

Course Descriptions

ACCT 200. Elements of Accounting I. 3 Hours.

Basic principles of the complete accounting cycle with emphasis on current assets; property, plant, and equipment; and current liabilities.

ACCT 201. Elements of Accounting II. 3 Hours.

A continuation course of acct 200 with emphasis on partnerships, corporations, and management accounting. Prerequisite: Student must complete ACCT 200 before enrolling in this class.

ACCT 299. Special Topics in Accounting. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

ACCT 300. Payroll and Bookkeeping Services. 3 Hours.

Study on payroll taxes and sales tax with an emphasis on compliance and application. Prerequisite: Acct 200.

ACCT 301. Intermediate Accounting I. 3 Hours.

Begins with a review of the accounting process and the conceptual framework underlying financial accounting. It proceeds to an in-depth study of cash, time value of money, receivables, and inventory. Prerequisites: ACCT 201 and BOTE 247.

ACCT 302. Intermediate Accounting II. 3 Hours.

Continues the intermediate sequence with in-depth coverage of operational assets (tangible and intangible), liabilities (current and long-term), stockholders' equity, and investments. Prerequisite: Acct 301.

ACCT 303. Intermediate Accounting III. 3 Hours.

ACCT 303 Intermediate Accounting III 3cr. Concludes the intermediate sequence with in-depth coverage of the statement of cash flows, pensions and post-retirement benefits, leases, earnings per share, financial statement analysis, accounting for income taxes, accounting changes and error analysis, revenue recognition, and financial reporting. Prerequisite: ACCT 302.

ACCT 315. Legal Environment of Business. 3 Hours.

Includes the nature and function of law; contracts and private property as basic concepts in free enterprise; and the legal system and evolution of attitudes and law regarding marketing functions and governmental regulation imposed on business activities. Prerequisite: Restricted to students with sophomore, junior, or senior status.

ACCT 321. Managerial Accounting. 3 Hours.

Emphasizes structuring and analyzing accounting data for management decisions related to manufacturing, merchandising, and service entities. Prerequisite: Student must complete ACCT 201 before enrolling in this class. Corequisite: Student must complete MGMT 301 before or at the same time as this course.

ACCT 325. Government/Not-For-Profit Accounting. 3 Hours.

Covers accounting principles for state and local governmental units, universities, hospitals, and other not-for-profit organizations. Topics include budgetary accounting, the preparation of reports and statements, and the use of special funds. Prerequisite: Student must complete ACCT 301 before enrolling in this class.

ACCT 331. Business Law I. 3 Hours.

Topics include contracts (formation, performance, rights, and remedies), negotiable instruments, and legal matters relating to the financial/banking community. Prerequisite: Restricted to students with junior or senior status.

ACCT 332. Business Law II. 3 Hours.

Topics includes Uniform Commercial Code (Art. 2, sales contracts), Uniform Commercial Code (Art. 9, secured transactions), and employment/agency law. Prerequisite: ACCT 331.

ACCT 351. Fraud Examination. 3 Hours.

This course is designed to provide the student with an introduction to the skills necessary to detect, investigate, and prevent fraud and white-collar crime. The material covered in this course should be of interest to accountants, auditors, fraud investigators, loss prevention specialists, attorneys, educators, criminologists, or business owners/managers. The purpose of this course is to 1) educate the student about both the pervasiveness of and the causes of fraud and white-collar crime in our society, 2) explore the methods of fraud detection, investigation, and prevention, and 3) increase the student's ability to detect material financial statement fraud. Prerequisite: ACCT 200.

ACCT 360. Accounting Information Systems. 3 Hours.

Emphasizes how accounting information systems function in today's business environment. Manual and computer systems will be used to study the processes and procedures by which an organization's financial information is accumulated, classified, processed, analyzed, and communicated. Topics include business cycles, controls, integrated accounting software, spreadsheets, and relational databases. Prerequisites: Students must complete ACCT 201 and BOTE 247 before enrolling in this class.

ACCT 394. Independent Study General Acct. 1-4 Hour.

This course provides flexible instruction in a variety of accounting areas. Consent of instructor required. This course may be repeated up to sixteen credits or sixteen attempts which ever comes first.

ACCT 401. Advanced Accounting I. 3 Hours.

Advanced Accounting I addresses issues related to business combinations and consolidated financial statements as well as partnership accounting. Prerequisite: ACCT 302.

ACCT 411. Taxation of Individuals. 3 Hours.

Provides a study of federal taxation principles and theories relating to individuals with emphasis on the determination of gross income and taxable income. Taxation of self-employment income will be examined and taxation of property transactions is studied thoroughly. Students apply these principles by preparing federal income tax returns and by performing tax research. Prerequisite: Student must complete ACCT 201 before enrolling in this class.

ACCT 412. Taxation of Property Transactions and Business Entities. 3 Hours.

Provides a study of federal taxation principles and theories relating to corporations, partnerships, LLCs, and S Corporations from formation through dissolution. Students will apply these principles by preparing various types of federal income tax returns and tax planning. Prerequisite: Student must complete ACCT 411 before enrolling in this class.

ACCT 415. Energy Law. 3 Hours.

Energy Law is an ever-changing discipline that emphasizes how both individuals and businesses interact with the law related to the energy industry on a day-to-day basis. This course will focus on the relationships between energy corporations and the individual landowner or service provider as well as the relationships between environmental laws and production. Prerequisite: Student must complete ACCT 300 before enrolling in this class.

ACCT 430. Auditing/Assurance Concepts and Practices. 3 Hours.

Introduces audit theory, standards, responsibilities, and processes. Study of audit principles and practices including evidence gathering, internal controls, sampling and testing, report writing, ethics, and legal liabilities. Prerequisite: Student must complete ACCT 302 before enrolling in this class.

ACCT 431. Advanced Auditing and Assurance. 3 Hours.

Discusses compilations, reviews, examinations, and other assurance services. Explores contemporary auditing and assurance issues including researching these issues. Expands on audit sampling and testing. Prerequisite: Student must complete ACCT 430 and MATH 210 before enrolling in this class.

ACCT 480. Controllership. 3 Hours.

Examines the role of a controller as a vital member of an organization's management team. Students exercise judgment in solving accounting-related problems by synthesizing and applying knowledge gained from previous business coursework. The focus will be placed on cost management, budgeting, organizational behavior, ethics, cash management, policy making, internal control, performance measurement, compensation and benefits, accounting information systems, and tax compliance. Prerequisites: Students must complete ACCT 321, have senior status, and complete the Department of Business core courses before enrolling in this class. Pre-corequisite: Student must complete ACCT 303 before or at the same time as this course.

ACCT 499. Special Topics. 1-8 Hour.

Topics are variable. Offerings include visiting professors, experimental offerings of new courses, or one-time offering and current topics. This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

AI 101. AI Everywhere & For Everyone. 3 Hours.

This course provides an overview of artificial intelligence for students of any major. It surveys types of artificial intelligence, techniques, tools, history, trends, and ethical considerations. The course includes the practical and responsible use of AI tools relevant to your future.

AI 201. AI for Personal and Professional Use. 3 Hours.

Students will explore and use AI tools relevant to their personal, academic, and professional interests.

AI 301. Projects in AI. 3 Hours.

Students will select and apply an AI approach to a project of their choice. Prerequisite: AI 101 or AI 201.

ART 112. Print, Web, and Social Media Graphics. 3 Hours.

This course introduces students to forms and techniques of social media graphics. Students will explore stylistic elements that are documented in current trends and established methods of design. Students will learn to craft and analyze a variety of inventive texts for traditional and non-traditional forms of print, web, and social media. Six studio hours per week.

ART 122. Two-Dimensional Design. 3 Hours.

A basic course in the study of two-dimensional design for the studio artist. Six studio hours per week.

ART 124. Three-Dimensional Design. 3 Hours.

A basic course in the study of three-dimensional design for the studio artist. Six studio hours per week.

ART 130. Drawing I. 3 Hours.

Introduction to basic drawing techniques through a variety of materials. Six studio hours per week.

ART 132. Technical Drawing. 3 Hours.

This course introduces students to the fundamentals of technical drawing as applied visual communication. Students will learn to represent three-dimensional forms through precise two-dimensional drawings using standard conventions such as orthographic and isometric drawing, perspective, dimensioning, scale, and tolerances. This studio hand-drawing experience strengthens visual reasoning, spatial understanding and interdisciplinary communication. Six studio hours per week.

ART 140. Arts, Crafts, and Jewelry. 3 Hours.

Instruction including, but not limited to, introductory techniques in fibers, glass, and metal processes. Six studio hours per week.

ART 180. Digital Photography. 3 Hours.

Introduction to digital photography. Digital SLR camera and tripod required. Six studio hours per week.

ART 188. Fall Visual Arts Seminar I. 1 Hour.

Introduction of departmental requirements, procedures, and opportunities. This fall semester offering is required for all art majors and minors or consent of instructor.

ART 189. Spring Visual Arts Seminar I. 1 Hour.

Introduction of departmental requirements, procedures, and opportunities. This spring semester offering is required for all art program majors or consent of instructor.

ART 197. Introduction to Art Careers. 2 Hours.

Course introduces career opportunities for artists and requires investigation of the creative workforce.

ART 201. Art Methods for Elementary Education. 3 Hours.

Methods of teaching art in elementary education. Six studio hours per week.

ART 207. Digital Tools: Imaging and Print. 3 Hours.

An exploration of Adobe's Photoshop, Illustrator, and InDesign. Covers software programs and peripherals designed for imaging and print, building basic skills, and knowledge of computer programs. Six studio hours per week. Prerequisite: ART 112.

ART 210. Art History: Prehistoric through Middle Ages. 3 Hours.

A survey of western art from Prehistoric through Middle Ages.

ART 211. Art History: Renaissance to Contemporary. 3 Hours.

A survey of western art from Renaissance to present.

ART 213. Graphic Design I. 3 Hours.

Introduction to the elements and practice of typography with emphasis on typefaces and letterforms in graphic design. Six studio hours per week. Prerequisite: ART 112 or consent of the instructor.

ART 220. Painting I. 3 Hours.

Introduction to basic painting through a variety of materials. Six studio hours per week. Prerequisite: ART 122 and ART 130 or consent of instructor.

ART 231. Figure Drawing I. 3 Hours.

Introduction to basic figure drawing with a live model. Six studio hours per week. Prerequisite: ART 130 or consent of instructor.

ART 250. Ceramics I. 3 Hours.

Introduction to basic ceramic techniques. Six studio hours per week.

ART 265. Sculpture I. 3 Hours.

Introduction to basic sculpture materials and techniques. Six studio hours per week. Prerequisite: ART 122 and ART 124 or consent of instructor.

ART 270. Printmaking I. 3 Hours.

Introduction to basic printmaking techniques and materials. Six studio hours per week. Prerequisites: ART 122 and ART 130 or consent of instructor.

ART 274. Paper Works. 3 Hours.

Introduction to works on or of paper including book arts, papermaking, and letterpress printing. Six studio credits per week.

ART 288. Fall Visual Arts Seminar II. 1 Hour.

A continuation of VA Seminar, including preparation for portfolio reviews. This fall semester offering is required for all art majors. Prerequisite: Art 189 or consent of instructor.

ART 289. Spring Visual Arts Seminar II. 1 Hour.

A continuation of VA Seminar, including presentation of Second Year Portfolio Review. This spring semester offering is required for all art majors. Prerequisite: ART 288 or consent of instructor.

ART 296. Study Tour. 1-3 Hour.

MSU faculty-led study trips to appropriate locations. Will include additional requirements beyond travel itself. This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

ART 299. Special Topics. 1-8 Hour.

Topics are variable. Offerings include visiting professors, experimental offerings of new courses, or one-time offerings of current topics. This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

ART 310. Art History: Modernism and Postmodernism. 3 Hours.

A survey of Modernism and Postmodernism in Art.

ART 314. Art History Topics. 3 Hours.

A survey of art history with variable topics. Course topics could include but are not limited to: History of Architecture, Women in the Visual Arts, Native American Art, or Non-Western Art History. This course can be repeated up to five times, or for a maximum fifteen credits, whichever limit is hit first.

ART 320. Advanced Drawing and Painting. 3 Hours.

This advanced art course will require common student assignments to demonstrate experience and expertise in drawing and painting. It will also facilitate continued growth by requiring advanced problem-solving assignments in either medium. Prerequisites: ART 130 and ART 220 or consent of instructor. This course can be repeated up to three times, or for a maximum nine credits, whichever limit is hit first.

ART 345. Introduction to Museum Studies. 3 Hours.

This course introduces students to the history, key debates, and contemporary practices of museums and galleries with a focus on exhibit design, education, conservation, and collection management. Six studio hours per week.

ART 350. Advanced Ceramics and Sculpture. 3 Hours.

This advanced art course will require common student assignments to demonstrate experience and expertise in ceramics and sculpture. It will also facilitate continued growth by requiring advanced problem-solving assignments in either medium. Prerequisites: ART 250 and ART 265 or consent of instructor. This course can be repeated up to three times, or for a maximum nine credits, whichever limit is hit first.

ART 360. Advanced Graphic Design and Illustration. 3 Hours.

This advanced art course will require common student assignments to demonstrate experience and expertise in graphic design and illustration. It will also facilitate continued growth by requiring advanced problem-solving assignments in either medium. ART 112 and ART 213 or consent of instructor. This course can be repeated up to three times, or for a maximum nine credits, whichever limit is hit first.

ART 370. Advanced Photography and Printmaking. 3 Hours.

This advanced art course will require common student assignments to demonstrate experience and expertise in photography and printmaking. It will also facilitate continued growth by requiring advanced problem-solving assignments in either medium. Prerequisite: ART 180 and ART 270 or consent of instructor. This course can be repeated up to three times, or for a maximum nine credits, whichever limit is hit first.

ART 375. Professional Practices for Artists. 3 Hours.

The course will present professional practices for artists. It will include freelance, small business, and studio management practices. Curriculum includes studio skills and an entrepreneurship project. Six studio hours per week.

ART 388. Fall Visual Arts Seminar III. 1 Hour.

A continuation of VA seminar, including exhibition preparation. This fall semester offering is required for all art majors.

ART 389. Spring Visual Arts Seminar III. 1 Hour.

A continuation of VA Seminar, including exhibition preparation. This spring semester offering is required for all art majors.

ART 390. Art Methods. 4 Hours.

Discussion and interactive experiences developing a K-12 art curriculum. Peer teaching and classroom management, organizational techniques, and practicum. Prerequisites: ART 122, ART 130, ART 140, ART 201, and admittance to teacher education.

ART 420. Advanced Study in Art History. 1-6 Hour.

Open to advanced students for independent research in art history. A preliminary outline of proposed research is required. Prerequisite: Consent of instructor. This course can be repeated up to six times, or for a maximum six credits, whichever limit is hit first.

ART 488. Fall Visual Arts Seminar IV. 1 Hour.

A continuation of VA seminar with emphasis on professional practice. This fall semester offering is required for all art majors.

ART 489. Spring Visual Arts Seminar IV. 1 Hour.

A continuation of VA Seminar with continued emphasis on professional practice. This spring semester offering is required for all art majors.

ART 492. Capstone Experience. 2 Hours.

Provides for individual research culminating in a capstone exhibition, portfolio, paper, or project with guidance from a capstone committee. Prerequisite: ART 388 or consent of instructor. Corequisite: ART 488 or consent of instructor. Student must be at junior or senior status before enrolling. This course gathers a student cohort in the fall semester (2 credits) and continues in the spring semester in ART 493 (2 credits) with a culminating experience. The Capstone Experience requirement is ART 492 and ART 493 combining for 4 credit hours. Four studio hours per week. Prerequisite: Student must be junior or senior status before enrolling in this course. Corequisite: Students must enroll in ART 388 concurrently or have instructor consent.

ART 493. Capstone Experience. 2 Hours.

Provides for individual research culminating in a capstone exhibition, portfolio, paper, or project with guidance from a capstone committee. Prerequisite: ART 389 or consent of instructor. Corequisite: ART 489 or consent of instructor. Student must be at junior or senior status before enrolling. This course advances a student cohort from the fall semester (ART 492, 2 credits) and finishes in the spring semester (ART 493, 2 credits) with a culminating experience. The Capstone Experience requirement is ART 492 and ART 493 combining for 4 credit hours. Four studio hours per week. Prerequisite: ART 492 or junior or senior status before enrolling in this course. Corequisite: Students must enroll into ART 489 concurrently or have instructor consent.

ART 494. Independent Art Studio. 1-4 Hour.

This course provides flexible instruction in a variety of studio disciplines. Art majors and minors only or with consent of instructor. This course can be repeated up to six times, or for a maximum sixteen credits, whichever limit is hit first.

ART 496. Study Tour. 0-6 Hour.

MSU faculty-led study trips to appropriate locations. The course requirements will include additional requirements beyond the travel itself. This course can be repeated up to four times, or for a maximum twenty-four credits, whichever limit is hit first.

ART 497. Art Internship IV. 1-6 Hour.

This internship is for advanced placement with a host. Prerequisite: Restricted to Art Majors or Art Minors. This course can be repeated up to twelve times, or for a maximum twelve credits, whichever limit is hit first.

ART 499. Special Topics. 1-8 Hour.

Topics are variable. Offerings include visiting professors, experimental offerings of new courses, or one-time offerings of current topics. This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

ART 88. Fall Visual Arts Seminar V. 0 Hours.

A continuation of VA seminar. Restricted to art majors and minors. Mandatory for Art Education, Bachelor of Arts, Bachelor of Fine Arts, and Arts Administration majors after completion of ART 489 or with consent of instructor. This course can be repeated up to three times, or for a maximum zero credits.

ART 89. Spring Visual Arts Seminar V. 0 Hours.

A continuation of VA Seminar. Restricted to art majors and minors. Mandatory for all Art Education, Bachelor of Arts, Bachelor of Fine Arts, and Arts Administration majors after completion of ART 88 or with consent of instructor. This course can be repeated up to three times, or for a maximum zero credits.

ART 95. Art Experience. 0 Hours.

Students will assist and contribute to an art experience. The course experience will require students to facilitate and support the production of art by working with guest artists and/or contributing art to an event. This course can be repeated up to four times, or for a maximum zero credits.

ASC 87. College Writing Prep. 3 Hours.

A precollege writing course that prepares students for ENGL 110. Provides instruction in writing error-free sentences, solid paragraphs, and well-organized essays. No college credit is obtained for this course.

ASC 88. Composition Lab. 1 Hour.

This course provides supplemental and developmental instruction for students taking ENGL 110 and is taken during the same semester as ENGL 110. No college credit is obtained for this course. Prerequisite: ACT score of 14-17 or qualifying Accuplacer WritePlacer score.

ASC 92. Beginning Algebra. 3 Hours.

This course is a beginning-level algebra course offered online. Topics covered include fundamental operations with fractions, absolute value, factoring, radicals and exponents, and an introduction to linear equations and inequalities. This class does not satisfy college graduation requirements for math.

ASC 93. Intermediate Algebra. 4 Hours.

Topics include properties of the real number system, polynomial factoring, linear equations and inequalities, polynomial and rational expressions, exponents, radicals, and radical expressions. This class does not satisfy college graduation requirements for math. Prerequisite: Qualifying math placement score. Corequisite: ASC 93L if a placement score qualifies for Elementary Algebra.

ASC 93L. Intermediate Algebra Lab. 2 Hours.

Intermediate-level lab provides students in ASC 93 with an extended experience in a lab setting working on algebra skills. Lab meets four hours per week. This class uses S/U grading. Required Corequisite: ASC 93L if a placement score qualifies for Elementary Algebra. Withdrawing from this class will also withdraw you from ASC 93.

ATR 207. Prevention and Care of Injuries. 2 Hours.

Provides a basic understanding of common injuries. Focus will be on the evaluation and course of treatment of the injuries presented.

ATR 208. Taping and Bracing. 2 Hours.

Application in the techniques of taping and bracing athletic injuries.

ATR 270. Upper/Low Extremity Evaluation. 3 Hours.

The purpose of this course is to provide students with the knowledge and skills to perform evaluation of upper and lower extremity (UE/LE) injuries or conditions. Students will be able to perform an observation, history, palpate, perform MMT, perform a neurological evaluation, evaluate ROM, and perform special and functional tests for the UE/LE. Prerequisites: ATR 207, KIN 431, and BIOL 220.

ATR 410. Advanced Athletic Injuries and Modalities. 3 Hours.

Provides specific manual examinations involved in the evaluation of athletic injuries. Use of therapeutic modalities in the treatment of athletic injuries will also be studied. Students will take part in laboratory work in order to facilitate hands on experience. Prerequisite or Corequisite: ATR 207.

BADM 299. Special Topics in Bus Admin. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

BADM 424. Logistics & Channel Management. 3 Hours.

Explores channels of distribution considering behavioral, social, and economic aspects of the distribution system to include transportation, inventory management, order processing, purchasing, warehousing, material handling, packaging, customer service, and product scheduling. Prerequisite: MRKT 321.

BADM 496. Study Abroad. 3 Hours.

MSU faculty-led trips to appropriate locations. Will include additional requirements beyond travel itself. May be repeated for credit for different countries. This course can be repeated up to three times, or for a maximum nine credits, whichever limit is hit first.

BADM 499. Special Topics in Business Administration. 1-8 Hour.

Topics are variable. Offerings include visiting professors, experimental offerings of new courses, or one-time offerings of current topics. This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

BIOL 103. Intro to Medical Lab Science. 1 Hour.

Designed to acquaint first-year (freshmen) medical technology students the depth and breadth of this field. Students visit medical technology departments at local hospitals and clinics. Students are introduced to the details of the entire program/major and opportunities in the profession.

BIOL 111. Concepts of Biology. 4 Hours.

This course is an overview of the science of biology designed for non-majors. The course will focus on a comprehensive survey of modern biology with an emphasis on enhancing the science literacy of the college-educated student. Topics will include, but not limited to: cell biology, genetics, evolution by natural selection, systematics, and the impact of human activity on the biosphere. Where appropriate, topics will be illustrated with examples of the human animal. Lecture, 3 hours; laboratory, 2 hours.

BIOL 115. Concepts of Anatomy and Physiology. 4 Hours.

This is an introductory level course in the basic principles of anatomy and physiology as they relate to the structure and function of the human body. It is designed for physical education and corporate fitness majors. This course does not count toward any biology major. Lecture, 3 hours; laboratory, 2 hours.

BIOL 127. Environmental Biology. 4 Hours.

Designed to acquaint students with major principles of ecology and the nature of human interaction with the living world. The course will focus on how human action influences the ecology of the earth. Ecological concepts covered will include community structure, predator prey interactions, competition, tropic levels, energy flow, the carbon cycle, and adaptation. In this light, students will examine specific issues and problems including those of land use choices, natural resource exploitation, biodiversity, industrialization, and urbanization.

BIOL 150. General Biology I. 4 Hours.

Introduction to fundamental concepts of biology at the level of the cell including: bioenergetics, cell structure, physiology principles, genetic function, and inheritance. Lecture, 3 hours; laboratory, 2 hours.

BIOL 151. General Biology II. 4 Hours.

This introductory biology course is intended for biology majors. An introduction to the biology of living organisms, exploring plant and animal evolution, diversity, structure, function, and ecology. Lecture, 3 hours; laboratory, 2 hours.

BIOL 154. Introduction to Botany. 4 Hours.

Introduction to the biology of plants emphasizing evolution and diversity, plant anatomy and development, water and mineral nutrition, photosynthesis, and plant ecology. Lecture, 3 hours; laboratory, 2 hours.

BIOL 202. Introductory Microbiology. 4 Hours.

A survey of microbial cell biology, microbial genetics, microbial interaction with humans, and the impact of microorganisms on the environment. Lecture, 3 hours; laboratory, 2 hours.

BIOL 215. Genetics. 4 Hours.

Introduction to principles of genetics including: inheritance, DNA and chromosomes, gene regulation, evolution, and genetic engineering. Lecture, 3 hours; laboratory, 3 hours. Prerequisite: BIOL 150.

BIOL 220. Anatomy and Physiology I. 4 Hours.

Structure and function of the human body dealing with the chemical, cellular, and tissue levels of organization and integumentary, skeletal, muscular, and nervous systems. Lecture, 3 hours; laboratory, 3 hours.

BIOL 221. Anatomy and Physiology II. 4 Hours.

Structure and function of the human body dealing with the digestive, cardiovascular, respiratory, lymphatic, endocrine, reproductive, and urinary systems; special senses, metabolism, fluid and electrolyte, and acid-base balance. Lecture, 3 hours; laboratory, 3 hours. Prerequisite: BIOL 220.

BIOL 240. Biometry. 4 Hours.

The course will cover introductory statistic concepts in a form designed specifically for biology majors. It is a practical, software-based examination of concepts of sampling, hypotheses testing (non-parametric and parametric), descriptive statistics, contingency, correlation, analysis of variation, linear models, and basic multivariate techniques. Only biological, real-world data will be used. The course will concentrate on underlying principles, applicability, and practical use of methods covered. Prerequisites: Students must complete Math 103 or higher and either BIOL 150 OR BIOL 151.

BIOL 250. Cellular Biology. 4 Hours.

An advanced cell biology designed for biology majors with an emphasis on biological chemistry, membrane and transport, cellular energy metabolism, protein synthesis, and modification, subcellular organelle structure and function, and the cell biology of the nucleus. Lecture, 3 hours; laboratory, 2 hours. Prerequisite: BIOL 150.

BIOL 299. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

BIOL 301. Evolution. 3 Hours.

This course details the processes that influence evolutionary change. An emphasis is placed on the methodology for (1) inferring phylogenetic relationships (i.e., history), (2) determining the relative influences of natural selection and genetic drift, and (3) exploring the conditions that lead to various modes of speciation. Topics covered include population genetics, speciation, microevolution vs. macroevolution, punctuated equilibrium, life history theory, and modes of selection. Lecture, 3 hours. Prerequisite: BIOL 150.

BIOL 302. General Microbiology. 4 Hours.

Students will develop a working understanding of the structure, growth, nutrition, metabolism, genetics, diversity, and ecology of Bacteria, Archaea, and viruses. Prerequisite: Students must complete BIOL 215 before enrolling in this course.

BIOL 310. Ethnobotany. 4 Hours.

This course will focus on the diversity of plant uses, covering approaches of diverse cultures, including introduction to medicinal plants, plant uses specific to North Dakota, and Native American plant use. Lecture, 3 hours, Lab 3 hours.

BIOL 325. Entomology. 4 Hours.

Classification, taxonomy, morphology, identification, life histories, interrelationships, and economic importance of insects. Lecture, 3 hours; laboratory, 3 hours. Prerequisite: Student must complete BIOL 151 before enrolling in this class.

BIOL 330. Biogeography. 3 Hours.

This course will describe the spatial patterns in the distribution of plants and animals and will examine how different factors influence these patterns. Lecture, 3 hours.

BIOL 330L. Biogeography Lab. 1 Hour.

This course is a corequisite for BIOL 330. The course exposes students to experiential field-based surveys of various ecosystems throughout North America and various international destinations. Travel to the field areas associated with this course will be required.

BIOL 335. Comparative Vertebrate Anatomy. 4 Hours.

A study of the structure of vertebrates, with a focus on revealing the evolutionary relationships of major vertebrate groups. The laboratories will involve detailed examination and dissection of a broad range of vertebrate animals, including lampreys, sharks, amphibians, reptiles, and cats. Lecture, 3 hours; Lab, 3 hours. Prerequisites: BIOL 151 or 151H.

