outdoor skills courses

- OED 107 - Basic Canoeing **1 Credits**
- OED 108 - Basic River Kayaking **1 Credits**
- OED 109 - Basic Sea Kayaking **1 Credits**
- OED 110 - Wilderness Navigation **1 Credits**
- OED 111 - Cross-country Skiing **1 Credits**
- OED 112 - Telemark & Backcountry Skiing **1 Credits**
- OED 114 - Basic Rock Climbing **1 Credits**
- OED 116 - Backpacking **1 Credits**
- OED 144 - Snowshoeing **1 Credits**
- OED 214 - Intermediate Rock Climbing **1 Credits**
- OED 237 - Woodcraft and Woodland Skills **1 Credits**

## Option Two (13 credits)

Outdoor Leadership Immersion Semester

- OED 237 - Woodcraft and Woodland Skills **1 Credits**
- OED 262 - Outdoor Leadership **4 Credits**
- OED 263 - Outdoor Living Skills **4 Credits**
- OED 264 - Technical Outdoor Skills **4 Credits**

## Option Three (7-8 credits)

- OED 261 - Foundations in Environmental Education **3 Credits**  
or
- EDU 210 - Teaching Environmentally **3 Credits**

AND

- OED 446 - Wilderness Instructor Training **4 Credits**

## Option Four (6-7 credits)

- OED 261 - Foundations in Environmental Education **3 Credits**  
or
- EDU 210 - Teaching Environmentally **3 Credits**

AND

- OED 330 - National Outdoor Leadership School Course **1-4 Credits**  
or
- OED 331 - Outward Bound Course 1 - **3 Credits**

Total Outdoor Education Minor: 19-26 Credits

## Philosophy

A minor in philosophy develops critical thinking skills in the evolving Western tradition and can be combined with any major. A philosophy minor provides excellent preparation for graduate studies, law school, or business, community development, or simply for leading a better life.

## **Philosophy Minor**

### **Minor Requirements:**

- PHL 225 - Ethics **3 Credits**  
**OR**
- PHL 226 - Environmental Ethics **3 Credits**
  
- PHL 270 - Philosophy of Science **3 Credits**
- PHL 276 - Logic **3 Credits**
- PHL 282 - Contemporary Western Philosophy **3 Credits**
- PHL 330 - Philosophy of Language **3 Credits**

### **Two of the following:**

- HIS 111 - History of World Civilizations to 1500 **3 Credits**
- HIS 112 - History of World Civilizations since 1500 **3 Credits**
- HIS 334 - Ideology in the 20th Century **3 Credits**
- HIS 320 - The Enlightenment **3 Credits**
- PHL 262 - Environmental Philosophy **3 Credits**
- PHL 266 - Environmental Aesthetics **3 Credits**
- PHL 360 - Concepts of Nature **3 Credits**
- REL 230 - Asian Religions and Philosophies **3 Credits**

**Total Philosophy Minor: 21-22 Credits**

## **Physics**

Physics minor coursework covers basic principles and scientific techniques of physics. It includes advanced instruction in atmospheric physics, thermodynamics, classical mechanics, and modern physics.

As the broadest of the sciences, physics provides rigorous problem-solving training that is applicable across the disciplines. A minor in physics is a particularly appropriate complement to majors or advanced studies in biology, chemistry, meteorology, geology, engineering, and computer science.

## **Physics Minor**

### **Minor Requirements:**

- MTH 140 - Calculus I **4 Credits**

- MTH 141 - Calculus II **4 Credits**
- PHY 110 - General Physics I **4 Credits**
- PHY 111 - General Physics II **4 Credits**
- PHY 330 - Thermodynamics **3 Credits**
- An additional 6 PHY credits.

**Total Physics Minor: 25 Credits**

## **Psychology**

Major coursework focuses on appreciating and understanding the human condition from a scientific, psychological point of view. Students completing the major in psychology possess a breadth of knowledge pertaining to the major principles, theoretical approaches, and findings in psychology. Students develop the ability to not only understand psychological principles but to apply these principles, approaches and findings to individual, group, and social issues. Upon graduating, students will be ready to apply their knowledge and skill directly in the workforce or to pursue further interests in graduate studies.

Psychology minor coursework focuses on appreciating and understanding the human condition from a scientific, psychological point of view. Students completing the minor in psychology possess a breadth of knowledge pertaining to the major principles, theoretical approaches, and findings in psychology. Students develop an understanding of the relevance and applicability of psychological principles, approaches and findings to individual, group, and social issues. Of particular emphasis are applications that are relevant to the relationship between humans and nature.

A psychology minor is richly supportive of any major as it prepares students to understand and analyze the social and psychological processes at work in any field of study or practical endeavor.

## **Psychology Major**

### **Major Requirements**

- MTH 107 - Statistical Concepts and Analysis **4 Credits**
- PSY 110 - General Psychology **4 Credits**
- PSY 225 - Experimental Psychology **4 Credits**  
**OR**
- SOC 370 - Social Science Research Methods **4 Credits**
- PSY 448 - Capstone **4 Credits**

**Three of the following:**

- PSY 227 - Cognitive Psychology **3 Credits**
- PSY 233 - Social Psychology **3 Credits**
- PSY 346 - Abnormal Psychology **3 Credits**
- PSY 366 - Neuropsychology **3 Credits**

### **Additional Requirements**

- Additional PSY credits (9 must be 300-level or higher) **18 Credits**

Total Psychology Major: 42 - 43 Credits

## Psychology Minor

Minor Requirements:

- PSY 110 - General Psychology **4 Credits**
- Two 200-level PSY courses **6 Credits**
- One 300-level PSY course **3 Credits**

Additional Requirements:

An additional 9 to 10 credits from one or more of the following categories:

- Any PSY course not previously completed
- MTH 107 - Statistical Concepts and Analysis **4 Credits**
- SOC 370 - Social Science Research Methods **4 Credits**

Total Psychology Minor: 22-23 Credits

## Religious Studies

The religious studies major engages students in fundamental questions of human knowledge, morality, and faith. The program includes an interdisciplinary approach to religion, including philosophy as part of the core curriculum. The course of studies emphasizes global faith perspectives and seeks to foster critical thinking, engage a broad spectrum of ideas, and develop strong written and oral expression. Classes involve a free exchange of ideas and a strong emphasis on group discussion.

## Religious Studies Major (B.A.)

Major Requirements:

\* At least 12 credits must be 300-level or above

- REL 210 - Exploring Religion and Spirituality **3 Credits**
- REL 229 - Religions of the West **3 Credits**
- REL 230 - Asian Religions and Philosophies **3 Credits**
- REL 258 - Religion and Nature **3 Credits**

Global Religious Literacy

East Asian Traditions

Two of the following:

- REL 231 - Buddhism **3 Credits**
- REL 234 - Japanese Religious History **3 Credits**
- REL 235 - Daoism Seminar **4 Credits**
- REL 331 - Zen Buddhism **3 Credits**

## Christian Traditions

Two of the following:

- REL 216 - Jesus, Paul, and Christian Origins **3 Credits**
- REL 240 - Jesus in Popular Cultures **3 Credits**
- REL 315 - History of Christian Cultures **3 Credits**

## Global and Indigenous Traditions

Two of the following:

- REL 215 - Hebrew Bible and Jewish Origins **3 Credits**
- REL 330 - History of Islamic Cultures **3 Credits**
- HIS 263 - History of the Middle East **3 Credits**
- HIS 270 - The Holocaust **3 Credits**
- NAS 160 - Lake Superior Ojibwe **3 Credits**
- NAS 211 - Native American History and Experience **3 Credits**
- NAS 212 - Wisconsin Indian Cultures, History, and Contemporary Issues **3 Credits**
- NAS 333 - Native American World Views **3 Credits**

## Critical Connections

Two of the following:

- IDS 154 - Fake News, Forgeries, and Frauds **3 Credits**
- REL 220 - Myth and Ritual **3 Credits**
- REL 225 - Magic, Medicine, and Miracle **3 Credits**
- REL 340 - Sex and Religion **3 Credits**
- REL 350 - Christianity & Ecology **3 Credits**
- PHL 225 - Ethics **3 Credits**
- PHL 226 - Environmental Ethics **3 Credits**
- PHL 230 - History of Western Philosophy I **3 Credits**
- PHL 262 - Environmental Philosophy **3 Credits**
- Other courses with approval of Religious Studies Program Coordinator

## Religious Studies Electives and Interdisciplinary Explorations

Three courses from any category below

### Religious Studies Electives

- Any course from categories above not already taken **and/or**
- REL 165 - Demons, Angels, & Ghosts **3 Credits**
- REL 219 - The Nature of Religious Experience **3 Credits**
- REL 257 - Death and Dying **3 Credits**
- PHL 270 - Philosophy of Science **3 Credits**
- PHL 276 - Logic **3 Credits**
- PHL 330 - Philosophy of Language **3 Credits**
- PHL 360 - Concepts of Nature **3 Credits**

## Interdisciplinary Explorations

- ART 230 - Art History Ancient to Medieval **3 Credits**
- ART 231 - Art History Renaissance to Modern **3 Credits**
- ART 232 - Contemporary Art History **3 Credits**
- ENG 228 - Literature of the Arab World **4 Credits**
- ENG 384 - Literary Criticism **3 Credits**
- ENG 415 - Chaucer **4 Credits**
- HIS 111 - History of World Civilizations to 1500 **3 Credits**
- HIS 112 - History of World Civilizations since 1500 **3 Credits**
- HIS 221 - History of Medieval Europe **3 Credits**
- HIS 320 - The Enlightenment **3 Credits**
- HIS 321 - The French Revolution **3 Credits**
- IDS 281 - Spring in Italy **4 Credits**
- OED 224 - North Woods Pathways **4 Credits**
- OED 328 - Wilderness Writers and Philosophers **3 Credits**
- SOC 225 - Social Problems **3 Credits**
- SOC 215 - Sociology of Community **3 Credits**
- Other courses with approval of the Religious Studies Program Coordinator

## Senior Capstone (one of the following):

- IDS 480 - Senior Seminar **3 Credits**
- IDS 496/497 - Independent Study **3 Credits**
- Other 400 level course with approval of Religious Studies Program Coordinator

**Total Religious Studies Major: 48 Credits**

## **Religion Minor**

### Minor Requirements

\* At least six credits must be 300-level or above.

- REL 210 - Exploring Religion and Spirituality **3 Credits**
- REL 229 - Religions of the West **3 Credits**

- REL 230 - Asian Religions and Philosophies **3 Credits**
- REL 258 - Religion and Nature **3 Credits**

## Global Religious Literacy

One course from each category below

### Asian and Indigenous Traditions

One of the following:

- REL 231 - Buddhism **3 Credits**
- REL 234 - Japanese Religious History **3 Credits**
- REL 235 - Daoism Seminar **4 Credits**
- REL 331 - Zen Buddhism **3 Credits**
- NAS 160 - Lake Superior Ojibwe **3 Credits**
- NAS 211 - Native American History and Experience **3 Credits**
- NAS 212 - Wisconsin Indian Cultures, History, and Contemporary Issues **3 Credits**
- NAS 333 - Native American World Views **3 Credits**

### Judaism, Christianity, and Islam

One of the following:

- REL 215 - Hebrew Bible and Jewish Origins **3 Credits**
- REL 216 - Jesus, Paul, and Christian Origins **3 Credits**
- REL 240 - Jesus in Popular Cultures **3 Credits**
- REL 315 - History of Christian Cultures **3 Credits**
- REL 330 - History of Islamic Cultures **3 Credits**

### Religious Studies Electives

Two courses from below:

- Any Global Literacy course not already taken
- IDS 154 - Fake News, Forgeries, and Frauds **3 Credits**
- REL 165 - Demons, Angels, & Ghosts **3 Credits**
- REL 219 - The Nature of Religious Experience **3 Credits**
- REL 220 - Myth and Ritual **3 Credits**
- REL 225 - Magic, Medicine, and Miracle **3 Credits**
- REL 257 - Death and Dying **3 Credits**
- REL 340 - Sex and Religion **3 Credits**
- Other REL course with approval of Program Coordinator

**Total Religion minor: 24 Credits**

# Sociology and Social Justice

The objective of the sociology and social justice program is to provide students with both a theoretical and practical understanding of the discipline of sociology and the interdisciplinary field of social justice. One comprehensively designed program will prepare students for graduate studies and develop in them practical skills for involved citizenship at the local, state, national, and even global level. Constructive approaches to the pressing issues of identity, equality, resource distribution, diversity, and environmental sustainability will be explored at the personal, governmental, and societal levels. The core question of the program is: How are democracy, equality, environmental protection, and sustainability to be achieved? Students in the program are strongly encouraged to take advantage of experiential opportunities through internships, volunteer opportunities, travel-study, and community justice work.

Students completing the program will have developed skills in critical analysis, conflict resolution, various social science research methods, writing, public presentations, and socially responsible citizenship. The strong emphasis on theory and research methods ensures that graduates will be well qualified for graduate studies in a variety of fields.

## Sociology and Social Justice Major (B.S.)

### Major Requirements:

- MTH 107 - Statistical Concepts and Analysis **4 Credits**
- SOC 111 - Introduction to Sociology **4 Credits**  
**OR**
- SOC 260 - Introduction to Sociology - Superior Connections **4 Credits**
- SOC 242 - Sociology of the Environment **3 Credits**
- SOC 336 - The Nature of Social Inequality **4 Credits**
- SOC 370 - Social Science Research Methods **4 Credits**
- SOC 448 - Sociological Theory **4 Credits**
- SOC 488 - Capstone in Sociology and Social Justice **4 Credits**

### One of the following:

- SOC 291/491 - Field Experience **3-4 Credits**
- SOC 292/492 - Internship **3-4 Credits**

### Additional Requirements 21 Credits

(At least 12 must be 300-level or above.)

- SOC 215 - Sociology of Community **3 Credits**
- SOC 225 - Social Problems **3 Credits**
- SOC 234 - Sociology of Gender **3 Credits**
- SOC 236 - Sociology of Sexuality **4 Credits**
- SOC 240 - Cultural Ecology **3 Credits**
- SOC 302 - Sociology of Culture **3 Credits**
- SOC 320 - Health, Medicine, and Justice **3 Credits**

- SOC 325 - Environmental Health and Sustainability **3 Credits**
- SOC 332 - Crime, Deviance, and Social Justice **3 Credits**
- SOC 368 - Global Inequality **4 Credits**
- SOC 374 - Human Rights and Social Justice **3 Credits**
- SOC 381 - Undoing Racism **3 Credits**
- SOC 472 - Advanced Justice Studies **4 Credits**
- SOC 481 - Qualitative Research Methods **4 Credits**
- SOC 290/490 - Independent Study **3-4 Credits**
- SCD 230 - The Political Process **3 Credits**
- SCD 335 - Organizing Communities **3 Credits**
- SCD 422 - Capitalism, Justice, and Sustainability **3 Credits**

Total Sociology and Social Justice Major: 51-54 Credits

## **Sociology and Social Justice Minor**

Minor Requirements:

- SOC 111 - Introduction to Sociology **4 Credits**  
OR
- SOC 260 - Introduction to Sociology - Superior Connections **4 Credits**
- SOC 336 - The Nature of Social Inequality **4 Credits**
- SOC 381 - Undoing Racism **3 Credits**
- SOC 448 - Sociological Theory **4 Credits**
- Additional Sociology courses totaling **9 Credits**

Total Sociology and Social Justice Minor: 24-25 Credits

## **Spanish**

While we do not offer a Spanish major or minor, we offer several Spanish courses to strengthen your language skills.

## **Sustainable Agriculture**

You will learn about sustainable agriculture from humanities, social science, and natural science perspectives; explore the production and distribution of food on field trips, in the campus gardens, and in the classroom; and will put that knowledge into practice during a field-based practicum course with local farmers and community partners. The environmental impacts of both conventional and sustainable agriculture is a recurrent theme.

## **Sustainable Agriculture and Food Systems Minor**

Minor Requirements:

- GSC 107 - Geology and Agriculture **4 Credits**
- IDS 132 - Food Preparation and Preservation **3 Credits**
- IDS 243 - Sustainable Agriculture Practicum **4 Credits**
- IDS 334 - Sustainable Food Production **4 Credits**

Two of the following:

- ENG 140 - Food for Thought **4 Credits**
- HIS 315 - American Foodways **3 Credits**
- NAS 227 - Native Foodways **3 Credits**

One of the following:

- BIO 115 - Concepts of Biology **4 Credits**
- CHM 103 - General Chemistry: The Chemistry of Food **4 Credits**
- CHM 110 - General Chemistry **4 Credits**
- GSC 222 - Sediments and Soils **4 Credits**
- CLM 244 - Understanding Climate Change **4 Credits**

One of the following:

- SCD 110 - Introduction to Sustainable Community Development **4 Credits**
- BUS 359 - Entrepreneurship **3 Credits**
- SCD 328 - Globalization and the Environment **3 Credits**
- SCD 342 - Policy and Econ of Climate Change **3 Credits**

**Total Sustainable Agriculture and Food Systems Minor - 28-30 Credits**

## **Sustainable Community Development**

*"Northland College aims, by academic excellence and sustainable practice, to lead the way to a world where integrated natural communities can thrive together indefinitely."*

The Sustainable Community Development major is designed for students who are interested in the interdependence of environmental, economic, and social issues and who want to strengthen their abilities to become effective community change agents. Sustainable Community Development offers courses in a wide range of areas including the theory and practice of Sustainable Community Development, community-building, co-operative economies, globalization, and social enterprises and leadership for Sustainable Community Development.

Students and faculty study the relationships among theory, practice, values, social and institutional structures, and various socio-environmental change processes. The program is designed to integrate knowledge gained in an academic setting with learning acquired through volunteer work, personal experience, internships, the programs of the Sigurd Olson Environmental Institute, and the experiences of regional community members. Central to this curriculum is the development of the whole person—a process that emphasizes social values, creativity, and the recognition that community involvement is necessary for individual growth and the enrichment of our society.

Sustainable Community Development majors prepare for careers in diverse areas such as government service, environmental consulting, urban & rural land-use planning, economic development, community development, and Director of Sustainability positions in both the public and private sector.

## **Sustainable Community Development Major (B.A.)**

### **Major Requirements:**

- ECN 263 - Essentials of Economics **4 Credits**
- GIS 201 - Introduction to Geographic Information Systems **4 Credits**
- MTH 107 - Statistical Concepts and Analysis **4 Credits**
  
- SCD 110 - Introduction to Sustainable Community Development **4 Credits**  
OR
- SCD 225 - Sustainable Development in the Lake Superior Watershed **4 Credits**
  
- SCD 230 - The Political Process **3 Credits**
- SCD 328 - Globalization and the Environment **3 Credits**
- SOC 370 - Social Science Research Methods **4 Credits**
- SCD 430 - Sustainable Development Theory **4 Credits**
- SCD 497 - Senior Capstone **4 Credits**

### **One of the following:**

- BIO 115 - Concepts of Biology **4 Credits**
- BIO 128 - Natural History and Conservation in the Lake Superior Watershed **3 Credits**
- NRS 215 - Natural Resources Policy **3 Credits**

### **One of the following:**

- SCD 412 - Advanced Community Planning Studio **4 Credits**
- SCD 481 - Applied Research Practicum **4 Credits**

## **Emphases**

To complete a major in Sustainable Community Development, choose one of the following emphases:

### **Physical Planning and Development Emphasis**

- SCD 220 - Sustainable Community Planning **3 Credits**
- SCD 320 - The History of Planning and Development **4 Credits**

### **Choose two of the following:**

- SCD 335 - Organizing Communities **3 Credits**
- SCD 360 - International Development **3 Credits**

- SCD 422 - Capitalism, Justice, and Sustainability **3 Credits**
- SOC 215 - Sociology of Community **3 Credits**
- PSY 233 - Social Psychology **3 Credits**
- GIS 301 - Intermediate GIS Applications **4 Credits**

## Community Development Emphasis

- SCD 335 - Organizing Communities **3 Credits**
- SOC 381 - Undoing Racism **3 Credits**

Choose two of the following:

- SCD 220 - Sustainable Community Planning **3 Credits**
- SCD 235 - Forces of Change **3 Credits**
- SCD 320 - The History of Planning and Development **4 Credits**
- SCD 340 - Gender & Economic Development **3 Credits**
- SCD 360 - International Development **3 Credits**
- SCD 422 - Capitalism, Justice, and Sustainability **3 Credits**
- SOC 215 - Sociology of Community **3 Credits**
- PSY 233 - Social Psychology **3 Credits**
- ECN 310 - Environmental Economics **3 Credits**

## International Development Emphasis

- SCD 360 - International Development **3 Credits**
- SCD 422 - Capitalism, Justice, and Sustainability **3 Credits**

Choose two of the following:

- SCD 320 - The History of Planning and Development **4 Credits**
- SCD 340 - Gender & Economic Development **3 Credits**
- SCD 355 - The Just City in Practice **3 Credits**
- ECN 310 - Environmental Economics **3 Credits**
- SOC 368 - Global Inequality **4 Credits**
- Travel Abroad Experience (up to 2 courses)

**Total Sustainable Community Development Major: 52-56 Credits**

## **Sustainable Community Development Minor**

Minor Requirements:

- SCD 110 - Introduction to Sustainable Community Development **4 Credits**
- SCD 220 - Sustainable Community Planning **3 Credits**
- SCD 230 - The Political Process **3 Credits**

- SCD 335 - Organizing Communities **3 Credits**
- SOC 370 - Social Science Research Methods **4 Credits**
- SCD 422 - Capitalism, Justice, and Sustainability **3 Credits**
- SOC 215 - Sociology of Community **3 Credits**
- SCD 430 - Sustainable Development Theory **4 Credits**

**Total Sustainable Community Development Minor: 26 Credits**

## **Water Science**

See Environmental Geosciences for the Water Science major.

## **Writing**

The Writing program combines the formal study of English literature with practice in the art and craft of writing fiction, poetry, and creative non-fiction. Coursework for Writing majors and minors includes a full range of classes in the genres, from introductory courses to advanced workshops. Because an understanding of the literary traditions in which they work is essential to the development of serious writers, writing students at Northland are also immersed in the study of literature.

Northland is home to a vibrant community of writers: students and faculty publish their writing locally and nationally, regularly give public readings, and work with visiting writers who conduct workshops and read at the College. A variety of campus publications, including Mosaic, Northland's undergraduate literary journal, provide ample opportunities for students to work in local publishing and to find audiences for both creative writing and journalism. The annual Barbara Bretting Creative Writing and Photography Awards offer monetary prizes for outstanding student creative work. Writing students take their studies beyond the classroom through internships in professional settings; these experiences allow them to explore career interests and gain on-the-job skills.

Career possibilities for graduates in Writing include editing for publishing companies, writing for magazines, and working in public relations, marketing, technical writing, teaching, or other occupations that require one to write well, read perceptively, and communicate effectively.

## **Writing Major (B.A.)**

### **Major Requirements:**

- ART 262 - Digital Photography I **3 Credits**
- ENG 387 - The English Language **4 Credits**
- WRI 260 - Introduction to Creative Writing **3 Credits**
- WRI 361 - Creative Writing: Fiction **3 Credits**
- WRI 362 - Creative Writing: Poetry **3 Credits**
- WRI 461 - Seminar in Fiction Writing **4 Credits**
- OR**
- WRI 462 - Seminar in Poetry Writing **4 Credits**
- WRI 492 - Internship **3 Credits**

One of the following:

- WRI 224 - News Writing & Reporting **3 Credits**
- WRI 273 - Writing the Environmental Essay **3 Credits**
- WRI 363 - Writing Literary NonFiction **3 Credits**

## Additional Requirements

- Additional courses in ENG or WRI **15 Credits**  
**Note:** At least 9 must be ENG

Total Writing Major: 41 Credits

## Writing Minor

Minor Requirements:

- WRI 260 - Introduction to Creative Writing **3 Credits**
- WRI 461 - Seminar in Fiction Writing **4 Credits**  
**OR**
- WRI 462 - Seminar in Poetry Writing **4 Credits**
- An additional 9 WRI credits  
**OR**
- 6 WRI credits **and**
- ART 262 - Digital Photography I **3 Credits**
- An additional 6 ENG credits

One of the following:

- WRI 361 - Creative Writing: Fiction **3 Credits**
- WRI 362 - Creative Writing: Poetry **3 Credits**
- WRI 363 - Writing Literary NonFiction **3 Credits**

Total Writing Minor: 25 Credits

## Directed Studies

A directed studies major or minor is available for students who have an unusual breadth of academic preparation, a high level of motivation and perseverance, and the ability to assume independence in undertaking their academic work. Directed Studies majors and minors are designed by individual students in consultation with a faculty advisory committee.

Students who wish to declare a Direct Studies major or minor must complete a Directed Studies Application form and submit it to the Registrar's Office. The Academic Standings Committee reviews and, when appropriate, approves student applications to complete a Directed Studies major or minor.

See the Registrar's Office for the necessary form.

## **Directed Studies Major (B.S.)**

### Requirements for a Directed Study Major or Minor

- The directed studies program will contain mostly regular Northland College courses, with additional selected studies, internships, independent study courses, and research courses and projects designed to meet the student's individual needs.
- A student pursuing a directed studies major may not complete a second major concurrently. A student pursuing a directed studies minor must avoid duplication of courses from their chosen major.
- All directed studies degree programs must be approved by the Academic Standings Committee of the Academic Council.
- A student wishing to pursue one of these programs needs a minimum GPA of 3.00 and is expected to maintain that GPA.
- Proposals for the directed studies program must be submitted to the Registrar's Office no later than November 10th of the student's junior year.
- The student must assemble a Faculty Advisory Committee to oversee their directed studies program. The student's Faculty Advisory Committee consists of a chair, which may be his/her academic advisor, and two other regularly contracted faculty members. At least one faculty member must be within the student's area of focus. The Faculty Advisory Committee must approve the proposal before it is submitted to the Registrar's Office.
- The Chair coordinates input from the faculty members serving on the committee during preparation and ongoing assessment of the proposal.
- The proposal must contain a detailed and explicit statement of rationale, showing precisely why a directed studies program is appropriate, how it prepares the student for further study or professional involvement, and how this differs from a traditional major. In addition, the proposal should show how each course proposed contributes to the major.
- The proposal must identify a specific focus and show how the independently designed program addresses that focus.
- The proposal must state how and when the student's program will be evaluated. A senior thesis or similar capstone experience, integrating all aspects of the student's program, is to be included in the program design.
- Directed studies program proposals normally include a minimum of 30 semester hours of upper division (300-400) level courses. A minimum of 12 semester hours in one program area is expected.
- Once the proposal is approved, the student is required to meet with his/her Faculty Advisory Committee to complete and submit a Directed Studies Program Continuance Form at the end of each semester. All changes to a student's original approved proposal must be approved by the Academic Standings Committee.
- The student and the committee chair will coordinate a meeting with the other committee members at the completion of all directed studies requirements to evaluate the success of the proposal.

## **Directed Studies Major (B.A.)**

### Requirements for a Directed Study Major or Minor

- The directed studies program will contain mostly regular Northland College courses, with additional selected studies, internships, independent study courses, and research courses and projects designed to meet the student's individual needs.
- A student pursuing a directed studies major may not complete a second major concurrently. A student pursuing a directed studies minor must avoid duplication of courses from their chosen major.
- All directed studies degree programs must be approved by the Academic Standings Committee of the Academic Council.
- A student wishing to pursue one of these programs needs a minimum GPA of 3.00 and is expected to maintain that GPA.
- Proposals for the directed studies program must be submitted to the Registrar's Office no later than November 10th of the student's junior year.
- The student must assemble a Faculty Advisory Committee to oversee their directed studies program. The student's Faculty Advisory Committee consists of a chair, which may be his/her academic advisor, and two other regularly contracted faculty members. At least one faculty member must be within the student's area of focus. The Faculty Advisory Committee must approve the proposal before it is submitted to the Registrar's Office.
- The Chair coordinates input from the faculty members serving on the committee during preparation and ongoing assessment of the proposal.
- The proposal must contain a detailed and explicit statement of rationale, showing precisely why a directed studies program is appropriate, how it prepares the student for further study or professional involvement, and how this differs from a traditional major. In addition, the proposal should show how each course proposed contributes to the major.
- The proposal must identify a specific focus and show how the independently designed program addresses that focus.
- The proposal must state how and when the student's program will be evaluated. A senior thesis or similar capstone experience, integrating all aspects of the student's program, is to be included in the program design.
- Directed studies program proposals normally include a minimum of 30 semester hours of upper division (300-400) level courses. A minimum of 12 semester hours in one program area is expected.
- Once the proposal is approved, the student is required to meet with his/her Faculty Advisory Committee to complete and submit a Directed Studies Program Continuance Form at the end of each semester. All changes to a student's original approved proposal must be approved by the Academic Standings Committee.
- The student and the committee chair will coordinate a meeting with the other committee members at the completion of all directed studies requirements to evaluate the success of the proposal.

## **Directed Studies Minor**

### **Requirements for a Directed Study Major or Minor**

- The directed studies program will contain mostly regular Northland College courses, with additional selected studies, internships, independent study courses, and research courses and projects designed to meet the student's individual needs.
- A student pursuing a directed studies major may not complete a second major concurrently. A student pursuing a directed studies minor must avoid duplication of courses from their chosen major.
- All directed studies degree programs must be approved by the Academic Standings Committee of the Academic Council.
- A student wishing to pursue one of these programs needs a minimum GPA of 3.00 and is expected to maintain that GPA.
- Proposals for the directed studies program must be submitted to the Registrar's Office no later than November 10th of the student's junior year.

- The student must assemble a Faculty Advisory Committee to oversee their directed studies program. The student's Faculty Advisory Committee consists of a chair, which may be his/her academic advisor, and two other regularly contracted faculty members. At least one faculty member must be within the student's area of focus. The Faculty Advisory Committee must approve the proposal before it is submitted to the Registrar's Office.
- The Chair coordinates input from the faculty members serving on the committee during preparation and ongoing assessment of the proposal.
- The proposal must contain a detailed and explicit statement of rationale, showing precisely why a directed studies program is appropriate, how it prepares the student for further study or professional involvement, and how this differs from a traditional major. In addition, the proposal should show how each course proposed contributes to the major.
- The proposal must identify a specific focus and show how the independently designed program addresses that focus.
- The proposal must state how and when the student's program will be evaluated. A senior thesis or similar capstone experience, integrating all aspects of the student's program, is to be included in the program design.
- Directed studies program proposals normally include a minimum of 30 semester hours of upper division (300-400) level courses. A minimum of 12 semester hours in one program area is expected.
- Once the proposal is approved, the student is required to meet with his/her Faculty Advisory Committee to complete and submit a Directed Studies Program Continuance Form at the end of each semester. All changes to a student's original approved proposal must be approved by the Academic Standings Committee.
- The student and the committee chair will coordinate a meeting with the other committee members at the completion of all directed studies requirements to evaluate the success of the proposal.

## **General Education**

### **General Education: Liberal Education for the Environment & Society**

#### **Liberal Education for the Environment & Society**

Northland College integrates liberal arts studies with an environmental emphasis, enabling those it serves to address the challenges of the future. Consistent with this mission, the College's Liberal Education for the Environment & Society program prepares students to be leaders in understanding, communicating, and acting upon the complexity of environmental issues, and in working to understand and address societal dynamics that create and are influenced by environmental issues.

The program is designed to assure that students develop . . .

- foundational skills in written communication and mathematics;
- a breadth of disciplinary learning characteristic of a liberally educated individual;
- an understanding of diversity, inequality, prejudice, and discrimination; and
- an understanding of natural systems and the complex relationships between human endeavors and the natural world.

Completion of the program is a graduation requirement for Northland College students, and those who successfully complete the program will also have satisfied many of the requirements for an environmental studies minor. Courses taken to satisfy requirements in the Liberal Arts Curriculum may also satisfy requirements in the Environmental

Curriculum and vice-versa; however, students must earn at least 30 credits overall to complete the Liberal Education for the Environment & Society Program.

## Overview: Liberal Education for the Environment and Society

### LIBERAL ARTS CURRICULUM

- Foundational Skills
  - ENG 110 College Writing (or equivalent proficiency through assessment)
  - Writing Intensive Courses
  - Math Proficiency
  - Quantitative Reasoning
- Disciplinary Learning
  - Natural Sciences
  - Social Sciences
  - Arts & Humanities
- Diversity & Justice

### ENVIRONMENTAL CURRICULUM

- Environmental Narratives
- The Science of Environmental Issues
- Communities, Policies, and Management of Environmental Issues
- Environmental Applications

## Liberal Arts Curriculum

### Foundational Skills

To assure a solid foundation in written communication and mathematical skills, students are required to fulfill the following requirements:

#### ENG 110 College Writing

or equivalent proficiency through assessment

#### Writing Intensive Courses

Four writing intensive courses are required. These courses may also fulfill other requirements in the liberal arts or environmental sections of the program.