BIOL 338. Animal Behavior. 4 Hours.

This course focuses on evolutionary, ecological, and mechanistic approaches to provide a framework for understanding the science of animal behavior. Course topics include methods for studying animal behavior, behavioral genetics, communication, learning and cognition, antipredator behavior, dispersal and migration, habitat selection, mating behavior, parental care, and others. Prerequisite: BIOL 151.

BIOL 340. Systematic Zoology. 4 Hours.

Evolution, classification, taxonomy, and identification of invertebrates and vertebrates. Lecture, 3 hours; laboratory, 3 hours. Prerequisite: Students must complete BIOL 151 before enrolling in this class.

BIOL 343. Natural Resource Policy. 3 Hours.

This course examines the historic evolution, current trajectory, and future trends of wildlife, fisheries, as well as natural resources policy, laws, and mandates. Special emphasis will be placed on current laws and administrative agencies from a global, national, regional, and statewide standpoint. In addition, the course will survey various natural resources agencies in North Dakota and address the growing importance of non-governmental organizations in policy formation.

BIOL 346. Developmental Biology. 4 Hours.

This course covers the morphological changes occurring during the development of select animals, as well as the current understanding of underlying molecular mechanisms that regulate development and produce those morphological changes. Lecture, 3 hours; laboratory, 3 hours. Prerequisite: Student must complete BIOL 215 before enrolling in this class.

BIOL 347. General Ecology. 4 Hours.

Plants and animals in their environment. An ecosystem approach is used. Lecture, 3 hours; laboratory, 3 hours. Prerequisites: Student must complete either BIOL 151 or BIOL 154 before enrolling in this class.

BIOL 349. Plant Physiology. 4 Hours.

Physiological processes of plants with special emphasis on nutrition, metabolism, growth, and development. Lecture, 3 hours; laboratory, 3 hours. Prerequisites: BIOL 150.

BIOL 350. Freshwater Biology. 4 Hours.

Biological, chemical, and physical characteristics of inland waters including origins, interrelationships, and the effect of civilization. Lecture, 3 hours; laboratory, 3 hours. Prerequisite: Students must complete BIOL 142 or BIOL 150 or BIOL 151 or BIOL 154 before enrolling in this class.

BIOL 355. Ecology of Fishes. 3 Hours.

This course examines worldwide fish populations in relation to various ecosystems, microhabitats, environmental degradation, connectivity, and physical forcing factors that drive both marine and aquatic systems. There will be a special emphasis on the behavioral evolution, reproductive strategies, and early-life history dynamics of fishes. Various aquatic and marine fish assemblages and their population structures will also be covered.

BIOL 360. Morphology of Vascular Plants. 4 Hours.

Structure and development of vascular plants with special emphasis on evolutionary trends. Lecture, 3 hours; laboratory, 3 hours. Prerequisite: Students must complete BIOL 154 before enrolling in this class.

BIOL 361. Environmental Health and Microbiology. 4 Hours.

This course explores major concepts regarding how the environment affects human health, with an emphasis on microbiology. The course will include a survey of environmental toxicology, aquatic microbiology, food, drug, and agricultural microbiology and safety, and animal health and zoonotic diseases. For each of these major concepts, students will learn techniques for testing for microbial contamination, as well as the federal and local regulations put in place to aid in maintaining healthy environments for human interaction. Lecture, 3 hours; Laboratory, 3 hours.

BIOL 394. Independent Study General Biol. 1-4 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

BIOL 401. Population Genetics. 4 Hours.

This course explores the mechanics of evolution from the viewpoint of allelic frequencies. It begins with the basic theory of Hardy Weinberg equilibrium and expands that theory to embrace linkage disequilibrium, selection in single-locus and multi-focus systems, genetic drift, and the effects of mutation rates, population size, and migration on the genetic structure of populations. Exposure is given to classic ideas (e.g., shifting balance theory and runaway sexual selection) and to applications of theory (e.g., breeding designs, conservation genetics). Lecture, 3 hours; recitation, 1 hour. Prerequisites: BIOL 215.

BIOL 402. Bioinformatics. 4 Hours.

Computational methods for study of biological sequence data in comparative biology and evolution. Analysis of genome content and organization. Techniques for searching sequence databases, pairwise and multiple sequence alignment, phylogenetic methods, and methods for pattern recognition and functional inference from sequence data. Prerequisites: Students must take DATA 240 as a pre-requisite or have permission from the instructor to take this course.

BIOL 405. Prokaryotic Physiology. 4 Hours.

In-depth examination of the physiology, metabolism, and genetics of bacteria and archaea. Lecture, 3 hours; Laboratory, 3 hours. Prerequisites: BIOL 215 and BIOL 151 or BIOL 202 or BIOL 154.

BIOL 420. Co-Op Practicum. 1 Hour.

A cooperative program with industry, state, and federal agencies for an in-depth study of a specialized aspect of biology. Students spend approximately 25 clock hours per semester hour for the practicum. Prerequisites: 2 years of biology or consent of biology coordinator. This course can be repeated up to four times.

BIOL 430. Pre-Veterinary Practicum. 3 Hours.

This program is designed to give MSU students a hands-on experience in veterinary medicine. The students spend about 80 hours per semester for the practicum. This course can be repeated up to three times. Prerequisite: 2 years of biology.

BIOL 431. Wildlife Management and Conservation. 4 Hours.

This course examines the principles and practices of wildlife management and conservation. Course topics will focus on human management of wildlife and their habitats and explore theory and methods for managing wildlife resources. Prerequisite: Students must complete BIOL 151 before enrolling in this class. Corequisite: Students must complete or be simultaneously enrolled in BIOL 347 before enrolling in this class.

BIOL 439. Conservation Biology. 3 Hours.

A course that integrates information from the disciplines of ecology, genetics, biogeography, economics, environmental policy, and ethics towards understanding how to maintain and restore biological diversity. Prerequisite: Students must complete BIOL 151 before enrolling in this class.

BIOL 440. Pre-Med Practicum. 3 Hours.

This program is designed to give MSU students a broad exposure to the workings of medical facilities and of the work of medical professionals. Students spend 70-80 hours per semester in the various departments of the local hospital and surrounding clinics. Students are given the opportunity to shadow physicians and other health care professionals. Opportunities vary each semester, but can include rotations in the ER/ED, OR, and laboratory. Students can request concentration in areas of interest. The course is co-coordinated by a biology professor on campus and at Trinity Hospital. Prerequisite: Consent of instructor. Restricted to Biology or Chemistry Majors and senior status.

BIOL 445. Cancer Biology. 3 Hours.

This course describes the major aspects of cell cycle control and relates them to the multiple cell cycle defects associated with cancer. Lecture, 3 hours. Prerequisites: BIOL 215.

BIOL 448. Systematic Botany. 4 Hours.

Classification and taxonomy of plants with emphasis on local flora. Lecture, 3 hours; laboratory, 3 hours. Prerequisite: BIOL 360.

BIOL 450. Parasitology. 4 Hours.

Morphology, taxonomy, and life histories of the endemic, exotic, and zoonotic parasites of the animal kingdom. Diseases caused by parasites are also presented. Lecture, 3 hours; laboratory, 3 hours. Prerequisite: Restricted to students who are Medical Laboratory Science majors.

BIOL 452. Ichthyology. 4 Hours.

This course addresses the biology, evolution, and ecology of freshwater and marine fishes. Special emphasis will be on the anatomy and physiological adaptations, as well as the conservation of taxa in both freshwater and marine systems. In lab, students will learn to archive and identify regional fishes collected during field trips. Special emphasis will be placed on the biodiversity and taxonomy of regional fishes. Students will also be expected to present a detailed description of a particular fish species of their choosing during the semester. Prerequisite: Students must complete BIOL 150 before enrolling in this class.

BIOL 455. Hematology. 4 Hours.

Study of the blood and hematologic disorders including anemia, leukemia, and other blood dyscrasias. Lecture, 3 hours; laboratory, 3 hours. Prerequisite: Restricted to students who Medical Laboratory Science majors.

BIOL 458. Anatomy of Seed Plants. 4 Hours.

Development of cells, tissues, and organs in seed plants. Lecture, 3 hours; laboratory, 3 hours. Prerequisites: BIOL 150.

BIOL 460. Herpetology. 4 Hours.

Herpetology is the study of reptiles (exclusive of birds) and amphibians; this includes extant groups (e.g., frogs) and extinct groups (e.g., dinosaurs). This course begins with the phylogeny, history, and taxonomy of "herps" (i.e., reptiles and amphibians) and progresses to coverage of physiology, ecology, and behavior. Prerequisite: BIOL 151.

BIOL 462. Ornithology. 4 Hours.

The evolutionary origin, characteristics, ecology, and distribution of recent birds. Course topics will include origin and diversity, form and function, behavior, reproduction, and ecology and conservation. Field work in addition to regular laboratory periods may be required. Prerequisite: Students must complete BIOL 151 before enrolling in this class.

BIOL 464. Mammalogy. 4 Hours.

The evolutionary origin, characteristics, ecology, and distribution of recent mammals. Course topics will include mammalian phylogeny and diversification, structure and function, adaptive radiation and diversity, behavior and ecology, and special topics. Labs will focus on the identification, collection, and preservation of specimens. Field work in addition to regular laboratory periods may be required. Prerequisite: Students must complete BIOL 151 before enrolling in this class.

BIOL 465. Immunology. 4 Hours.

Principles and techniques of immunology, including innate and adaptive immune responses. Special topics include immunology-based research techniques, tumor immunology, and immune dysfunction. Lecture, 3 hours; laboratory, 3 hours. Prerequisites: BIOL 150.

BIOL 470. Histology. 4 Hours.

The course presents the microscopic anatomy of vertebrates with an emphasis on humans. Structure-function relationships at the cell and tissue levels are highlighted. Cell and tissue anatomy comprise the structural basis of normal physiology. Knowledge of histology is essential for understanding disease mechanisms in terms of altered structure and function of the body. Students are expected to identify cells, tissues, and organs and understand the structural basis of their function. Emphasis is placed on microscopic study in laboratories. Lecture, 2 hours; laboratory, 4 hours. Prerequisite: BIOL 150 or BIOL 220.

BIOL 475. Clinical Microbiology. 4 Hours.

Isolation, identification, and clinical application of pathogenic microorganisms. Lecture, 3 hours; laboratory, 3 hours. Prerequisite: BIOL 202.

BIOL 480. Molecular Biology. 4 Hours.

This course covers a variety of topics concerning the macromolecules of living cells, focusing on nucleic acids and proteins. Major areas of study include: DNA replication and transcription, protein synthesis (translation), and comparison of processes in prokaryotic and eukaryotic cells. The latter part of the course will focus on mechanisms of gene expression, the molecular genetics of cancer, and applied molecular biology. Lecture, 3 hours; laboratory, 3 hours. Prerequisite: Student must complete BIOL 215 before enrolling in this class.

BIOL 482. Neurobiology. 4 Hours.

This course covers the organization and function of the nervous system. Students will learn about the nervous system at the anatomical, neurophysiological, and molecular level. The course starts with the study of neuron at the cellular level and how they communicate chemically as individual cells and as a group. We then cover topics in sensation and how the nervous system commands the body. In the later part of the semester, we will examine the neurobiology of human behavior, such as motivation, attention, etc., and mental illnesses. Lecture, 3 hours. Laboratory, 3 hours. Prerequisites: Students must complete BIOL 150, CHEM 121, and CHEM 122 before enrolling in this course. Student must also have sophomore status or higher.

BIOL 492. Directed Research. 1-5 Hour.

The faculty of the Department of Biology considers a valuable component of the curriculum. The content and extent of research projects are determined by the student and a faculty sponsor. The research may be in the lab or field and is intended to help the student develop a greater appreciation of the scientific process. While publication is not a requirement, all projects have a goal of producing publishable results. A successful experience in research can be an asset for graduate studies and many careers in biology. This course can be repeated up to eight times, or for a maximum eight credits, whichever limit is hit first. Prerequisites: BIOL 150 and BIOL 151 or BIOL 202 or BIOL 154.

BIOL 499. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

BOTE 152. Keyboarding II. 3 Hours.

Development of speed and accuracy in keyboarding straight copy and production activities. Emphasis placed on formatting and keying various business documents including memos, letters, reports, and tables from straight copy, rough drafts, and unorganized material. Student must complete at least one semester of high school keyboarding before enrolling in this class. Offered online only.

BOTE 247. Spreadsheet Applications. 3 Hours.

Intermediate and advanced use of application software for creation of spreadsheets, graphs, databases, and macros. Integration with other software applications is also reviewed.

BUS 120. Fundamentals of Business. 3 Hours.

Students will develop an understanding of the abilities and skills required for success in future business and nonbusiness careers and endeavors within society. This course may not be taken by business majors during their final two semesters. An excellent course for beginning students and nonbusiness majors.

BUS 154. Word Processing and Presentation Software. 3 Hours.

Focuses on an intermediate level of Microsoft Word and Microsoft PowerPoint. The focus of the Word portion is business correspondence, reports, tables, mail merge, templates, and styles; the focus of PowerPoint is slide creation and delivery of business presentations utilizing appropriate text, graphics, objects, and pictures. Microsoft Office Specialist (MOS) certification is encouraged after completion of this course. Prerequisites: Previous computer experience.

BUS 269. Professional Ethics. 3 Hours.

This course will examine ethical issues faced by businesses broadly defined as compliance-based ethics and value-based ethics including topics such as distributive justice, capitalism, decision-making, corporate responsibility, social responsibility, governance, whistle-blowing, hiring policies, codes of ethics, advertising, safety, environmental impacts, and foreign business practices.

BUS 300. Prior Learning Assessment. 1 Hour.

Prior Learning Assessment Portfolio Development is a one-credit experience where students develop one or more Prior Learning Portfolios. A Prior Learning Portfolio is a collection of materials, reflections, and artifacts compiled to demonstrate previous non-academic experience and knowledge relevant to a specific course in your academic degree plan. A portfolio consists of multiple required components. Each portfolio component plays a role in demonstrating mastery of course objectives. Portfolio components will illustrate knowledge, comprehension, application, analysis, synthesis, and evaluation of prior learning.

BUS 305. Business Communication. 3 Hours.

Focuses on professional communication in written, oral, and nonverbal channels. Emphasis on message planning in the digital age and with diverse populations, workplace communication, business report writing and presenting, and employment communication. Prerequisite: ENGL 110.

BUS 391. Methods of Teaching Business. 3 Hours.

Emphasizes the competencies needed for preservice teachers that may apply to the teaching of any business course. Special emphasis placed on classroom management strategies, unit development, lesson planning, evaluation, and assessment option, along with other activities pertaining to the actual teaching experience. Offered on campus fall odd years.

BUS 420. Supply Chain and Operations Management. 3 Hours.

Introduces the concepts, issues, and problems of supply chain and operations management. Processes are analyzed and solutions are recommended. Prerequisites: BOTE 247, MGMT 301 and MRKT 321.

BUS 494. Directed Research. 3 Hours.

Under the supervision of a Department of Business faculty member, students shall conduct a research project using the steps in the scientific method including design, execution, analysis, and communication of findings. The project must be aligned with their Department of Business program. Based on a topic mutually agreed upon between student and a supervising faculty, students will demonstrate that they (i) know the literature; (ii) have chosen and applied an appropriate methodology; and (iii) have made an appropriate contribution for the benefit of the identified audience. This course is intended to substitute for a senior-level course in the student's academic discipline. Department consent is required and senior status.

BUS 495. Seminars in Leadership Development. 3 Hours.

This is an applied leadership course that emphasizes effective, compassionate, and ethical leadership within the leader/follower dynamic. Students shall apply techniques relevant to authentic leadership including self-awareness, self-management, environmental situations, social awareness and responsibility, and relationship management. A service-learning project is integrated into this applied experience. Prerequisites: Instructor consent is required.

BUS 497. Internship. 1-12 Hour.

Internship allows the student to combine an on-the-job learning experience with related academic coursework. Restricted to any College of Business major or minor and consent of the Internship Coordinator. This course can be repeated up to three times, or for a maximum of twelve credits, whichever limit is hit first.

CHEM 110. Survey of Chemistry. 4 Hours.

An introductory course covering topics that concern students' everyday lives. This course is designed for liberal arts and general education students. The course consists of an introduction to the science and includes historical perspectives. The course is intended to present chemistry in its broad culture, social, and economic context. Lecture, 3 hours; laboratory, 2 hours.

CHEM 118. General, Organic, and Biological Chemistry. 4 Hours.

Presents knowledge of concepts of chemical principles in general inorganic chemistry, organic chemistry, and biochemistry. A basic introduction to measurements, ionic and covalent compounds, chemical calculations, states of matter, energy, solutions, reactions, chemical bonding, equilibrium, kinetics, thermodynamics, acid-base reactions, nuclear reactions, structures and simple reactions of common organic functional groups, carbohydrates, lipids, amino acids, and proteins. Designed for those in allied health fields. Lecture, 3 hours; laboratory, 2 hours.

CHEM 121. General Chemistry I. 5 Hours.

This course is the first of a two-semester sequence primarily intended for students majoring in science and science-related fields. Topics likely to be covered in this semester include: matter, measurement, atoms, ions, molecules, reactions, chemical calculations, thermochemistry, bonding, molecular geometry periodicity, and gases. Lecture, 3 hours; recitation, 1 hour; laboratory, 3 hours. Corequisite: MATH 103 or MATH 107 or MATH 146 or MATH 165.

CHEM 122. General Chemistry II. 5 Hours.

This course is the second of a two-semester sequence primarily intended for students majoring in science and science-related fields. Topics likely to be covered in this semester include: intermolecular forces, liquids, solids, kinetics, equilibria, acids, bases, solution chemistry, precipitation, thermodynamics, and electrochemistry. Lecture, 3 hours; recitation, 1 hour; laboratory, 3 hours. Prerequisite: CHEM 121.

CHEM 127. Chemistry of the Environment. 4 Hours.

This course is unique in that it uses topics of concern/interest to facilitate the learning and understanding of the scientific concepts behind them. The course will use current environmental topics, such as our atmosphere, global warming, energy, the ozone layer, and water quality, to bring forward important chemical concepts as naming, bonding, stoichiometry, energetics, pH, and chemical reactions. The course will also bring an interdisciplinary flavor to the material, discussing such topics as the carbon cycle and biological contributions, how earth processes may affect the quality of our drinking water, and the effect of acid rain on the earth (both in terms of the geology and the ecosystem).

CHEM 240. Fundamentals of Organic Chemistry. 5 Hours.

Theory of bonding and structure in organic molecules and their reactions. An emphasis on functional groups related to biological molecules. This course presents the minimum preparation for CHEM 480. Offered in the spring. Lecture, 4 hours; laboratory, 2 hours. Prerequisite: CHEM 122.

CHEM 299. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

CHEM 330. Quantitative Analysis. 4 Hours.

A course in quantitative chemistry including gravimetric and volumetric analysis, statistical treatment of data, and an introduction to some instrumental analysis. Lecture, 3 hours; laboratory, 3 hours. Prerequisites: CHEM 122 and BIOL 240 or DATA 211 or MATH 210.

CHEM 341. Organic Chemistry I. 5 Hours.

A study of different classes of organic functional groups, their nomenclature, reactions, and properties. An introduction to Infrared and Nuclear Magnetic Resonance Spectroscopy is included. Offered in the fall. Lecture, 3 hours; laboratory, 3 hours; recitation, 1 hour. Prerequisite: CHEM 122.

CHEM 342. Organic Chemistry II. 5 Hours.

A continuation of CHEM 341. A study of the chemical and mechanistic properties of organic functional groups. Offered in the spring. Lecture, 3 hours; laboratory, 3 hours; recitation, 1 hour. Prerequisite: CHEM 341.

CHEM 360. Principles of Physical Chemistry. 4 Hours.

This course is designed for students interested in chemical education at the secondary level. Topics include gas laws, thermodynamics, equilibria, kinetics, quantum mechanism, and spectroscopy. Offered alternate years. Lecture, 3 hours; laboratory, 3 hours. Prerequisites: CHEM 230 and MATH 107.

CHEM 380. Environmental Chemistry. 4 Hours.

The course examines the interaction of chemical substances with the environment. Emphasis is placed on water quality and air quality. Offered alternate years. Lecture, 3 hours; laboratory, 3 hours. Prerequisite: CHEM 230.

CHEM 381. Fundamentals of Biochemistry. 3 Hours.

Introductory exploration of the major concepts in biochemistry. Topics covered include: protein structure and function; DNA, RNA and protein translation; enzyme reactions and regulation strategies; carbohydrates structure and metabolism; lipids structure and metabolism; the principles of cellular metabolism. Prerequisite: CHEM 240 or CHEM 341.

CHEM 420. Inorganic Chemistry. 3 Hours.

An advanced course in inorganic chemistry, including theories of covalent and ionic bonding, crystalline structure, coordinate covalent bonding, group theory, and coordination chemistry. Offered alternate years. Lecture, 3 hours. Prerequisite: CHEM 330.

CHEM 422. Inorganic Synthesis. 1 Hour.

Applied techniques in inorganic synthesis and compound characterization. Offered on demand. Laboratory, 3 hours. Prerequisite: Consent of instructor. Corequisite: CHEM 420.

CHEM 430. Instrumental Analysis. 5 Hours.

A survey of instrumental methods used for chemical analysis. These methods include molecular absorption, atomic absorption and emission, fluorescence and phosphorescence infrared absorption chromatography, nuclear magnetic resonance, and mass spectrometry. Offered alternate years. Lecture, 3 hours; laboratory, 6 hours. Prerequisite: CHEM 341.

CHEM 436. Industrial Chemical Analysis and QA/QC. 4 Hours.

A study of methods for chemical analysis and quality assurance/quality control of industrial products and processes. Methods studied will include spectroscopy, gas and liquid chromatography, mass spectroscopy, and metal analysis. Aspects of quality assurance, calibration, and method validation will also be discussed and applied. Lecture, 2 hours; laboratory, 4 hours. Prerequisites: CHEM 330. CHEM 430 recommended.

CHEM 440. Organic Spectroscopy. 3 Hours.

Identification of organic molecules via spectroscopic methods. Methods studied include infrared, UV-visible, proton and carbon-13 nuclear magnetic resonance, and mass spectrometry. Offered alternate years. Lecture, 2 hours; laboratory, 2 hours. Prerequisite: CHEM 342.

CHEM 442. Medicinal Chemistry. 3 Hours.

This course is designed for students interested in medicinal applications of organic chemistry and for students interested in continuing their education in medicine, pharmacy, and other health-related fields. The course offers the study of major classes of medicinal compounds presented in a broad historic and cultural perspective of the development of medicinal chemistry from the first attempt to synthesize quinine in the early XIX century to modern days' antibiotics. Offered alternate years. Lecture, 3 hours. Prerequisite: CHEM 342.

CHEM 461. Physical Chemistry I. 4 Hours.

This course is the first of a two-semester sequence of calculus-based physical chemistry for chemistry majors. Topics covered include thermodynamics and equilibrium. Offered alternate years. Lecture, 3 hours; laboratory, 3 hours. Prerequisites: CHEM 122, MATH 166, and PHYS 252.

CHEM 462. Physical Chemistry II. 4 Hours.

A continuation of CHEM 461. Topics include: quantum mechanics, molecular orbital theory, group theory, and spectroscopy. Offered alternate spring terms. Lecture, 3 hours; laboratory, 3 hours. Prerequisite: CHEM 461.

CHEM 480L. Biochemistry Laboratory. 2 Hours.

A course covering theory and laboratory experience with a variety of techniques used in biochemistry. Laboratory, 6 hours. Prerequisite: CHEM 230. Corequisite: CHEM 481.

CHEM 481. Biochemistry I. 3 Hours.

A rigorous study of the major concepts of biochemistry, including detailed description of: DNA/RNA structure and function; protein structure, purification and function; enzyme mechanisms, kinetics and regulation; carbohydrate structures and basic functions; lipid structures and basic functions; mechanisms of cellular signaling. Lecture, 3 hours. Prerequisite: BIOL 150 and CHEM 240 or CHEM 342.

CHEM 482. Biochemistry II. 3 Hours.

An detailed study of biochemical metabolism, with a particular focus on human metabolism. Principles of metabolism, as well as carbohydrate, lipid and protein metabolic pathways with a special emphasis on metabolic regulation and integration. Lecture 3 hours; Prerequisite CHEM 481.

CHEM 494. Directed Research in Chemistry. 1-6 Hour.

Students conduct research under the direction of a faculty mentor. The general topic and specific goals and activities are agreed upon by the student and the mentor. The number of credits is proportional to the time committed to the research. This course can be repeated up to six times, or for a maximum six credits, whichever limit is hit first.

CHEM 497. Internship in Chemistry. 1-4 Hour.

A cooperative occupational training program in the field of chemistry or a related area. The course may be repeated in the same or different position. This course can be repeated up to four times, or for a maximum eight credits, whichever limit is hit first. Prerequisite(s): Departmental approval and student must be a Chemistry or Composite Science major. Student must be at Junior or Senior status.

CHEM 499. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

CIS 123. Technology-Personal Development. 3 Hours.

Introduction to technology for personal development. Emphasis placed on how to leverage technology to achieve goals and improve quality of life.

CIS 185. Fundamentals of IT and Security. 3 Hours.

This course provides a foundational understanding of IT and cybersecurity, equipping students with essential skills to manage and secure computing environments. Through hands-on labs and simulations, students will learn about hardware, network setup, operating systems (Linux, MacOS, and Windows), and cybersecurity practices. Emphasis is placed on configuring devices, implementing security measures, managing user accounts, authentication, and system maintenance, thus preparing students for entry-level IT roles and further study.

CIS 220. Managing Computer Information Systems. 3 Hours.

This course offers an engaging introduction to information systems and development concepts and explores how technology is shaping modern organizations and society. Students will learn the essentials of how technology supports business strategy. Centered around the key elements of information systems-people, software, hardware, data, and processes-this course demonstrates how these components come together to create innovation, efficiency, and a competitive edge.

CIS 244. IT Security and Information Assurance. 3 Hours.

Designed to explore hardware, software, processes, communications, applications, policies, and procedures with respect to organizational IT Security and Risk Management. This course will increase students' understanding of the broad areas of cybersecurity along with the best practices for personal, professional, corporate, financial, and government protection strategies.

CIS 258. Networking Essentials. 3 Hours.

This course offers a comprehensive introduction to the principles of networking, providing students with essential knowledge and practical skills needed for entry-level IT roles. Topics include network architectures, devices, protocols, addressing, configuration, troubleshooting, and basic network security practices. Through hands-on labs and exercises, students will gain experience in setting up and managing networks across various platforms. The course culminates in a capstone project where students demonstrate their proficiency with the concepts and skills covered throughout the course. Students will have the opportunity to earn the Cisco Certified Support Technician (CCST) certification in networking at the conclusion of the course.

CIS 261. Windows Administration. 3 Hours.

Provides the knowledge and skills needed to administer Windows Operating Systems, including installing, configuring, and managing both client and server computers. Learn planning and installation of the appropriate operating systems, configuration of system components and peripherals, and computer virtualization platforms in a variety of Windows environments.

CIS 299. Special Topics. 1-3 Hour.

This course can be repeated up to six times, or for a maximum six credits, whichever limit is hit first.

CIS 310. Agile Project Management and Collaboration. 3 Hours.