- ART 403 - Senior Seminar **3 Credits**
- BIO 128 - Natural History and Conservation in the Lake Superior Watershed **3 Credits**
- BIO 480 - Biology Senior Seminar **3 Credits**
- BUS 475 - Strategic Planning and Policy Capstone **3 Credits**
- CLM 480 - Seminar in Climate Science **3 Credits**
- EDU 337 - Fall Practicum **1-4 Credits**
- EDU 338 - Winter Practicum **1-4 Credits**
- ENG 111 - Writing and Inquiry **3 Credits**
- ENG 126 - Confluences: Reading and Writing in the Lake Superior Watershed **3 Credits**

- ENG 140 - Food for Thought **4 Credits**
- ENG 209 - The Story and the Stone **4 Credits**
- ENG 211 - Humanity and Nature in Literature **3 Credits**
- ENG 213 - Literature of the Western Worlds **3 Credits**
- ENG 216 - The Contemporary Novel **3 Credits**
- ENG 217 - Contemporary Third World Literature **4 Credits**
- ENG 225 - Major American Authors **3 Credits**
- ENG 228 - Literature of the Arab World **4 Credits**
- ENG 230 - Literature and Medicine **3 Credits**
- ENG 233 - Women of the Third World **3 Credits**
- ENG 234 - Dystopias: Ecology & Gender in SciFi **4 Credits**
- ENG 235 - Monsters, Modern and Postmodern **3 Credits**
- ENG 240 - Pens and Paddles in the North Woods **4 Credits**
- ENG 241 - CLIFI: Climate Fiction **3 Credits**
- ENG 262 - Survey of British Literature **3 Credits**
- ENG 264 - Survey of American Literature **3 Credits**
- ENG 318 - Nature Writers **3 Credits**
- ENG 332 - Major American Authors II **3 Credits**
- ENG 372 - Nature & Gender in Lat Am Lit **3 Credits**
- ENG 377 - Green Romanticism **3 Credits**
- ENG 384 - Literary Criticism **3 Credits**
- ENG 413 - Shakespeare **4 Credits**
- ENG 415 - Chaucer **4 Credits**
- GSC 209 - The Story and the Stone **4 Credits**
- GSC 489 - Geoscience Senior Honors Thesis **2 Credits**
- HIS 101 - United States History to 1865 **3 Credits**
- HIS 102 - United States History since 1865 **3 Credits**
- HIS 209 - Gender in the United States Landscape **3 Credits**
- HIS 221 - History of Medieval Europe **3 Credits**
- HIS 241 - American Environmental History **3 Credits**
- HIS 242 - European Environmental History **3 Credits**
- HIS 260 - Gender in Modern Europe **3 Credits**
- HIS 263 - History of the Middle East **3 Credits**
- HIS 266 - American Material Culture/Objects in Everyday Life and History **3 Credits**
- HIS 270 - The Holocaust **3 Credits**
- HIS 315 - American Foodways **3 Credits**
- HIS 320 - The Enlightenment **3 Credits**
- HIS 321 - The French Revolution **3 Credits**
- HIS 325 - Nature and Nation: Environment, Art, Ideology **3 Credits**
- HIS 334 - Ideology in the 20th Century **3 Credits**
- HIS 350 Special Topic: History of National Forests & Parks; **3 Credits**
- HIS 357 - Gender in Total War **3 Credits**
- NAS 100 - Introduction to Native American Studies **3 Credits**
- NAS 160 - Lake Superior Ojibwe **3 Credits**
- NAS 216 - Indigenous Representations **3 Credits**
- NAS 227 - Native Foodways **3 Credits**
- NAS 236 - Indigenous Film and Media **3 Credits**
- NAS 260 - Indigenous Environmental Justice **3 Credits**

- NAS 265 - Indigenous Perceptions of Water **3 Credits**
- NAS 283 - American Indian Literature **3 Credits**
- NAS 306 - Global Indigenous Politics **3 Credits**
- NAS 315 - American Indian Environmental Perspectives **3 Credits**
- NAS 340 - Indigenous Gender Studies **3 Credits**
- NAS 342 - Gender in Indigenous Borderlands **3 Credits**
- NAS 362 - Native Women's Activism **3 Credits**
- NAS 380 - Indigenous Women Writers **3 Credits**
- NRS 348 - Wildlife Ecology and Management **4 Credits**
- OED 210 - Inclusive Outdoor Education **3 Credits**
- OED 221 - Group Process and Leadership **4 Credits**
- OED 265 - Teaching & Facilitation Skills **3 Credits**
- OED 279 - Access and Diversity **3 Credits**
- OED 328 - Wilderness Writers and Philosophers **3 Credits**
- OED 439 - Therapeutic Principles and Practices **4 Credits**
- OED 472 - Accident Theory & Risk Management **3 Credits**
- OED 489 - Advanced Topics in Diversity and Inclusion **3 Credits**
- PHL 225 - Ethics **3 Credits**
- PHL 226 - Environmental Ethics **3 Credits**
- PHL 229 - Introduction to Philosophy **3 Credits**
- PHL 262 - Environmental Philosophy **3 Credits**
- PHL 266 - Environmental Aesthetics **3 Credits**
- PHL 270 - Philosophy of Science **3 Credits**
- PHL 330 - Philosophy of Language **3 Credits**
- PHL 360 - Concepts of Nature **3 Credits**
- PSY 233 - Social Psychology **3 Credits**
- PSY 234 - Theories of Personality **3 Credits**
- PSY 236 - Political Psychology **3 Credits**
- PSY 331 - Ecopsychology **3 Credits**
- PSY 346 - Abnormal Psychology **3 Credits**
- PSY 448 - Capstone **4 Credits**
- REL 165 - Demons, Angels, & Ghosts **3 Credits**
- REL 219 - The Nature of Religious Experience **3 Credits**
- REL 229 - Religions of the West **3 Credits**
- REL 240 - Jesus in Popular Cultures **3 Credits**
- REL 241 - Religion in America **3 Credits**
- REL 257 - Death and Dying **3 Credits**
- REL 258 - Religion and Nature **3 Credits**
- REL 270 - Religion and Human Rights **3 Credits**
- REL 315 - History of Christian Cultures **3 Credits**
- REL 330 - History of Islamic Cultures **3 Credits**
- REL 331 - Zen Buddhism **3 Credits**
- REL 340 - Sex and Religion **3 Credits**
- SCD 110 - Introduction to Sustainable Community Development **4 Credits**
- SCD 235 - Forces of Change **3 Credits**
- SCD 320 - The History of Planning and Development **4 Credits**
- SCD 335 - Organizing Communities **3 Credits**

- SOC 336 - The Nature of Social Inequality **4 Credits**
- SOC 381 - Undoing Racism **3 Credits**
- SOC 488 - Capstone in Sociology and Social Justice **4 Credits**
- WRI 260 - Introduction to Creative Writing **3 Credits**
- WRI 273 - Writing the Environmental Essay **3 Credits**
- WRI 224 - News Writing & Reporting **3 Credits**

## Math Proficiency

An ACT math score of 17 or higher; SAT math score of 470 or higher; BUS 136 Financial Literacy for Everyone; or any MTH course.

## Quantitative Reasoning Course

One of the following courses:

- BUS 120 - Quantitative Methods **3 Credits**
- BUS 136 - Financial Literacy for Everyone **3 Credits**
- CHM 103 - General Chemistry: The Chemistry of Food **4 Credits**
- CHM 110 - General Chemistry **4 Credits**
- MTH 106 - Environmental Mathematics **4 Credits**
- MTH 107 - Statistical Concepts and Analysis **4 Credits**
- MTH 109 - Precalculus Mathematics **4 Credits**
- MTH 140 - Calculus I **4 Credits**
- PHL 276 - Logic **3 Credits**

## Disciplinary Learning

To assure a breadth of disciplinary learning characteristic of a liberally educated individual, students are required to complete two courses, each representing different disciplines, from each of the following categories (6 courses total):

## Natural Sciences

Two courses required from different disciplines:

- BIO 115 - Concepts of Biology **4 Credits**
- BIO 128 - Natural History and Conservation in the Lake Superior Watershed **3 Credits**
- CHM 103 - General Chemistry: The Chemistry of Food **4 Credits**
- CHM 110 - General Chemistry **4 Credits**
- CHM 145 - Atmospheric Pollution **4 Credits**
- CHM 246 - Introduction to Forensic Chemistry **Credits**
- CLM 125 - Weather and Climate **4 Credits**
- CLM 244 - Understanding Climate Change **4 Credits**
- CLM 270 - Oceans and Climate **4 Credits**
- GSC 107 - Geology and Agriculture **4 Credits**
- GSC 112 - Geoscience Issues of Lake Superior **3 Credits**
- GSC 120 - Physical Geology **4 Credits**
- GSC 222 - Sediments and Soils **4 Credits**

- PHY 104 - Introduction to Astronomy **4 Credits**
- PHY 110 - General Physics I **4 Credits**
- PSY 227 - Cognitive Psychology **3 Credits**
- PSY 340 - Evolutionary Psychology **3 Credits**
- PSY 342 - Psycholinguistics **3 Credits**
- PSY 360 - Sensation and Perception **3 Credits**
- PSY 366 - Neuropsychology **3 Credits**

## Social Sciences

Two courses required from different disciplines:

- BUS 226 - Essentials of Economics **4 Credits**
- ECN 220 - Macroeconomics in Context **3 Credits**
- ECN 221 - Microeconomics in Context **3 Credits**
- ECN 263 - Essentials of Economics **4 Credits**
- ECN 310 - Environmental Economics **3 Credits**
- EDU 225 - Foundations of Education **3 Credits**
- EDU 232 - Learning, Growth and Cognition **3 Credits**
- GSC 262 - World Regional Geography **3 Credits**
- IDS 154 - Fake News, Forgeries, and Frauds **3 Credits**
- OED 210 - Inclusive Outdoor Education **3 Credits**
- OED 221 - Group Process and Leadership **4 Credits**
- OED 265 - Teaching & Facilitation Skills **3 Credits**
- OED 279 - Access and Diversity **3 Credits**
- OED 439 - Therapeutic Principles and Practices **4 Credits**
- OED 472 - Accident Theory & Risk Management **3 Credits**
- OED 489 - Advanced Topics in Diversity and Inclusion **3 Credits**
- PSY 110 - General Psychology **4 Credits**
- PSY 203 - Lifespan Developmental Psychology **3 Credits**
- PSY 229 - Sport Psychology **3 Credits**
- PSY 233 - Social Psychology **3 Credits**
- PSY 234 - Theories of Personality **3 Credits**
- PSY 236 - Political Psychology **3 Credits**
- PSY 241 - Positive Psychology **3 Credits**
- PSY 322 - Health Psychology **3 Credits**
- PSY 340 - Evolutionary Psychology **3 Credits**
- PSY 346 - Abnormal Psychology **3 Credits**
- REL 210 - Exploring Religion and Spirituality **3 Credits**
- REL 225 - Magic, Medicine, and Miracle **3 Credits**
- SCD 110 - Introduction to Sustainable Community Development **4 Credits**
- SCD 205 - Introduction to Local Economies **3 Credits**
- SCD 220 - Sustainable Community Planning **3 Credits**
- SCD 225 - Sustainable Development in the Lake Superior Watershed **4 Credits**
- SCD 230 - The Political Process **3 Credits**
- SCD 235 - Forces of Change **3 Credits**
- SCD 320 - The History of Planning and Development **4 Credits**
- SCD 335 - Organizing Communities **3 Credits**

- SCD 365 - Workforce Development **3 Credits**
- SOC 111 - Introduction to Sociology **4 Credits**
- SOC 225 - Social Problems **3 Credits**
- SOC 234 - Sociology of Gender **3 Credits**
- SOC 236 - Sociology of Sexuality **4 Credits**
- SOC 240 - Cultural Ecology **3 Credits**
- SOC 242 - Sociology of the Environment **3 Credits**
- SOC 260 - Introduction to Sociology - Superior Connections **4 Credits**
- SOC 215 - Sociology of Community **3 Credits**
- SOC 332 - Crime, Deviance, and Social Justice **3 Credits**
- SOC 336 - The Nature of Social Inequality **4 Credits**
- SOC 370 - Social Science Research Methods **4 Credits**
- SOC 381 - Undoing Racism **3 Credits**
- SOC 448 - Sociological Theory **4 Credits**

## Arts & Humanities

Two courses required from different disciplines:

- ART 106 - Intro to Visual Communication **3 Credits**
- ART 111 - Drawing I **3 Credits**
- ART 112 - Drawing by Nature **3 Credits**
- ART 209 - Art + Community **3 Credits**
- ART 220 - Ceramics I **3 Credits**
- ART 222 - Ceramics Handbuilding **3 Credits**
- ART 226 - 3D Printing in Clay **3 Credits**
- ART 230 - Art History Ancient to Medieval **3 Credits**
- ART 231 - Art History Renaissance to Modern **3 Credits**
- ART 232 - Contemporary Art History **3 Credits**
- ART 262 - Digital Photography I **3 Credits**
- EDU 289 - Children and Adolescent Literature **3 Credits**
- ENG 111 - Writing and Inquiry **3 Credits**
- ENG 126 - Confluences: Reading and Writing in the Lake Superior Watershed **3 Credits**
- ENG 140 - Food for Thought **4 Credits**
- ENG 209 - The Story and the Stone **4 Credits**
- ENG 211 - Humanity and Nature in Literature **3 Credits**
- ENG 213 - Literature of the Western Worlds **3 Credits**
- ENG 216 - The Contemporary Novel **3 Credits**
- ENG 217 - Contemporary Third World Literature **4 Credits**
- ENG 225 - Major American Authors **3 Credits**
- ENG 228 - Literature of the Arab World **4 Credits**
- ENG 230 - Literature and Medicine **3 Credits**
- ENG 233 - Women of the Third World **3 Credits**
- ENG 234 - Dystopias: Ecology & Gender in SciFi **4 Credits**
- ENG 235 - Monsters, Modern and Postmodern **3 Credits**
- ENG 240 - Pens and Paddles in the North Woods **4 Credits**
- ENG 241 - CLIFI: Climate Fiction **3 Credits**
- ENG 264 - Survey of American Literature **3 Credits**

- ENG 318 - Nature Writers **3 Credits**
- ENG 332 - Major American Authors II **3 Credits**
- ENG 387 - The English Language **4 Credits**
- ENG 415 - Chaucer **4 Credits**
- GSC 209 - The Story and the Stone **4 Credits**
- HIS 101 - United States History to 1865 **3 Credits**
- HIS 102 - United States History since 1865 **3 Credits**
- HIS 111 - History of World Civilizations to 1500 **3 Credits**
- HIS 112 - History of World Civilizations since 1500 **3 Credits**
- HIS 209 - Gender in the United States Landscape **3 Credits**
- HIS 221 - History of Medieval Europe **3 Credits**
- HIS 241 - American Environmental History **3 Credits**
- HIS 242 - European Environmental History **3 Credits**
- HIS 260 - Gender in Modern Europe **3 Credits**
- HIS 263 - History of the Middle East **3 Credits**
- HIS 266 - American Material Culture/Objects in Everyday Life and History **3 Credits**
- HIS 270 - The Holocaust **3 Credits**
- HIS 315 - American Foodways **3 Credits**
- HIS 334 - Ideology in the 20th Century **3 Credits**
- HIS 350 Special Topic: History of National Forests & Parks **3 Credits**
- IDS 154 - Fake News, Forgeries, and Frauds **3 Credits**
- IDS 315 - Comparative Race Studies **3 Credits**
- MLG 105 - Elementary Spanish I **4 Credits**
- MLG 106 - Elementary Spanish II **4 Credits**
- MUS 205 - Story of Jazz **3 Credits**
- NAS 100 - Introduction to Native American Studies **3 Credits**
- NAS 160 - Lake Superior Ojibwe **3 Credits**
- NAS 211 - Native American History and Experience **3 Credits**
- NAS 212 - Wisconsin Indian Cultures, History, and Contemporary Issues **3 Credits**
- NAS 216 - Indigenous Representations **3 Credits**
- NAS 231 - Native American Arts and Cultures **3 Credits**
- NAS 241 - Indigenous Museum Studies **3 Credits**
- NAS 227 - Native Foodways **3 Credits**
- NAS 236 - Indigenous Film and Media **3 Credits**
- NAS 260 - Indigenous Environmental Justice **3 Credits**
- NAS 265 - Indigenous Perceptions of Water **3 Credits**
- NAS 283 - American Indian Literature **3 Credits**
- NAS 315 - American Indian Environmental Perspectives **3 Credits**
- NAS 342 - Gender in Indigenous Borderlands **3 Credits**
- NAS 362 - Native Women's Activism **3 Credits**
- NAS 380 - Indigenous Women Writers **3 Credits**
- PHL 225 - Ethics **3 Credits**
- PHL 226 - Environmental Ethics **3 Credits**
- PHL 229 - Introduction to Philosophy **3 Credits**
- PHL 230 - History of Western Philosophy I **3 Credits**
- PHL 262 - Environmental Philosophy **3 Credits**
- PHL 266 - Environmental Aesthetics **3 Credits**

- PHL 270 - Philosophy of Science **3 Credits**
- PHL 282 - Contemporary Western Philosophy **3 Credits**
- PHL 330 - Philosophy of Language **3 Credits**
- PHL 360 - Concepts of Nature **3 Credits**
- REL 122 - Religions & Cultures in the Lake Superior Watershed **3 Credits**
- REL 165 - Demons, Angels, & Ghosts **3 Credits**
- REL 174 - Religion and Science **3 Credits**
- REL 215 - Hebrew Bible and Jewish Origins **3 Credits**
- REL 216 - Jesus, Paul, and Christian Origins **3 Credits**
- REL 219 - The Nature of Religious Experience **3 Credits**
- REL 220 - Myth and Ritual **3 Credits**
- REL 225 - Magic, Medicine, and Miracle **3 Credits**
- REL 229 - Religions of the West **3 Credits**
- REL 230 - Asian Religions and Philosophies **3 Credits**
- REL 231 - Buddhism **3 Credits**
- REL 234 - Japanese Religious History **3 Credits**
- REL 235 - Daoism Seminar **4 Credits**
- REL 240 - Jesus in Popular Cultures **3 Credits**
- REL 241 - Religion in America **3 Credits**
- REL 257 - Death and Dying **3 Credits**
- REL 258 - Religion and Nature **3 Credits**
- REL 270 - Religion and Human Rights **3 Credits**
- REL 315 - History of Christian Cultures **3 Credits**
- REL 330 - History of Islamic Cultures **3 Credits**
- REL 331 - Zen Buddhism **3 Credits**
- REL 340 - Sex and Religion **3 Credits**
- SCD 235 - Forces of Change **3 Credits**
- SCD 320 - The History of Planning and Development **4 Credits**
- WRI 224 - News Writing & Reporting **3 Credits**
- WRI 260 - Introduction to Creative Writing **3 Credits**

## Diversity & Justice

To develop an understanding of diversity and of how inequality, prejudice, and discrimination can undermine justice, students must complete two courses that explore these topics as a substantial focus of their curricula.