The course is designed to examine the processes, methods, techniques, and tools that organizations use to manage their information systems projects utilizing a systematic methodology for initiating, planning, executing, controlling, and closing projects. This course also focuses on collaboration within an organization, including culture, virtual team development and member roles, collaborative communication, and collaborative tools and technology.

CIS 315. Documentation and Content Management. 3 Hours.

The Technical Documentation and Content Management course provides a comprehensive understanding of creating, organizing, and maintaining technical documentation using content management systems (CMS). It covers the principles of writing clear, concise, and user-friendly documentation, focusing on different formats such as manuals, help guides, and online knowledge bases. Students learn to structure content for various audiences, implement version control, and collaborate within teams using CMS platforms. The course also explores best practices for formatting, accessibility, and localization, ensuring documents are accessible to diverse users. Emphasis is placed on understanding user needs. By the end of the course, students gain the skills to manage large-scale content projects, improve workflow efficiency, and deliver high-quality documentation that enhances user experience and supports organizational goals.

CIS 316. AI and Business. 3 Hours.

The purpose of this course is to provide the students with a comprehensive introduction to the recent developments in AI through the coverage of fundamental AI concepts and practical applications of these concepts in business.

CIS 340. Enterprise Architecture. 3 Hours.

Designed to explore the design, selection, implementation, and management of enterprise resource planning (ERP) solutions for information systems. The focus is on applications and infrastructures as applied within the business. The course will also address outsourcing and use of a cloud environment. Prerequisite: CIS 220.

CIS 399. Special Topics. 1-3 Hour.

This course can be repeated up to six times, or for a maximum six credits, whichever limit is hit first.

CIS 445. IT Audit Controls. 3 Hours.

Designed to explore the fundamental concepts of the information technology audit and control functions. The focus of this course is to gain an understanding of information controls, the types of controls and their impact on the organization, and how to manage and audit the technology in an organization. Offered online fall semesters, and on campus spring semesters. Prerequisite: Students must complete CIS 244 before enrolling in this course.

CIS 452. Client/Server Database. 3 Hours.

Designed to explore the issues of managing database systems as essential organizational resources. Students learn the enterprise-data-architecture components, data storage configurations, and information retrieval methods.

CIS 453. Systems Analysis. 3 Hours.

This course focuses on systematic methods for analyzing business problems or opportunities and determining how computer-based technologies can address them. Students will learn to identify and articulate business requirements for technology solutions, evaluate alternative approaches to acquiring the necessary technological capabilities, and define the requirements for effective information systems solutions.

CIS 454. Data and Information Management. 3 Hours.

Provides the students with an introduction to the core concepts in data and information management. It is centered around the core skills of identifying organization information requirements, modeling them using conceptual data modeling techniques, converting the conceptual data modes into relational data models, and verifying its structural characteristics with normalization techniques, and implementing and utilizing a relational database.

CIS 467. Data Governance. 3 Hours.

This course emphasizes the importance of understanding policy and governance concerns with regards to data creation, access, ownership, and use. Students will gain an understanding of crucial data policy and governance principles, as well as emergent issues. Students will consider data governance and policy from a social, political, ethical, and legal perspective. Students will explore how socio-technical systems and data flows impact data policy and governance practices. Additionally, students will explore data policy and governance from various perspectives and context.

CIS 470. Projects in CIS. 3 Hours.

This is the culminating experience for all CIS majors. The application of concepts learned from courses taken in the Information Systems core and related courses are applied to real world projects. Students may substitute CIS 497 Internship, by completing at least 3 credits. Restricted to students with senior status.

CIS 497. Internship. 1-9 Hour.

Internship allows the student to combine an on-the-job learning experience with related academic coursework. This course can be repeated up to three times, or for a maximum nine credits, whichever limit is hit first. Prerequisite: Restricted to CIS majors.

CIS 499. Special Topics. 1-3 Hour.

Topics will vary from year to year. This course can be repeated up to six times, or for a maximum six credits, whichever limit is hit first.

CJ 201. Introduction to Criminal Justice. 3 Hours.

Survey of U.S. Criminal Justice system, including law, law-making and court decisions, law enforcement, courts and prosecution, corrections, juvenile justice, and selected challenges in the field of criminal justice. In this course students will learn all the basics to comprehend in fundamental terms the entire Criminal Justice System. Knowledge of this basic information is essential for studying particular segments of Criminal Justice in other courses in the department's curriculum.

CJ 226. Introduction to Criminal Investigation. 3 Hours.

This course provides a broad examination of the basic principles involved in conducting a criminal investigation. Specifically, the students in this course learn about the general modus operandi of different types of criminals in committing; violent crimes, property crimes, organized crimes, sex crimes, cybercrimes, and several others in addition to gaining knowledge and skills to carry out basic processes of investigating these crimes. Furthermore, the course explores issues like reporting and documenting crimes and crime scenes, forensic examinations, interviews, and interrogations, intelligence gathering and security, as well the search warrant and search process. Prerequisite: CJ 201.

CJ 227. Crimes Against Children. 3 Hours.

This course explores child abuse and neglect as major types of crimes committed against children. Considering the fact that processing these types of crimes requires a set of specific knowledge and skills, this course primarily intends to teach students about the methods of identifying victims, mandatory reporting requirements, specialized techniques of investigation, and interviewing children. In addition, this course intends to provide students a broader perspective on understanding the social and individual dynamics of these types of crimes as well as potential policies, strategies, and programs to prevent them.

CJ 229. Interviewing and Interrogation. 3 Hours.

This course aims to help students to gain a set of essential knowledge and practical skills to carry out interviews and interrogation for investigative and legal purposes as used in law enforcement, probation, corrections, juvenile justice, homeland security, and in other areas of application. Specifically, it covers crucial interpersonal communication skills as well as methods and techniques for understanding the psychological, ethical, and legal aspects of obtaining information from subjects. Prerequisite: CJ 201.

CJ 265. Statistical Literacy for Criminal Justice. 3 Hours.

The field of criminal justice has in recent decades shifted to an evidence-based approach to policing, sentencing, and corrections. This course will teach a practical understanding of statistics and probabilities used in Criminal Justice to better understand best practice. Students will learn how to read and understand criminal justice program analysis, crime statistics, criminal probabilities, and statistical significance. Prerequisite: CJ 201.

CJ 299. Special Topics. 1-8 Hour.

Independent investigations of topics of special interest related to criminal justice. Topics may vary to reflect contemporary criminal justice issues. This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first. Prerequisite: CJ 201.

CJ 300. Policing. 3 Hours.

The broader objective of this course is to help students to gain knowledge and develop an intellectual perspective on the structure, role, and organization of policing in a democratic and multi-cultural society. Specifically, the course examines the historical, philosophical, social, legal, and political aspects of law enforcement as well as current and future trends, research, and practices that are developed for its overall functions. Prerequisite: CJ 201.

CJ 302. Use of Force in Policing. 3 Hours.

This course will examine the origins of police use of force to include a review of case law and department policy involving the various use of force levels by law enforcement. Students will research and review specific instances where the use of force by law enforcement have occurred. The course will include an examination of the subculture of policing and the situational factors affecting an officer's use of force and as a victim of violence. The course will review of the investigatory and judicial process after a law enforcement use of force incident and the statistical information involving the use of force by law enforcement. Prerequisite: CJ 201.

CJ 320. Community Corrections. 3 Hours.

This course analyzes community corrections with a comprehensive study of probation, parole, and intermediate sanctions. The history of community corrections as well as the modern state of community corrections are examined. Students will critically analyze community-based corrections through an evidence-based practice approach. Students will identify challenges as well as examine the effectiveness of management techniques and implementation of community corrections. This course will include in-depth discussion of community corrections from the view point of individuals sentenced to community corrections, practitioners in the field of community corrections, as well as society.

CJ 330. Criminological Theory. 3 Hours.

This course intends to help students to gain an intellectual perspective on the nature of criminal behavior through which a comprehensive understanding regarding the existing and potential practices of the criminal justice system can be developed. This course examines positivist and classical perspectives of criminological theory regarding why people are committing crimes. More specifically, it explores legal, biological, social, and psychological correlates of criminal behavior. Prerequisite: CJ 201.

CJ 332. Restorative Justice. 3 Hours.

This course examines the philosophy, ideals, and practice of Restorative Justice. Students will have in-depth discussions examining what restorative means, what justice means, and how restorative justice programs fulfill or don't fulfill these concepts. This course will analyze restorative justice programs for both juveniles and adults and students will evaluate the effectiveness of these programs. Students will critically evaluate how society responds to crime and whether restorative justice programs can provide an alternative to punishment-based sanctions. Prerequisite: CJ 201.

CJ 340. Juvenile Justice System. 3 Hours.

This course will cover the breadth of the Juvenile Justice System in the United States of America. Students will examine the juvenile justice system from its inception in the United States to the modern era of juvenile justice. Students will engage in a critical examination of all aspects of juvenile justice, including policing juveniles, juvenile courts, juvenile sanctions, and the rights of juveniles. We will explore the philosophy of *parens patriae* and examine how well the juvenile justice system has maintained its goal of rehabilitation. Prerequisite: CJ 201.

CJ 344. Media, Internet, and Crime. 3 Hours.

Media, Internet, and Crime enables students to understand how mass media presents crime, criminals, and the U.S. criminal justice system - policing, prosecution, courts, and corrections. The focus of this course is the historical evolution of media (sound, print, visual, comic books, film, television, video games, recorders) and the impact of the computer and the Internet as it applies to dissemination of crime-related information. This course will also attempt to dispel common misconceptions about the mass media's effects on crime and justice. Prerequisite: CJ 201.

CJ 345. Policy Issues in Criminal Justice. 3 Hours.

Assessment of the development, process, efficiency, and politics of criminal justice policy. Emphasis on analyzing the formulation, implementation, and evaluation of criminal justice policy, including, for example, contemporary urban policing, problem-solving courts, corrections and reentry, juvenile justice policy, immigration policy, and others. Prerequisite: CJ 201.

CJ 346. Crime and Intelligence Analysis. 3 Hours.

In this course, students will examine the crime analysis function within the law enforcement organization. Students will learn how to develop, implement, and manage a dynamic crime analysis program. Study will relate to the differences between crime patterns, series, trends, and monitoring criminal actions to forecast future crimes. Prerequisite: CJ 201.

CJ 347. Digital Forensics. 3 Hours.

In this course, students will learn the fundamental process of analyzing data collected from electronic devices (including computers, media, and other digital evidence). Students will become familiar with proper techniques and tools utilized for securing, handling, and preserving digital and multimedia evidence. Students will utilize examination and chain of custody forms, as well as prepare crime scene and digital acquisition reports related to administrative, civil, and criminal investigations. Prerequisite: CJ 201.

CJ 348. Legal and Ethical Issues in Criminal Justice. 3 Hours.

This course explores a wide range of legal philosophies and ethical issues in decision making and agency operations. Included are conflict in standards, decision making, and operational priorities during routine and crises situations, professionalism in recognizing and dealing with questionable behavior of individuals, and the consequences of failing to deal effectively with them. Prerequisite: CJ 201.

CJ 361. Class and Race in Criminal Justice. 3 Hours.

In this course students will evaluate whether the criminal justice system works the same for all individuals. Class differences in policing practices, court decisions, sentencing, and the way laws are written will be discussed as well as how society responds to harm when the perpetrator is an individual versus a large corporation. Racial differences in how the criminal justice system affects populations disproportionately to other racial groups will be discussed as well as the historical use of the criminal justice system as a way to control racial populations. Prerequisite: CJ 201.

CJ 362. Gender Issues in Criminal Justice. 3 Hours.

This course is a comprehensive examinations of gender differences in all aspects of Criminal Justice. Students will critically analyze gender differences in victimization, offending, theories of offending, international crimes, policing, courts and sentencing, corrections, and being a criminal justice practitioner. Prerequisite: CJ 201.

CJ 363. Human Trafficking. 3 Hours.

Human trafficking, a form of modern-day slavery, is examined to give students a global and local perspective on this growing epidemic. Primary forms of human trafficking, sex trafficking, and forced labor will be examined. This course will address the specific needs (medical, psychological, social) and vulnerabilities of human trafficking victims. Identification of human trafficking crimes, traffickers, and the impact of this crime on the global economy will be examined. Topics discussed consist of national and international anti-trafficking policies; prevention and intervention strategies; promising practices to combat human trafficking; responses of law enforcement, courts, and service providers; organizational challenges; and the cost of trafficking to human wellbeing. Current events will help depict the evolution of human trafficking and teach of the impact of this crime. Political and policy issues related to trafficking will be discussed.

CJ 364. Cybercrimes. 3 Hours.

The major objective of this course is to prepare students for their future careers in the field of criminal justice or related areas by providing essential knowledge with the major concepts, trends, and issues regarding crimes perpetrated with computers. This course will be a general survey of cybercrime where the following areas will be covered during the course; - Strategies utilized by criminals to access computers as targets (access offenses, interception of data, etc.) - Fraud and related issues on cyberworld - Content-related offenses (pornography, gambling, etc.) - Offenses against the person (harassment, etc.) - Major principles and procedures in the investigation of cybercrimes - Legal and jurisdictional matters. Prerequisite: CJ 201.

CJ 365. Mass Shootings. 3 Hours.

When a mass shooting happens, the news media is flooded with headlines and information about the shooters, victims, and acts themselves. What is absent in the news reporting are any concrete details that serve to inform how prevalent these mass shootings really are (or are not), what legitimate causes for concern are, and how likely an individual is to be involved in such an incident. This course tackles common misconceptions about mass shootings by researching the realities of such events in empirical evidence. Exploration of the history of mass shootings will be involved to fully understand the progression of these incidents. Consideration will be given to international reach, the potential warning signs, characteristics of the shooter, and how evidence associated with the events can provide clues into why they occurred. Local and national responses (law enforcement, politicians, media, etc.) will be examined in consideration with gun control legislation and mental health care. Prerequisite: CJ 201.

CJ 366. International Crime. 3 Hours.

This course is an introduction to international crime and international criminal justice. Issues discussed include topics like globalization and globalized crime, international criminal law, international and transnational crimes, contemporary slavery, human smuggling, and human trafficking. The course should be viewed in the context of the phenomenon of globalization and the need for knowledge of other cultures - including cultures of law and legal systems - as crucial in order to be able to meaningfully and respectfully interact with other nations of the world. Prerequisite: CJ 201.

CJ 367. Sex Crimes and Offenders. 3 Hours.

This course explores the topics of defining sexual deviancy, dysfunction, typology, and disorders. Evaluation of how the Criminal Justice System responds to sex crimes and sex offenders will be discussed for policing and prosecuting sexual harm; correctional management and civil commitment; assessing and treating sex offenders; and community supervision and reentry issues. The course will provide an overview of laws, public policy, and sex offender legislative action as well as public awareness, victim advocacy, and prevention. Prerequisite: CJ 201.

CJ 368. Campus Crime. 3 Hours.

This course will give students a comprehensive understanding of campus crime and victimization. Special attention will be given to understanding the scope of the crime problem nationally and within North Dakota with a focus on victims of sexual assault. The course will also actively research intervention strategies, prevention policies, and the role of the Clery Act, Title IX investigation and adjudication, student and campuses responses. Prerequisite: CJ 201.

CJ 375. Gangs. 3 Hours.

Explores gang phenomena in U.S.; concentrates in research about formation and gang related violence including the various criminological theories that explain the social, economic, political, and environmental reasons for the rise of gangs in various American urban centers. Prerequisite: CJ 201.

CJ 380. Corrections. 3 Hours.

The course begins with an examination of the history of corrections, correctional philosophies, and sentencing practices that affect institutional release. A deeper examination is conducted of probation and intermediate sanctions, jails, prisons, parole, and reentry. Additional topics include special-category offenders, classification systems, and the death penalty. Principles of effective intervention, along with the risk, need, and responsivity model, are discussed to help understand the overall function of corrections. Prerequisite: CJ 201.

CJ 381. Institutional Corrections. 3 Hours.

This course will examine the various issues in prisons and jails in the U.S. Past and current literature will be discussed regarding institutional corrections and participants in prisons and jails, including inmates, officers, and administrators. The explored issues include the purposes of incarceration, differences between jails and prisons, adaptation to life in prison for inmates, differences between male and female inmate experiences, correctional officers, prison violence, relationships in prison, and prisoners' rights. Prerequisite: CJ 201.

CJ 382. Correctional Rehabilitation. 3 Hours.

Various issues related to the implementation and effectiveness of correctional treatment approaches and programs will be presented in this course. This course will cover specific correctional programs and therapeutic interventions, the risk/needs/responsivity model for effective correctional programming, and correctional assessment and classification. Most common targets for correctional interventions and the application of those interventions to special populations (e.g., mentally ill, juvenile offenders) will be explored. Prerequisite: CJ 201.

CJ 383. Offender Risk Assessment and Typology. 3 Hours.

Almost all correctional settings, institutional or community-based, rely on offender assessment to guide practices with offenders. This class will provide a hands-on approach to conducting numerous actuarial risk assessments commonly used in correctional practice, such as the Level of Service Inventory-Revised (LSI-R). Students will learn what actuarial risk assessments are, how validation of assessments are completed, and the barriers of offender typology in actuarial risk assessments (i.e., sexual offenders, female offenders, violent offenders). Prerequisite: CJ 201.

CJ 384. Special Correctional Populations. 3 Hours.

This course provides an introduction to special correctional populations including: sexual offenders, drug offenders, female offenders, those with mental illness, those with learning disabilities, and others. Various definitions of these offenders will be examined as well as the theories behind their criminal behavior. Appropriate assessment, placement, and treatment of special correctional populations will guide the course. Prerequisite: CJ 201.

CJ 385. Terrorism and Homeland Security. 3 Hours.

This course has two major components: First, it explores terrorism from an international and national perspective, and it examines the social, political, and cultural reasons for terrorism. In addition, students learn about different types of terror and terrorist organizations existing in different countries and regions around the world. The second part of this course is dedicated to an introduction to homeland security. Students learn about what constitutes homeland security as a concept as well as the practical operations and the history and legal foundations of the agencies responsible for maintaining homeland security. Prerequisite: CJ 201. This course is a prerequisite for Advanced Homeland Security.

CJ 387. Capital and Corporal Punishment. 3 Hours.

In this course, students will examine the moral and ethical arguments around the history and use of corporal and capital punishment. Students will review and discuss the major United States Supreme Court rulings involving the death penalty, including method of execution, who is eligible for execution, due process, and who is exempt from execution. Prerequisite: CJ 201.

CJ 388. Societal Reentry from Incarceration. 3 Hours.

Almost every individual sentenced to prison is released back into society at some point. This course will examine that process from the perspective of the individual leaving prison, parole officers, and society to better understand this process. Students will critically analyze parole, prison reentry programs, recidivism rates, and the concept of never-ending punishment.

CJ 390. Criminal Justice in Indian Country. 3 Hours.

Course examines historical and contemporary issues of crime, delinquency, justice, and public safety on American Indian Reservations in the US. Specific focus will be given to tribal justice systems; tribal interactions with Federal Justice Organizations (FBI, Federal Courts and Probation, Federal Bureau of Prisons), as well as tribal interface with local/county/state police, courts and corrections. The Major Crimes Act, the Violence Against Women Act, tribal law, and order reforms under PL 111-211 are examined along with reform policies for dealing with domestic violence, sexual assault, substance abuse, gang violence, and missing and murdered indigenous women. Prerequisite: CJ 201.

CJ 394. Independent Study General CJ. 1-6 Hour.

Intensive study of substantive interest areas of students; major literature review leading to analytical paper; topics chosen collaboratively by student and instructor/advisor. This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first. Prerequisite: Consent of instructor.

CJ 395. Victims and Victimology. 3 Hours.

The course provides students with a comprehensive understanding of the history and role of the victim within the criminal justice system, a critique of the data source of crime types, rates, trends, and patterns and victim characteristics, special emphasis will be given to intimate partner violence and sexual assault. The evolution of victims' rights and the criminal justice system are also examined.

CJ 401. Administration of Criminal Justice Systems. 3 Hours.

This course is an overview of organizational theory as it applies to the administration of Criminal Justice agencies. It explores the nature of criminal justice organizations, individual, and group behavior in these organizations as well as managerial processes carried out in these organizations. The topics included in this course covers, but not limited with, leadership, motivation, communication, evaluation, socialization, culture, conflict, decision making, organizational change, and effectiveness. Prerequisite: CJ 201.

CJ 402. Police Supervision. 3 Hours.

This course examines the supervisor's purpose and the key components of the supervisor's role in law enforcement. These areas include the communication, deployment, development, discipline, evaluation, supervision, and training of law enforcement personnel. Prerequisite: CJ 201.

CJ 420. Advanced Homeland Security. 3 Hours.

This course builds on a student's knowledge about the American Criminal Justice System and its relation to Homeland Security. The course examines Homeland Security's history, legal foundation, national infrastructure, and interface with criminal justice. Specific focus is given to intelligence and counterintelligence, weapons of mass destruction, cyber-crime, organized crime, domestic and border security, and immigration issues. Incident command and control systems, utilized by law enforcement, firefighters, and emergency managers are discussed. Students completing the course satisfactorily may wish to obtain nationally recognized FEMA training certificates. Prerequisites: CJ 201 and CJ 385.

CJ 450. White-Collar Crime. 3 Hours.

Categories of job offending are analyzed through criminological theory, law, and the criminal and regulatory justice systems, including corporate crime, professional crime, individual crime, occupational crime, organizational crime, and crime by state workers. Traditional and novel strategies for the social control of these offenses are also presented. The course also dispels misconceptions among society regarding different aspects of white-collar crime versus conventional crime. Prerequisite: CJ 201.

CJ 480. Research Methods in Criminal Justice. 3 Hours.

This course will explore social research methods and their application in Criminal Justice. Students will be introduced to both qualitative and quantitative methodologies. Students will create hypotheses and analyze them using the methodological approaches discussed in this course. Prerequisites: CJ 201.

CJ 481. Data Analysis Strategies in Criminal Justice. 3 Hours.

Data analysis is a very sought-after skill in the field of Criminal Justice. Crime data analytic ability is a skill that is needed for both Criminal Justice practitioners as well as Criminological researchers. Students will learn to use and understand output from the most commonly used statistical analysis software packages, to test hypothesis, analyze the results, and interpret their findings. Students will present their original research to the class. Prerequisites: CJ 201 and CJ 480.

CJ 491. Senior Seminar. 3 Hours.

A capstone course for the integration of knowledge of the core classes in the criminal justice curriculum: criminological theory, criminal law, policing, court processing and sentencing, juvenile justice, and corrections. The application of core classes will prepare students for the ACAT exam. Course assignments will help students demonstrate mastery of their criminal justice education and the development and implementation of future career objectives and skills. Prerequisites: CJ 201; criminal justice major; completion of all CJ core courses, or one remaining CJ core course may be taken concurrently. Restricted to junior or senior status.

CJ 494. Directed Criminal Justice Research. 1-8 Hour.

This course provides an opportunity for students to carry out an independent research project in their area of interest within the field of criminology and criminal justice. The students will practically design their own research project in consultation with the instructor and implement appropriate research method under the guidance and supervision of the instructor. The overall purpose of the course is to help students to gain practical experience of identifying a research problem, designing a research project accordingly, and carrying out this project. The students will, eventually, be expected to report the results of this project as a publication and an oral presentation to a group of audience. This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

CJ 497. Field Experience. 1-6 Hour.

Students' practicum in a criminal justice or related agency. The course may be repeated for up to a total of six credit hours with the same or different agencies. Hours of placement with a hosting agency is dependent upon the number of credit hours enrolled. Supplementary readings, assignments and formal class meetings designed to enhance these experiences are required. This course can be repeated up to six times, or for a maximum six credits, whichever limit is hit first. Prerequisites: CJ 201, completion of the CJ Core classes in the placement area of the agency, junior or senior academic year, and department approval.

CJ 499. Special Topics Criminal Justice. 1-8 Hour.

Specialized topics offered as regular classes; topics vary depending upon student and faculty interest. This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first. Prerequisite: CJ 201.

COMM 100. Professional Communication Colloquium. 0.5 Hours.

This course is required for all Professional Communication majors and offers a variety of professional development and networking opportunities. This course can be repeated up to eight times, or for a maximum four credits.

COMM 101. Human Communication. 3 Hours.

Introduces students to the discipline of Communication through a sustained focus on how people make and share meaning through a variety of practices and media. Thus grounded in a state-of-the-art survey of scholarship in human communication, students are prepared to explore specific contexts such as social interaction, social media, strategic communication, and digital communications technologies.

COMM 110. Fundamentals of Public Speaking. 3 Hours.

The theory and practice of public speaking with emphasis on topic selection, content, organization of material, language, methods of securing attention and maintaining interest, delivery, and critical evaluation of informative and persuasive messages. May not be used as part of communication arts major, minor, or concentration.

COMM 120. Introduction to Broadcasting. 3 Hours.

This course introduces students to the history of television and radio broadcasting. Students will explore how the broadcasting industry is undergirded and shaped by a variety of factors, including economics, operations, and emerging media technologies. The course also examines current laws and regulations of the Federal Communications Commission (FCC) and other governing organizations.

COMM 191. Freshman Seminar. 1 Hour.

Introduction to departmental requirements and opportunities. Prerequisite: Communication major or minor.

COMM 210. Advanced Public Speaking. 3 Hours.

An advanced course in the art of oral discourse. Emphasis is placed on professional presentations, adapting to diverse audiences, logic, persuasion, and rhetorical analysis. Prerequisite: COMM 110 or consent of instructor.

COMM 211. Communication and Popular Culture. 3 Hours.

Includes analysis of audience, occasion, subject, and speaker. Subject matter will include such media as movies, songs, television, humor, fashion, public demonstration, advertisements, architecture, etc. Includes text readings, group discussion, analytical essays, and a critical paper and presentation.

COMM 212. Interpersonal Communication. 3 Hours.

Introduces fundamental concepts of communication between individuals. Exploring aspects of self-expression, relationship communication-how people present themselves, and how others perceive them in return.

COMM 218. Public Relations Principles. 3 Hours.

This course provides an introduction to the theory and practice of public relations. Students learn about the history and growth of PR, as well as the role of PR as a management function. Topics of study include research and planning, campaign implementation, new and social media, professional ethics, and more. Course projects and assignments allow students to build experience in professional speaking and writing as it applies to the field of public relations.

COMM 219. Mass Media and Society. 3 Hours.

Basic communication theory and its application to mass communication with emphasis on social, cultural, and political implication of the media.

COMM 220. Broadcast Advertising and Applications. 3 Hours.

This course introduces students to chief principles and theories of advertising, with emphasis on published examples of print and electronic advertisements. Students learn documented factors that increase the power of advertising through mass media, and they apply this knowledge to a variety of assignments to ultimately understand, critique, and create advertisements for both products and services. Restricted to sophomore, junior, and senior status.

COMM 221. Strategic Communication Writing. 3 Hours.

Introduction to basic writing skills in the field of public relations and the media. This is a writing intensive course that teaches students how to prepare professional public relations messages for print and electronic media. Specifically, students will learn to compose news releases, fact sheets, media advisories, internal communications information, and more.

COMM 224. Social Media, Writing, and Design. 3 Hours.

Learn techniques used to capture readers' attention in online and print media while combining images and text to tell the story.

COMM 225. Audio Production. 3 Hours.

Laboratory and lecture course with emphasis on the principles and techniques of radio production and programming.

COMM 244. Reporting and Feature Writing. 3 Hours.

Introduction to news gathering, judgment, writing, history, conventions, and style of the news story, the newspaper feature story, and the magazine article.

COMM 254. Special Events Planning I. 2 Hours.

The course will introduce students to special events processes and techniques. Students will become knowledgeable about model workplace skills, leadership development, promotions, media relations, and production associated with an event. Additional topics of study include site selection, program planning, and material development.

COMM 281. Reporting and Editing. 1 Hour.

Laboratory course in which class members work on the campus paper and attend staff meetings. This course can be repeated up to eight times, or for a maximum eight credits.

COMM 283. TV Activities. 1 Hour.

An opportunity for students to work on various projects that they will produce for on and off campus. This course can be repeated up to eight times, or for a maximum eight credits.

COMM 284. Radio Activities. 1 Hour.

An opportunity for students to work on various audio projects that they will produce for on and off campus groups. This course can be repeated up to eight times, or for a maximum eight credits.

COMM 285. Broadcasting and Professional Communication Activities. 2 Hours.

This course provides hands-on training for technological tools of broadcasting and professional communication, including TV and radio production, public relations, social media, and communication. This course can be repeated up to five times, or for a maximum ten credits.

COMM 286. Promotions Activities. 1 Hour.

The course provides students with an understanding of how to strategically plan promotions. Students are able to engage in real life events activities such as planning, marketing, advertising, production, writing, and more. Students are taught time management alongside promotions. This course specifically directs students to have hands on experience within the Professional Communication. More directly, writing newsletters, promotions of channel 19, alumni relations, website writing and creation, and advertising. This course can be repeated up to four times, or for a maximum four credits.

COMM 291. Sophomore Seminar. 1 Hour.

Study of communication (people, events, activities) as determined by student/professor consultation. Prerequisite: Communication major or minor.

COMM 297. Internship. 1-2 Hour.

Hands-on experience in the discipline. Restricted to Communication majors or minor or consent of instructor.

COMM 299. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

COMM 310. Social Media Strategy and Measurement. 3 Hours.

Students will learn how to strategically plan and implement social media communication for different organizations (for-profit, non-profit) with different audiences and goals, and these efforts will be guided by established research and industry trends. The class will complete a variety of projects that use different forms of communication (videography, photography, graphic design, writing) that span multiple platforms. Students will learn how to measure social media communication using quantitative and qualitative research methods, and they will explore how this data can be used to guide current and future efforts.

COMM 311. Oral Interpretation. 3 Hours.

The study of literature for performance with emphasis on written and verbal analysis. The technique of performance applied to oral reading of literature.

COMM 312. Travel Writing. 3 Hours.

Travel writing comes in many forms and styles. This course combines a survey of travel writing with instruction and practice in travel writing. Students will seek out their own travel experience during the semester the course is taken and return to the classroom to write about that experience.

COMM 315. Persuasion and Argumentation. 3 Hours.

An investigation of the structure, types, and tests of persuasive arguments with practical application through rhetorical analysis and speeches. Prerequisite: COMM 110 or consent of instructor.

COMM 316. Group Dynamics. 3 Hours.

Study of techniques of group discussion and small group theory with emphasis on participating in various types of discussion and conferences.

COMM 317. Rhetorical Theory. 3 Hours.

A study of the development of rhetorical standards and practices from ancient time to the present.

COMM 318. Organizational Communication. 3 Hours.

The course is a study of communication practices in organizations by examining organizational structure, leadership, teambuilding, and ethics. The course will include communication areas such as diversity, conflict, stress, and technology.

COMM 322. Media Sales and Analysis. 3 Hours.

This course explores media sales and analysis within a variety of mediums, including television, radio, newspapers, magazines, online and social media, interactive, and outdoor communication channels. Students will use theory and research to guide their course projects and assignments. Cumulatively, these efforts allow students to build both knowledge and skills that are critical to successful media sales and analysis.

COMM 323. Journalism History. 3 Hours.

Examination of the news gathering function of the mass media with special emphasis on press theory and the development of thought of freedom of expression.

COMM 324. Community Relations. 3 Hours.

This course examines current communication strategies used by public relations practitioners to establish and maintain relationships with different communities. Students apply their knowledge from course readings to complete a variety of applied assignments and at least one community-based project. Topics of study include resource management, social networking, traditional and new media, problem-solving, and more.

COMM 325. Campaigns and Strategies. 3 Hours.

This course explores the integral relationship between public relations, marketing, and advertising in today's market. The textbook, classroom lectures, guest speakers, and assignments help students build a solid foundation in the fundamentals needed to plan, implement, and evaluate public relations campaigns. Prerequisites: COMM 218 and junior or senior status.

COMM 326. Media Announcing. 3 Hours.

Theories, practices, and techniques of "on-air" presentation will be the focus of this course. Students will develop the skills necessary to perform a variety of media announcing tasks. Students will study the techniques and styles required to perform as media newscaster, interviewers, program hosts, commercial, and public service announcers. Prerequisite: COMM 120 or consent of instructor.

COMM 328. Play-by-Play Communication. 3 Hours.

Focuses on the theory and practice of electronic media sports coverage, with an emphasis on the role, skills, and practice of radio and TV sports announcers and electronic sports media journalism. The class includes play-by-play broadcasts and a class project.

COMM 329. Sports Television Production. 3 Hours.

Professional sports media at an advanced level. Special topics in areas such as sports media production, announcing, performance, and sports feature. The course will emphasize other performance situations, such as producing and anchoring radio and television sportscasts. After completing this course, students will be able to develop, write, pre-produce, produce, perform as talent, and post-produce programming for broadcast sports media.

COMM 344. Investigative Reporting. 3 Hours.

This course is an introduction to the subject matter, techniques, and ethics of investigative reporting. It will include such topics as secondary sources, primary documents, people sources, computer-assisted reporting, writing projects, accuracy, and ethics. Prerequisite: COMM 244.

COMM 360. Video Production. 3 Hours.

Emphasis on the operation of video, audio, and editing equipment.

COMM 361. Broadcast News Writing. 3 Hours.

Intensive survey and application of gathering, writing, and presenting.

COMM 362. Broadcast News Gathering. 3 Hours.

An introduction to the practical knowledge of basic electronic news gathering production techniques, as well as to learn to operate equipment associated with ENG. Students will learn the correct terminology and the basic formats of ENG. Prerequisite: COMM 360.

COMM 388. Communication for Educators. 3 Hours.

This course is designed for students pursuing an education or related degree. It will include the study of various communication opportunities faced by person in a professional educational setting.

COMM 389. Directing Forensics. 2 Hours.

Theory, philosophy, and practice in speech contest/festival design and of coaching individual forensic events and debate. Designed for the teacher who will be asked to coach speech on the secondary level. May be taken at the same time as student teaching.

COMM 390. Communication Arts Methods. 4 Hours.

Methods and materials for creative teaching of speaking, listening, and theater and broadcast activities, in today's secondary school environment. Prerequisite: Admittance to Teacher Education.

COMM 394. Independent Study. 1-3 Hour.

Independent or directed study of special topics in the study of communication. This course can be repeated up to two times, or for a maximum six credits, whichever limit is hit first. Prerequisite: Communication major or minor.

COMM 397. Communication Arts Practicum. 1-3 Hour.

Student Internship with application of specialized speech techniques in broadcasting, theater, or other areas of communication arts. This course can be repeated up to three times, or for a maximum three credits, whichever limit is hit first.

COMM 410. Advanced Problems. 3 Hours.

Courses beyond the present offerings on broadcasting, speech communication, and theater arts. No more than three courses may be accrued.

COMM 412. Communication Law and Ethics. 3 Hours.

A study of the regulatory policies (federal, state, and municipal), history of free speech, the responsibility of the media, the responsibility of the individual as sender and receiver of messages, and ethical decision making in modern electronic and print media. The course will focus on current communications issues in social and workplace settings.

COMM 413. Gender Communication. 3 Hours.

Course designed to explore the theories surrounding differences and similarities in male and female communication. Focus on ways in which gender roles originated and are sustained in a variety of context including families, organizations, institutions, peer groups, the media, and interpersonal relationships. Prerequisites: COMM 110 and junior or senior status.

COMM 425. Crisis Communication. 3 Hours.

This course provides both a theoretical and applied approach to proactive crisis communication. Students learn how to engage in effective communication before, during, and after a crisis in a manner that benefits both the public and the organization at hand. Students also explore how management decisions impact crisis communication and how PR practitioners can support managerial decisions. Throughout the course students complete case studies, participate in mock crisis situations, and learn how to compose, utilize, and evaluate crisis management plans. Prerequisite(s): COMM 218.

COMM 454. Special Events Planning II. 2 Hours.

The course is a capstone experience in special event processes and techniques. Students will demonstrate enhanced leadership development, and mentor underclasspersons in the end-to-end process of planning and executing special event site selection, promotions, media relations, content and event production.

COMM 460. Advanced TV and Social Media Production. 3 Hours.

Use of TV video, audio, and editing equipment in various news and commercial applications. Prerequisite: COMM 360.

COMM 474. Social Media Management Practicum. 1-3 Hour.

The operations, techniques, and practices of social media management for the KMSU television program. Activities include optimizing content for search engines and social media platforms, engaging with audience members, and marketing the program. This course can be repeated up to twelve times, or for a maximum twelve credits, whichever limit is hit first. Prerequisite: COMM 221 or COMM 224.

COMM 475. Broadcast Production. 1-3 Hour.

The operations, techniques, and practices of broadcast production. Activities include originating, acquiring, organizing, and assembling news segments into a complete television program. This course can be repeated up to twelve times, or for a maximum twelve credits, whichever limit is hit first. Prerequisite: COMM 360.

COMM 492. Senior Portfolio. 1 Hour.

In this course, students will present their final portfolios prior to graduation. The portfolio will be compiled throughout the student's academic career and include professional quality elements for the student to market him-/herself to potential employers. Portfolios may include coursework and/or work from an internship. Prerequisite: COMM 100.

COMM 497. Communication Internship. 2-4 Hour.

Student internship with application of specialized communication techniques in strategic communication, sports communication, or other areas of communication arts. This course can be repeated up to three times, or for a maximum six credits, whichever limit is hit first.

COMM 499. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

CSCI 101. Introduction to Computer Science. 3 Hours.

General hardware and software issues such as: terminology, environments. Applications such as: word processing, spreadsheets, databases, Internet usage.

CSCI 111. Introductory Programming and Big Data. 4 Hours.

Introduction to programming and Big Data through the accessible and powerful language of Python. Emphasis on problem solving and logical thinking. Design, implementation, and testing of programs for small scale problems using elementary data types, control structures, and data acquisition.

CSCI 112. Introduction to Visual Programming. 4 Hours.

An introductory programming course featuring user interface-oriented applications and the event-driven programming paradigm.

CSCI 160. Computer Science I. 4 Hours.

An introduction to computer science, with problem-solving algorithm development and structured programming in a high-level language. Emphasis is on code design, code debugging, and code documentation, using techniques of good programming style.

CSCI 161. Computer Science II. 4 Hours.

Object-oriented concepts, terminology, and notation. The C++ language is explored including topics such as dynamic memory, exception handling, function and class templates, operator overloading, inheritance, polymorphism, and generic programming with the standard template library. Additional topics may include GUI libraries. Prerequisites: CSCI 160 with a C or higher.

CSCI 221. Web Application Development and Security. 4 Hours.

Covers the essentials of designing, testing, and deploying web applications using modern frameworks and technologies, with a special focus on RESTful applications. Aspects such as security, scalability, user experience, and accessibility are addressed. Security threats specific to web-based software are discussed, including common attack vectors and their mitigation strategies. Prerequisite: CSCI 161 with a C or higher.

CSCI 240. Assembly Language Programming. 4 Hours.

An introduction to the principles and techniques of low-level programming and how they are influenced by processor architecture. Students learn how to develop stand-alone programs in assembly as well as the significance of assembly language in forensics, malware analysis, and exploit development. Prerequisite: CSCI 161 with a C or higher.

CSCI 242. Algorithms and Data Structures I. 4 Hours.

Advanced programming techniques including recursion, divide-and-conquer, and backtracking will be considered. Dynamic and static data structures including lists, stacks, and queues. Modular programming, program specification and verification, and analysis of algorithms. Prerequisites: CSCI 161 with a C or higher.

CSCI 243. Algorithms and Data Structures II. 4 Hours.

Advanced programming techniques including sorting, binary trees, AVL trees, graphs, and networks. A discussion of searching techniques for conceptual graphs and networks and additional searching strategies. Analysis of algorithms will also be presented. Prerequisite: CSCI 242 with a C or higher.

CSCI 258. Software Security and Design. 4 Hours.

This course illustrates good coding design and security principles through hands-on projects. Developing software that is robust and secure, students will employ programming techniques that maintain confidentiality, integrity, and availability. Correspondingly, vulnerabilities, attacks, and mitigation strategies are explored through topics such as password weakness, code injection, buffer overflows, input validation, race conditions, filter evasion, session management, and the use of artificial intelligence tools for secure design and vulnerability analysis. Best security practices are emphasized for software development and deployment. Prerequisite: CSCI 161 with a C or better.

CSCI 260. UNIX and Linux Systems. 4 Hours.

This course examines both UNIX and Linux environments, focusing on their similarities and transferable skills. Students will explore key areas such as system architecture, the intricacies of installation and package management, and the Filesystem Hierarchy Standard. The course covers essential GNU and Unix commands, alongside practical shell scripting. Administrative tasks, system services, and aspects of network and system level security are also addressed. Prerequisite: CSCI 111, CSCI 160 or BIT 185 with a C or higher.

CSCI 275. Computer and Digital Hardware. 4 Hours.

Fundamentals of digital systems, data representations, mathematics digital systems, microprocessor design and instruction sets, introduction to laboratory equipment. Prerequisite: CSCI 160 or CSCI 111 with a C or higher.

CSCI 276. Industrial Hardware Design and Security. 4 Hours.

Through hands-on projects, the use, programming, and security of digital hardware devices found in industry are explored. These devices include programmable logic, microcontrollers, and embedded systems. Working with programmable logic, coding languages such as VHDL or Verilog are used to design basic circuits. Microcontroller architecture, instruction sets and applications introduce security issues and real-time requirements, which are extended with more complex embedded systems. Throughout the course, these devices are related to the integration and security issues of large-scale industrial control systems affecting U.S. infrastructures such as energy, water, and transportation. Prerequisite: CSCI 160 or CSCI 111 with a C or higher.

CSCI 297. Internship. 1-8 Hour.

Supervised professional work experience in a cyber-technology environment at the 100 and 200 course level. May not be counted towards earned credits for major or minor. This course can be repeated up to twelve times, or for a maximum twelve credits, whichever limit is hit first. Student must have departmental approval before enrolling.

CSCI 299. Special Topics. 1-4 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first. Prerequisite: CSCI 160.

CSCI 321. Windows Programming. 4 Hours.

Development of applications for the Windows environment and use of a standard library and its classes. Prerequisite: CSCI 161 with a C or higher.

CSCI 323. Robotics. 4 Hours.

Introduction to robotics, emphasis is on computer design, programming of autonomous robot systems, basic dynamics and control of motion, sensors, and artificial intelligence techniques for robot applications in the real world. Individual and group projects analyze robot control problems, designing hardware, and software solutions. Students write basic control programs for different robot platforms and apply state-of-art artificial intelligence techniques to the control of robotic mechanisms. Prerequisite: CSCI 161 with a C or higher.

CSCI 324. Reverse Engineering. 4 Hours.

Reverse engineering focuses on how to understand software without access to its source code. Topics include understanding the design and functionality of software components, recovering software specifications, examining program data, and analyzing software through methods like disassembly and decompilation. Code obfuscation and an exploration of common tools and analysis techniques used in the reverse engineering process will be covered. Prerequisite: CSCI 240 with a C or higher.

CSCI 330. Software Engineering and Testing. 4 Hours.

The principles, methods, and models used to develop and manage software projects, including test implementation of a large-scale project. Prerequisite: CSCI 161, CSCI 275, and CSCI 340 with a C or higher.

CSCI 331. Technology and Society. 4 Hours.

This course offers a comprehensive exploration of the impact of computer technology on society and individuals. Course topics include ethical challenges faced by computing professionals, examining human-computer interactions, the legal aspects of working with cyber technology, risk management when dealing with information systems, and highlighting the importance of security principles in operational environments. This course is essential for those seeking to understand and responsibly influence the evolving landscape of cyber technology and its societal implications. Prerequisite: CSCI 160, CSCI 112, or CSCI 111 with a C or higher.

CSCI 335. Theoretical Computer Science. 4 Hours.

Models of computation, regular expressions, finite automata, Kleene's Theorem, lexical analysis, context-free grammars, pushdown automata, introduction to parsing. Prerequisites: CSCI 242, CSCI 275, and MATH 208, with a C or higher in all courses.

CSCI 340. Networking. 4 Hours.

An introduction to network design and management. Topics include the OSI and TCP/IP models, protocol design (Ethernet, etc.), network programming, signals and modulation, ad hoc networks, flow control, error handling, routing, and an introduction to wireless and cellular communication. Prerequisites: CSCI 161 and MATH 208 with a C or higher in both courses.

CSCI 356. Database Management. 4 Hours.

Introduction to database management systems, database theory and schema design, and programming, including data modeling, set theory, relational calculus, functional and multivalued data dependencies, and normalization. Various database models are discussed including relational, NoSQL, network, hierarchical, and inverted files, and database management and security. Prerequisite: CSCI 161 or DATA 240 with a C or higher.

CSCI 360. Systems Programming. 4 Hours.

Programming using interrupts and operating systems services. Device driver implementation. Brief comparison of different hardware systems. Prerequisites: CSCI 242, CSCI 275, and MATH 208, with a C or higher in all courses.

CSCI 370. Computer Organization. 4 Hours.

The structure and organization of computer hardware. Register implementation and usage. Memory management. Comparison of architectures. Prerequisites: CSCI 161, MATH 208, and one of CSCI 275 or CSCI 276 with a C or higher in all courses.

CSCI 390. Ethical Hacking. 4 Hours.

This course focuses on the development of skills necessary for identifying and mitigating vulnerabilities within network systems. Real-world scenarios and theoretical learning will be combined to enable students to understand the mindset and tactics of potential attackers, enabling them to design and implement comprehensive security strategies. The course covers a spectrum of topics including but not limited to penetration testing, network scanning, system exploitation, web application security, and wireless network defense. In addition to technical skills, the course integrates the ethical considerations and legal frameworks guiding the cybersecurity domain, ensuring students understand the responsibilities and boundaries of an ethical hacker. Prerequisite: CSCI 340 or CIS 244 with a C or higher.

CSCI 410. Defensive Network Security. 4 Hours.

This course explores the methodologies used in the development and deployment of firewalls, anomaly, and signature-based detection systems and virtual honeypots. Secure software development techniques will be covered as will practical exercises in how to analyze and defend against network-based attacks. Prerequisite: CSCI 340 or CIS 244 with a C or higher.

CSCI 415. Vulnerability Analysis. 4 Hours.

This course introduces students to software vulnerability discovery and how to overcome identified issues from both a design and implementation perspective. Reverse engineering methodologies such as black, grey, and white box testing and techniques such as fuzzing will be covered. Historical vulnerabilities, corresponding exploits, and techniques to minimize exposure and mitigate risk will be covered. Prerequisites: CSCI 370 and CSCI 340 and CSCI 242 with a C or higher in all courses.

CSCI 420. Mobile and Wireless Security. 4 Hours.

This course explores concepts related to various generations of mobile networks such as 2G, 3G, 4G and discusses their security frameworks. Security models related to common mobile platforms such as iOS and Android would be explored. WPA standards in Wi-Fi along with security standards for various proprietary protocols implementing features such as VoIP would also be discussed. Prerequisite: CSCI 340 or CIS 244 with a C or higher.

CSCI 425. Applied Cryptography. 4 Hours.

This course investigates advanced topics in cryptography. It begins with an overview of the necessary background in algebra and number theory, private- and public-key cryptosystems, and basic signature schemes. The course will cover number theory and basic theory of Galois fields used in cryptography; the history of primality algorithms and the polynomial-time test of primality; discrete logarithm-based cryptosystems including those based on elliptic-curves; interactive protocols including the role of zero-knowledge proofs in authentication. Prerequisites: CSCI 242 and Math 208 with a C or higher in both courses.

CSCI 432. Malware Analysis. 4 Hours.

This course introduces students to concepts related to malware analysis and discusses several static analysis techniques. Students will be working with several tools which can function as static analyzers. Students would also understand Malware taxonomies and perform heap analysis to identify malware at run-time. Prerequisite: CSCI 324 with a C or higher.

CSCI 450. Operating Systems. 4 Hours.

Design and implementation of operating systems. Study of the control of and communication between interacting processes. Resource allocation and management in a multiprogramming environment. Prerequisites: MATH 208, CSCI 242 and one of CSCI 275 or CSCI 276 with a C or higher in all courses.

CSCI 452. Compiler and Interpreter Construction. 4 Hours.

Theory and practice of program translation. Lexical and syntactic analysis, error detection and response, optimization. Prerequisites: CSCI 335 with a C or better.

CSCI 456. Machine Learning, Data Mining, and Artificial Intelligence. 4 Hours.

The course engages current topics in machine learning algorithms, data mining, and artificial intelligence with hands-on projects. Supervised and unsupervised machine learning models are explored from basic regression and clustering to deep learning with neural nets. Working with techniques in data mining on data from NASA and other student-selected sources, students research, gather, clean, train, and analyze the data with appropriate model selection and fine-tuning. Prerequisites: CSCI 242 or DATA 240 and also MATH 210 or DATA 211 with a C or higher in both courses.

CSCI 458. Computer and Network Security. 4 Hours.

Introduction to computer and network security. Topics covered include the CIA triad model, symmetric and public-key encryption algorithms, hashing algorithms, and securing data storage, application and communications systems, firewalls, penetration testing, vulnerability assessments, reverse engineering, malware, and ethics. Prerequisites: CSCI 340 and CSCI 370 with a C or higher in both courses.

CSCI 460. Capstone Project. 4 Hours.

To complete this course students will choose a research, software development, or security analysis project in consultation with the instructor. Each student will prepare a project proposal discussing the scope of the project and develop it to those specifications. On completion of the project, the student is expected to present the results of their work and submit a project portfolio. It is recommended that each student's project be focused on their chosen field of study. Class Restriction: Senior.

CSCI 493. Directed Research in Computer Science. 1-4 Hour.

Faculty directed research in computer science topics. This course can be repeated up to four times, or for a maximum four credits, whichever limit is hit first.

CSCI 497. Internship. 1-8 Hour.

Supervised professional experience in computing applications. A maximum of four credits may be counted toward a major or minor. This course can be repeated up to eight times, or for a maximum eight credits, whichever limit is hit first. Grading is pass/fail. Prerequisite: Departmental Approval.

CSD 150. Profession of Com Disorders. 2 Hours.

An introduction into the profession of Communication Disorders. Contents will describe the progression from the preprofessional student level to the expert-consultant level. Major topics will include development of interpersonal skills, professional skills, problem-solving skills, technical skills, and knowledge/experience.

CSD 210. Introduction to Communication Disorders. 3 Hours.

This course provides an overview of human communication disorders across the lifespan. Eight hours of guided clinical observation are required.

CSD 221. Language Science in CSD. 2 Hours.

To understand language disorders in children and adults, we must first understand the normal structure and processing of language. This class will introduce students to the structures of language, the processes of language comprehension and production, and the methods used to study these processes. This course is meant to prepare students for future study of language, language acquisition, and language disorders. It is recommended students complete this course prior to enrolling in Language Development.

CSD 320. Introduction to Phonetics. 3 Hours.

A study of the sounds of American English and the use of the International Phonetic Alphabet (IPA) to record normal and disordered articulatory production.

CSD 321. Language Development. 3 Hours.

The study of the processes by which children come to understand and acquire language during early childhood.

CSD 322. Speech Sound Disorders. 3 Hours.

This course covers the development, etiology, diagnosis, and intervention of speech sound disorders. Eight hours of guided clinical observation are required. Prerequisite: CSD 320 Introduction to Phonetics.

CSD 324. Techniques in Communication Disorders. 3 Hours.

This course covers the fundamental approaches and techniques used in planning and providing intervention for individuals with communication disorders. This course is a prerequisite for CSD 411. Prerequisite: CSD 322.

CSD 331. Language Disorders in Children. 3 Hours.

This class covers the characteristics, etiology, prevention, diagnoses, and intervention of language disorders in children including differentiation of language differences due to cultural-linguistic factors. Five hours of guided clinical observation are required. Prerequisite: CSD 321.

CSD 341. Speech and Hearing Science. 2 Hours.

This course covers the fundamentals of acoustics, speech production, speech perception, and basic instrumentation.

CSD 342. Introduction to Audiology. 4 Hours.

A study of the anatomy and physiology of the auditory system, its relationship to the differing types and degrees of hearing loss, and related pathologies. This course will cover prevention of hearing difficulties, as well as screening, assessment, and interpretation of test results.

CSD 350. Bridging the Gap: SLPP to SLP. 3 Hours.

This course is designed to complete the preliminary knowledge needed for individuals who have earned the Associate in Applied Science (AAS) in Speech-Language Pathology Paraprofessional (SLPP) from Lake Region State College or a similar program. This course will cover additional information related to language development, language disorders, speech sound disorders, and techniques in speech-language pathology. Restricted to Communication Science and Disorders majors and junior or senior status.

CSD 394. Independent Study General Cd. 1-4 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

CSD 408. Social and Pragmatic Communication Disorders. 3 Hours.

Social and pragmatic communication disorders are becoming more and more prevalent in the practice of speech-language pathology and audiology; especially as mental health issues are becoming more prevalent. This course will provide needed content in order for students and professionals to effectively assess and intervene for people with social and pragmatic communication disorders. Prerequisites: CSD 321 and restricted to Junior or Senior status.

CSD 410. Audiology Practicum. 1 Hour.

This practicum course will provide the undergraduate student in Communication Sciences and Disorders, who has an interest in Audiology, the opportunity to participate in Audiology diagnostics in the CSD clinic. The student will initially observe the audiologic diagnostic/patient management protocols in the clinic and will gradually be required to participate in greater measure. The goal is for the student to acquire greater understanding of audiologic test administration, interpretation, and patient counseling. This course can be repeated up to four times, or for a maximum four credits, whichever limit is hit first. Prerequisite: CSD 342.

CSD 411. Clinical Practicum. 3 Hours.

Supervised practicum in a clinical setting. This course can be repeated up to two times, or for a maximum six credits, whichever limit is hit first. Prerequisite: CSD 321, CSD 322, CSD 324, CSD 331. Restricted to CSD majors only.

CSD 412. Neurology for Communication Disorders. 2 Hours.

This course provides an overview of the role of neuroanatomy in speech and language. Attention is given to the structures of the brain and spinal cord, the ascending and descending pathways, cranial nerves, and the vascular supply to the brain. The role of these structures in the communication process is discussed.

CSD 413. Anatomy and Physiology for Communication Disorders. 3 Hours.

This course provides an overview of the anatomical and physiological bases of communication. Attention is given to the structures and functions of the respiratory, phonatory, resonatory, and articulatory systems.

CSD 420. Advanced Communication Disorders. 3 Hours.

This course will provide a general overview of issues related to medical speech language pathology. Five hours of guided clinical observations are required.

CSD 427. Aural Rehabilitation. 3 Hours.

This course covers the philosophies and methodologies related to the habilitation and rehabilitation of individuals with hearing impairment.