- BUS 415 - The Inclusive Workplace **3 Credits**
- EDU 376 - Strategies for Teaching Diverse Learners **3 Credits**
- ENG 140 - Food for Thought **4 Credits**
- ENG 213 - Literature of the Western Worlds **3 Credits**
- ENG 216 - The Contemporary Novel **3 Credits**
- ENG 217 - Contemporary Third World Literature **4 Credits**
- ENG 228 - Literature of the Arab World **4 Credits**
- ENG 233 - Women of the Third World **3 Credits**
- ENG 234 - Dystopias: Ecology & Gender in SciFi **4 Credits**
- ENG 372 - Nature & Gender in Lat Am Lit **3 Credits**
- ENG 415 - Chaucer **4 Credits**
- GWS 265 - Introduction to Gender and Women's Studies **3 Credits**

- GWS 266 - Ecofeminism **3 Credits**
- GWS 331 - Feminist Theory **3 Credits**
- GWS 343 - Queer Ecologies **3 Credits**
- HIS 101 - United States History to 1865 **3 Credits**
- HIS 102 - United States History since 1865 **3 Credits**
- HIS 209 - Gender in the United States Landscape **3 Credits**
- HIS 241 - American Environmental History **3 Credits**
- HIS 260 - Gender in Modern Europe **3 Credits**
- HIS 263 - History of the Middle East **3 Credits**
- HIS 270 - The Holocaust **3 Credits**
- HIS 315 - American Foodways **3 Credits**
- IDS 315 - Comparative Race Studies **3 Credits**
- MLG 105 - Elementary Spanish I **4 Credits**
- MLG 106 - Elementary Spanish II **4 Credits**
- MLG 205 - Intermediate Spanish I **4 Credits**
- MLG 206 - Intermediate Spanish II **4 Credits**
- NAS 100 - Introduction to Native American Studies **3 Credits**
- NAS 160 - Lake Superior Ojibwe **3 Credits**
- NAS 211 - Native American History and Experience **3 Credits**
- NAS 212 - Wisconsin Indian Cultures, History, and Contemporary Issues **3 Credits**
- NAS 216 - Indigenous Representations **3 Credits**
- NAS 227 - Native Foodways **3 Credits**
- NAS 231 - Native American Arts and Cultures **3 Credits**
- NAS 236 - Indigenous Film and Media **3 Credits**
- NAS 241 - Indigenous Museum Studies **3 Credits**
- NAS 260 - Indigenous Environmental Justice **3 Credits**
- NAS 265 - Indigenous Perceptions of Water **3 Credits**
- NAS 283 - American Indian Literature **3 Credits**
- NAS 306 - Global Indigenous Politics **3 Credits**
- NAS 315 - American Indian Environmental Perspectives **3 Credits**
- NAS 340 - Indigenous Gender Studies **3 Credits**
- NAS 342 - Gender in Indigenous Borderlands **3 Credits**
- NAS 362 - Native Women's Activism **3 Credits**
- NAS 380 - Indigenous Women Writers **3 Credits**
- OED 279 - Access and Diversity **3 Credits**
- OED 489 - Advanced Topics in Diversity and Inclusion **3 Credits**
- PHL 225 - Ethics **3 Credits**
- PHL 226 - Environmental Ethics **3 Credits**
- PSY 331 - Ecopsychology **3 Credits**
- REL 122 - Religions & Cultures in the Lake Superior Watershed **3 Credits**
- REL 165 - Demons, Angels, & Ghosts **3 Credits**
- REL 210 - Exploring Religion and Spirituality **3 Credits**
- REL 215 - Hebrew Bible and Jewish Origins **3 Credits**
- REL 216 - Jesus, Paul, and Christian Origins **3 Credits**
- REL 225 - Magic, Medicine, and Miracle **3 Credits**
- REL 229 - Religions of the West **3 Credits**
- REL 234 - Japanese Religious History **3 Credits**

- REL 240 - Jesus in Popular Cultures **3 Credits**
- REL 258 - Religion and Nature **3 Credits**
- REL 270 - Religion and Human Rights **3 Credits**
- REL 315 - History of Christian Cultures **3 Credits**
- REL 330 - History of Islamic Cultures **3 Credits**
- REL 340 - Sex and Religion **3 Credits**
- SCD 110 - Introduction to Sustainable Community Development **4 Credits**
- SCD 230 - The Political Process **3 Credits**
- SCD 235 - Forces of Change **3 Credits**
- SCD 320 - The History of Planning and Development **4 Credits**
- SCD 335 - Organizing Communities **3 Credits**
- SOC 111 - Introduction to Sociology **4 Credits**
- SOC 225 - Social Problems **3 Credits**
- SOC 234 - Sociology of Gender **3 Credits**
- SOC 236 - Sociology of Sexuality **4 Credits**
- SOC 242 - Sociology of the Environment **3 Credits**
- SOC 260 - Introduction to Sociology - Superior Connections **4 Credits**
- SOC 325 - Environmental Health and Sustainability **3 Credits**
- SOC 332 - Crime, Deviance, and Social Justice **3 Credits**
- SOC 336 - The Nature of Social Inequality **4 Credits**
- SOC 374 - Human Rights and Social Justice **3 Credits**
- SOC 381 - Undoing Racism **3 Credits**
- SOC 472 - Advanced Justice Studies **4 Credits**

## Environmental Curriculum

To assure an understanding of the substance and complexity of environmental issues, students must complete five courses from at least three of the following categories: Environmental Narratives, the Science of Environmental Issues, Communities, Policies, and Management of Environmental Issues, and Environmental Applications. Students who transfer to Northland with sophomore standing or higher are required to complete three courses from at least two of the four environmental curriculum categories.

## Environmental Narratives

Courses in this category focus on narratives that individuals and cultures have created to describe, understand, and justify their relationships and interactions with the natural world. Through these courses, students develop their ability to recognize, understand, and critique these narratives.

- ART 112 - Drawing by Nature **3 Credits**
- BUS 327 - Marketing for Sustainability **3 Credits**
- ENG 140 - Food for Thought **4 Credits**
- ENG 209 - The Story and the Stone **4 Credits**
- ENG 211 - Humanity and Nature in Literature **3 Credits**
- ENG 240 - Pens and Paddles in the North Woods **4 Credits**
- ENG 318 - Nature Writers **3 Credits**
- ENG 372 - Nature & Gender in Lat Am Lit **3 Credits**

- GSC 209 - The Story and the Stone **4 Credits**
- GWS 266 - Ecofeminism **3 Credits**
- GWS 343 - Queer Ecologies **3 Credits**
- HIS 101 - United States History to 1865 **3 Credits**
- HIS 209 - Gender in the United States Landscape **3 Credits**
- HIS 241 - American Environmental History **3 Credits**
- HIS 242 - European Environmental History **3 Credits**
- HIS 266 - American Material Culture/Objects in Everyday Life and History **3 Credits**
- HIS 315 - American Foodways **3 Credits**
- HIS 325 - Nature and Nation: Environment, Art, Ideology **3 Credits**
- HIS 350 Special Topic: History of National Forests & Parks **3 Credits**
- NAS 227 - Native Foodways **3 Credits**
- NAS 260 - Indigenous Environmental Justice **3 Credits**
- NAS 265 - Indigenous Perceptions of Water **3 Credits**
- NAS 315 - American Indian Environmental Perspectives **3 Credits**
- NAS 362 - Native Women's Activism **3 Credits**
- NAS 380 - Indigenous Women Writers **3 Credits**
- NRS 365 - Conservation of Large Carnivores **3 Credits**
- OED 328 - Wilderness Writers and Philosophers **3 Credits**
- OED 363 - Apostle Islands School **4 Credits**
- PHL 226 - Environmental Ethics **3 Credits**
- PHL 262 - Environmental Philosophy **3 Credits**
- PHL 266 - Environmental Aesthetics **3 Credits**
- PHL 270 - Philosophy of Science **3 Credits**
- PSY 331 - Ecopsychology **3 Credits**
- PSY 431 - Applied Ecopsychology **4 Credits**
- REL 122 - Religions & Cultures in the Lake Superior Watershed **3 Credits**
- REL 174 - Religion and Science **3 Credits**
- REL 258 - Religion and Nature **3 Credits**
- SOC 242 - Sociology of the Environment **3 Credits**
- WRI 273 - Writing the Environmental Essay **3 Credits**

## The Science of Environmental Issues

Courses in this category emphasize a scientific perspective on the environment. Through these courses, students develop an ability to apply scientific methodologies to investigations, analyses, quantitative procedures, and understandings of environmental issues.

- BIO 128 - Natural History and Conservation in the Lake Superior Watershed **3 Credits**
- BIO 234 - Ecology **4 Credits**
- BIO 360 - Vertebrate Physiology **4 Credits**
- BIO 410 - Conservation Biology **3 Credits**
- BIO 473 - Limnology **4 Credits**
- CHM 103 - General Chemistry: The Chemistry of Food **4 Credits**
- CHM 110 - General Chemistry **4 Credits**
- CHM 145 - Atmospheric Pollution **4 Credits**
- CHM 210 - Chemistry of Natural Waters **4 Credits**
- CHM 212 - Water Quality Lab Techniques **4 Credits**

- CHM 213 - Soil Chemistry Lab Techniques **4 Credits**
- CHM 220 - Organic Chemistry I **4 Credits**
- CHM 221 - Organic Chemistry II **4 Credits**
- CHM 225 - Quantitative Analysis **4 Credits**
- CHM 240 - Inorganic Chemistry **4 Credits**
- CHM 326 - Atmospheric Chemistry **4 Credits**
- CLM 125 - Weather and Climate **4 Credits**
- CLM 244 - Understanding Climate Change **4 Credits**
- CLM 270 - Oceans and Climate **4 Credits**
- GIS 201 - Introduction to Geographic Information Systems **4 Credits**
- GIS 380 - Remote Sensing **4 Credits**
- GSC 107 - Geology and Agriculture **4 Credits**
- GSC 112 - Geoscience Issues of Lake Superior **3 Credits**
- GSC 120 - Physical Geology **4 Credits**
- GSC 233 - Earth Resources **4 Credits**
- GSC 312 - Paleoclimate: Past as Prologue **4 Credits**
- NRS 348 - Wildlife Ecology and Management **4 Credits**
- NRS 349 - Fisheries Science and Management **4 Credits**
- NRS 358 - Wetlands **4 Credits**
- NRS 363 - Fire Ecology and Management **3 Credits**
- NRS 464 - Wolf Ecology, Management, & Research **4 Credits**
- SCD 160 - Renewable Energy & Sustainable Design **3 Credits**
- SOC 325 - Environmental Health and Sustainability **3 Credits**

## Communities, Policies, and Management of Environmental Issues

Courses in this category focus on the role that communities, governments, organizations, or groups play in environmental issues. Through these courses, students develop an understanding of how these different entities function as well as an appreciation for how they might contribute to environmental issues and their resolutions.

- CHM 145 - Atmospheric Pollution **4 Credits**
- ECN 310 - Environmental Economics **3 Credits**
- EDU 210 - Teaching Environmentally **3 Credits**
- HIS 102 - United States History since 1865 **3 Credits**
- HIS 241 - American Environmental History **3 Credits**
- HIS 242 - European Environmental History **3 Credits**
- HIS 315 - American Foodways **3 Credits**
- HIS 350 Special Topic: History of National Forests & Parks **3 Credits**
- IDS 248 - Great Lakes Water Wars **3 Credits**
- IDS 334 - Sustainable Food Production **4 Credits**
- NAS 227 - Native Foodways **3 Credits**
- NAS 260 - Indigenous Environmental Justice **3 Credits**
- NAS 265 - Indigenous Perceptions of Water **3 Credits**
- NAS 306 - Global Indigenous Politics **3 Credits**
- NRS 215 - Natural Resources Policy **3 Credits**
- NRS 348 - Wildlife Ecology and Management **4 Credits**
- NRS 358 - Wetlands **4 Credits**
- NRS 363 - Fire Ecology and Management **3 Credits**

- NRS 464 - Wolf Ecology, Management, & Research **4 Credits**
- OED 221 - Group Process and Leadership **4 Credits**
- OED 261 - Foundations in Environmental Education **3 Credits**
- PHL 226 - Environmental Ethics **3 Credits**
- PHL 266 - Environmental Aesthetics **3 Credits**
- PSY 236 - Political Psychology **3 Credits**
- REL 258 - Religion and Nature **3 Credits**
- SCD 205 - Introduction to Local Economies **3 Credits**
- SCD 220 - Sustainable Community Planning **3 Credits**
- SCD 225 - Sustainable Development in the Lake Superior Watershed **4 Credits**
- SCD 230 - The Political Process **3 Credits**
- SCD 335 - Organizing Communities **3 Credits**
- SCD 342 - Policy and Econ of Climate Change **3 Credits**
- SOC 215 - Sociology of Community **3 Credits**
- SOC 242 - Sociology of the Environment **3 Credits**
- SOC 260 - Introduction to Sociology - Superior Connections **4 Credits**

## Environmental Applications

Courses in this category integrate intellectual inquiry with emotional, social, or physical engagement in nature or environmental issues. Through these courses, students develop an appreciation for ways of knowing and understanding beyond those grounded solely in intellectual approaches. They also develop their ability to integrate theoretical and applied learning when addressing complex questions and issues.

- ART 280 - Graphic Design I **3 Credits**
- ART 306 - Art Collaborations with Nature **3 Credits**
- BIO 226 - Field Parasitology **4 Credits**
- BIO 410 - Conservation Biology **3 Credits**
- BIO 473 - Limnology **4 Credits**
- CHM 210 - Chemistry of Natural Waters **4 Credits**
- CHM 212 - Water Quality Lab Techniques **4 Credits**
- CHM 213 - Soil Chemistry Lab Techniques **4 Credits**
- CHM 321 - Advanced Organic/Inorganic Chemistry **3 Credits**
- EDU 460 - Student Teaching (EA-A) and Seminar **6 - 12 Credits**
- EDU 471 - Student Teaching (MC-EA) and Seminar **6 - 12 Credits**
- ENG 209 - The Story and the Stone **4 Credits**
- ENG 240 - Pens and Paddles in the North Woods **4 Credits**
- GSC 209 - The Story and the Stone **4 Credits**
- GSC 260 - Geology of the Lake Superior Region **4 Credits**
- GSC 284 - On the Trail of the Ice Age **4 Credits**
- GSC 482 - Wyoming Geology Field Camp **4 Credits**
- GSC 483 - Great Lakes Geology Field Camp **4 Credits**
- IDS 180 - Lake Superior Circumnavigation **4 Credits**
- IDS 243 - Sustainable Agriculture Practicum **4 Credits**
- IDS 334 - Sustainable Food Production **4 Credits**
- MET 255 - Broadcast Meteorology Practicum **3 Credits**
- MET 282 - Microclimate Field Camp **3 Credits**
- NRS 347 - Sustainable Forest Management **4 Credits**

- NRS 358 - Wetlands **4 Credits**
- OED 210 - Inclusive Outdoor Education **3 Credits**
- OED 263 - Outdoor Living Skills **4 Credits**
- OED 328 - Wilderness Writers and Philosophers **3 Credits**
- OED 332 - Winter Travel and Living Skills **4 Credits**
- OED 361 - Interpretive Program Design **3 Credits**
- OED 363 - Apostle Islands School **4 Credits**
- OED 385 - Urban Outdoor Education **3 Credits**
- OED 425 - Advanced Topics in Natural History **3 Credits**
- OED 439 - Therapeutic Principles and Practices **4 Credits**
- OED 446 - Wilderness Instructor Training **4 Credits**
- PSY 331 - Ecopsychology **3 Credits**
- PSY 345 - Cognition in the Wild **4 Credits**
- PSY 431 - Applied Ecopsychology **4 Credits**
- SCD 355 - The Just City in Practice **3 Credits**
- SCD 412 - Advanced Community Planning Studio **4 Credits**
- SCD 481 - Applied Research Practicum **4 Credits**
- SOC 242 - Sociology of the Environment **3 Credits**
- Internships or Field Experiences focused on environmental or societal issues;

**Credits / Units:** 3 or 4 credits

- SOC 325 - Environmental Health and Sustainability **3 Credits**

## Liberal Education Equivalencies

Students who enroll at Northland with college credits earned at other institutions may fulfill some or all of the liberal education requirements through transfer equivalencies. This includes both first-time freshmen who earned college credit while in high school and transfer students. Individual transfer evaluations will indicate which requirements, if any, have been met through these equivalencies.

AP and CLEP tests can be utilized to fulfill course requirements.

## Admission Information

Applications for admission to Northland College are evaluated individually to assess each student's preparedness for both academic success and the ability to become a contributing member of the Northland College learning community.

## Admission Criteria for First Year Students

Applications for admission are accepted on a rolling basis. Each is evaluated on the basis of high school curriculum, cumulative grade-point average, class rank (when available), and ACT or SAT test scores. Before individual admissibility can be determined by the Office of Admissions, applicants must submit the following:

1. a Northland College Application for Admission or the Common Application;
2. An unofficial or official copy of high school transcripts;
3. An unofficial or official copy of ACT or SAT test scores. (If your cumulative, unweighted high school grade-point average is above a 3.0 on a scale of 4.0, you do not have to submit test scores.)

Applicants for admission to Northland College should have a minimum cumulative, unweighted high school grade-point average of 2.0 to be considered for admission. Students with college aptitude test scores and academic records

below the median for high school seniors may be considered for admission if other factors indicate their potential for academic success in college. Letters of recommendation may be required for these students.

## **Admission Criteria for Transfer Students**

Applications for admission from students with previous college experience are welcomed. Transfer students may begin enrollment at Northland in either the fall (early September) or winter (early January) terms.

Applications for transfer admission are evaluated on the basis of college curriculum, college credit accumulation, and cumulative college grade-point average. Before individual admissibility can be determined by the Office of Admissions, applicants must submit the following:

1. A Northland College Application for Admission;
2. An official college transcript from all institutions previously attended (these must be sent directly to the Office of Admission from the college of origin);

Applicants for transfer admission should have a minimum of 17 earned credits. Any college credits completed with a C- (70%) or better are considered for credit transfer. While there is no minimum GPA for transfer students, a 2.0 is recommended. Students with college academic records below these standards may be considered for admission if other factors indicate their potential for academic success in college. Letters of recommendation as well as high school transcripts and test scores may be required for these students.

## **Enrollment Deposit**

A non-refundable \$200 enrollment deposit fee must be received by the College once a student is accepted and decides to enroll. The tuition deposit portion of \$100 will be applied to the student's account after the add/drop date. The room deposit portion of \$100 will be kept by the College to defray the cost of wear and tear to residential facilities. A student who pays their deposit and then decides to defer entry to a later term must pay another \$200 fee to recommit. Likewise, a student who leaves Northland and later decides to reenroll must pay another \$200.

## **Letter of Commitment**

If unable to pay the \$200 enrollment deposit fee, students who have filed their Free Application for Federal Student Aid (FAFSA) and are Pell Grant-eligible have the option to submit a letter of commitment instead. Students unable to submit the FAFSA and unable to pay the \$200 deposit fee may also be eligible to submit a letter of commitment. A student who submits their letter of commitment and then decides to defer entry to a later term will be required to pay the \$200 enrollment deposit fee to recommit.

## **Non-Discrimination Statement**

Northland College does not discriminate on the basis of race, color, creed, sex, religion, national origin, age, disability, genetic information, status with respect to public assistance, sexual orientation, or any other protected status in administration of its educational policies, financial aid program, athletics and all other programs. Harassment based upon an individual's legally protected status is a form of prohibited discrimination.

## **Transfer of Credits**

- Military
- Test-Out Options

A student entering Northland College, after having attended a postsecondary institution for any length of time, must provide Northland College with official transcripts for all prior, postsecondary coursework. Transcripts must be sent directly from the postsecondary institution of origin electronically or through the mail. Hand delivered or emailed from the student are not considered official transcripts. Failure to provide official transcripts from all institutions attended will result in an administrative hold being placed on a student's ability to register for courses at Northland.

The Registrar's Office will prepare a course-by-course evaluation of the submitted transcripts to determine credit transfer. College-level courses from institutions accredited by a regional accrediting agency at the time the course work was completed as well as some work evaluated by the American Council on Education (ACE) will be considered for transfer. For more information, on the acceptance of ACE credit, see Military and Test-Out Options.

Courses completed at a postsecondary institution outside of the United States must be evaluated by an international evaluation agency prior to submission to Northland College. The official international course-by-course evaluation is paid by the student and must be made in advance of the evaluation. Contact the Registrar's Office for information on approved evaluating agencies.

All courses are evaluated for credit transfer on a course-by-course basis, and a grade of C- or better must have been earned in a course for it to be accepted for transfer credit. Courses that are technical in nature are generally not accepted for transfer. Courses that are considered developmental, remedial, or do not count towards graduation at the institution where they were taken are generally not accepted. Internships taken at other colleges may transfer in as elective credit within a department but do not transfer in as internship credit at Northland.

Completed courses that do not have an exact equivalent at Northland may be transferred in as general elective credits or may not be accepted. Some credits more than ten years old may require approval from the appropriate Department Chair.

A maximum of 65 credits will be accepted from all junior or two-year colleges or any combination of junior or two-year colleges. There is no limit on the number of credits that will be accepted from an accredited four-year college or university; however, to earn a Northland College degree, a minimum of 30 credits must be earned at Northland College, including at least 20 credits in a student's major field of study and six credits in a student's minor field of study.

Courses that were repeated are counted only once. If a student is awarded transfer credit for a course and then repeats the course at Northland, the transferred course will remain on the student's record; however, it will no longer count toward credits earned or graduation requirements.

In addition to a course-by-course evaluation, previously completed courses will be evaluated for possible equivalency to our general education requirements. These equivalencies will be listed on the transfer evaluation.

Students who have received an Associate of Arts or Sciences degree from an institution that required at least 32 general education credits and who completed their general education courses with grades of C- or better will have fulfilled a large portion of the general education requirements upon entry to Northland.

Transfer students planning to pursue teacher licensure will be required to meet certain state-mandated general education course requirements before they are eligible for student teaching. A personal interview with the Director of Teacher Education is strongly recommended for all transfer students planning to pursue teacher licensure.

## **Military**

Transfer students with military training may receive college credit for this training as well as credit for studies completed at service schools, international institutions, and the United States Armed Forces Institute. Northland

College grants credit for military training based on the recommendations of the American Council on Education. For more information, contact the Registrar's Office.

## Test-Out Options

Students may accelerate the earning of college credit through test-out programs. These programs offer the option of earning college credit in areas where the student demonstrates a sufficient degree of knowledge and understanding.

The test-out programs approved by Northland College are the following:

- Advanced Placement (AP) examination taken at the high school level (minimum score of 3 required to receive credit);
- International Baccalaureate (IB) program;
- College Level Examination Program (CLEP), available through the University of Wisconsin-Superior or designated testing centers throughout the United States (minimum score of 50 required to receive credit).

To earn credits for AP, IB, or CLEP examinations, an official score report must be sent directly to Northland College from the appropriate agency.

Northland College follows the recommendations of the American Council on Education in regards to awarding credit based on the scores earned on AP and CLEP exams.

A maximum of 30 credits from the test-out option may be applied toward a Northland College degree, and credits are not awarded for passing competency exams provided by other colleges.

For more information on test-out programs, contact the Registrar's Office.

## Degree Requirements

In order to receive a baccalaureate degree from Northland College, a student must complete a major field of study, fulfill the requirements for the General Education program, earn at least 124 credits, and be in good academic standing. First-year students must also complete a first-year experience (FYE) course. The distribution of credits is typically:

- 31 to 36 credits in the general education curricula;
- 42 to 75 credits in a declared major field of study; and
- 13 to 52 elective credits or credits in an optional declared major or minor field of study.

To complete a degree, students must also:

- earn a grade point average of at least 2.00 on a scale of 4.00 for all coursework (2.75 for students pursuing teacher licensure or a teacher certification minor);
- earn a grade point average of 2.00 in the major, including concentrations or emphases, and in minors (students pursuing a directed studies major must earn a 3.00 grade point average in the major);
- earn at least 20 credits in the major at Northland College;
- earn at least 6 credits in the minor at Northland College;
- earn 30 of the total required credits at Northland College;
- earn 20 of the final 30 credits at Northland College;
- complete a senior capstone experience at Northland College.

The following credit limits apply:

- no more than 65 credits earned from a two-year community or junior college may be applied toward requirements for the baccalaureate degree (see Transfer of Credits under Academic Policies and Procedures);

- no more than 12 internship, field experience, or teaching assistantship credits may be applied towards requirements for the baccalaureate degree, with the exception of the Outdoor Education major;
- no more than 30 credits may be applied through testing options such as Advanced Placement, CLEP, or International Baccalaureate.

Though the Registrar's Office tracks every student's progress toward meeting degree requirements, each student is ultimately responsible for determining and completing the academic credits they need to satisfy the degree requirements.

## Second Baccalaureate Degree

A second baccalaureate degree may be earned by Northland College graduates. The following provisions apply:

- a 30-credit minimum is earned at Northland beyond all of the credits and degree requirements for the first baccalaureate degree, and any repeated courses do not count toward the 30 credits (For students who earned their first degree at Northland, this means that a minimum of 154 credits must be earned to qualify for a second degree.);
- a student may not earn two of the same degrees (e.g. two B.A.'s or two B.S.'s) from Northland College, and double majors within the same degree category lead to one degree with two majors listed, regardless of how many credits are earned;
- students should complete all requirements for the second degree within four semesters of attendance at Northland, and exceptions to this policy must be cleared with the Registrar's Office prior to the first semester of enrollment.

## Pre-Professional Curricula

### Pre-Professional Curricula

Most professional schools advise prospective students to develop a solid foundation in the liberal arts as the best preparation for admission. Consistent with this advice, Northland College does not offer designated pre-professional majors; instead, students interested in pursuing a professional degree after graduation from Northland are encouraged to complete a regular major and to choose elective courses that further prepare them for the professional field of their choice.

For assistance in developing an undergraduate course of study that will facilitate admittance into specific professional schools, students are encouraged to research the requirements of specific professional schools in their areas of interest and to meet with Northland College faculty members who have been designated as pre-professional advisors.

The recommendations below are intended to provide general guidance for students interested in pursuing post-baccalaureate professional training.

### Pre-Law

The American Bar Association, the American Association of Law Schools, and pre-law advising organizations all agree that a solid liberal arts education is the best preparation for law school. Because of this, law schools accept students with a wide variety of majors and backgrounds.

Northland College encourages students interested in pursuing a law degree to meet with the pre-law faculty advisor. Students are also encouraged to select a major that has relevance to the type of law they expect to practice in the future.

and to pursue a course of study that hones the following skills and values, all of which are crucial to the successful practice of law:

- analytical and problem-solving skills;
- critical reading skills;
- writing skills;
- oral communication and listening skills;
- general research skills;
- task organization and management skills;
- values of serving faithfully the interests of others while promoting justice.

Finally, because law school curricula are demanding and because law schools admission officers look for demonstrated achievement by applicants, students interested in attending law school should select challenging courses and develop the self-discipline required to do well in those courses.

## Pre-Health Care

Northland College has a solid track record of preparing students for admission to medical professions graduate schools. Our strength is in maintaining a high quality of instruction, but also encouraging our students to think critically and broadly as they pursue their particular interests. The American Association of Medical Colleges recommends a solid liberal education preparation for medical professions. Students who are passionate about human health care may choose to major in [Biology or Chemistry](#), while taking courses that meet professional school admissions requirements. One particular major does not have an advantage over another for admission. Pre-professional students should be prepared for career alternatives and the suggested curricula for pre-medical, pre-dental, pre-physical therapy, and pre-physician assistant will prepare students for general graduate school admission if students decide to postpone pre-professional school or pursue another career path.

Successful admission to health care professional schools in medicine (MD and DO), dental, physical therapy, physician assistant, and nursing, requires careful and long-term planning. Students should plan time for extracurricular activities such as internships, research, job shadowing, paid positions, and volunteering that provide experience working with people or in some health care capacity. Students should also keep a record of hours spent with each activity because that information may be requested on the application.

Because entrance requirements change from year to year and differ among schools, students are encouraged to become familiar with the requirements of the professional schools to which they plan to apply, and to work closely with their academic advisor and the pre-medicine advisor to plan for the completion of courses required for their major(s) as well as by the professional schools. The following coursework should meet or exceed recommended prerequisites for most health care professional programs (note that AP or CLEP credit may not be accepted at some professional schools without taking additional college courses).

### Pre-Medicine (MD and DO)

- two semesters of inorganic chemistry with lab;
- one semester of organic chemistry with lab;
- one semester of biochemistry;
- two semesters of physics with lab;
- one semester of calculus\*\*;
- one semester of statistics;
- two semesters of biology (one of which is advanced);
- one semester of psychology;
- one semester of sociology;
- writing as a stand-alone course or another course with an extensive writing requirement.

### **Pre-Dental**

- two semesters of inorganic chemistry with lab;
- one semester of organic chemistry with lab;
- one semester of biochemistry;
- two semesters of physics with lab;
- one semester of calculus\*;
- two semesters of biology (zoology and anatomy preferred);
- one semester of psychology;
- two semesters of English writing and composition;
- elective courses in biology (anatomy, cell biology, genetics, microbiology suggested), math, speech, humanities (including art) and social sciences;
- writing as a stand-alone course or another course with an extensive writing requirement.

### **Pre-Physician Assistant**

- two semesters of inorganic chemistry with lab;
- one semester of organic chemistry with lab;
- one semester of biochemistry;
- two semesters of physics with lab;
- one semester of calculus\*\*;
- one semester of statistics;
- one semester physiology;
- one semester of anatomy;
- one semester of microbiology;
- one semester of psychology;
- 2 semesters of English writing and composition;
- Elective courses in biology (genetics, immunology, embryology, parasitology, medical terminology suggested).

### **Pre-Physical Therapy**

- one semester of anatomy;
- one semester of physiology;
- two semesters of chemistry;
- two semesters of physics;
- one semester of psychology
- one semester of abnormal and/or developmental psychology;
- one semester of statistics;
- one semester of calculus\*\*;
- two elective courses in biology (microbiology, embryology, genetics);
- Some schools require additional courses not offered at Northland: biomechanics, exercise physiology, kinesiology, or medical terminology.

### **Pre-Nursing**

- two semesters of inorganic chemistry with lab;
- one semester of organic chemistry with lab;
- one semester of biochemistry;
- one semester of anatomy;
- one semester of physiology;
- one semester of statistics;

- one semester of microbiology;
- one semester of sociology;
- one semester of psychology;
- one semester of developmental psychology;
- one semester of writing.

\*\* one semester of calculus is required for physics at Northland College

## Pre-Ministry

Consistent with other pre-professional studies, seminaries and divinity schools encourage a solid, broad liberal arts course of study as the best preparation for success at the graduate level. Students must work closely with the pre-ministry advisor to determine the best course of study for the denomination and seminary of choice.

This course of study will include a major relevant to the kind of ministry a student intends to pursue. For example, a student interested in outdoor and camping ministries should take advantage of the college's strong program in outdoor education, combined with general studies in the humanities and in religion. Students interested in parish ministry should select a major in the humanities or the social sciences, with additional coursework in religion.

Pre-ministry students must also choose courses that develop critical thinking and communication skills as they prepare for graduate seminary studies. These skills include analytical thinking, clear and concise writing, critical reading, oral communication, independent research, and task management. Students will further enhance their success by developing their knowledge of intellectual history, including religion and philosophy. Finally, students should choose courses that help them grow intellectually and personally—courses that challenge the heart as well as the mind—in order develop the depth of character and the appreciation of others that ministry requires.