CSD 497. External Practicum - Speech-Language-Pathology-Assistant. 1-6 Hour.

Supervised external practicum at a school, medical, long-term care, private practice, or other non-MISU clinical site. This course is designed to provide individuals with a bachelor's degree in Communication Sciences and Disorders the necessary clinical experience to obtain licensure as a speech-language pathology assistant. This course can be repeated up to two times, or for a maximum six credits, whichever limit is hit first. Prerequisite: CSD 411. Restricted to Communication Sciences and Disorders major and senior status.

CSD 499. Special Topics in Comm Disorders. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

CTE 421. History and Philosophy of CTE. 3 Hours.

Focuses on the history, growth, legislation, and elements of Career and Technical Education (CTE). An overview of the organization and administration at the federal, state, and local level is included. Prerequisite: Admission to teacher education. Corequisite: CTE 423.

CTE 423. Leadership in CTSOs. 3 Hours.

Study of planning and implementing of career and technical student organizations. Principles in developing co-curricular career and technical education curriculum are included. Prerequisite: Admission to Teacher Education. Corequisite: CTE 421.

DATA 211. Applied Statistics and Data Visualization. 4 Hours.

Students experience Big Data with an introduction to data analysis that focuses on applied statistics and visualization utilizing R, Python, and spreadsheets in a lab setting. Content and methods include sampling, descriptive statistics, probability, correlation, regression, binomial and normal distributions, confidence intervals and hypothesis testing, ANOVA, and Chi-square tests. Prerequisite(s): ASC 93 with a C or better or qualifying math placement score.

DATA 240. Programming for Data Science. 4 Hours.

Students deepen their programming skills essential to data science, utilizing Python and R, machine learning algorithms, data mining, and visualization. Prerequisites: CSCI 111 or CSCI 160.

DATA 347. Data Analytics and Visualization. 3 Hours.

Data has become the new economic asset that interacts with all areas of society. Data Analytics and Visualization introduces data analytics in environments such as business and in research using a variety of business and research cases. Students will acquire practical data analytic abilities that will include data pattern recognition, analytical frameworks, predictive model construction, visualization techniques, and investigation of hidden relationships within the data. Students will present the data using visualization and acquired knowledge from using different analytic software.

DATA 350. Project Design and Techniques. 3 Hours.

A team-taught course focusing on details of data science project design, including: effective research question strategies, survey design, methodology and tool selection, socio-cultural dimensions of research design for data projects, and assessment of design validity. Prerequisites: DATA 240 and DATA 347. Restricted to junior or senior status.

DATA 491. Data Science Capstone I. 2 Hours.

A course offered where the general topic and specific goals and activities are agreed upon by the student and the instructor. While presentation is not a requirement, all projects have a goal of producing presentable results. Prerequisite: SOC 278 or DATA 350.

DATA 494. Data Science Capstone II. 2 Hours.

A second course offered where students will work to improve their Capstone I project from feedback and further study. Specific goals and activities are agreed upon by the student and the instructor. While presentation is not a requirement, all projects have a goal of producing presentable results. Prerequisite: DATA 491.

DTS 230. Driver and Traffic Safety Education. 3 Hours.

Introduction to driver and traffic safety education. A review of various high school textbooks and other teaching tools.

DTS 260. Teenage Driving Behavior Problems. 2 Hours.

Teaches prospective driver about the past problems concerning teenage traffic offenders. Assists driver educators in adjusting classroom presentations to address problems with beginning teenage drivers.

DTS 350. Advanced Driving. 3 Hours.

Advanced driving to improve skills, perception, decision making, and general driving ability.

DTS 450. Organization and Administration of Safety Education. 2 Hours.

Basic concepts and development of the four-phase program: dual-controlled car, simulator, multiple car driving range, and classroom. Corequisite or Prerequisite: DTS 230.

ECE 310. Introduction to Early Childhood Education. 3 Hours.

Study of early childhood learning theories, developmentally appropriate materials, classroom arrangement, observational techniques, and curriculum planning.

ECE 312. Methods: Arts Integration. 2 Hours.

This course explores and uses the fine and performing arts as primary pathways for learning in young children. Includes selecting materials, creating environments, and planning lessons and activities that integrate art, music, and movement across curriculum disciplines.

ECE 313. Language Development and Emerging Literacy. 3 Hours.

Coursework will center on how language is acquired, the functions of language, and how language develops. The course will examine how ECE Professionals can best support the growth of children as language learners and users. Prerequisite/Corequisite: ECE 310 or Elementary Education major.

ECE 314. Mathematics and the Young Child. 2 Hours.

This course includes projects and activities that help ECE Professionals develop a conceptual understanding of teaching mathematics in a cooperative and constructionist environment where children view themselves as mathematicians. Emphasis is placed on the use of manipulatives, problem-solving activities, and children's literature in the planning and organizing of developmentally appropriate classroom activities and lessons. Prerequisite: ECE 310.

ECE 316. The Emergent Reader. 2 Hours.

This course explores a wide variety of developmentally appropriate instructional practices for teaching young learners multiple ways of communicating and experiencing language through books and media programs. Emphasis is placed on integrating reading, writing, speaking, and listening as forms of creative personal expression.

ECE 320. Infant/Toddler Development. 2 Hours.

This course explores the child's growth and development from birth to 36 months. It will give ECE Professionals a basis for understanding normal developmental needs of children and a means of meeting them in the children's home, childcare center, and community environments. Prerequisite or Corequisite: Students must have completed ECE 310 or be enrolled in ECE 310 prior to enrolling in this course.

ECE 322. Leadership and Supervision in Early Childhood Education. 2 Hours.

This course explores effective organization of early childhood programs and looks at managing the day-to-day operations of a program. ECE Professionals examine leadership framework, unique leadership styles, how to apply the principles of leadership to create vision, become an agent of change, and model professional and ethical behavior. ECE Professionals examine supervision frameworks for effective recruitment, selection, and orientation practices. ECE Professionals study a comprehensive model for supervising staff, promoting ongoing professional development, and creating a strengths-based team in nurturing positive teaching/learning environments. Prerequisite: ECE 310.

ECE 333. Preschool Methods and Materials. 3 Hours.

Study of development of 4-5 year-olds and procedures in preschool planning including teaching techniques and developmentally appropriate materials in preschool settings. Prerequisite: ECE 310.

ECE 338. Home School Community Relations. 2 Hours.

This course explores home-school-community relations. The content includes history, parental involvement in schools, parent-teacher conferences, home visits, parent and community programs, and community resources for parents. Prerequisite: ECE 310.

ECE 361. Observation, Planning, and Assessment. 3 Hours.

Students will learn about and actively engage in a variety of methods to assess the social, motor, and cognitive growth of young children. Observational, informal, formal, screening and intervention based methods will be included. In addition, lesson and unit planning for a variety of contexts will be explored. Prerequisite: ECE 310.

ECE 362. Curriculum and Planning for Early Childhood. 2 Hours.

The development of curriculum for the public schools and strategies for the planning, delivery, and assessment of instruction with birth to third grade emphasis. Prerequisite: ECE 310 and ED 260.

ECE 364. Planning and Assessment for Early Childhood. 2 Hours.

The development of assessment processes and tools based on the reciprocal relationship between instruction and assessment, with a focus on data driven interventions and instruction with a birth to third grade emphasis. Prerequisite: Students must complete ECE 310 and ECE 362 before enrolling in this course.

ECE 430L. Pre-School Practicum. 1 Hour.

Students will work in a preschool setting, with direct application of those concepts learned in ECE coursework. Prerequisite: ECE 310.

ECE 436. Kindergarten Methods and Materials. 3 Hours.

Exploration of curriculum, methods, and materials for use in kindergarten settings. Prerequisite: ECE 310.

ECON 201. Principles of Microeconomics. 3 Hours.

Nature, method, and scope of economic analysis; economic scarcity, resources; specialization and trade; supply and demand; price and output determination in the product and resource markets; market structures; costs and profits, income discrimination, inequality, poverty; externalities and public goods.

ECON 202. Principles of Macroeconomics. 3 Hours.

Nature, method, and scope of economic analysis; supply and demand; aggregate income and employment analysis; business cycles, unemployment, inflation, and economic growth; fiscal policy; money and monetary policy. (May be taken before Econ 201).

ECON 299. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

ECON 312. Intermediate Microeconomics. 3 Hours.

Analysis of consumer demand, principles of production, costs, pricing, and output decisions under different market structures, market failure, and related public policy.

ECON 314. Intermediate Macroeconomics. 3 Hours.

Analysis of national income, employment, inflation, interest rates, business cycles, as well as impact of monetary and fiscal policies on equilibrium and economic growth.

ECON 318. Money and Banking. 3 Hours.

Nature and function of U.S. depository institutions (especially commercial banks, saving and loans, and credit unions); their regulation with particular emphasis on the Federal Reserve System's monetary policy and instruments of control and an introduction to monetary theory. Prerequisites: ECON 201 and ECON 202.

ECON 320. Environ and Nat Resource Econ. 3 Hours.

This class engages students in standard economic theory through the lens of environmental issues such as global climate change and overpopulation. The approach of this class combines traditional microeconomic analysis with a detailed examination of macro-level ecological problems that require local, national, and global policy solutions. It discusses how to utilize natural resources efficiently and issues related to the usage of natural resources. Prerequisite(s): ECON 201.

ECON 394. Independent Study General Econ. 1-4 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

ECON 410. Managerial Economics. 3 Hours.

Managerial Economics is an application of the part of Microeconomics that focuses on the topics that are of greatest interest and importance to managers. The purpose of this course is to help managers refine their problem-solving and decision-making skills through application of principles already learned in other Economics courses. Topics include problem solving and decision making for managers, demand and cost analysis, market structure, pricing decisions, strategic decision making, organizational design, and government regulations. Prerequisites: ECON 201.

ECON 414. International Economics. 3 Hours.

Study of the causes of international trade, classical and neoclassical models of international trade, the movement of money, goods, and factors of production over national boundaries, role of trade barriers and balance of payments. Prerequisites: ECON 201 and ECON 202.

ECON 499. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

ED 221L. Diagnostic Teaching. 1 Hour.

This course provides an introduction to the concept and practice of diagnostic teaching and data driven instruction. Candidates will apply these principles and practices in a 30-hour clinical experience focused on literacy.

ED 250. Foundations of Education. 2 Hours.

Study of the historical, philosophical, and sociological concepts that have impacted the development of American public schools. Includes an orientation to the teaching profession and a field experience.

ED 250H. Foundations of Education. 2-3 Hour.

Study of the historical, philosophical, and sociological concepts that have impacted the development of American public schools. Includes an orientation to the teaching professional and a field experience. Prerequisite: Acceptance into the Honors Program and must be of sophomore, junior, or senior status.

ED 260. Educational Psychology. 3 Hours.

Emphasis on child development, learning theory, effective teaching, and classroom management as applied to educational settings.

ED 260H. Educational Psychology. 2 Hours.

Emphasizes learning theory, effective teaching, classroom management, and child development as applied to educational settings. Prerequisite: Admitted to the Honor Program and of sophomore, junior, or senior status.

ED 260L. Clinical I. 0 Hours.

The initial-level clinical within the teacher education program provides candidates with 10 hours of observations in schools related to their major and the content in educational psychology.

ED 282. Managing the Learning Environment. 2 Hours.

Strategies for successfully creating a positive learning environment in the classroom; strategies for dealing with the disruptive student, strategies for creating positive parental involvement in student learning.

ED 282L. Clinical II. 0.5 Hours.

This entry-level clinical provides candidates with 20 hours of experience in a variety of support programs and services in educational settings.

ED 284. Teaching Diverse Learners. 2 Hours.

Adapting teaching strategies to culture, ethnic, linguistic, developmental, and physical differences in the classroom. Collaborating with related professions in individualizing instruction.

ED 284L. Clinical III. 0.5 Hours.

This entry-level clinical experience provides candidates with 30 hours of engagement with professional organizations and service learning in projects related to education in schools and the community.

ED 287. Early-Level Transition Point Conference. 0 Hours.

Teacher candidates enrolled in this course will reflect on their clinical experiences in ED 260L, ED 282L, and ED 284L and set goals for their mid-level clinical experiences. This course should be taken in the semester that the candidate completes the third experience.

ED 299. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

ED 320. Curriculum, Planning, and Assessment I. 2 Hours.

The development of curriculum for the public schools and strategies for the planning, delivery, and assessment of instruction. Prerequisite: ED 260.

ED 321L. Clinical IV. 0.5 Hours.

This mid-level clinical experience provides students in Teacher Education with an extended experience in school working on academic interventions with small groups of students.

ED 322. Data Driven Integrated Instruction. 2 Hours.

This course focuses on the development of data driven integrated instructional plans, following an MTSS model. Teacher candidates will focus on integrating research-based reading instruction, inclusive of all five components of reading, into all subject areas in P-12 classrooms. Students must complete ED 320 and be admitted to teacher education before enrolling in this course or ECE 361 and admitted to teacher education for BSE in Early Childhood Major or BS in Early Childhood Major.

ED 323L. Clinical V. 0.5 Hours.

This mid-level clinical experience provides students in Teacher Education with an extended experience in a school working on academic interventions with small groups of students and designing appropriate assessments.

ED 324L. Fall Experience. 0 Hours.

This mid-level clinical experience provides students in Teacher Education with an extended experience in the fall semester observing and assisting with beginning of the year room design, organization, and classroom management policies and procedures. This course is typically taken with a methods class or student teaching.

ED 350. Middle School Philosophy and Curriculum. 3 Hours.

Acquaints students with the philosophy of middle school education and current practices in middle school curriculum, instruction, and assessment. Prerequisites: ED 320.

ED 380. Technology in Teaching. 2 Hours.

Strategies for the instructional uses of technology including multimedia presentation, e-mail, internet, spreadsheets, databases, and emerging technologies.

ED 394. Independent Study in Education. 1-4 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

ED 402. Content Area and Develop Reading. 3 Hours.

The study of teaching reading at elementary, middle school, and high school levels; ways of responding to literature and other written materials, content area reading for different purposes, application of strategies and study skills, and use of a variety of performance assessments. Prerequisite: Student must complete ED 320 before enrolling in this class.

ED 407. Mid-Level Transition Point Conference. 0 Hours.

Teacher candidates enrolled in this course will reflect on their clinical experiences in ED 321L, ED 323L, and methods/practicum and set goals for their student teaching experiences. This course should be taken in the semester before student teaching.

ED 440. Identification, Assessment and Intervention in Literacy Difficulties. 3 Hours.

This course focuses on the identification of children with literacy difficulties, including dyslexia, assessment of specific areas related to these difficulties, and appropriate interventions in the areas of the five components of reading (phonemic awareness, decoding, vocabulary, fluency, and comprehension) as well as written expression. Prerequisites: Admission to Teacher Education and ELED 352.

ED 441. Clinical Practice in Remedial Reading. 2 Hours.

Supervised practice in a clinical remedial reading situation. Prerequisite: Admission to Teacher Education. Pre-corequisite: ED 440.

ED 451. Middle School Teaching Strategies. 3 Hours.

Designed to develop the skills and teaching strategies to implement a middle school program. Stresses teaming, thematic curriculum development, advising, and working with parents. Prerequisites: Admission to Teacher Education and ED 320.

ED 480. Clinical Practicum in Education. 1-12 Hour.

This course is designed to give education majors an opportunity to have 60 hours of practical experience per credit hour. Placements in school settings are arranged by the Teacher Advisement and Field Placement office. This course can be repeated up to five times, or for a maximum twelve credits, whichever limit is hit first.

ED 482. Student Teaching Seminar. 2 Hours.

This seminar supports candidates as they student teach. Topics relevant to student teaching will be discussed. Corequisites: Students must be enrolled in either ED 491, ED 492, ED 493, ED 494, or ED 495 at the same time as this course.

ED 483. Student Teaching Seminar: Secondary. 2 Hours.

This seminar will provide support to secondary candidates as they complete the final phase of their teacher education program. Topics relevant to student teaching will be explored including classroom management, diversity, technology, instructional strategies, assessment, and data driven instruction. Corequisite: Students must be enrolled in either ED 491, ED 492, ED 493, ED 494, or ED 495 at the same time as this course.

ED 484. Student Teaching Seminar: K-12. 2 Hours.

This seminar will provide support to K-12 candidates as they complete the final phase of their teacher education program. Topics relevant to student teaching will be explored including classroom management, diversity, technology, instructional strategies, assessment, and data driven instruction. Corequisite: Students must be enrolled in either ED 491, ED 492, ED 493, ED 494, or ED 495 at the same time as this course.

ED 491. Student Teaching, Pre-K-Kindergarten. 4-16 Hour.

Supervised teaching in pre-k or kindergarten setting. Prerequisites: Recommendation by advisor and TEAC; admission to Teacher Education; and completion of all other required education coursework.

ED 492. Student Teaching, Elementary. 4-16 Hour.

Supervised teaching in elementary schools. Prerequisites: Recommendation by advisor and TEAC; admission to Teacher Education; and completion of all other required education coursework.

ED 493. Student Teaching, Secondary. 4-16 Hour.

Supervised teaching in secondary schools. Prerequisites: Recommendation by advisor and TEAC; admission to Teacher Education; and completion of all other required education coursework.

ED 494. Student Teaching K-12. 4-16 Hour.

Supervised teaching in both elementary and secondary levels in restricted areas. Prerequisites: Recommendation by advisor and TEAC; admission to Teacher Education; and completion of all other required education coursework.

ED 495. Student Teaching, Special Education. 4-16 Hour.

Supervised teaching in special education areas. Recommendation by advisor and TEAC; admission to Teacher Education; and completion of all other required education coursework.

ED 497. Mentored Clinical Practice. 5-16 Hour.

This course is designed to provide a one-year mentored clinical internship for classroom teachers. Prerequisites include departmental approval and emergency licensure by the Educational Standards and Practices Board of North Dakota. This course can be repeated up to two times, or for a maximum sixteen credits, whichever limit is hit first.

ED 499. Independent Study Honors Ed. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

ED 95. Interconnecting Perspectives in Education. 0 Hours.

This course provides an opportunity for students to reflect on the diverse perspectives of an educational experience relating to teaching and learning. This course can be repeated up to five times.

ELED 352. Foundations of Reading. 3 Hours.

Principles, techniques, and approaches for implementing a developmental reading program in the elementary school. Prerequisite: Admission to Teacher Education or BS in Early Childhood major or Communication Sciences and Disorders major.

ELED 362. Applications of Literacy Instruction, Intervention, and Assessment. 3 Hours.

This course provides instruction in relation to literacy components, interventions, and assessment and provides students with the opportunity to apply their knowledge and skills in a P-12 school setting. Prerequisites: Admission to Teacher Education and ELED 352. Corequisite: ED 221L.

ELED 421. Elementary Mathematics Methods. 3 Hours.

Practicum in teaching mathematics to children in cooperative learning groups through the use of manipulative materials, symbolic representations, and problem-solving approaches. Observation and participation in a planned teaching experience in a school setting will illustrate and support the learning processes. Prerequisites: Admission to Teacher Education, ED 320, MATH 277 and MATH 377 or ECE 362. Corequisites: ELED 422, ELED 423, ELED 424, ELED 425 and SCI 426.

ELED 422. Elementary Language Arts Methods. 3 Hours.

Encompasses curriculum, theory, and methodology in elementary language arts. Observation and participation in a planned teaching experience in a school setting will illustrate and support the learning processes. Prerequisites: Admission to Teacher Education and ED 320, or ECE 362 and ELED 352. Corequisite: ELED 421, ELED 423, ELED 424, and SCI 426. Course restricted to Elementary Education and Early Childhood Education majors.

ELED 423. Elementary Reading Methods. 3 Hours.

Principles, techniques, approaches, and materials for teaching reading in grades K through 8. Observation and participation in a planned teaching experience in a school setting will illustrate and support the learning processes. Prerequisites: Admission to Teacher Education and ED 320 or ECE 362 and ELED 352. Corequisite: ELED 421, ELED 422, ELED 423, ELED 424, SCI 426. Course restricted to Elementary Education or Early Childhood Education majors.

ELED 424. Elementary Social Studies Methods. 3 Hours.

Curriculum, theory, and methodology in the teaching of elementary social studies. Observation and participation in a planned teaching experience in a school setting will illustrate and support the learning process. Prerequisites: Admission to Teacher Education and ED 320 or ECE 362. Corequisites: ELED 421, ELED 422, ELED 423, ELED 424 SCI 426. Course restricted to Elementary Education or Early Childhood Education majors.

ELED 425. Elementary Education Practicum. 0 Hours.

This practicum course accompanies the five methods classes in elementary education and reflects approximately 150 hours in the elementary classroom.

ENGL 110. College Composition I. 3 Hours.

Guided practice in college-level reading, writing, and critical thinking. Emphasis on writing processes, and on approaches to critical reading. Does not apply toward the English major. Prerequisite: Students must complete ASC 87 with a C or higher, have an ACT English test score of at least 18, an SAT Reading & Writing score of at least 480, an ACCUPLACER test score of at least 5, or a PLAN test score of at least 15.

ENGL 111H. Honors Composition I. 3 Hours.

The first course in the honors curriculum, ENGL 111 takes the place of ENGL 110 and, if the student continues in the Honors Program, COMM 110 is required of all Honors Students earning a BSE degree. The course is reading intensive and encourages intellectual independence. Admission to the Honors Program is not a prerequisite, but ACT scores of 25 in reading and writing are required. Does not apply to the English major.

ENGL 120. College Composition II. 3 Hours.

Advanced practice in college-level writing from sources and in applying rhetorical strategies. Emphases in rhetorical strategies and incorporating research in academic writing. Does not apply toward the English major. Prerequisite: ENGL 110.

ENGL 121H. Honors Composition II. 3 Hours.

The second course taken in the honors curriculum. Replaces ENGL120 in the general education program. Independent research and writing focuses in a rigorous study of literature. Prerequisites: ENGL 110 or 111H; admission to Honors Program or permission of the Honors Director. Does not apply toward the English major.

ENGL 191. English Community Seminar. 1 Hour.

This course is designed to be taken the spring following a student's declaration of an English or English Education major. The community seminar is an introduction to the English community at Minot State. Students will learn the many different areas of research within the field of English studies, become aware of club and academic opportunities within the department, and practice community building. Prerequisite: Students must be an English or an English Education major before enrolling in this course.

ENGL 209. Introduction to Linguistics. 3 Hours.

Entry level knowledge for the scientific study of language, including such topics as phonology, semantics, grammar, and related cultural history.

ENGL 211. Introduction to Creative Writing. 3 Hours.

Study and practice in writing techniques and strategies employed by writers in various genres, including fiction/creative nonfiction/poetry/teleplay/drama. Focus on developing skills in manipulating point of view, creating figurative language, writing realistic dialogue, developing themes and characters, and honing style to suit various audiences and genres. Read for craft by examining and analyzing the work of successful writers in various genres.

ENGL 220. Introduction to Literature. 3 Hours.

Reading and discussion of literary forms such as the short story, the novel, poetry, and drama, with emphasis on common literary terminology.

ENGL 225. Introduction to Film. 3 Hours.

Introduction to the aesthetic, technical, and social significance of selected films, with emphasis on understanding basic film vocabulary and narrative structure. Four studio hours per week.

ENGL 227. Survey of Creative Nonfiction. 3 Hours.

This introductory survey course provides exposure to reading and analyzing a variety of creative nonfiction including reportage, criticism and commentary, memoir, and the personal essay to explore how the genre can be both honest and creative. Students will examine the use of voice, subjectivity, emotion, speculation, memory, humor, imagination, and the complicated idea of truth in nonfiction literature in its various forms, and discuss how nonfiction is conceived and constructed.

ENGL 231. Bible as Literature. 3 Hours.

Study of the Bible from a literary point of view.

ENGL 232. World Mythology. 3 Hours.

The study of representative myths, legends, and folklore from various cultures with emphasis upon the literary aspects of myth.

ENGL 238. Children's Literature. 3 Hours.

Introductory study of picture books and poetry; folk tales, fairy tales, myth, and legend; modern fiction, both realistic and imaginary, historical fiction, and biographical and informational books for children.

ENGL 240. World Literature. 3 Hours.

Study of diverse and significant literary texts in a variety of genres from antiquity to the present from a wide variety of cultures and nationalities in terms of their aesthetic quality, cultural values, and historical periods.

ENGL 251. Foundations in Brit Lit I. 3 Hours.

A survey of British literature from the Anglo-Saxon period through the 18th century. Prerequisite: ENGL 110.

ENGL 252. Foundations in Brit Lit II. 3 Hours.

A continuing survey of British literature from the Romantic period to the present. Prerequisite: ENGL 110.

ENGL 261. Foundations in Am Lit I. 3 Hours.

A survey of American literature from the pre-Colombian aboriginal literature through the mid-19th century. Prerequisite: ENGL 110.

ENGL 262. Foundations in Am Lit II. 3 Hours.

A survey of American literature from the mid-19th century to the present. Prerequisite: ENGL 110.

ENGL 265. Introduction to Native American Literature. 3 Hours.

An exploration of the written and oral literary traditions of Native American and Indigenous writers.

ENGL 270. Foundations in Literary Analysis. 3 Hours.

An introduction to the methods, values, and critical theories employed in the study of literary texts, with particular emphasis on analytical reading and critical writing skills. Prerequisite: ENGL 110.

ENGL 299. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

ENGL 305. Advanced Grammar. 3 Hours.

A thorough study of the structure of the English language through traditional and transformational grammar with an emphasis on syntax, or sentence formation. Morphology (word formation), differences between prescriptive and descriptive grammar, and controversies over current usage are also considered.

ENGL 315. Profes and Tech Writing. 3 Hours.

Concentrated instruction and practice in technical and job-related expository writing.

ENGL 317. Teaching Writing. 3 Hours.

Study of methods of teaching writing with emphasis on contemporary theories. Prerequisite: ENGL 120.

ENGL 318. Writing Tutor Training. 1 Hour.

The course covers practices and theories for tutoring writers. Content includes the composing process, diagnosing problems, establishing rapport, managing research, and helping with second language needs. Prerequisite: ENGL 120.

ENGL 318L. Supervised Writing Tutoring. 0 Hours.

Supervised tutoring experience in the Writing Center (20 hours). Prerequisites: Student must complete ENGL 110 and ENGL 120 with a grade of C or better. Prerequisite or Corequisite: be enrolled or have completed ENGL 318 before enrolling in this class.

ENGL 321. Topics in Creative Writing. 3 Hours.

This course offers students further practice in various genres and/or topics in the field of creative writing. Topics will change to inspire students to explore new writing styles and strategies in creative writing, ranging from poetry to fiction to creative nonfiction. This course can be repeated up to two times.

ENGL 322. Am Dialects in Lit and Media. 3 Hours.

Examines American regional dialects (e.g. African American English, Chicano English, Appalachian English) and how those dialects are represented in literature and media. Students will explore the history, development, and linguistic features of various dialects, then they will read literature and watch films that make use of those dialects. Students will evaluate the effects of authentic and stereotypical representations of dialects on audience with an eye to exploring how these representations reflect attitudes towards dialects in America.

ENGL 324. Rhetoric of Everyday Life. 3 Hours.

This course is an introduction to modern rhetorical theory and the application of mid to late 20th-century theories in analyzing, exploring, and interpreting our everyday experiences. In this course, students will continue the ongoing conversations of how we are influenced by the persuasive messages (written and performed) surrounding us in our cultures through rhetorical theories and how our personal histories influence the messages we receive.

ENGL 333. Shakespeare in Film. 3 Hours.

This film course explores the works of William Shakespeare by examining the ways his plays have been adapted for the cinema screen. As students of language, literature, and culture, research will combine historically contextualized interpretations and interactions with our modern experience of Shakespearean drama in print, on stage, and on screen.

ENGL 334. Film Directors. 3 Hours.

According to the auteur theory, some directors are the dominant creators of their films. In the seminar we'll read selected materials about several major directors, view several films by each director, and identify and discuss the recurrent patterns, techniques, and meanings that are the directors' individual signatures.

ENGL 335. Film Genres. 3 Hours.

Films are commonly classified into broad categories, or genres, including action, war, western, comedy, science fiction, mystery/suspense, horror, drama, and family. In this seminar we'll discuss aesthetic conventions, content, cultural contexts, and socio-historical significance of films in three genres. We'll view nine or 10 major films in total and we'll read selected materials.

ENGL 338. Adolescent Literature. 3 Hours.

Literature written for teenagers (ages 14 through 18) is uniquely positioned because it addresses the emotional and social issues and fears unique to adolescence. In this course, students will read a variety of literature written for teens and through this literature, explore topics such as race, family, technology, and coming of age. Specific topics will vary each time the course is offered, but students will explore how writers attempt to address the concerns and problems of adolescents in an increasingly complex society.

ENGL 341. Theories and Rhetorics of Game Studies. 3 Hours.

This course is an introduction to theories and rhetorics of games and video games. In this course, students will read, discuss, write about, and present theories that undergird and describe ludological and narrative structures and concepts of games. Readings are generally taken from theories and rhetorics from the field of game studies and also rhetoric and composition.

ENGL 355. Age of Shakespeare. 3 Hours.

Study of representative works of Shakespeare. Prerequisite: ENGL 110.

ENGL 367. Media Literacy. 3 Hours.

In order to address the increasingly visual and digital demands of our culture, this course will examine the dissemination of information and culture via different forms of popular media. Students will read and produce texts in a variety of media using the appropriate technologies and tools. Students will also explore how different media changes how we process information and the impact they have on concepts such as identity, self, culture, community, authority, and argumentation.

ENGL 373. World Drama. 3 Hours.

Study of diverse and significant dramatic texts from antiquity to the present from a wide variety of cultures and nationalities in terms of their aesthetic quality, cultural values, and historical periods.

ENGL 383. Topics in Black American Literature. 3 Hours.

This course examines one or more authors, literary genres, historical periods, or movements related to Black American literature, from its origins to the present.

ENGL 390. Secondary Language Arts Methods. 3 Hours.

Theory and practice in teaching literature, composition, and language in the secondary school. Prerequisite: Admission to Teacher Education. Co-requisite: ENGL 398.

ENGL 391L. Junior Research Lab. 1 Hour.

This course is designed to be completed the spring semester prior to Senior Seminar (ENGL 491). In this research seminar, students will begin the research process for their senior seminar paper, select a second reader within the English department, and craft a research proposal and annotated bibliography pertaining to their research paper for Senior Seminar. Prerequisite: Students must be an English or an English Education major before enrolling in this course.

ENGL 397. Internship. 1-6 Hour.

Hands-on experience in the discipline. Placement determined at time of internship. This course can be repeated up to three times, or for a maximum six credits, whichever limit is hit first. Prerequisite: Restricted to students who are English or English Education majors.

ENGL 398. Secondary Language Arts Practicum. 1 Hour.

This course is designed to give English education majors an opportunity to have 30 hours of practical classroom experience. Placements in school settings are arranged by the Teacher advisement and Field Placement Office. Prerequisite: Admission to Teacher Education. Co-requisite: ENGL 390.

ENGL 399. Special Topics. 3 Hours.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

ENGL 400. Studies in British Literature. 3 Hours.

Advanced study in themes, authors, genres within British Literature. Faculty teaching the course will provide sub-title descriptors for registration and transcription. This course can be repeated up to four times, or for a maximum twelve credits, whichever limit is hit first.

ENGL 401. Studies in American Literature. 3 Hours.

Advanced studies in various themes, authors, genres of American Literature. This course can be repeated up to four times, or for a maximum twelve credits, whichever limit is hit first.

ENGL 402. Studies in Literature and Culture. 3 Hours.

Advanced study in various themes, authors, genres in Literature and culture, to include World Literature. This course can be repeated up to four times, or for a maximum twelve credits, whichever limit is hit first.

ENGL 403. Studies in Rhetoric and Composition. 3 Hours.

Advanced study in rhetoric and composition themes, authors, and genres to include historical places and topics related to composition studies, classical rhetoric, and contemporary modes of writing and research. This course can be repeated for six credits.

ENGL 410. Fiction Workshop. 3 Hours.

Concentrated instruction and practice in writing fiction.

ENGL 411. Poetry Workshop. 3 Hours.

Concentrated instruction and practice in writing poetry. This course can be repeated up to twelve credits.

ENGL 412. Creative Nonfiction Workshop. 3 Hours.

Concentrated instruction and practice in writing creative nonfiction.

ENGL 430. Advanced Seminar in Literature. 3 Hours.

Intensive exploration of selected literary texts and topics. May include literary and nonliterary cultural texts and genres, historical periods, oral and written forms, dramatic texts, the roles of audience, gender, class, nationalism, and/or other social relations. May be repeated for credit as content changes. The seminar method will be used as the organizational norm for the class. In this method, students can expect to lead class discussions and openly critique the work of others in the class. This course can be repeated up to four times, or for a maximum twelve credits, whichever limit is hit first. Prerequisites: Students must complete ENGL 110 and ENGL 120 before enrolling in this course.

ENGL 434. Grant Writing. 3 Hours.

This course applies a rhetorical framework to researching and writing grants, proposals, and related professional documents. The experiential education and service-learning approach offer students the opportunity to work with real institutions on active local, government, and national grants. Students develop a portfolio of professionally designed and edited documents as well as the vocabulary of grant writing and research. A highly sought-after set of skills, grant writing experience enhances research and employment opportunities in any field.

ENGL 435. Major Writers. 3 Hours.

Intensive study of selected literary works by major authors. Authors and selections will vary from semester to semester. Prerequisites: ENGL 120 and one 300-level English course or consent of instructor. May be repeated for credit as content changes. This course can be repeated for nine credits.

ENGL 470. Advanced Seminar in Literary Criticism. 3 Hours.

Intensive exploration of one school (or related schools) of modern literary theory. Focus will be on primary works of criticism, not literature. May repeat for credit as content changes for a total of 12 credits. Prerequisite: ENGL 270.

ENGL 491. Senior Seminar. 3 Hours.

In-depth study of literary issues. Serves as capstone course for English degree. Prerequisites: ENGL 120, ENGL 191, ENGL 391L, and senior status. Course restricted to majors.

ENGL 494. Independent Study Honors Eng. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

ENGL 496. Study Abroad. 1-6 Hour.

MSU faculty-led study trips to appropriate locations. Will include additional requirements beyond travel itself. Does not count toward English major/minor/BSE. This course can be repeated up to three times, or for a maximum six credits, whichever limit is hit first.

ENGL 497. Internship. 4-12 Hour.

Hands-on experience in the discipline. Placement determined at time of internship. This course can be repeated up to four times, or for a maximum sixteen credits, whichever limit is hit first. Prerequisite: Restricted to students who are English or English Education majors or have the consent of the instructor.

ENGL 499. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

ENGL 95. Digital Literacy. 0 Hours.

This course provides an opportunity for students to develop and demonstrate digital literacies and reflect on the role that digital information and technologies play in modern society.

ENGR 107. Engineering Essentials. 3 Hours.

Basic principles of engineering, engineering as a helping profession, engineering disciplines and careers, and pre-calculus mathematics with engineering examples. Prerequisite: MATH 103.

ENGR 150. E-Studio I: Engineering for Industry and Research. 2 Hours.

Engineering and engineers have played a crucial role in research, industry, and infrastructure to support quality-of-life and economic development. In this course, students will explore applications of engineering in today's world and into the future. The course challenges students to use essential engineering knowledge and skills by solving problems and tackling projects, while also providing structured support for student success and professional readiness.

ENGR 160. E-Studio II: Professional Practice in Engineering. 2 Hours.

Employment for engineers may be found in small businesses, consulting firms, and large corporations, and engineers work with a wide variety of clients. Professional advancement may entail steps towards licensure and professional networking and leadership roles in professional organizations. This course challenges students to use essential engineering knowledge and skills by solving problems and tackling projects, while also providing structured support for student success and professional readiness.

ENGR 190. Computer-Aided Design. 2 Hours.

This introductory course provides students with the fundamental principles and practices of Computer Aided Design (CAD). Students will learn the necessary skills to create, modify, and interpret 2D drawings and 3D solid models of engineering components and assemblies. The course emphasizes visualization, geometric dimensioning and tolerancing, proper drawing standards, and effective digital file management, serving as a foundation for advanced design and analysis software applications. Upon completion, you'll be able to create, document, and communicate technical designs effectively using industry-standard CAD software. Prerequisite: ENGR 201.

ENGR 195. Introduction to Workplace Safety and Compliance Management. 2 Hours.

Introduces students to federal, state, and local agencies, laws, policies, and regulatory environments relevant to engineering, and the processes necessary to ensure and document compliance. Opportunities to earn certifications may be included.

ENGR 201. Statics. 4 Hours.

Engineering Statics introduces the vector analysis of forces and moments required to determine the equilibrium of stationary structures. You'll first master Free Body Diagrams (FBDs) and the principles of equilibrium for both particles and rigid bodies in 2-D and 3-D systems. The course then transitions to practical applications, including the detailed analysis of forces in trusses, frames, and machines, calculating shear and bending moments in beams, and understanding the effects of friction in mechanical elements like wedges and screws. Finally, you'll learn to calculate essential geometric properties: centroids, center of mass, and area and mass moments of inertia. Upon completion, you'll be equipped to perform a comprehensive force and moment analysis on any stationary structure. Prerequisite: MATH 107 or ENGR 107. Corequisite: MATH 165.

ENGR 202. Dynamics. 4 Hours.

Engineering Dynamics introduces the vector analysis of bodies in motion (kinematics) and the forces causing that motion (kinetics). The primary focus is on vector analysis for both particles and rigid bodies in 2-D and 3-D systems. You'll master the three fundamental methods of kinetic analysis-Newton's Second Law, the Work-Energy principle, and Impulse-Momentum-applied across various coordinate systems. Upon completion, you'll be able to analyze, model, and predict the motion of any particle or rigid body under the influence of forces. Prerequisites: ENGR 201 and MATH 165.

ENGR 203. Engineering Materials. 4 Hours.

Engineering Materials introduces the fundamental relationship between the internal structure of materials and their resulting mechanical, electrical, thermal, and chemical properties. The course covers the basic concepts of atomic bonding, crystalline structures, imperfections, and diffusion in solids. We'll examine the four major material classes-metals, polymers, ceramics, and composites-detailing their unique characteristics and common applications. Key topics include understanding phase diagrams, analyzing mechanical behavior through stress-strain relationships, and exploring the effects of processing methods (such as heat treatment and alloying) on material performance. Upon completion, you'll be able to identify, classify, and select appropriate materials for engineering applications based on their structure, processing, and required performance criteria. Prerequisite: ENGR 202. Corequisites: CHEM 121 and ENGR 251.

ENGR 204. Surveying. 3 Hours.

Measurements and errors; topographical and construction surveys; vertical and horizontal control methods; field exercises and computation techniques for surveying data; computation of earthwork volumes. 2 one-hour lectures, 1 three-hour laboratory. Prerequisite: MATH 107.

ENGR 206. Fundamentals of Electrical Engineering. 4 Hours.

Fundamentals of Electrical Engineering introduces core concepts and analysis techniques for AC/DC electric circuits. The course introduces passive and active components (resistor, capacitor, inductor, operational amplifier, digital gates), circuit analysis (Ohm's Law, KCL, KVL, Phasors), energy, power and three-phase systems. The theoretical concepts are reinforced through required laboratory experiments and computer simulations. Upon completion, you'll be able to apply analytical methods to solve for unknown values and characterize linear electric circuits. Prerequisite: MATH 265. Corequisite: PHYS 252.

ENGR 240. E-Studio V: Research Methods for Engineering and Science. 2 Hours.

The process of research involves review of areas of established knowledge, and often requires systems analysis, process engineering, and modeling. This course challenges students to use essential engineering knowledge and skills in solving problems and tackling projects, while also providing structured support for student success and professional readiness.

ENGR 250. Fabrication. 2 Hours.

This hands-on course introduces the fundamental disciplines and processes involved in manufacturing and making engineering components. Students will gain practical experience with various fabrication techniques, including welding, machining, and material joining/forming. The course emphasizes safety, proper tool usage, and the practical skills necessary to translate engineering designs into physical prototypes and products. Upon completion, you'll be able to confidently operate essential workshop equipment and apply fundamental fabrication methods to create and assemble engineering projects.

ENGR 251. Fluids and Thermodynamics. 2 Hours.

Fluids and Thermodynamics introduces the principles of thermodynamics, including concepts of heat, temperature, ideal gas laws, and the Laws of Thermodynamics as they apply to energy transfer and heat engines. The second major focus is on the behavior of continuous media, examining both fluid statics (pressure, buoyancy) and fluid dynamics (flow and continuity). We will also investigate the fundamental mechanics of mechanical waves. Upon completion, you'll be able to apply fundamental physical laws to solve problems involving the behavior of fluids, thermal systems, and mechanical waves. Prerequisite: MATH 165.

ENGR 260. E-Studio III: Design and Innovation in Engineering. 2 Hours.

Engineers are entrepreneurs! Through the design process, including prototyping, testing, and failure, novel ideas will become reality. The course challenges students to use essential engineering knowledge and skills by solving problems and tackling projects, while also providing structured support for student success and professional readiness.

ENGR 296. Engineering Study Tour. 1-3 Hour.

Faculty-led study trips to relevant locations. Includes additional requirements beyond travel itself. This course can be repeated up to three times or a maximum four credits, whichever limit is hit first. Prerequisite: Consent of instructor.

ENGR 297. Engineering Internship. 1-6 Hour.

Supervised external practicum in an engineering setting to be specified before enrollment in the course. The number of credits is proportional to the time committed, with 32-48 hours of work per semester per credit hour expected. Includes additional requirements beyond the work of the internship. This course can be repeated up to three times, or for a maximum six credits, whichever limit is hit first. Prerequisite: Consent of instructor.

ENGR 299. Special Topics. 1-4 Hour.

Topics are variable. Offerings include visiting professors, experimental offerings of new courses, or one-time offerings of current topics. This course can be repeated up to two times, or for a maximum eight credits, whichever limit is hit first.

ENGR 310. E-Studio IV: Project Management. 2 Hours.

Engineering projects require teamwork and communication, as well as effective planning and project management to achieve goals and meet deadlines. This course challenges students to use essential engineering knowledge and skills by solving problems and tackling projects, while also providing structured support for student success and professional readiness.

ENGR 320. E-Studio VI: Engineering Futures. 1 Hour.

The Grand Challenges in Engineering are ambitious goals that represent critical, high-impact societal problems that engineers must solve in the 21st century to ensure the continuation of life on the planet and improve global quality of life. Application of AI will certainly change the practice of engineering, demanding adaptability and continuous learning. This course exposes students to the future of engineering, while also providing structured support for student success and professional readiness.

ENGR 397. Engineering Internship. 1-6 Hour.

Supervised external practicum in an engineering setting to be specified before enrollment in the course. The number of credits is proportional to the time committed, with 32-48 hours of work per semester per credit hour expected. Includes additional requirements beyond the work of the internship. Prerequisite: Consent of instructor. This course can be repeated up to four times, or for a maximum eight credits, whichever limit is hit first.

ENGR 480. Engineering Capstone. 2 Hours.

Students present and discuss the research project in both written and oral forms. Prerequisite: Consent of instructor. Restricted to Junior or Senior status.

ENGR 497. Engineering Cooperative Education. 4-8 Hour.

Supervised external practicum in a professional engineering setting, generally at least six months in duration, to be specified before enrollment in the course. Includes additional requirements beyond the work of the internship. Students must have departmental approval before enrolling. This course can be repeated up to two times, or for a maximum sixteen credits, whichever limit is hit first.

ENGR 499. Special Topics. 1-4 Hour.

Topics are variable. Offerings include visiting professors, experimental offerings of new courses, or one-time offerings of current topics. This course can be repeated up to three times, or for a maximum eight credits, whichever limit is hit first.

ENTR 302. Introduction to Entrepreneurship. 3 Hours.

Introduces fundamental concepts of entrepreneurship. Students will develop an understanding of the entrepreneurial mindset and core entrepreneurship competencies. Explores current issues and trends in entrepreneurship.

ENTR 304. Entrepreneurship/Small Business Management. 3 Hours.

Introductory entrepreneurship course intended to provide a solid foundation in terms of the vital role played by entrepreneurs, innovation, and creativity in the global economy. The various components of a business plan are introduced. This course is complemented at the end of the management program with the entrepreneurship and new venture creation course. Prerequisite: ENTR 302.

ENTR 340. Corporate Entrepreneurship. 3 Hours.

The course focus is on creating work environments for entrepreneurial thinking and skills to recognize, assess and exploit market opportunities for a company. This course allows students to examine the unique nature of corporate entrepreneurship and the application of entrepreneurial concepts and behaviors within an established company. Students explore entrepreneurial imperatives businesses need to become more innovative to acquire a sustainable competitive advantage. Students examine the role that leaders and managers play in initiating and implementing entrepreneurial activities such as new product launches and managing innovation within a business.

ENTR 430. Professional Sales and Relationship Management. 3 Hours.

This course will explore the important role of sales, its relationship to other functions within an organization, and its impact on customers. To accomplish this, students will learn the principles of selling, explore the effective usage of Customer Relationship Management (CRM) technology, and practice communication skills through the use of artificial intelligence technology. Additionally, the role of ethics in the development of long-term customer relationships will be examined. Prerequisite: MRKT 321.

ENTR 470. Projects in Entrepreneurship. 3 Hours.

Provides application of the skills acquired in previous entrepreneurship and business courses through experiential coursework. Students will navigate the first 100 days of launching a business. Students will complete a project integrating the skills and tools learned in the program to develop and detail their business venture. Prerequisites: Students must complete ENTR 302 and ENTR 304 prior to enrolling in this course.

ENTR 489. Entrepreneurship and New Venture. 3 Hours.

This course focuses on entrepreneurship, new venture creation, and the completion of a business plan. The business plan applies principles, concepts, and a framework to real world situations. Prerequisites: Students must complete MRKT 321, ENTR 304, FIN 353 and ACCT 321 before enrolling in this class.

ESR 206. Medical Conditions. 3 Hours.

The purpose of this course is to provide students with the knowledge and skills to recognize and treat common medical conditions.

ESR 226. Methods of Teaching Group Exercise. 2 Hours.

Provides instruction, practice, and teaching experience in group exercise. Fundamental terminology, skills, and teaching techniques teaching a variety of group exercise formats will be emphasized. Students will practice developing training programs tailored to fit ability, fitness level, and desired outcomes of their future students and clients. Prerequisites: KIN 120 and KIN 126.

ESR 227. Strength and Conditioning Programming Principles and Methods. 2 Hours.

The Strength and Conditioning Programming Principles and Methods is designed to provide safe programming principles and teaching methods to exercise professionals.

ESR 303. Therapeutic Exercise I. 3 Hours.

The purpose of this course is to provide a background in pediatric and adolescent examination, assessment, rehabilitation, healing, and physics. The course will discuss techniques of therapeutic exercise, performance enhancement, and application to regions and conditions of the body. Prerequisite: KIN 431.

ESR 304. Therapeutic Exercise II. 3 Hours.

The purpose of this course is to provide a background rehabilitation, healing, physics, examination, and assessment. The course will discuss techniques of therapeutic exercise, performance enhancement, and application to regions and conditions of the body. Prerequisite(s): KIN 431.

ESR 305. Therapeutic Exercise III. 3 Hours.

The purpose of this course is to provide a background in older population examination, assessment, rehabilitation, healing, and physics. The course will discuss techniques of therapeutic exercise, performance enhancement, and application to regions and conditions of the body.

ESR 306. Health Risk Appraisal. 2 Hours.

The Health Risk Appraisal course provides information on risk stratification or classification of various health conditions.

ESR 307. Head, Neck, and Spine Evaluation. 3 Hours.

The purpose of this course is to provide students with the knowledge and skills to perform evaluation of head, neck, and spine injuries or conditions. Students will be able to perform an observation, take a history, palpate, perform MMT, perform a neurological evaluation, evaluate ROM, perform special and functional tests for the head, neck, and spine. Prerequisite(s): ATR 207, KIN 431, and BIOL 220.

ESR 308. Biomechanics. 2 Hours.

The purpose of this course is to introduce students to biomechanics. Course topics include terminology, the quantitative and qualitative perspective of biomechanics. The study of biomechanics in this class will involve the study of the body's architecture with the body's abilities to function in motion. Prerequisite(s): ATR 207, KIN 431, and BIOL 220.

ESR 316. Graded Exercise Testing and Prescription. 2 Hours.

The Graded Exercise Testing and Prescription is to provide students with the skills and knowledge to evaluate exercise capacity and provide exercise prescription based on the evaluation outcomes.

ESR 317. Graded Exercise Testing Lab. 1 Hour.

The Graded Exercise Testing and Prescription is to provide students with the skills and knowledge to evaluate exercise capacity in a laboratory setting.

ESR 323. Basic EKG for Exercise Science. 2 Hours.

The Basic EKG for Exercise Science Course will provide information on the characteristics and basic analysis of EKG tracings.

ESR 342. Exercise Programming for Older Adults. 2 Hours.

This course explores evidence-based principles and practical strategies for designing safe, effective, and engaging exercise programs for older adults. Students will examine age-related physical, cognitive, and social changes and their impact on fitness participation and performance. Emphasis is placed on conducting appropriate fitness assessments, creating individualized and group exercise prescriptions, and applying best practices in personal training and group exercise settings. Through lecture, hands-on practice, and research, students will develop the skills needed to support healthy aging, enhance functional ability, and promote quality of life in diverse older adult populations. Prerequisites: ESR 226 and ESR 227.

ESR 414. Pathomechanics. 2 Hours.

This course introduces students to pathomechanics, changes in normal biomechanical function of a joint, extremity, or torso as a result of injury or disease. Students will gain a basic understanding of pathomechanics pertaining to the human musculoskeletal system and explore assessment and implications of pathomechanics as a basis for interventions when applicable. Prerequisite or Corequisite: ESR 308.

ESR 425. Exercise Science and Rehabilitation Capstone. 1 Hour.

This course is designed to prepare students for a certification exam.

ESR 498. Internship. 1-4 Hour.

This course will provide hands-on experiences in the fields of Exercise Science and Rehabilitation or Corporate Fitness and Wellness Management. Students can complete practicum hours at two to four sites in a metabolic disease, chronic disease, recreation, wellness, fitness center, clinical, athletic performance setting, or research. Students can take 1- 4 credits at a time, with 40 hours of clinical experience required per credit. This course can be repeated up to twelve times, or for a maximum twenty credits, whichever limit is hit first. Restricted to Exercise Science and Rehabilitation majors or Corporate Fitness and Wellness Management.

FIN 251. Personal Finance. 3 Hours.

Introduces the consumer to money management and the development of long and short-term personal financial planning. Topics include budgeting, consumer credit, saving and investing, insurance planning, retirement and estate planning, real estate investment, and shelter planning. An excellent course for beginning students and nonbusiness majors.

FIN 299. Special Topics in Finance. 2-3 Hour.**FIN 353. Principles of Financial Management. 3 Hours.**

Introduces the student to the essentials of financial management. Coverage includes financial analysis, working capital management, capital budgeting, cost of capital, dividend policy, and long-term financing decisions. Prerequisites: ACCT 201 and MATH 210.

FIN 355. Investments. 3 Hours.

Introduces the student to the principles of investment. Topics to be covered include: description of the investment environment and investment decisions; introduction to investment, security, and portfolio theories; financial statement analysis; the implications of the Efficient Market Hypothesis for active and passive portfolio management; and analysis, valuation, and management of equities, fixed income securities, indices and indexed funds, and derivative securities. Prerequisites: FIN 353 and ECON 201 and ECON 202.

FIN 357. Advanced Corporate Finance. 3 Hours.

An advanced course which examines issues related to financing the corporation including capital structure, valuation of various forms of debt and equity financing, capital budgeting decisions, dividend policy decisions, financial analysis, forecasting, and managing risk with financial instruments. Prerequisite: FIN 353.

FIN 360. Entrepreneurial Finance. 3 Hours.

Introduces the student to the theories, knowledge, and financial tools needed by the entrepreneur in starting, building, and harvesting a successful venture. Topics include financing a new venture, managing profit and cash flow, financing the growth of the firm, alternative financing methods, creation of value, valuation methods, financial distress, and harvesting a successful venture. A primary focus is on the financial aspect of the business plan. Prerequisite: FIN 353.

FIN 443. Real Estate Finance. 3 Hours.

Introduces the students to the basic principles of real estate, real estate law, and real estate finance. Topics include the ownership and transfer of real estate property, legal instruments, analysis of real estate markets, real estate appraisals, legal aspects of real estate, and financing residential, commercial, and income property. Prerequisites: FIN 353 and ACCT 315.

FIN 451. Insurance and Risk Management. 3 Hours.

Examines the nature of risk and risk management from a social, individual, business, and organizational perspective. Explores the available risk management tools and alternatives including insurance. Prerequisites: FIN 353 and ACCT 315.

FIN 454. Portfolio Theory. 3 Hours.

Studies advanced concepts relating to investment to include financial statement analysis, stock market efficiency and anomalies, derivative securities, valuation of debt, equity securities, and modern portfolio theory. Prerequisite: FIN 355.

FIN 455. Financial Institutions and Markets. 3 Hours.

Focuses on the management of depository and non-depository financial institutions and the use of the money and capital markets in financial management strategy. Institutional emphasis includes banks, S & L's, credit unions, investment companies, real estate investment trusts, finance companies, insurance companies, and pension funds. Prerequisite: FIN 353.

FIN 457. International Corporate Finance. 3 Hours.

Examines financial management implications of exchange risk exposure, accounting conventions, international constraint on capital flows, international investment management, foreign taxation, and working capital management of international firms. Prerequisite: FIN 353.

FIN 458. Financial Analysis and Valuation. 3 Hours.

Provides a framework for using financial statement data in a variety of business analysis and valuation contexts used by management, security analysts, bankers, and business consultants. The student will be taught the concepts and tools to analyze financial statements and cash flows in order to evaluate the effectiveness of a company's strategy and to make sound financial decisions. Prerequisite: FIN 357 and senior status.

FIN 499. Special Topics. 1-16 Hour.

Topics are variable. Offerings include visiting professors, experimental offerings of new courses, or one-time offerings of current topics. This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

FREN 101. Beginning French I. 3 Hours.

For beginners or those entering with one or two years of high school French. Introduction to listening, speaking, reading, writing, and culture.

FREN 102. Beginning French II. 3 Hours.

A continuation of Beginning French I. Prerequisite: FREN 101.

FREN 194. Independent Study. 1-3 Hour.

Independent or directed study of special topics in the study of French. This course can be repeated up to two times, or for a maximum six credits, whichever limit is hit first.

FREN 201. Intermediate French I. 3 Hours.