## Pre-Veterinarian Medicine

The Association of American Veterinary Medicine Colleges recommends a solid liberal education preparation for veterinary medicine professions. Students planning to enter veterinary science professions should pursue a course of study that meets professional school entrance requirements, regardless of major. In addition, students should plan extracurricular time for volunteer and service activities and prepare for the GRE exam.

Because entrance requirements change from year to year and differ among schools, students are encouraged to work closely with the pre-veterinary advisor and to become familiar with the requirements of the veterinary schools to which they plan to apply. In general, though, the following coursework is recommended (note that AP credit may not be accepted at some veterinary schools without taking additional college courses):

- one semester of general biology or zoology with lab;
- one semester of genetics;
- one semester of microbiology;
- two semesters of inorganic chemistry with lab;
- one semester of organic chemistry with lab;
- one semester of biochemistry;
- two semesters of physics with lab;
- one semester of calculus;
- two semesters of writing or courses with an extensive writing requirement;
- courses in humanities and social sciences in preparation for the social, psychological, and business aspects of veterinary practice.

# General Education

## General Education: Liberal Education for the Environment & Society

### Liberal Education for the Environment & Society

Northland College integrates liberal arts studies with an environmental emphasis, enabling those it serves to address the challenges of the future. Consistent with this mission, the College's Liberal Education for the Environment & Society program prepares students to be leaders in understanding, communicating, and acting upon the complexity of environmental issues, and in working to understand and address societal dynamics that create and are influenced by environmental issues.

The program is designed to assure that students develop . . .

- foundational skills in written communication and mathematics;
- a breadth of disciplinary learning characteristic of a liberally educated individual;
- an understanding of diversity, inequality, prejudice, and discrimination; and
- an understanding of natural systems and the complex relationships between human endeavors and the natural world.

Completion of the program is a graduation requirement for Northland College students, and those who successfully complete the program will also have satisfied many of the requirements for an environmental studies minor. Courses taken to satisfy requirements in the Liberal Arts Curriculum may also satisfy requirements in the Environmental Curriculum and vice-versa; however, students must earn at least 30 credits overall to complete the Liberal Education for the Environment & Society Program.

### Overview: Liberal Education for the Environment and Society

#### LIBERAL ARTS CURRICULUM

- Foundational Skills
  - ENG 110 College Writing (or equivalent proficiency through assessment)
  - Writing Intensive Courses
  - Math Proficiency
  - Quantitative Reasoning
- Disciplinary Learning
  - Natural Sciences
  - Social Sciences
  - Arts & Humanities
- Diversity & Justice

#### ENVIRONMENTAL CURRICULUM

- Environmental Narratives
- The Science of Environmental Issues
- Communities, Policies, and Management of Environmental Issues
- Environmental Applications

# Liberal Arts Curriculum

## Foundational Skills

To assure a solid foundation in written communication and mathematical skills, students are required to fulfill the following requirements:

### ENG 110 College Writing

or equivalent proficiency through assessment

## Writing Intensive Courses

Four writing intensive courses are required. These courses may also fulfill other requirements in the liberal arts or environmental sections of the program.

- ART 403 - Senior Seminar **3 Credits**
- BIO 128 - Natural History and Conservation in the Lake Superior Watershed **3 Credits**
- BIO 480 - Biology Senior Seminar **3 Credits**
- BUS 475 - Strategic Planning and Policy Capstone **3 Credits**
- CLM 480 - Seminar in Climate Science **3 Credits**
- EDU 337 - Fall Practicum **1-4 Credits**
- EDU 338 - Winter Practicum **1-4 Credits**
- ENG 111 - Writing and Inquiry **3 Credits**
- ENG 126 - Confluences: Reading and Writing in the Lake Superior Watershed **3 Credits**
- ENG 140 - Food for Thought **4 Credits**
- ENG 209 - The Story and the Stone **4 Credits**
- ENG 211 - Humanity and Nature in Literature **3 Credits**
- ENG 213 - Literature of the Western Worlds **3 Credits**
- ENG 216 - The Contemporary Novel **3 Credits**
- ENG 217 - Contemporary Third World Literature **4 Credits**
- ENG 225 - Major American Authors **3 Credits**
- ENG 228 - Literature of the Arab World **4 Credits**
- ENG 230 - Literature and Medicine **3 Credits**
- ENG 233 - Women of the Third World **3 Credits**
- ENG 234 - Dystopias: Ecology & Gender in SciFi **4 Credits**
- ENG 235 - Monsters, Modern and Postmodern **3 Credits**
- ENG 240 - Pens and Paddles in the North Woods **4 Credits**
- ENG 241 - CLIFI: Climate Fiction **3 Credits**
- ENG 262 - Survey of British Literature **3 Credits**
- ENG 264 - Survey of American Literature **3 Credits**
- ENG 318 - Nature Writers **3 Credits**
- ENG 332 - Major American Authors II **3 Credits**
- ENG 372 - Nature & Gender in Lat Am Lit **3 Credits**
- ENG 377 - Green Romanticism **3 Credits**
- ENG 384 - Literary Criticism **3 Credits**
- ENG 413 - Shakespeare **4 Credits**

- ENG 415 - Chaucer **4 Credits**
- GSC 209 - The Story and the Stone **4 Credits**
- GSC 489 - Geoscience Senior Honors Thesis **2 Credits**
- HIS 101 - United States History to 1865 **3 Credits**
- HIS 102 - United States History since 1865 **3 Credits**
- HIS 209 - Gender in the United States Landscape **3 Credits**
- HIS 221 - History of Medieval Europe **3 Credits**
- HIS 241 - American Environmental History **3 Credits**
- HIS 242 - European Environmental History **3 Credits**
- HIS 260 - Gender in Modern Europe **3 Credits**
- HIS 263 - History of the Middle East **3 Credits**
- HIS 266 - American Material Culture/Objects in Everyday Life and History **3 Credits**
- HIS 270 - The Holocaust **3 Credits**
- HIS 315 - American Foodways **3 Credits**
- HIS 320 - The Enlightenment **3 Credits**
- HIS 321 - The French Revolution **3 Credits**
- HIS 325 - Nature and Nation: Environment, Art, Ideology **3 Credits**
- HIS 334 - Ideology in the 20th Century **3 Credits**
- HIS 350 Special Topic: History of National Forests & Parks **3 Credits**
- HIS 357 - Gender in Total War **3 Credits**
- NAS 100 - Introduction to Native American Studies **3 Credits**
- NAS 160 - Lake Superior Ojibwe **3 Credits**
- NAS 216 - Indigenous Representations **3 Credits**
- NAS 227 - Native Foodways **3 Credits**
- NAS 236 - Indigenous Film and Media **3 Credits**
- NAS 260 - Indigenous Environmental Justice **3 Credits**
- NAS 265 - Indigenous Perceptions of Water **3 Credits**
- NAS 283 - American Indian Literature **3 Credits**
- NAS 306 - Global Indigenous Politics **3 Credits**
- NAS 315 - American Indian Environmental Perspectives **3 Credits**
- NAS 340 - Indigenous Gender Studies **3 Credits**
- NAS 342 - Gender in Indigenous Borderlands **3 Credits**
- NAS 362 - Native Women's Activism **3 Credits**
- NAS 380 - Indigenous Women Writers **3 Credits**
- NRS 348 - Wildlife Ecology and Management **4 Credits**
- OED 210 - Inclusive Outdoor Education **3 Credits**
- OED 221 - Group Process and Leadership **4 Credits**
- OED 265 - Teaching & Facilitation Skills **3 Credits**
- OED 279 - Access and Diversity **3 Credits**
- OED 328 - Wilderness Writers and Philosophers **3 Credits**
- OED 439 - Therapeutic Principles and Practices **4 Credits**
- OED 472 - Accident Theory & Risk Management **3 Credits**
- OED 489 - Advanced Topics in Diversity and Inclusion **3 Credits**
- PHL 225 - Ethics **3 Credits**
- PHL 226 - Environmental Ethics **3 Credits**
- PHL 229 - Introduction to Philosophy **3 Credits**
- PHL 262 - Environmental Philosophy **3 Credits**
- PHL 266 - Environmental Aesthetics **3 Credits**

- PHL 270 - Philosophy of Science **3 Credits**
- PHL 330 - Philosophy of Language **3 Credits**
- PHL 360 - Concepts of Nature **3 Credits**
- PSY 233 - Social Psychology **3 Credits**
- PSY 234 - Theories of Personality **3 Credits**
- PSY 236 - Political Psychology **3 Credits**
- PSY 331 - Ecopsychology **3 Credits**
- PSY 346 - Abnormal Psychology **3 Credits**
- PSY 448 - Capstone **4 Credits**
- REL 165 - Demons, Angels, & Ghosts **3 Credits**
- REL 219 - The Nature of Religious Experience **3 Credits**
- REL 229 - Religions of the West **3 Credits**
- REL 240 - Jesus in Popular Cultures **3 Credits**
- REL 241 - Religion in America **3 Credits**
- REL 257 - Death and Dying **3 Credits**
- REL 258 - Religion and Nature **3 Credits**
- REL 270 - Religion and Human Rights **3 Credits**
- REL 315 - History of Christian Cultures **3 Credits**
- REL 330 - History of Islamic Cultures **3 Credits**
- REL 331 - Zen Buddhism **3 Credits**
- REL 340 - Sex and Religion **3 Credits**
- SCD 110 - Introduction to Sustainable Community Development **4 Credits**
- SCD 235 - Forces of Change **3 Credits**
- SCD 320 - The History of Planning and Development **4 Credits**
- SCD 335 - Organizing Communities **3 Credits**
- SOC 336 - The Nature of Social Inequality **4 Credits**
- SOC 381 - Undoing Racism **3 Credits**
- SOC 488 - Capstone in Sociology and Social Justice **4 Credits**
- WRI 260 - Introduction to Creative Writing **3 Credits**
- WRI 273 - Writing the Environmental Essay **3 Credits**
- WRI 224 - News Writing & Reporting **3 Credits**

## Math Proficiency

An ACT math score of 17 or higher; SAT math score of 470 or higher; BUS 136 Financial Literacy for Everyone; or any MTH course.

## Quantitative Reasoning Course

One of the following courses:

- BUS 120 - Quantitative Methods **3 Credits**
- BUS 136 - Financial Literacy for Everyone **3 Credits**
- CHM 103 - General Chemistry: The Chemistry of Food **4 Credits**
- CHM 110 - General Chemistry **4 Credits**
- MTH 106 - Environmental Mathematics **4 Credits**
- MTH 107 - Statistical Concepts and Analysis **4 Credits**
- MTH 109 - Precalculus Mathematics **4 Credits**

- MTH 140 - Calculus I **4 Credits**
- PHL 276 - Logic **3 Credits**

## Disciplinary Learning

To assure a breadth of disciplinary learning characteristic of a liberally educated individual, students are required to complete two courses, each representing different disciplines, from each of the following categories (6 courses total):

### Natural Sciences

Two courses required from different disciplines:

- BIO 115 - Concepts of Biology **4 Credits**
- BIO 128 - Natural History and Conservation in the Lake Superior Watershed **3 Credits**
- CHM 103 - General Chemistry: The Chemistry of Food **4 Credits**
- CHM 110 - General Chemistry **4 Credits**
- CHM 145 - Atmospheric Pollution **4 Credits**
- CHM 246 - Introduction to Forensic Chemistry **Credits**
- CLM 125 - Weather and Climate **4 Credits**
- CLM 244 - Understanding Climate Change **4 Credits**
- CLM 270 - Oceans and Climate **4 Credits**
- GSC 107 - Geology and Agriculture **4 Credits**
- GSC 112 - Geoscience Issues of Lake Superior **3 Credits**
- GSC 120 - Physical Geology **4 Credits**
- GSC 222 - Sediments and Soils **4 Credits**
- PHY 104 - Introduction to Astronomy **4 Credits**
- PHY 110 - General Physics I **4 Credits**
- PSY 227 - Cognitive Psychology **3 Credits**
- PSY 340 - Evolutionary Psychology **3 Credits**
- PSY 342 - Psycholinguistics **3 Credits**
- PSY 360 - Sensation and Perception **3 Credits**
- PSY 366 - Neuropsychology **3 Credits**

### Social Sciences

Two courses required from different disciplines:

- BUS 226 - Essentials of Economics **4 Credits**
- ECN 220 - Macroeconomics in Context **3 Credits**
- ECN 221 - Microeconomics in Context **3 Credits**
- ECN 263 - Essentials of Economics **4 Credits**
- ECN 310 - Environmental Economics **3 Credits**
- EDU 225 - Foundations of Education **3 Credits**
- EDU 232 - Learning, Growth and Cognition **3 Credits**
- GSC 262 - World Regional Geography **3 Credits**
- IDS 154 - Fake News, Forgeries, and Frauds **3 Credits**
- OED 210 - Inclusive Outdoor Education **3 Credits**
- OED 221 - Group Process and Leadership **4 Credits**

- OED 265 - Teaching & Facilitation Skills **3 Credits**
- OED 279 - Access and Diversity **3 Credits**
- OED 439 - Therapeutic Principles and Practices **4 Credits**
- OED 472 - Accident Theory & Risk Management **3 Credits**
- OED 489 - Advanced Topics in Diversity and Inclusion **3 Credits**
- PSY 110 - General Psychology **4 Credits**
- PSY 203 - Lifespan Developmental Psychology **3 Credits**
- PSY 229 - Sport Psychology **3 Credits**
- PSY 233 - Social Psychology **3 Credits**
- PSY 234 - Theories of Personality **3 Credits**
- PSY 236 - Political Psychology **3 Credits**
- PSY 241 - Positive Psychology **3 Credits**
- PSY 322 - Health Psychology **3 Credits**
- PSY 340 - Evolutionary Psychology **3 Credits**
- PSY 346 - Abnormal Psychology **3 Credits**
- REL 210 - Exploring Religion and Spirituality **3 Credits**
- REL 225 - Magic, Medicine, and Miracle **3 Credits**
- SCD 110 - Introduction to Sustainable Community Development **4 Credits**
- SCD 205 - Introduction to Local Economies **3 Credits**
- SCD 220 - Sustainable Community Planning **3 Credits**
- SCD 225 - Sustainable Development in the Lake Superior Watershed **4 Credits**
- SCD 230 - The Political Process **3 Credits**
- SCD 235 - Forces of Change **3 Credits**
- SCD 320 - The History of Planning and Development **4 Credits**
- SCD 335 - Organizing Communities **3 Credits**
- SCD 365 - Workforce Development **3 Credits**
- SOC 111 - Introduction to Sociology **4 Credits**
- SOC 225 - Social Problems **3 Credits**
- SOC 234 - Sociology of Gender **3 Credits**
- SOC 236 - Sociology of Sexuality **4 Credits**
- SOC 240 - Cultural Ecology **3 Credits**
- SOC 242 - Sociology of the Environment **3 Credits**
- SOC 260 - Introduction to Sociology - Superior Connections **4 Credits**
- SOC 215 - Sociology of Community **3 Credits**
- SOC 332 - Crime, Deviance, and Social Justice **3 Credits**
- SOC 336 - The Nature of Social Inequality **4 Credits**
- SOC 370 - Social Science Research Methods **4 Credits**
- SOC 381 - Undoing Racism **3 Credits**
- SOC 448 - Sociological Theory **4 Credits**

## Arts & Humanities

Two courses required from different disciplines:

- ART 106 - Intro to Visual Communication **3 Credits**
- ART 111 - Drawing I **3 Credits**
- ART 112 - Drawing by Nature **3 Credits**
- ART 209 - Art + Community **3 Credits**