Review of basic French with increased practice in conversation, reading, and writing. Prerequisite: FREN 102, three years of high school French, or consent of instructor.

FREN 202. Intermediate French II. 3 Hours.

Continuation of FREN 201. Prerequisite: FREN 201.

FREN 220. French Film. 3 Hours.

An exploration of socio-cultural, historical, and political issues in French film. Supplementary readings on modern French art and literature in English translation. Taught in English.

FREN 230. Sound Structure of French. 3 Hours.

This course will address the sound system of French. It will begin with a thorough introduction and overview of articulatory phonetics, highlighting the striking differences in sound systems between standard Parisian French and American English. The course will then pivot towards phonetic isoglosses which differentiate French dialects across the Francophone world, with particular emphasis on Québécois French and West African French. Finally, the course will end with a discussion of how sound systems are represented in the brain, using French data to contrast an ordered rule approach with an optimality theoretic approach. Prerequisite: FREN 202.

FREN 296. Study Tour. 1-3 Hour.

MSU faculty-led study trips to appropriate locations. Will include additional requirements beyond travel itself. This course can be repeated up to two times, or for a maximum six credits, whichever limit is hit first.

FREN 299. Special Topics. 1-8 Hour.

Varying areas of content, issues, or themes in the study of French language, literature, culture, and civilization. This course can be repeated up to two times, or for a maximum eight credits, whichever limit is hit first.

FREN 343. Contemporary Culture of the French-Speaking World. 3 Hours.

Readings in culture and society from the French-speaking world.

FREN 394. Independent Study. 1-8 Hour.

Independent or directed study of special topics in the study of French. This course can be repeated up to eight times, or for a maximum eight credits, whichever limit is hit first.

FREN 399. Special Topics. 1-8 Hour.

Varying areas of content, issues, or themes in the study of French. This course can be repeated up to two times, or for a maximum eight credits, whichever limit is hit first.

FREN 496. Study Tour. 1-18 Hour.

MSU faculty-led study trips to appropriate locations. Will include additional requirements beyond travel itself. This course can be repeated up to two times, or for a maximum eighteen credits, whichever limit is hit first.

GEOG 110. Introduction to Geography. 3 Hours.

Study of geography in a modern context and its synthesizing role in relation to both physical and social sciences. Major emphasis is on the relationships between people and their environment, spatial interactions, and regional structures.

GEOG 161. World Regional Geography. 3 Hours.

A survey of the world's geographic regions. Focus on the location of Earth's major physical features, human populations, cultures, and their interaction.

GEOG 261. Countries and Cultures. 3 Hours.

The course presents countries of the world through the experiences of MSU faculty native to these countries. The principal objectives are: 1) to illustrate the immense diversity of world countries and cultures, 2) to facilitate the students' understanding and appreciation of the world cultures, 3) to motivate students to learn more about other countries and cultures, 4) to help students to become citizens of the world, 5) to increase marketability of MSU students on the global job market.

GEOG 262. North America. 3 Hours.

A thematic and regional approach to the geography of North America that stresses human patterns and relationships with the physical environment.

GEOG 263. North Dakota. 3 Hours.

Study of the interrelationship that exists between North Dakota's physical and cultural environments. Specific topics include physiography, climate, flora, prehistoric occupation, historic development, demography, and economic structures.

GEOG 264. Geography of Africa. 3 Hours.

Study of the natural regions of Africa with emphasis on the climate, physical and human resources, trade, culture, and their effects upon world affairs.

GEOG 265. Geography of Asia. 3 Hours.

A regional study of Asia with special emphasis on Central, South, East, and Southeast Asia. A study of the natural and cultural regions with emphasis on the climate, physical and human resources, trade, culture, and their effects upon world affairs.

GEOG 266. Latin America and the Caribbean. 3 Hours.

A general overview of an extremely diverse region that is the product of both physical and cultural factors which have interacted over time to produce a unique landscape.

GEOG 267. Geography of Europe. 3 Hours.

A study of Europe's environmental and cultural geography with emphasis on its environmental regions, current Supranational union, and nationalistic divisions.

GEOG 268. Geography of the Middle East. 3 Hours.

An investigation of the natural, political, and historical regions of Southwestern Asia, the Levant, and the Saudi Peninsula. International political linkages, economic implications of oil, environmental opportunities and limitations, and cultural landscapes are emphasized.

GEOG 289. Introduction to GIS. 3 Hours.

Introduces students to theory and techniques of geographic information systems (GIS), which includes the discovery, management, analysis, and display of spatial data. GIS is a valuable tool in disciplines that deal with spatial data, including geography, history, field or environmental sciences, epidemiology, economics, and business. This course is equivalent to GEOL 220. Lecture 2 hours; laboratory, 2 hours.

GEOG 299. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

GEOG 329. Applied GIS. 3 Hours.

This course is designed to advance student knowledge in the rapidly changing field of Geographic Information Science and Systems (GIS). Applied GIS provides an in-depth understanding of GIS applications, the industry, and geographic and GIS concepts. Using a hands-on approach, students use specialized GIS software to complete projects which may focus on GIS applications in business, marketing, local government, urban planning, environmental management, resource planning, hazards, federal government, logistics, and other fields. Prerequisite: GEOG 289 or permission from instructor.

GEOG 330. Geography of Weather and Climate. 3 Hours.

The major aspects of meteorology which involves the study of weather conditions will be addressed. Climatology will be treated as the scientific study of the Earth's climates. The dynamics of global climate change will be discussed in detail.

GEOG 340. Human Geography. 3 Hours.

Human Geography: The world will be viewed as a complex interaction between political, economic, social, and cultural systems, illustrative of the changes that occur on the landscape over time.

GEOG 360. Perception of the Environment. 3 Hours.

This seminar will examine attitudes and perceptions people hold of their environment and how landscapes become symbolic in cultural identity. Perceptions of a variety of environments will be studied including plains, mountains, deserts, lakes, rivers, forests, deltas, rural towns, farmscapes, and urban settings. The thematic emphasis will be on how perceptions of landscapes are important to environmental ethics, community identity, and land management.

GEOG 370. Geography of World Tourism. 3 Hours.

A systematic description and analysis of the world's major tourism destination regions including coastal zones, alpine areas, interior lakes, and waterways, cities, and cultural attractions. Geographic and economic factors affecting the development of tourism regions are considered. Prerequisites: GEOG 110 and GEOG 161.

GEOG 380. Cultural Geography. 3 Hours.

As a sub-field within human geography, the seminar will address the human imprint on the physical landscape. The study will focus sharply on describing and analyzing the ways language, religion, economy, government, and other cultural phenomena interact in space creating place; basically, how humankind functions spatially.

GEOG 394. Independent Study General Geog. 1-4 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

GEOG 420. Environmental Hazards. 3 Hours.

Natural and technological events continue to impact people and places across the globe. This course draws upon hazard and disaster experiences to introduce the nature, impact, and societal responses to environmental hazards. Focus is placed on the relationship between nature, society, and technology as we discuss how people and places experience, and cope with, environmental hazards and disasters.

GEOG 494. Independent Study Honors Geog. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

GEOG 499. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

GEOL 100. Earth Science with Lab. 4 Hours.

A lecture and laboratory course which surveys topics in geology, oceanography, meteorology, and astronomy.

GEOL 101. Environmental Geology with Lab. 4 Hours.

Mankind's interaction with the earth. Major environmental problems facing citizens today including: water resources, energy and mineral resources, and geologic hazards. Local field trips. Lecture, 3 hours; laboratory, 2 hours.

GEOL 105. Physical Geology with Lab. 4 Hours.

Earth as a physical body, its structure, composition, and the geologic processes acting on and within the earth. Designed especially for students with a specific interest in geology and for those students contemplating a major in sciences. Field trips. Lecture, 3 hours; laboratory, 2 hours.

GEOL 106. Historical Geology with Lab. 4 Hours.

Earth through time, its origin, history, and the history and evolution of animal and plant life. Laboratory study of fossils, sedimentary rocks, and stratigraphic problems. Field trips. Lecture, 3 hours; laboratory, 2 hours. Prerequisite: GEOL 105.

GEOL 121. Dinosaurs. 4 Hours.

This course combines concepts from paleontology, biology, and geology to explore the history of life on Earth from its beginnings with a focus on dinosaurs. In the laboratory, students apply scientific principles and methodologies to the study of animal and plant fossils, trace fossils, and fossil assemblages as we engage in a lively investigation of dinosaurs, the environments and ecosystems in which they lived, and their ancient and modern relatives. Recent discoveries and research directions in vertebrate paleontology and the dinosaurs of North Dakota and the Northern Plains region are featured. Field trips.

GEOL 123. Global Climate Change: Science and Society. 4 Hours.

The changing climate will be the biggest, most complex, and most expensive problem that humans have ever had to face. There is no environment on the planet that is immune from the influences of the changing climate. This course will examine the interrelationships between the atmosphere, surficial geology, the ocean, biological systems, and how the energy received, shared, and moved between these systems can lead to global changes, and how these will effect humans from a broad array of socio-economic, geographic, and ethnic backgrounds. Topic covered include the Earth's energy budget, atmospheric-ocean coupling, the carbon cycle, how complex forcings and feedbacks can affect the climate system, climate change in deep time, and renewable energy technologies. Lecture, 3 hours; laboratory, 2 hours.

GEOL 190. Introductory Geology in the Field. 3 Hours.

This course merges outdoor experiences with an introductory study of geology in the field. Course involves a mandatory week-long field trip; destinations depend on the geology to be emphasized. Students are introduced to the geology to be seen on the trip, and to how to plan and prepare for the outdoor activities (camping and hiking) that the trip will involve.

GEOL 260. Energy Resources. 3 Hours.

A survey of energy resources including fossil fuels, renewable, nuclear, and unconventional sources. Includes origins, extraction, geography (major reserves, producers, and consumers), uses, and environmental implications. Field trips. Lecture, 2 hours; laboratory, 2 hours.

GEOL 270. Introduction to UAS-Remote Sensing. 4 Hours.

This course will provide an introduction to UAS-based remote sensing operations with an emphasis on technologies, remotely-operated aircraft systems, and sensor types commonly utilized in UAS-remote sensing. This is a hands-on course in which students will assemble and code small UAS systems early in the course and then explore, through a variety of interactive activities, several different remote sensing tools, including: Photography (photogrammetry), LiDAR (Light Detection And Ranging), infrared and multispectral imaging, ROV (Remotely Operated Vehicle - underwater) operations, as well as GPR (Ground Penetrating Radar) technologies. We will also explore satellite-based remote sensing datasets and do significant missions planning coursework. Students will plan and execute a project with the technologies possessed by the Geosciences Program as a significant part of this course and learn about opportunities for startups in this space.

GEOL 290. Regional Geology. 3 Hours.

A study of the geology of a particular region in the United States or abroad. Class time involves introduction to the geology and preparation for a field trip to the region. Field trip is typically 10-14 days long and involves hiking and camping. Special fees required. This course can be repeated up to four times, or for a maximum twelve credits, whichever limit is hit first. Lecture, 2 hours; field trip required. Prerequisite: GEOL 101 or GEOL 105 or consent of instructor.

GEOL 299. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

GEOL 300. Geologic Field Methods. 3 Hours.

Geologic mapping and sampling techniques. Students use basic mapping instruments, gather data, and record it while in the field, and construct complete and accurate geologic maps, cross sections, and stratigraphic columns. Field trip(s) required. Lecture, 1 hour; laboratory, 4 hours. Prerequisites: GEOL 105, or consent of instructor.

GEOL 311. Paleontology. 4 Hours.

Fossilization, classification, evolution, and paleoecology. Geologic history and identification of major invertebrate phyla. Laboratory emphasizes fossils identification. Offered alternate falls. Field trip. Lecture, 2 hours; laboratory, 4 hours. Prerequisites: GEOL 105 or BIOL 151.

GEOL 317. Mineralogy and Petrology. 4 Hours.

Identification, classification, and description of minerals and rocks within the context of the evolution of Earth's mineralogy from chondritic simplicity to Phanerozoic complexity. Physical, chemical, structural, and optical properties of minerals; chemical and instrumental analysis of minerals; mineral associations. Description and classification of rocks based on mineralogy, textures, and chemical compositions; and study of the genesis of rocks, ore deposits, and mineral products of weathering and alteration through laboratory investigations. Field trips. Lecture, 2 hours; laboratory, 4 hours. Prerequisite: GEOL 105.

GEOL 320. Oceanography. 3 Hours.

Nature, origin, and evolution of ocean basins and sea water. Sea water chemistry, movement, and ability to support life. Life forms. Lecture, 2 hours; laboratory, 2 hours. Prerequisite: GEOL 105.

GEOL 321. Hydrogeology. 3 Hours.

Surface water hydrology; runoff and stream flow; groundwater hydrogeology: distribution of groundwater, aquifer properties, local and regional groundwater flow, geology of groundwater occurrence; groundwater resource development and management; water law. Lecture, 2 hours; laboratory, 3 hours. Prerequisite: GEOL 105.

GEOL 322. Geomorphology. 4 Hours.

Processes that shape Earth's surface. Effects of rock type, geologic structures, and climate on the formation and evolution of landforms. Lecture, 3 hours; laboratory, 3 hours. Prerequisite: GEOL 105.

GEOL 323. Global Climate Change. 3 Hours.

Examination of physical, chemical, and biological processes that cause environments to change naturally or under the influence of human activities. Consideration of small watersheds, large lake systems, and global atmospheric-ocean systems including meteorological processes. Emphasis on positive and negative feedback in controlling environments and their susceptibility to change. Prerequisite: GEOL 101 or GEOL 105 or GEOL 108.

GEOL 331. Soils. 4 Hours.

Principles of soils including formation, properties, and classification. This course includes the use of soils information in environmental applications. Lecture, 3 hours; laboratory, 3 hours. Prerequisite: GEOL 106.

GEOL 340. Chemistry of Natural Waters. 4 Hours.

Principles of aqueous chemistry, interactions between water and geologic materials, and the chemical nature of various natural waters; includes both fresh and saline waters found in both surface water environments (streams, lakes, oceans) and subsurface environments (vadose zone and saturated zones). Lecture, 3 hours; laboratory, 2 hours. Prerequisite: GEOL 105. Prerequisite or Co-requisite: CHEM 121.

GEOL 361. Structural Geology. 4 Hours.

Stress, strain, mechanical behavior of rocks; description and interpretation of folds, faults, joints, and foliation; tectonic processes; interpretation of geologic maps and field data. Lecture, 2 hours; laboratory, 4 hours. Prerequisite: GEOL 105.

GEOL 390. Regional Field Geology. 3 Hours.

Application of geologic field methods to a particular area or areas. Field work focuses on rock unit descriptions, stratigraphic section measurement, and geologic mapping in areas of moderately complex geology. One hour of lecture per week is used to prepare for field work. The field work requires a 15-day trip. Prerequisite: GEOL 300.

GEOL 411. Field Geology. 6 Hours.

The methods of geology, including the preparation of stratigraphic columns, cross sections, and geologic maps integrated with paleoenvironmental interpretation and structural history. Students must write professional level reports. Offered in summer. Prerequisites: GEOL 361, GEOL 471, and consent of instructor.

GEOL 421. Applied Hydrogeology. 3 Hours.

Mass transport in vadose and saturated zones; origin and behavior of inorganic and organic contaminants; investigative techniques; groundwater models; site remediation. Lecture, 2 hours; laboratory, 3 hours. Prerequisite: GEOL 321.

GEOL 471. Sedimentation and Stratigraphy. 4 Hours.

Origins, characteristics, and classification of sedimentary rocks. Techniques of study, interpretation of data, lithostratigraphy, biostratigraphy, chronostratigraphy, and correlation. Field trip required. Lecture, 3 hours; laboratory, 2 hours. Prerequisite: GEOL 105.

GEOL 494. Directed Research in Geology. 1-2 Hour.

Students conduct research under direction of a faculty mentor. The topic and goals are agreed to by student and mentor in writing at the beginning of the research. A requirement for successful completion of a second credit of GEOL 494 on a project is that the student will submit an acceptable draft of a research paper that includes introduction/background, methods, and results. This course can be repeated up to six times, or for a maximum twelve credits, whichever limit is hit first.

GEOL 497. Co-Op Practicum. 4-8 Hour.

This course can be repeated up to two times, or for a maximum eight credits, whichever limit is hit first.

GEOL 499. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

GERM 101. Beginning German I. 3 Hours.

For beginners or those entering with one or two years of high school German. Introduction to listening, speaking, reading, writing, and culture.

GERM 102. Beginning German II. 3 Hours.

A continuation of Beginning German I. Prerequisite: GERM 101.

GERM 201. Intermediate German I. 3 Hours.

Review of basic German with increased practice in conversation and reading. Prerequisite: GERM 102, three years of high school German, or consent of instructor.

GERM 202. Intermediate German II. 3 Hours.

Continuation of GERM 201. Prerequisite: GERM 201.

GERM 220. German Film. 3 Hours.

An exploration of socio-cultural, historical, and political issues in non-mainstream German film. Supplementary readings on modern German art and literature in English translation. Includes a cross-cultural unit on censorship in the arts during the cold war. Taught in English.

GERM 230. Sound Structure of German. 3 Hours.

This course will address the sound system of High German. It will begin with a thorough introduction and overview of articulatory phonetics, highlighting the striking differences in sound systems between standard German and American English. The course will then pivot towards phonetic isoglosses which differentiate German dialects, with particular emphasis on Swiss German. The course will also touch on German "dialects" spoken in North America, particularly Texas German and Pennsylvania Dutch. Finally, the course will end with a discussion of how sound systems are represented in the brain, using German data to contrast an ordered rule approach with an optimality theoretic approach. Prerequisite: GERM 202.

GS 225. Intro to Gender/Women's Studies. 3 Hours.

This course provides a general introduction to the wide array of historical, social, economic, and philosophical topics usually included within the boundaries of gender studies, and the methods used to analyze society and culture. Considers the differences between sex and gender by examining the relationships among nature, and masculinity, students will examine the patriarchal structure, feminism, non-hetero-normative sexualities, sexism, and various categories of generated existence. An interdisciplinary collection of texts from literature and theory, social sciences, psychology, pop culture, and film will be utilized.

GS 294. Independent Study. 1-3 Hour.

Directed topics of study.

GS 299. Special Topics in Gender/Women's Studies. 1-6 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

GS 494. Independent Study. 1-3 Hour.

Directed topics of study. This course can be completed one time for a maximum three credits.

GS 499. Special Topics in Gender/Women's Studies. 1-6 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

HIST 101. Western Civilization I. 3 Hours.

An introductory survey of early western civilization. (General Education History Survey).

HIST 102. Western Civilization II. 3 Hours.

An introductory survey of recent western civilization. (General Education History Survey).

HIST 103. US History to 1877. 3 Hours.

Survey of U.S. history from Colonial period to the end of Reconstruction. (General Education History Survey).

HIST 104. US History from 1877. 3 Hours.

Survey of U.S. history from the end of Reconstruction to present. (General Education History Survey).

HIST 105. World Civilizations I. 3 Hours.

A thematic and comparative survey of world history from the rise of agriculture through the Age of Exploration. (General Education History Survey).

HIST 106. World Civilizations II. 3 Hours.

A thematic and comparative survey of world history from the Age of Exploration through the modern period. (General Education History Survey).

HIST 215H. Modern World Origins. 3 Hours.

A seminar in the origins of the modern world. Class time will emphasize student discussion of assigned relevant historical sources, both primary and secondary. In addition, there will be extensive and varied writing assignments. Honors Program admission of 3.30 cumulative GPA and permission of the instructor is required. (General Education History Survey).

HIST 220. North Dakota History. 3 Hours.

This course surveys the history of North Dakota, amid its broader geographic region, from prehistoric times to the present. Course topics examine the environmental, social, economic, cultural, and political development of the state and its people. US.

HIST 239. History of Vietnam. 3 Hours.

This course surveys the history of Vietnam from its formation to the late 20th century. Topics covered include Vietnam's cultural and historical origins, its place in South-East Asia, colonization under the French, the experience of WWII, the French and American wars in Vietnam, and Vietnam since the 1970's.

HIST 240. History of Africa. 3 Hours.

Africa has a wide variety of cultures and peoples. In this survey, we will study civilizations in as different areas as the Egyptian Nile, the Malian savanna, the Congolian rainforest, and East Coast Swahili traders. Topics include ancient Egypt, Islam, European colonialism, and its consequences, apartheid, women, and kinship. NW.

HIST 251. Introduction to Public History. 3 Hours.

The purpose of this course is to introduce students to public history, which is often simply defined as the practice of history outside of the classroom, produced for a non-academic audience. This simple definition belies complicated fundamental issues, such as what role the public audience does and should play in the determination of what issues are of historical concern, and how they should be handled. Starting with consideration of what public history is, and what are its purposes and basic questions, the class will then work on developing some of the basic skills that public historians need. Students will speak with and, in some cases, shadow current professionals in the field. They will be introduced to sources of historical information available in the local community and organizations of value to public historians. Ultimately, students will utilize the ideas and skills that they develop during the semester as they undertake a local historical research project that will culminate in a public presentation.

HIST 261. American Indian History. 3 Hours.

A survey of American Indian history from pre-contact to the present, providing an overview of major trends and developments. US.

HIST 271. History of Latin America. 3 Hours.

Survey of the countries below the Rio Grande from pre-Colombian times to the present. Special attention to continuity of Native American culture, colonial legacies, identity, gender roles, revolutions, relations with the U.S., and land and income distribution. NW.

HIST 280. Practice and Method. 3 Hours.

This colloquium introduces students to the tools, research, and writing methods, resources, and theoretical approaches required in upper level history courses. It includes a semester-long student-initiated research project that will allow students to refine their skills. The course also features discussion of reading that illustrate a wide variety of historical approaches and methods. To be taken upon declaring a major in history or social science.

HIST 283. Diversity in America. 3 Hours.

This course examines American diversity, including Native American, and places that diversity in global perspective. This course meets the Education Standards and Practices Board (ESPB) Native American Studies requirement for teacher certification.

HIST 299. Special Topics in History. 3 Hours.

These are flexible courses that may be taught depending on student needs. The design of the course is to present the student an opportunity to concentrate on various topics. Prerequisites may apply. Depending on topic, course may be categorized as a NW, EU, or US. This course can be repeated up to three times for up to 9 credits.

HIST 306. Islam and the Muslim World. 3 Hours.

This course introduces students to the history and culture of the wider Muslim world. In this course we will study three aspects of Islam and the Muslim World: Islam as a religion, the 1,400-year history of Muslim civilization in all its diversity, and Islam today. NW.

HIST 315. History of American Women. 3 Hours.

The experience of women in American history, with emphasis upon the continual change in women's roles and differences brought about by region, ethnicity, and economic class. Prerequisites: any general education history survey or consent of instructor. US.

HIST 319. Colonial America. 3 Hours.

Traces the development of the colonies from the time of European exploration and early English colonization to the confrontations between Britain and America in the 1760s and 1770s. Prerequisite: any general education history survey or consent of instructor. US.

HIST 320. The Early Republic. 3 Hours.

Study of the social, intellectual, political, and diplomatic forces, issues, and personalities in America's formative (1781-1824) years. Prerequisite: any general education history survey or consent of instructor. US.

HIST 325. Sectionalism and the Civil War. 3 Hours.

Traces the rise of sectionalism as a force on antebellum America leading to the Civil War. Prerequisite: any general education history survey or consent of instructor. US.

HIST 328. The Transformation of America. 3 Hours.

Study of industrialization, urbanization, and immigration in America from 1865 to 1901, focusing on the social, political, and international consequences of and reaction to economic change. Prerequisite: any general education history survey or consent of instructor. US.

HIST 336. African American History. 3 Hours.

Examines the history of African Americans in American society from 1619 to the present, including the West African cultural context, cultural retentions and changes in the American environment, and the emergence of cohesive African American culture. The course pays special attention to the ideas, contributions, and changing roles of African Americans within American society, economy, culture, and politics. Prerequisite: any general education history survey or consent of instructor. US.

HIST 337. Imperialism. 3 Hours.

This course studies imperialism, colonialism, and decolonization in the nineteenth and twentieth centuries. The course employs case studies of different models of imperialism to study political, social, economic, and cultural developments in Asia, India, Africa and the Americas. The course emphasizes understanding of the experience of colonialism, the legacy of empire, and their influence on the post-colonial world. Serves as NW or EU focus for majors.

HIST 341. Roman Republic and Empire. 3 Hours.

This course explores in detail the history of Rome from the foundation of the city in the ninth century B.C.E. through the fall of the western part of the Roman Empire in 476 C.E. Topics discussed include Roman Republican institutions, imperial expansion, the creation of the Roman Empire, the foundation and development of Christianity, and the lasting influence of Rome on European politics and culture. Prerequisite: any general education history survey or consent of the instructor. EU.

HIST 342. The Age of the Vikings. 3 Hours.

This course looks not only at the "Viking Age" circa 780-1070 CE but also at the origins of the Vikings and their cultural contexts and legacies. It discusses Scandinavian society from late antiquity through the Middle Ages, exploring social structure, gender ideas and relations, religion and mythology, technology, politics and war, literature, and art. This course details Viking raids, expansion, and integration throughout Europe and examines modern literature and media to discover what "Viking" came to mean long after the Viking Age ended. Prerequisite: any general education history survey or consent of instructor. EU.

HIST 346. Reformation and Early Modern Europe. 3 Hours.

European history from the 16th through the 18th centuries. Topics include the Protestant and Catholic Reformations, the "Scientific Revolution," absolutism and mercantilism, and the Enlightenment. EU. Prerequisite: Any general education history survey or instructor's consent.

HIST 347. The Making of Modern Europe. 3 Hours.

A thematic study of Europe during the age of the industrial and social revolution, 1815-1919. This course compares major social and cultural trends across a variety of European nations. Prerequisite: any general education history course or consent of instructor. EU.

HIST 350. Europe in 20th Century. 3 Hours.

A detailed consideration of the main political, intellectual, social, and economic trends of 20th century Europe. Prerequisite: any general education history course or consent of instructor. EU.

HIST 351. The Mediterranean World. 3 Hours.

This course explores the development and interactions of the many Bronze Age and Iron Age civilizations and peoples of Africa, Asia, and Europe who were connected by the Mediterranean Sea. Those studied include the Egyptians, Minoans, Mycenaeans, Assyrians, Hebrews, Phoenicians, Persians, Greeks, and Romans. Prerequisite: any general education history survey or consent of instructor. NW.

HIST 352. Medieval and Early Modern Women. 3 Hours.

This course examines the lives of European women from the beginning of the Middle Ages through the early 17th century. It explores the use of gender as a category for historical interpretation as it investigates women's (and men's) identities, agency, and power in the household, the court, the Church, and the marketplace. While this course does examine the lives of famous women, it primarily seeks to reveal the lives, thoughts, feelings, and experiences of all European women over the course of 11th centuries. Prerequisite: any general education history survey or consent of instructor. EU.

HIST 353. Great Plains Indian History. 3 Hours.

Study of the culture and history of the Indian peoples of the Great Plains. Prerequisite: any general education history survey or consent of instructor. US.

HIST 354. Digital History. 3 Hours.

Introduces students to issues in digital history, digital history tools, design of digital media projects, and digital presentation of historical topics for diverse audiences. Students will produce an applied digital project based on primary materials. Instruction in this course is primarily applied, using documents and digital media equipment and software. This course can be repeated up to three times for a maximum 9 credits.