- ART 220 - Ceramics I **3 Credits**
- ART 222 - Ceramics Handbuilding **3 Credits**
- ART 226 - 3D Printing in Clay **3 Credits**
- ART 230 - Art History Ancient to Medieval **3 Credits**
- ART 231 - Art History Renaissance to Modern **3 Credits**
- ART 232 - Contemporary Art History **3 Credits**
- ART 262 - Digital Photography I **3 Credits**
- EDU 289 - Children and Adolescent Literature **3 Credits**
- ENG 111 - Writing and Inquiry **3 Credits**
- ENG 126 - Confluences: Reading and Writing in the Lake Superior Watershed **3 Credits**
- ENG 140 - Food for Thought **4 Credits**
- ENG 209 - The Story and the Stone **4 Credits**
- ENG 211 - Humanity and Nature in Literature **3 Credits**
- ENG 213 - Literature of the Western Worlds **3 Credits**
- ENG 216 - The Contemporary Novel **3 Credits**
- ENG 217 - Contemporary Third World Literature **4 Credits**
- ENG 225 - Major American Authors **3 Credits**
- ENG 228 - Literature of the Arab World **4 Credits**
- ENG 230 - Literature and Medicine **3 Credits**
- ENG 233 - Women of the Third World **3 Credits**
- ENG 234 - Dystopias: Ecology & Gender in SciFi **4 Credits**
- ENG 235 - Monsters, Modern and Postmodern **3 Credits**
- ENG 240 - Pens and Paddles in the North Woods **4 Credits**
- ENG 241 - CLIFI: Climate Fiction **3 Credits**
- ENG 264 - Survey of American Literature **3 Credits**
- ENG 318 - Nature Writers **3 Credits**
- ENG 332 - Major American Authors II **3 Credits**
- ENG 387 - The English Language **4 Credits**
- ENG 415 - Chaucer **4 Credits**
- GSC 209 - The Story and the Stone **4 Credits**
- HIS 101 - United States History to 1865 **3 Credits**
- HIS 102 - United States History since 1865 **3 Credits**
- HIS 111 - History of World Civilizations to 1500 **3 Credits**
- HIS 112 - History of World Civilizations since 1500 **3 Credits**
- HIS 209 - Gender in the United States Landscape **3 Credits**
- HIS 221 - History of Medieval Europe **3 Credits**
- HIS 241 - American Environmental History **3 Credits**
- HIS 242 - European Environmental History **3 Credits**
- HIS 260 - Gender in Modern Europe **3 Credits**
- HIS 263 - History of the Middle East **3 Credits**
- HIS 266 - American Material Culture/Objects in Everyday Life and History **3 Credits**
- HIS 270 - The Holocaust **3 Credits**
- HIS 315 - American Foodways **3 Credits**
- HIS 334 - Ideology in the 20th Century **3 Credits**
- HIS 350 Special Topic: History of National Forests & Parks **3 Credits**
- IDS 154 - Fake News, Forgeries, and Frauds **3 Credits**
- IDS 315 - Comparative Race Studies **3 Credits**

- MLG 105 - Elementary Spanish I **4 Credits**
- MLG 106 - Elementary Spanish II **4 Credits**
- MUS 205 - Story of Jazz **3 Credits**
- NAS 100 - Introduction to Native American Studies **3 Credits**
- NAS 160 - Lake Superior Ojibwe **3 Credits**
- NAS 211 - Native American History and Experience **3 Credits**
- NAS 212 - Wisconsin Indian Cultures, History, and Contemporary Issues **3 Credits**
- NAS 216 - Indigenous Representations **3 Credits**
- NAS 231 - Native American Arts and Cultures **3 Credits**
- NAS 241 - Indigenous Museum Studies **3 Credits**
- NAS 227 - Native Foodways **3 Credits**
- NAS 236 - Indigenous Film and Media **3 Credits**
- NAS 260 - Indigenous Environmental Justice **3 Credits**
- NAS 265 - Indigenous Perceptions of Water **3 Credits**
- NAS 283 - American Indian Literature **3 Credits**
- NAS 315 - American Indian Environmental Perspectives **3 Credits**
- NAS 342 - Gender in Indigenous Borderlands **3 Credits**
- NAS 362 - Native Women's Activism **3 Credits**
- NAS 380 - Indigenous Women Writers **3 Credits**
- PHL 225 - Ethics **3 Credits**
- PHL 226 - Environmental Ethics **3 Credits**
- PHL 229 - Introduction to Philosophy **3 Credits**
- PHL 230 - History of Western Philosophy I **3 Credits**
- PHL 262 - Environmental Philosophy **3 Credits**
- PHL 266 - Environmental Aesthetics **3 Credits**
- PHL 270 - Philosophy of Science **3 Credits**
- PHL 282 - Contemporary Western Philosophy **3 Credits**
- PHL 330 - Philosophy of Language **3 Credits**
- PHL 360 - Concepts of Nature **3 Credits**
- REL 122 - Religions & Cultures in the Lake Superior Watershed **3 Credits**
- REL 165 - Demons, Angels, & Ghosts **3 Credits**
- REL 174 - Religion and Science **3 Credits**
- REL 215 - Hebrew Bible and Jewish Origins **3 Credits**
- REL 216 - Jesus, Paul, and Christian Origins **3 Credits**
- REL 219 - The Nature of Religious Experience **3 Credits**
- REL 220 - Myth and Ritual **3 Credits**
- REL 225 - Magic, Medicine, and Miracle **3 Credits**
- REL 229 - Religions of the West **3 Credits**
- REL 230 - Asian Religions and Philosophies **3 Credits**
- REL 231 - Buddhism **3 Credits**
- REL 234 - Japanese Religious History **3 Credits**
- REL 235 - Daoism Seminar **4 Credits**
- REL 240 - Jesus in Popular Cultures **3 Credits**
- REL 241 - Religion in America **3 Credits**
- REL 257 - Death and Dying **3 Credits**
- REL 258 - Religion and Nature **3 Credits**
- REL 270 - Religion and Human Rights **3 Credits**

- REL 315 - History of Christian Cultures **3 Credits**
- REL 330 - History of Islamic Cultures **3 Credits**
- REL 331 - Zen Buddhism **3 Credits**
- REL 340 - Sex and Religion **3 Credits**
- SCD 235 - Forces of Change **3 Credits**
- SCD 320 - The History of Planning and Development **4 Credits**
- WRI 224 - News Writing & Reporting **3 Credits**
- WRI 260 - Introduction to Creative Writing **3 Credits**

## Diversity & Justice

To develop an understanding of diversity and of how inequality, prejudice, and discrimination can undermine justice, students must complete two courses that explore these topics as a substantial focus of their curricula.

- BUS 415 - The Inclusive Workplace **3 Credits**
- EDU 376 - Strategies for Teaching Diverse Learners **3 Credits**
- ENG 140 - Food for Thought **4 Credits**
- ENG 213 - Literature of the Western Worlds **3 Credits**
- ENG 216 - The Contemporary Novel **3 Credits**
- ENG 217 - Contemporary Third World Literature **4 Credits**
- ENG 228 - Literature of the Arab World **4 Credits**
- ENG 233 - Women of the Third World **3 Credits**
- ENG 234 - Dystopias: Ecology & Gender in SciFi **4 Credits**
- ENG 372 - Nature & Gender in Lat Am Lit **3 Credits**
- ENG 415 - Chaucer **4 Credits**
- GWS 265 - Introduction to Gender and Women's Studies **3 Credits**
- GWS 266 - Ecofeminism **3 Credits**
- GWS 331 - Feminist Theory **3 Credits**
- GWS 343 - Queer Ecologies **3 Credits**
- HIS 101 - United States History to 1865 **3 Credits**
- HIS 102 - United States History since 1865 **3 Credits**
- HIS 209 - Gender in the United States Landscape **3 Credits**
- HIS 241 - American Environmental History **3 Credits**
- HIS 260 - Gender in Modern Europe **3 Credits**
- HIS 263 - History of the Middle East **3 Credits**
- HIS 270 - The Holocaust **3 Credits**
- HIS 315 - American Foodways **3 Credits**
- IDS 315 - Comparative Race Studies **3 Credits**
- MLG 105 - Elementary Spanish I **4 Credits**
- MLG 106 - Elementary Spanish II **4 Credits**
- MLG 205 - Intermediate Spanish I **4 Credits**
- MLG 206 - Intermediate Spanish II **4 Credits**
- NAS 100 - Introduction to Native American Studies **3 Credits**
- NAS 160 - Lake Superior Ojibwe **3 Credits**
- NAS 211 - Native American History and Experience **3 Credits**
- NAS 212 - Wisconsin Indian Cultures, History, and Contemporary Issues **3 Credits**
- NAS 216 - Indigenous Representations **3 Credits**
- NAS 227 - Native Foodways **3 Credits**

- NAS 231 - Native American Arts and Cultures **3 Credits**
- NAS 236 - Indigenous Film and Media **3 Credits**
- NAS 241 - Indigenous Museum Studies **3 Credits**
- NAS 260 - Indigenous Environmental Justice **3 Credits**
- NAS 265 - Indigenous Perceptions of Water **3 Credits**
- NAS 283 - American Indian Literature **3 Credits**
- NAS 306 - Global Indigenous Politics **3 Credits**
- NAS 315 - American Indian Environmental Perspectives **3 Credits**
- NAS 340 - Indigenous Gender Studies **3 Credits**
- NAS 342 - Gender in Indigenous Borderlands **3 Credits**
- NAS 362 - Native Women's Activism **3 Credits**
- NAS 380 - Indigenous Women Writers **3 Credits**
- OED 279 - Access and Diversity **3 Credits**
- OED 489 - Advanced Topics in Diversity and Inclusion **3 Credits**
- PHL 225 - Ethics **3 Credits**
- PHL 226 - Environmental Ethics **3 Credits**
- PSY 331 - Ecopsychology **3 Credits**
- REL 122 - Religions & Cultures in the Lake Superior Watershed **3 Credits**
- REL 165 - Demons, Angels, & Ghosts **3 Credits**
- REL 210 - Exploring Religion and Spirituality **3 Credits**
- REL 215 - Hebrew Bible and Jewish Origins **3 Credits**
- REL 216 - Jesus, Paul, and Christian Origins **3 Credits**
- REL 225 - Magic, Medicine, and Miracle **3 Credits**
- REL 229 - Religions of the West **3 Credits**
- REL 234 - Japanese Religious History **3 Credits**
- REL 240 - Jesus in Popular Cultures **3 Credits**
- REL 258 - Religion and Nature **3 Credits**
- REL 270 - Religion and Human Rights **3 Credits**
- REL 315 - History of Christian Cultures **3 Credits**
- REL 330 - History of Islamic Cultures **3 Credits**
- REL 340 - Sex and Religion **3 Credits**
- SCD 110 - Introduction to Sustainable Community Development **4 Credits**
- SCD 230 - The Political Process **3 Credits**
- SCD 235 - Forces of Change **3 Credits**
- SCD 320 - The History of Planning and Development **4 Credits**
- SCD 335 - Organizing Communities **3 Credits**
- SOC 111 - Introduction to Sociology **4 Credits**
- SOC 225 - Social Problems **3 Credits**
- SOC 234 - Sociology of Gender **3 Credits**
- SOC 236 - Sociology of Sexuality **4 Credits**
- SOC 242 - Sociology of the Environment **3 Credits**
- SOC 260 - Introduction to Sociology - Superior Connections **4 Credits**
- SOC 325 - Environmental Health and Sustainability **3 Credits**
- SOC 332 - Crime, Deviance, and Social Justice **3 Credits**
- SOC 336 - The Nature of Social Inequality **4 Credits**
- SOC 374 - Human Rights and Social Justice **3 Credits**
- SOC 381 - Undoing Racism **3 Credits**

- SOC 472 - Advanced Justice Studies **4 Credits**

## Environmental Curriculum

To assure an understanding of the substance and complexity of environmental issues, students must complete five courses from at least three of the following categories: Environmental Narratives, the Science of Environmental Issues, Communities, Policies, and Management of Environmental Issues, and Environmental Applications. Students who transfer to Northland with sophomore standing or higher are required to complete three courses from at least two of the four environmental curriculum categories.

## Environmental Narratives

Courses in this category focus on narratives that individuals and cultures have created to describe, understand, and justify their relationships and interactions with the natural world. Through these courses, students develop their ability to recognize, understand, and critique these narratives.

- ART 112 - Drawing by Nature **3 Credits**
- BUS 327 - Marketing for Sustainability **3 Credits**
- ENG 140 - Food for Thought **4 Credits**
- ENG 209 - The Story and the Stone **4 Credits**
- ENG 211 - Humanity and Nature in Literature **3 Credits**
- ENG 240 - Pens and Paddles in the North Woods **4 Credits**
- ENG 318 - Nature Writers **3 Credits**
- ENG 372 - Nature & Gender in Lat Am Lit **3 Credits**
- GSC 209 - The Story and the Stone **4 Credits**
- GWS 266 - Ecofeminism **3 Credits**
- GWS 343 - Queer Ecologies **3 Credits**
- HIS 101 - United States History to 1865 **3 Credits**
- HIS 209 - Gender in the United States Landscape **3 Credits**
- HIS 241 - American Environmental History **3 Credits**
- HIS 242 - European Environmental History **3 Credits**
- HIS 266 - American Material Culture/Objects in Everyday Life and History **3 Credits**
- HIS 315 - American Foodways **3 Credits**
- HIS 325 - Nature and Nation: Environment, Art, Ideology **3 Credits**
- HIS 350 Special Topic: History of National Forests & Parks **3 Credits**
- NAS 227 - Native Foodways **3 Credits**
- NAS 260 - Indigenous Environmental Justice **3 Credits**
- NAS 265 - Indigenous Perceptions of Water **3 Credits**
- NAS 315 - American Indian Environmental Perspectives **3 Credits**
- NAS 362 - Native Women's Activism **3 Credits**
- NAS 380 - Indigenous Women Writers **3 Credits**
- NRS 365 - Conservation of Large Carnivores **3 Credits**
- OED 328 - Wilderness Writers and Philosophers **3 Credits**
- OED 363 - Apostle Islands School **4 Credits**
- PHL 226 - Environmental Ethics **3 Credits**
- PHL 262 - Environmental Philosophy **3 Credits**

- PHL 266 - Environmental Aesthetics **3 Credits**
- PHL 270 - Philosophy of Science **3 Credits**
- PSY 331 - Ecopsychology **3 Credits**
- PSY 431 - Applied Ecopsychology **4 Credits**
- REL 122 - Religions & Cultures in the Lake Superior Watershed **3 Credits**
- REL 174 - Religion and Science **3 Credits**
- REL 258 - Religion and Nature **3 Credits**
- SOC 242 - Sociology of the Environment **3 Credits**
- WRI 273 - Writing the Environmental Essay **3 Credits**

## The Science of Environmental Issues

Courses in this category emphasize a scientific perspective on the environment. Through these courses, students develop an ability to apply scientific methodologies to investigations, analyses, quantitative procedures, and understandings of environmental issues.

- BIO 128 - Natural History and Conservation in the Lake Superior Watershed **3 Credits**
- BIO 234 - Ecology **4 Credits**
- BIO 360 - Vertebrate Physiology **4 Credits**
- BIO 410 - Conservation Biology **3 Credits**
- BIO 473 - Limnology **4 Credits**
- CHM 103 - General Chemistry: The Chemistry of Food **4 Credits**
- CHM 110 - General Chemistry **4 Credits**
- CHM 145 - Atmospheric Pollution **4 Credits**
- CHM 210 - Chemistry of Natural Waters **4 Credits**
- CHM 212 - Water Quality Lab Techniques **4 Credits**
- CHM 213 - Soil Chemistry Lab Techniques **4 Credits**
- CHM 220 - Organic Chemistry I **4 Credits**
- CHM 221 - Organic Chemistry II **4 Credits**
- CHM 225 - Quantitative Analysis **4 Credits**
- CHM 240 - Inorganic Chemistry **4 Credits**
- CHM 326 - Atmospheric Chemistry **4 Credits**
- CLM 125 - Weather and Climate **4 Credits**
- CLM 244 - Understanding Climate Change **4 Credits**
- CLM 270 - Oceans and Climate **4 Credits**
- GIS 201 - Introduction to Geographic Information Systems **4 Credits**
- GIS 380 - Remote Sensing **4 Credits**
- GSC 107 - Geology and Agriculture **4 Credits**
- GSC 112 - Geoscience Issues of Lake Superior **3 Credits**
- GSC 120 - Physical Geology **4 Credits**
- GSC 233 - Earth Resources **4 Credits**
- GSC 312 - Paleoclimate: Past as Prologue **4 Credits**
- NRS 348 - Wildlife Ecology and Management **4 Credits**
- NRS 349 - Fisheries Science and Management **4 Credits**
- NRS 358 - Wetlands **4 Credits**
- NRS 363 - Fire Ecology and Management **3 Credits**
- NRS 464 - Wolf Ecology, Management, & Research **4 Credits**
- SCD 160 - Renewable Energy & Sustainable Design **3 Credits**

- SOC 325 - Environmental Health and Sustainability **3 Credits**

## Communities, Policies, and Management of Environmental Issues

Courses in this category focus on the role that communities, governments, organizations, or groups play in environmental issues. Through these courses, students develop an understanding of how these different entities function as well as an appreciation for how they might contribute to environmental issues and their resolutions.

- CHM 145 - Atmospheric Pollution **4 Credits**
- ECN 310 - Environmental Economics **3 Credits**
- EDU 210 - Teaching Environmentally **3 Credits**
- HIS 102 - United States History since 1865 **3 Credits**
- HIS 241 - American Environmental History **3 Credits**
- HIS 242 - European Environmental History **3 Credits**
- HIS 315 - American Foodways **3 Credits**
- HIS 350 Special Topic: History of National Forests & Parks **3 Credits**
- IDS 248 - Great Lakes Water Wars **3 Credits**
- IDS 334 - Sustainable Food Production **4 Credits**
- NAS 227 - Native Foodways **3 Credits**
- NAS 260 - Indigenous Environmental Justice **3 Credits**
- NAS 265 - Indigenous Perceptions of Water **3 Credits**
- NAS 306 - Global Indigenous Politics **3 Credits**
- NRS 215 - Natural Resources Policy **3 Credits**
- NRS 348 - Wildlife Ecology and Management **4 Credits**
- NRS 358 - Wetlands **4 Credits**
- NRS 363 - Fire Ecology and Management **3 Credits**
- NRS 464 - Wolf Ecology, Management, & Research **4 Credits**
- OED 221 - Group Process and Leadership **4 Credits**
- OED 261 - Foundations in Environmental Education **3 Credits**
- PHL 226 - Environmental Ethics **3 Credits**
- PHL 266 - Environmental Aesthetics **3 Credits**
- PSY 236 - Political Psychology **3 Credits**
- REL 258 - Religion and Nature **3 Credits**
- SCD 205 - Introduction to Local Economies **3 Credits**
- SCD 220 - Sustainable Community Planning **3 Credits**
- SCD 225 - Sustainable Development in the Lake Superior Watershed **4 Credits**
- SCD 230 - The Political Process **3 Credits**
- SCD 335 - Organizing Communities **3 Credits**
- SCD 342 - Policy and Econ of Climate Change **3 Credits**
- SOC 215 - Sociology of Community **3 Credits**
- SOC 242 - Sociology of the Environment **3 Credits**
- SOC 260 - Introduction to Sociology - Superior Connections **4 Credits**

## Environmental Applications

Courses in this category integrate intellectual inquiry with emotional, social, or physical engagement in nature or environmental issues. Through these courses, students develop an appreciation for ways of knowing and understanding

beyond those grounded solely in intellectual approaches. They also develop their ability to integrate theoretical and applied learning when addressing complex questions and issues.

- ART 280 - Graphic Design I **3 Credits**
- ART 306 - Art Collaborations with Nature **3 Credits**
- BIO 226 - Field Parasitology **4 Credits**
- BIO 410 - Conservation Biology **3 Credits**
- BIO 473 - Limnology **4 Credits**
- CHM 210 - Chemistry of Natural Waters **4 Credits**
- CHM 212 - Water Quality Lab Techniques **4 Credits**
- CHM 213 - Soil Chemistry Lab Techniques **4 Credits**
- CHM 321 - Advanced Organic/Inorganic Chemistry **3 Credits**
- EDU 460 - Student Teaching (EA-A) and Seminar **6 - 12 Credits**
- EDU 471 - Student Teaching (MC-EA) and Seminar **6 - 12 Credits**
- ENG 209 - The Story and the Stone **4 Credits**
- ENG 240 - Pens and Paddles in the North Woods **4 Credits**
- GSC 209 - The Story and the Stone **4 Credits**
- GSC 260 - Geology of the Lake Superior Region **4 Credits**
- GSC 284 - On the Trail of the Ice Age **4 Credits**
- GSC 482 - Wyoming Geology Field Camp **4 Credits**
- GSC 483 - Great Lakes Geology Field Camp **4 Credits**
- IDS 180 - Lake Superior Circumnavigation **4 Credits**
- IDS 243 - Sustainable Agriculture Practicum **4 Credits**
- IDS 334 - Sustainable Food Production **4 Credits**
- MET 255 - Broadcast Meteorology Practicum **3 Credits**
- MET 282 - Microclimate Field Camp **3 Credits**
- NRS 347 - Sustainable Forest Management **4 Credits**
- NRS 358 - Wetlands **4 Credits**
- OED 210 - Inclusive Outdoor Education **3 Credits**
- OED 263 - Outdoor Living Skills **4 Credits**
- OED 328 - Wilderness Writers and Philosophers **3 Credits**
- OED 332 - Winter Travel and Living Skills **4 Credits**
- OED 361 - Interpretive Program Design **3 Credits**
- OED 363 - Apostle Islands School **4 Credits**
- OED 385 - Urban Outdoor Education **3 Credits**
- OED 425 - Advanced Topics in Natural History **3 Credits**
- OED 439 - Therapeutic Principles and Practices **4 Credits**
- OED 446 - Wilderness Instructor Training **4 Credits**
- PSY 331 - Ecopsychology **3 Credits**
- PSY 345 - Cognition in the Wild **4 Credits**
- PSY 431 - Applied Ecopsychology **4 Credits**
- SCD 355 - The Just City in Practice **3 Credits**
- SCD 412 - Advanced Community Planning Studio **4 Credits**
- SCD 481 - Applied Research Practicum **4 Credits**
- SOC 242 - Sociology of the Environment **3 Credits**
- Internships or Field Experiences focused on environmental or societal issues;

**Credits / Units:** 3 or 4 credits

- SOC 325 - Environmental Health and Sustainability **3 Credits**

## Liberal Education Equivalencies

Students who enroll at Northland with college credits earned at other institutions may fulfill some or all of the liberal education requirements through transfer equivalencies. This includes both first-time freshmen who earned college credit while in high school and transfer students. Individual transfer evaluations will indicate which requirements, if any, have been met through these equivalencies.

AP and CLEP tests can be utilized to fulfill course requirements.

## Special Courses

Special courses include internships, independent studies, arranged courses, field experiences, senior theses, teaching assistantships, and research assistantships. Students may enroll in special courses provided they meet all eligibility criteria. These courses will not be added to a student's schedule until the appropriate form is completed and processed by the Registrar's Office.

To register for a special course, students must complete the appropriate registration form, available through the Registrar's Office or [my.northland.edu](http://my.northland.edu). This form needs to be completed in its entirety, including details regarding the course and the required signatures of approval. The instructor for the special course must be a member of the academic department to which the course is being assigned. The Special Course Registration Form must be turned into the Registrar's Office by the end of the add/drop period of the term in which a student will be participating in the special course.

Special courses are offered at the 200 and 400 course levels, with the exception of senior capstones, which are only offered at the 400 level. The difference between 200 and 400 level special courses is the rigor and application of skills and knowledge required to complete the course.

No more than 12 internship, field experience, research assistant, or teaching assistant credits may be applied towards requirements for the baccalaureate degree with the exception of the Outdoor Education major.

## Field Experiences and Internships

### **Registration form: Internship and Field Experience Registration**

A field experience or internship is a way to gain practical, hands-on work experience utilizing the theories and skills learned through the student's course of studies. Students may pursue such opportunities locally or elsewhere and may receive pay for their experiences. In addition to opportunities on campus, in the Chequamegon Bay area there are diverse opportunities available for student experiences with state and federal governmental agencies, non-profit organizations, for-profit organizations, tribal governments, municipalities, as well as with other organizations.

Students may receive academic credit for a field experience or internship. Students who wish to participate in either option must make arrangements with a faculty member to develop a description, goals, and evaluation criteria for the experience or internship. When a field experience or internship includes work with a cooperating organization, a supervisor from the cooperating organization must submit to the faculty member an evaluation halfway through and at the end of the student's experience to confirm that the student has met the pre-arranged criteria. The faculty member assigns a grade at the end of the experience based upon the supervisor's evaluation, a final debrief with the student, and any other work the student has agreed to submit. Students earn either a Satisfactory (S) or Unsatisfactory (U) grade. Internships and field experiences are treated like any other academic course with the work started and completed during the term in which the student is enrolled for credit.

Students should register for a field experience if the proposed experience

- will provide significant support for the cooperating organization with less focus on new learning;
- meets all the criteria for an academic experience but does not meet the criteria for internship.

Students should register for an internship if the proposed experience

- will primarily increase the student's knowledge, while benefiting the cooperating organization;
- meets all criteria developed for a certain department's internship (see website for specific internship criteria);
- will include training or mentoring in new skills and knowledge.

For more information regarding field experiences or internships, contact your faculty advisor or the Coordinator of Applied Learning.

## Independent Studies

### **Registration form: Special Course Registration Form**

Students may pursue independent studies to investigate a topic or subject area of particular interest to the student. Students who most benefit from independent studies are mature, self-disciplined, and highly motivated. Students must have specific objectives clearly defined for their independent study and work with a chosen faculty member, who will serve as a consultant and evaluator. Independent studies are only available to students in good academic standing who have a 3.0 cumulative grade point average. Students will receive a letter grade for the course.

## Teaching and Research Assistantships

### **Registration form: Special Course Registration Form**

With approval from the instructor, students may serve as teaching or research assistants for a course. As teaching assistants, students assist instructors in classroom activities, student training, or material preparation for a course in which they have particularly strong skills or experience. Students are eligible to receive some credit for these experiences, but no more than the credit value of the course. As research assistants, students perform library, laboratory, or survey research under the direction of a faculty member on an issue, topic, or project that the faculty member is investigating. Students receive letter grades for their work. Only students in good academic standing may serve as teaching or research assistants.

## Senior Capstones & Senior Theses

### **Registration form: Special Course Registration Form**

All Northland students must complete a senior capstone or senior thesis that demonstrates the composite knowledge and skills that they have acquired and developed through their collegiate studies. To fulfill this requirement, students work with faculty in their major fields of study (or take a multi-disciplinary approach) to design a project that reflects senior-level work. Projects vary across disciplines and may include in-depth research or writing and presenting a paper similar to a graduate-level thesis. Public presentations in all disciplines are encouraged so students can share their knowledge with others.

Faculty members provide guidance for and assessment of capstones and theses. Some departments offer a senior capstone or thesis class, while others require students to register independently for a capstone or thesis using the Special Course Registration Form. See the listing of courses or your faculty advisor for more information regarding capstone and thesis options.

# Arranged Courses

## **Registration form: Arranged Course Form**

An arranged course is one that appears in the Northland College catalog; however, it is being provided to a student on an individual basis due to mitigating circumstances. An arranged course is allowed only in the rare instances when a class is required for graduation but has not fit into the student's course schedule or is no longer offered. An arranged course may not be used to meet a liberal education requirement or general elective. Students must be in good academic standing and must provide a rationale for the request.

# Academic Awards and Honors

Northland College presents awards and honors to students in recognition of academic merit and achievement. Many of these accomplishments are announced at the Honors Day Convocation held the first week of April. Awards and honors are listed below.

## Dean's List

The Dean's List is computed at the conclusion of the fall and winter semesters. Full-time students (students who complete 12 or more credits during each of the fall and winter sessions) with letter grades in at least 12 credits and who earn a 3.5 grade point average with no grade less than C and no incomplete grades earn this honor.

## Academic Achievement Awards

Awards, such as the Elementary Education Program Award and Native American Studies Award for Academic Excellence, are awarded to seniors upon nomination by the program faculty members of the major. Eligibility for nomination is based on a minimum grade point average of 3.0 and significant contributions made to the major above and beyond academic contributions.

Several other awards are conferred upon students on the basis of academic merit. Monetary awards often accompany these recognitions. In some cases, a check is presented at the Honors Day Convocation. In other instances, the award is applied to the following year's tuition.

## Graduating with Honors

To be eligible to graduate with honors, students must earn a minimum of 48 letter-graded credits at Northland. The minimum requirements for the Bachelor of Arts or Bachelor of Science degree must be successfully fulfilled as stated in the student's assigned program catalog. Students will graduate with honors if they have attained an overall grade point average of 3.50 or higher. Students who earn a cumulative grade point average from 3.50 to 3.69 will graduate Cum Laude (with honor); students who earn a grade point average from 3.70 to 3.89 will graduate Magna Cum Laude (with great honor); and students who earn a grade point average of 3.90 or higher will graduate Summa Cum Laude (with highest honor). For purposes of the commencement program, honors are determined at the end of the winter semester. For purposes of the final transcript, honors are determined at degree completion.

# Alpha Chi Honor Society

Alpha Chi is a co-educational society whose purpose is to promote academic excellence and exemplary character among college and university students and to honor those who achieve such distinction. Its name derives from the initial letters of the Greek words "aletheia", meaning truth, and "xarakter", meaning character. As a general honor society, Alpha Chi admits to membership students from all academic disciplines.

Membership in Alpha Chi recognizes previous accomplishments and provides opportunity for continued growth and service. It seeks above all else to serve the needs of the students who comprise its membership. As a phrase from its constitution suggests, Alpha Chi seeks to find ways to assist its members in making scholarship effective for good.

Alpha Chi is opposed to bigotry, narrowness, and distinctions between people on any basis. Alpha Chi seeks to promote the genuine personal worth of each individual.

## Academic Calendar 2020 - 2021

### The 4-4-1 Calendar

A unique element in Northland's academic program is its calendar. The summer session is 12 weeks, fall and winter sessions are each 15 weeks, and the May session is 4 weeks in length. The summer session allows for extended time for field experiences and internships. Fall and winter sessions allow time for maturation of ideas in a program of varied courses. The shorter May session provides an opportunity for concentration through seminars, field experiences, travel abroad, independent study, and internships.

## Summer Session 2020-21 (12 Weeks)

First day of classes (Monday, 8 am)	June 8
Deadline for fall session 2019-20 incomplete grades	June 15
Last day to add courses with faculty approval (4 pm)	June 17
Last day to drop courses without record (4 pm)	June 17
Independence Day (no classes)	July 4
Last day to withdraw from courses (4 pm)	July 31
Last day of summer term	August 28
Final grades due (4 pm)	August 31

# Fall Session 2020-21 (15 Weeks)

Residence halls open for new students (per scheduled arrival)	August 22-23
Residence halls open for returning students (per scheduled arrival)	August 24-26
Last day to add courses online (midnight)	August 30
Full term & Session 1 classes begin	August 31
Last day to add Session 1 courses with faculty approval (4 pm)	September 4
Last day to drop Session 1 courses without record (4 pm)	September 4
Labor Day - classes held (administrative offices closed)	September 7
Last day to add full-term courses with faculty approval (4 pm)	September 9
Last day to drop full-term courses without record (4 pm)	September 9
Midterm grades due for Session 1 (4 pm)	September 23
Last day to withdraw from Session 1 course (4 pm)	September 30
Last day of Session 1 classes	October 13
Fall break	October 14
Midterm grades due for full-term courses (4 pm)	October 14
Session 2 courses begin	October 15
Last day to add Session 2 courses with faculty approval (4 pm)	October 19
Last day to drop Session 2 courses without record (4 pm)	October 19
Final grades due for Session 1 courses (4 pm)	October 19
Due date for prior winter term incomplete grades	October 19
Last day to withdraw from full-term courses (4 pm)	October 28
Midterm grades due for Session 2 (4 pm)	November 9
Last day to withdraw from Session 2 courses (4 pm)	November 13
Registration begins for winter and May sessions	November 16

Due date for May session 2019-20 incomplete grades	November 23
On campus instruction ends	November 24
Thanksgiving break begins	November 25
Classes resume off campus (online format)	November 30
Last day of full-term & Session 2 classes	December 2
Residence halls close for all students (7 pm)	December 2
Final grades due for full-term & Session 2 classes (4 pm)	December 7

## **Winter Session 2020-21 (15 Weeks)**

Residence halls open for returning students (8 am)	January 11
Last day to add courses online	January 19
First day of Full-term and Session 1 classes	January 20
Last day to add Session 1 courses with faculty approval (4 pm)	January 25
Last day to drop Session 1 courses without record (4 pm)	January 25
Last day to add Full-term courses with faculty approval (4 pm)	January 29
Last day to drop Full-term courses without record (4 pm)	January 29
Mid-session grades due for Session 1 (4 pm)	February 18
Last day to withdraw from Session 1 courses (4pm)	February 22
Due date for summer 2020-21 incomplete grades	March 2
Last day of Session 1 Classes	March 5
Session 2 courses begin	March 8
Last day to add Session 2 courses with faculty approval (4 pm)	March 11
Last day to drop Session 2 courses without record (4 pm)	March 11
Mid-term grades due for Full-term courses (4 pm)	March 12

Final grades due for Session 1 courses (4 pm)	March 12
Last day to withdraw from Full-term courses (4 pm)	March 26
Registration begins for summer and fall sessions 2021-22	March 29
Mid-session grades due for Session 2 (4 pm)	March 31
Good Friday (classes will be held)	April 2
Last day to withdraw from Session 2 Courses (4 pm)	April 5
Honors Day	April 8
Podding begins for those involved in May term travel courses	April 17
Last day of Full term and Session 2 classes	April 23
Final grades due for Full-term and Session 2 classes (4 pm)	April 26

## **May Session 2020-21 (4 Weeks)**

First day of classes (Monday, 8 am)	May 3
Last day to add courses with faculty approval (4 pm)	May 5
Last day to drop courses without record (4 pm)	May 5
Last day to withdraw from courses (4 pm)	May 14
Last day of classes/session	May 28
Commencement	May 29
Residence halls close (12 pm)	May 30
Memorial Day	May 31
Final grades due (4 pm)	June 1