HIST 364. Explorers and Encounters. 3 Hours.

This course is about early modern explorers and the lands and peoples they encountered. The course reflects on explorations and encounters by European explorers as they marveled and interpreted the peoples and lands they met. The class encompasses the Atlantic, Indian Ocean, and the Pacific and changes over time from the late 15th through the 18th centuries, as attitudes changed and perceptions of the other modified. Prerequisite: any general education history survey or consent of instructor. NW.

HIST 365. Peoples and Cultures of Native North America. 3 Hours.

The course surveys the major culture areas of North America prior to contact with Europeans. In each region particular attention is given to one group or nation to highlight cultural adaptations and development. Prerequisite: any general education history survey consent of instructor. US.

HIST 380. History of Mexico. 3 Hours.

We will study Mexico from early civilizations to the present, stressing continuity over time. Topics include Olmecs, Aztec, and Maya civilizations, arrival of the Spanish, church, women in colonial society, formation of national identity, the Mexican revolution, the institutionalized revolution, and Mexico beyond NAFTA. Prerequisite: any general education history survey or consent of instructor. NW.

HIST 385. History of Brazil. 3 Hours.

Brazil is more than carnival alone, but that is a fundamental aspect of the largest South American society. In this course, we will examine Brazilian history and society from a wide variety of angles. The country is very diverse: from the Amazon rainforest where native peoples still live in isolation, to the Sao Paulo metropolitan area that can compete with any Western country as to modernity and industrial development. Brazil is a country full of contrasts: optimistic but sad, dancing sambas but violent. In the course we will examine Brazil's past and how this contributed to the country's present social, economic, political, and cultural situation. Prerequisite: any general education history survey or consent of instructor. NW.

HIST 391. Secondary History Teaching Methods. 3 Hours.

A methods course designed for those intending to teach history and social studies at the secondary level. The course includes a study of classroom techniques, a microteaching experience, and a practicum in a secondary level social classroom. Required of students in History BSEd History or Social Studies tracks. Prerequisite: Students must be admitted to teach education prior to enrolling for this course.

HIST 392. Experimental Course in History. 3 Hours.

This experimental course allows testing and assessment of content and methodology that may become part of the department's permanent course listings. It may be categorized as a NW, EU, or US course depending on topic. This course can be repeated up to three times for a maximum of 9 credits. Prerequisites: any general education history survey or consent of instructor.

HIST 394. Independent Study General Hist. 1-4 Hour.

Depending on topic, course may be categorized as NW, EU, or US. Must have instructor consent. This course can be repeated up to two times, or for a maximum of 8 credits, whichever limit is hit first.

HIST 396. Secondary Hist/Soc Sci Practicum. 1 Hour.

This course is designed to give History BSEd education majors (History or Social Studies tracks) an opportunity to earn 60 hours of practical experience. Placements in school settings are arranged by the Teacher Advisement and Field Placement Office. Prerequisite: Admission to Teacher Education. Prerequisite or Corequisite: HIST 391.

HIST 399. Readings in History. 1-3 Hour.

Study and discussion of readings in history. Specific topic will be arranged with the instructor. Prerequisite: consent of instructor. Depending on topic, course may be categorized as a NW, EU, or US. This course can be repeated up to two times, or for a maximum 6 credits, whichever limit is hit first.

HIST 401. Historiography. 3 Hours.

A course to consider both the philosophy or theory of history as well as the mechanics of "doing" history. Prerequisites: any general education history survey or consent of instructor.

HIST 410. Trans-Mississippi West. 3 Hours.

An in-depth seminar looking at the impact of this region on the development and growth of America. Prerequisites: any general education history survey or consent of instructor. US.

HIST 415. 20th Century America. 3 Hours.

A seminar focusing on a particular theme or time period of 20th century American history. A specific focus will be selected each time the course is offered. Prerequisites: any general education history survey or consent of instructor. US.

HIST 430. Native American Social History. 3 Hours.

Seminar examining the different social experiences of Native peoples in North America. Topics include, among others, historical demography, gender, intercultural relations with the U.S. Prerequisites: any general education history survey or consent of instructor. US.

HIST 436. Piracy, Smuggling, and Corruption. 3 Hours.

In this course students will study morals and values in their colonial Latin American contexts, how they are construed, and how historians and contemporaries have interpreted them. We will do this by examining the most controversial peoples in these societies, from prostitutes to pirates, from slaves to men and women of ill repute. This promises to be a voyage of discovery of the other and of the self. Prerequisites: any general education history survey or consent of instructor. NW.

HIST 440. Comparative Slavery in the Americas. 3 Hours.

North and South America have different experiences with slavery. In this seminar we will compare and contrast the African impact on both continents, especially in Brazil and the United States. Some topics that we will study are the slave trades, runaway slave societies, the Haitian revolution, African religions, race relations, gender roles, families, and the meanings of freedom. Prerequisites: any general education history survey or consent of instructor. NW or US.

HIST 441. The Early Middle Ages. 3 Hours.

This seminar focuses on Late Antiquity and the Early Middle Ages, the period from the late fourth through the late 10th centuries C.E. during which the Western Roman Empire was replaced by the individual kingdoms and principalities of medieval Europe. Participants will research the history and historiography of this period, which includes the "barbarian invasions" of Rome and the fall of the Western Roman Empire, the rise of the Roman Church, the transition from Classical to medieval philosophy, the establishment of the Carolingian and Holy Roman Empires, and the foundation of medieval European political, social, and economic systems. Prerequisite: any general education history survey or consent of instructor. EU.

HIST 442. The Crusades. 3 Hours.

This seminar explores the period of the Crusades from its inception in the late eleventh century through its demise in the later Middle Ages. It looks at the development of the religion of Islam and of Muslim political states, the wars of the Crusades, the creation of the Crusader States, and conflict and cooperation among Christians, Jews, and Muslims in Asia and North Africa. Prerequisite: any general education history survey or consent of instructor. NW.

HIST 460. Modern France and Francophone Society. 3 Hours.

An in-depth seminar on the major themes of modern French history from 1750 to the present. Prerequisites: any general education history survey or consent of instructor. EU.

HIST 491. History Seminar. 3 Hours.

An advanced seminar in history with a major paper requirement. Prerequisite: any general education history survey or consent of instructor. Depending on topic, course may be categorized as NW, EU, or US.

HIST 497. Internship. 1-6 Hour.

Placement in applied public history setting for practical experience. This course may not be used to fulfill the History B.A. or History B.S.Ed. senior seminar/capstone requirement. Prerequisite: HIST 280 and consent of instructor. This course can be repeated up to two times or for a maximum 12 credits, whichever limit is hit first.

HIST 499. Special Topics in History. 3 Hours.

This is a flexible course that may be taught depending on student needs. The design of the course is to present the student an opportunity to concentrate on various topics. This course can be repeated up to two times for a maximum 6 credits. Prerequisites may apply. Depending on topic, course may be categorized as a NW, EU, or US.

HIST 95. Intercultural Experience. 0 Hours.

History 095 creates and/or facilitates intercultural and/or interpersonal experiential opportunities for students. Students will participate in an experience that requires thoughtful and demonstrated engagement.

HIST 97. History/Social Science Portfolio. 0 Hours.

Students should register for this course in the semester they intend to submit their portfolio for their History B.A. or History B.S.Ed. degree.

HMS 100. Introduction to Healthcare Professions. 2 Hours.

This course will expose students to a broad variety of professions found in modern healthcare. The overlap and distinctions between different healthcare professions, the interaction and collaboration between disciplines, and the academic training required for each profession will be discussed.

HMS 151. Stress Management. 2 Hours.

Focuses on utilizing concepts related to stress and stress management strategies to achieve holistic high-level wellness.

HMS 203. Health Care Through the Life Span. 3 Hours.

Provides an overview of promotion of health and prevention of illness throughout the life span.

HMS 208. Medical Terminology. 2 Hours.

Comprehensive examination of prefixes, stems, and suffixes as well as emphasis on pronunciation, spelling, and definitions of words used by health professionals including key pathology, diagnostic, and treatment procedures terms.

HMS 213. Life Span Growth and Development. 3 Hours.

Focuses on human growth and development throughout the life span. Prerequisite or Corequisite: PSY 111. Classroom Study = 45 hrs.

HMS 215. Principles of Pharmacology. 3 Hours.

Provides a survey of all major drug groups as they apply to providing safe, therapeutic client care.

HMS 240. Nutrition. 3 Hours.

Nutrition and application to human dietary needs of people at different ages.

HMS 243. Pathophysiology. 3 Hours.

Provide fundamental knowledge of the structural and functional changes caused by disease and alterations in body function. Emphasis is placed on understanding changes and responses that produce signs and symptoms in common health problems. Prerequisites: Student must complete BIOL 220 and BIOL 221 before enrolling in this class.

HMS 279. Death and Dying. 3 Hours.

Provides a holistic approach to end-of-life issues, including death, dying, and bereavement.

HMS 299. Special Topics Health Mgmt Sci. 1-8 Hour.**HMS 333. Transcultural Health Care. 3 Hours.**

Present framework for health care providers to learn concepts and characteristics of diverse populations to provide culturally competent care for individuals, families, and communities.

HMS 460. Quality and Risk Management in Health Care. 3 Hours.

Examines the fundamentals of a health care quality and risk management program, including risk identification, loss prevention, loss reduction, claims management process, risk financing, legal-ethical factors, and clinical risk exposures. Provides experience in quality and risk management practices that are unique to the health care settings. Prerequisite: Restricted to students with junior or senior standing or have consent of instructor.

HMS 463. Issues Health Care Regs and Prac. 3 Hours.

Examines a variety of agencies that oversee and regulate healthcare in the United States. Focuses on a variety of professional standards and laws that affect quality of care, delivery, and managerial decision making. Prerequisite: Restricted to students with junior or senior status or consent of instructor.

HMS 499. Special Topics Health Mgmt Sci. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

HON 191H. The Honors Community. 1 Hour.

This course introduces students to the MSU honors program. Informal conversations with MSU faculty, administrators, honors students, staff, and community leaders will familiarize students with the University, the community, the honors approach to learning. Students also investigate or discover new or existing passions through student-created learning experiences (SCLE), created in consultation with the instructor. Students present, evaluate, and reflect on their learning and experiences related to the SCLE. Prerequisite: Student must be admitted to the honors program before enrolling in this course.

HON 199H. Honors Special Topics. 1-4 Hour.

An Honors-level exploration of a special topic area determined by participating department. Content will vary. This course can be repeated up to two times, or for a maximum eight credits, whichever limit is hit first.

HON 250H. Foundations of Leadership. 3 Hours.

HON 250H is designed to introduce students to basic components of leadership theory, concepts, and development. Students will engage in activities, assignments, and discussions that will enhance their leadership skills and community involvement.

HON 251H. Culinary Arts and Entertaining. 1 Hour.

A hands-on cuisine from a particular geographical region of the world. Readings on historical, social, economic, and artistic aspects of the relevant culture that pertain to the culinary arts. Applied lessons in menu planning, table setting, and food preparation/presentation. Additional course fee covers food costs. This course can be repeated up to three credits. Prerequisite: Student must be admitted into the Honors Program before enrolling in this class.

HON 252H. Visionaries of the Past. 2 Hours.

A thematically organized survey of "Great Works" by noted authors and artists. Literature, art, theater, film, and music will be included. These works have demonstrated enduring relevance, significant historical or social impact, and/or recognized aesthetic value. Broad themes in any given semester might include, for example, utopia/dystopia, human justice, social conflict, etc. Prerequisite(s): Honors Program admission or permission of instructor.

HON 264H. Thinking Outside the Box. 3 Hours.

A seminar that emphasizes the practice of intellectual inquiry, innovative pedagogies, and/or interdisciplinary connections. The class will rotate between academic colleges and departments. This course can be repeated up to two times, or for a maximum six credits, whichever limit is hit first. Prerequisite(s): Honors Program Admission or 3.30 cumulative GPA and permission of instructor.

HON 299H. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

HON 351H. Integrity and the Examined Life. 3 Hours.

This seminar addresses the two themes of moral integrity and Socrates' claim that only the examined life is truly worth living. The focus is on great works, both written and visual (movies), and the students are challenged to develop their own views on a number of substantive matters. Prerequisite: Students must be admitted to the Honors program or have a cumulative GPA of 3.30 and instructor consent before enrolling in this course.

HON 391H. Community Problem-Solving. 3 Hours.

A seminar in civic engagement. Students will work with a community leader or community agency to identify, understand, and formulate solutions to complex, real-life community challenges. Emphasis on political empowerment, collaborative work with diverse constituencies, research, data analysis, and problem-solving. This course can be repeated for six credits. Prerequisite: Student must be admitted into the Honors Program before enrolling in this class.

HON 395H. Citizenship and Service. 3 Hours.

An interdisciplinary exploration of community-building, social justice, and human liberation that engages students directly in meaningful community service. Study of history, theory, and the local/global realities of community-building; reflection upon characteristics of a just society, individual responsibility, and potential leadership roles. Prerequisite: Student must be admitted to the honors program or have a cumulative GPA of 3.30 and instructor consent before enrolling in this course.

HON 399H. Honors Special Topics. 1-4 Hour.

An Honors-level exploration of special topic area, determined by participating department. Content will vary. This course can be repeated up to two times, or for a maximum eight credits, whichever limit is hit first.

HON 491H. Honors Program Capstone. 1 Hour.

The Honors Program capstone course offers students an opportunity to create a portfolio that integrates their honors coursework in order to demonstrate how they have applied program concepts and achieved student learning outcomes. The portfolio will be displayed at an exhibition at the end of the semester and students will also give a public presentation highlighting the learning outcomes and scholarly progress achieved through their participation in honors program courses.

HON 494H. Honors Independent Study. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

HON 496H. Honors Study Tour. 0-6 Hour.

A faculty-led tour of appropriate locations designed for Honors Program students. The course includes pre- and post-trip requirements.

HON 499. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

HUM 194. Independent Study. 1-3 Hour.

Independent or directed study of special topics in the study of humanities. This course can be repeated up to two times, or for a maximum six credits, whichever limit is hit first.

HUM 210. Research Strategies. 2 Hours.

Both practical and theoretical in scope, this class is designed to help students become full participants in our Information Society. This class uses a mixture of lecture, in-class discussion, hands-on assignments, and written research project to give the student the technical skills and critical thinking abilities they need to use the printed and electronic information resources found in libraries and on the Internet.

HUM 251. Humanities. 3 Hours.

We study the art, literature, and music of the ancient world from the Stone Ages through the Greeks and the Romans up to the Early Middle Ages. Get to know the cultures of the classical past.

HUM 252. Humanities. 3 Hours.

We study the art, literature, and music of the Western World, from the High Middle Ages (Gothic Period) through the Renaissance (15th and 16th Centuries) to the 17th and early 18th Century (Baroque Period). This course features the artistic genius of Dante, Leonardo, Michelangelo, Shakespeare, Rembrandt, Handel, Bach, and more.

HUM 253. Humanities. 3 Hours.

We study the art, literature, and music of the Western World, from the 18th Century ("Age of Reason"/"Classical Period" in Music) through the "Romantic Era" of the 19th Century to "Modernism" and "Post-Modernism" in the 20th and 21st Centuries, celebrating many artists including (usually) Mozart, Voltaire, Beethoven, Keats, Austen, Renoir, van Gogh, Ibsen, Picasso, Armstrong, and Wolff.

HUM 254. Non-Western Humanities. 3 Hours.

An integrated survey of the art, literature, philosophy, and history of a particular non-western culture. The specific culture studied from year to year will vary but could rotate among Japanese, African, pre-Columbian American, Chinese, or Indian. May be repeated for credit.

HUM 299. Special Topics. 1-8 Hour.

Topics are variable. Offerings include visiting professors, experimental offerings of new courses, or one-time offerings of current topics. This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first. Prerequisite: Consent of instructor.

HUM 303. The World of Ancient Greece. 3 Hours.

Humanities 303 offers students an in-depth look at Greek Culture, its language, laws, arts, history, philosophy, literature, and cultural values. Students can expect to live and breathe Greek culture, and to gauge its impact on the world then, now, and all of the time in between. The course will explore Greek Culture from its earliest cyclic stories surrounding the fall of Troy, the advent of the Pre and Post Socratic thinkers, its formative poets and artists, and the various parts of its historic and linguistic record. Expect to consider the great conflicts with the Persians that ultimately forged a democratic identity that guides our understanding of human governance still, as well as the various Confederacies and alliances with and against other Greek City States, forging for us an identity that shadows us still. Students can expect to experience how the Greeks approached life in ways different from every other ancient culture, engaging in the act of questioning received truths that transformed virtually every aspect of Greek society.

HUM 304. The World of Ancient Rome. 3 Hours.

Humanities 304 offers students an in-depth look at Roman Culture, its language, laws, arts, history, philosophy, literature, and cultural values. Students can expect to live and breathe Roman culture, and gauge its impact on the world then, now, and all of the time in between. The course will explore Roman culture from its earliest fragments of Latin inscriptions and the customary Twelve Tables of Law, through the tumultuous Roman passions for building, power, love, lust, war, bread, and games. The course ends in the Roman dust, when the Western Empire falls, circa 476 CE, and the surviving eastern half grows ever stranger as the centuries pass. Students will learn about Rome both in the grand scale of its huge achievements and ambitions, as well as in the small ways of everyday life. The course contributes to the Minor and Concentration in the Humanities.

HUM 325. Cultural Objects and Material Research. 3 Hours.

Objects tell at least three stories: of creation, of use-life, and of discard. While fine art captures the great ideals of a culture, contextualizing material objects can unlock deeper insights into the social values and cultural currents of the time. This course provides an introduction to material culture and examines the use and significance of objects in research. Material culture research enables students to explore methods of interpreting culture as well as understanding how objects undergo shifts in meaning over time or in different contexts.

HUM 394. Independent Study. 1-3 Hour.

Independent or directed study of special topics in the study of humanities. This course can be repeated up to two times, or for a maximum six credits, whichever limit is hit first.

HUM 399. Special Topics. 1-3 Hour.

Varying areas of content, issues, or themes in the study of humanities. This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

HUM 496. Study Tour. 1-6 Hour.

MSU faculty-led study trips to appropriate locations. The course requirements will include additional requirements beyond the travel itself and may be repeated for credit.

HUM 499. Special Topics. 1-8 Hour.

Topics are variable. Offerings include visiting professors, experimental offerings of new courses, or one-time offerings of current topics. This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first. Prerequisite: Consent of instructor.

IDS 240. Introduction to Interdisciplinary Studies. 2 Hours.

Introduction to the nature of interdisciplinary studies - drawing on disciplinary perspectives to construct a more comprehensive perspective to address questions, problems, or topics too broad or complex for a single discipline. The primary goal of the course is to help students develop a thoughtfully crafted Academic Plan of study for pursuit of a BIS degree.

IDS 310. Prior Learning Assessment Portfolio Development. 1 Hour.

Prior Learning Assessment Portfolio Development is a one-credit course in which students will develop one or more Prior Learning Portfolios. A Prior Learning Portfolio is a collection of materials, reflections, and/or artifacts that a student will compile to demonstrate their previous non-academic experience and knowledge that is relevant to a specific course. Each portfolio component plays a role in demonstrating mastery of course objectives. This course can be repeated up to two times.

IDS 360. Directed Project. 2-4 Hour.

Under the direction of their advisors, students complete an interdisciplinary project that integrates their disciplines of study. The nature of the project varies with the student's goals and the disciplines being integrated (e.g., research project, service-learning project, creative work, etc.). This course can be repeated up to two times, or for a maximum four credits, whichever limit is hit first. Prerequisite: approved Directed Project proposal and permission of IDS director, IDS 240, and permission of instructor.

IDS 470. General Studies Capstone. 1 Hour.

This capstone seminar provides Bachelor of General Studies students an opportunity to reflect on their degree experience and prepare for the future. Students will reflect on and synthesize their academic experiences and present them in a paper and presentation. Part of the course will focus on preparation for the future, including resume and cover letter preparation, interview skills, and professional communications related to individual career goals. Restricted to senior status and General Studies major.

IDS 480. Senior Capstone. 2 Hours.

In this seminar course, students present the results of their Directed Project. In most cases students will present their work in both a paper and an oral presentation, but other formats are possible depending on the nature of the Directed Project. Prerequisite: IDS 360.

INT 496. Study Abroad (Non-Reciprocal). 1-18 Hour.

Students registered will study abroad in programs not governed by reciprocal exchange agreements with Minot State University. The course is considered as a placeholder and required for students studying abroad in order to maintain full-time status. In addition, course content is designed to enhance cross-cultural learning and provide guidance on how to approach living and adapting to another culture and community. Courses and grades earned abroad will be entered as transfer credits from the host institution for the related semester of study abroad. This course can be repeated up to three times, or for a maximum twenty-four credits, whichever limit is hit first. Prerequisites: Restricted to students who have at least Sophomore status, a 2.5 GPA, and approval from the Office of International Programs.

INT 497. Study Abroad. 1-18 Hour.

Students registered will study abroad in programs governed by reciprocal exchange agreements with Minot State University. The course is considered as a placeholder and required for students studying abroad in order to maintain full-time status. In addition, course content is designed to enhance cross-cultural learning and provide guidance on how to approach living and adapting to another culture and community. Course and grades earned abroad will be entered as transfer credits from the host institution for the related semester of study abroad. This course can be repeated up to three times, or for a maximum twenty-four credits, whichever limit is hit first. Prerequisites: Restricted to students who have at least Sophomore status, a 2.5 GPA, and approval from the Office of International Programs.

INT 95. Fostering a Diverse and Inclusive Community. 0 Hours.

This is a service course in which students work to promote the vitality of community and culture through public activities that foster a diverse and inclusive climate. The course experience will require students to organize, coordinate, or play a significant role in executing a public activity or event that celebrates different cultural or ethnic backgrounds, such as the International Cultural Celebration, Black History Month activities, or the annual spring Honor Dance and Powwow.

INTB 307. International Business. 3 Hours.

Introduces the conceptual and operational problems of participating in international business. Coverage includes a study of managerial, marketing, financial, accounting, legal, economic, and cultural environments in foreign markets for the conduct of world business.

INTB 427. International Marketing. 3 Hours.

Introduces the essentials of conducting international marketing operations to include estimating market potential, developing entry strategies, and managing and controlling marketing programs.

INTB 437. International Culture & Management. 3 Hours.

Examines the impact of culture on business practices and introduces the student to the management process in an international setting. Includes an examination of comparative systems and environmental conditions and their impact on management decisions.

INTB 462. International Business Strategy. 3 Hours.

Provides an international business capstone experience. Case studies illustrating international business decisions and operations are emphasized. Precorequisite: INTB 427, INTB 437, and FIN 457.

KIN 100. Concepts of Fitness and Wellness. 2 Hours.

Provides information and skill training directed to assessing the health-related components of physical fitness, proper nutritional needs for performing physical activities, laboratory activities (group exercise, calisthenics, walk/jog, and weight training), and the cognitive concepts of health-related fitness.

KIN 101. Social Dance. 1 Hour.

Students will participate in a variety of social dances including; line, swing, Latin, square, waltz, country two step, country three step, traditional two step, and multicultural dance.

KIN 102. Jogging and Conditioning. 1 Hour.

Instruction, practice, and participation in the basic skills, body mechanics, and terminology associated with jogging and power walking. An emphasis is placed on developing a personal fitness program to fit the individual's needs and current abilities.

KIN 105. Outdoor Activities I. 1 Hour.

Requires active participation in (but not limited to) snow skiing and other outdoor related activities. Fees apply to specific activities.

KIN 106. Varsity Soccer. 1 Hour.

Requires active participation in varsity soccer. This course can be repeated up to five credits.

KIN 107. Introduction to Health and Physical Education. 2 Hours.

Provides prospective physical educators with an insight into the broad scope of health and physical education. The student will have the opportunity to obtain an understanding and appreciation of this multifaceted field. Opportunities to assess what school health and physical education offer in terms of career potential.

KIN 109. Racket Sports. 1 Hour.

Requires active participation in (but not limited to) tennis, racquetball, and pickleball.

KIN 111. Varsity Football. 1 Hour.

Requires active participation in varsity football. This course can be repeated up to five credits.

KIN 112. Varsity Basketball. 1 Hour.

Requires active participation in varsity basketball. This course can be repeated up to five credits.

KIN 113. Varsity Track & Field. 1 Hour.

Requires active participation in varsity track & field. This course can be repeated up to five credits.

KIN 115. Varsity Golf. 1 Hour.

Requires active participation in varsity golf. This course can be repeated up to five credits.

KIN 116. Varsity Cross Country. 1 Hour.

Requires active participation in varsity cross country. This course can be repeated up to five credits.

KIN 117. Varsity Volleyball. 1 Hour.

Requires active participation in varsity volleyball. This course can be repeated up to five credits.

KIN 118. Varsity Cheerleading. 1 Hour.

Requires active participation in cheerleading during the fall or winter sports. This course can be repeated up to five credits.

KIN 119. Varsity Softball. 1 Hour.

Requires active participation in varsity softball. This course can be repeated up to five credits.

KIN 120. Strength Training. 1 Hour.

Instruction, practice, and participation in the basic skills, body mechanics, and terminology associated with weight training. An emphasis is placed on developing a strength training program to fit the individual's needs and current abilities.

KIN 121. Varsity Baseball. 1 Hour.

Requires active participation in varsity baseball. This course can be repeated up to five credits.

KIN 123. Outdoor Activities II. 1 Hour.

Requires active participation in (but not limited to) canoeing and other associated outdoor activities. Fees apply to specific activities.

KIN 124. Individual Sports. 1 Hour.

Requires active participation, terminology, knowledge, and skills associated with (but not limited to) golf and archery.

KIN 126. Group Exercise. 1 Hour.

Students will actively participate in a variety of group exercise formats including yoga, bodypump, cardio, strength, sculpt, circuit, tabata, stability ball, and step. This course can be repeated up to two credits.

KIN 128. Varsity Hockey. 1 Hour.

Athletes participate in varsity hockey program. This course can be repeated up to five credits.

KIN 131. Varsity Wrestling. 1 Hour.

Requires active participation in varsity wrestling. This course can be repeated up to five credits.

KIN 210. First Aid and CPR. 1 Hour.

Provides instruction in first aid, emergency care procedures, and CPR, which leads to certification by the American Red Cross.

KIN 215. Methods of Teaching Sport Activities. 2 Hours.

Provides instruction, practice, and teaching experience in sports activities. Fundamental rules, skills, terminology, and teaching strategies will be emphasized in (but not limited to) the following sports: softball, soccer, speedball, volleyball, badminton, racquetball, archery, golf, tennis, wallyball, pickleball, and ultimate frisbee. This course is restricted to PE majors and minors, corporate fitness majors and Exercise Science and Rehabilitation majors.

KIN 216. Methods of Teaching Lifetime Activities and Outdoor Pursuits. 2 Hours.

Provides instruction, practice, and teaching experience in lifetime activities and outdoor pursuits. Fundamental skills, terminology, and teaching strategies will be emphasized in (but not limited to) the following activities: golf, jogging, cross-country skiing, cycling, hiking, pickleball, rock climbing, and canoeing. This course is restricted to Physical Education majors and minors, Corporate Fitness and Wellness Management majors, Coaching minors, and Exercise Science and Rehabilitation majors.

KIN 220. Methods of Teaching Dance. 2 Hours.

Provides practice, instruction, and teaching experience in (but not limited to) social, folk, and square dance. Emphasis will be placed on methods and techniques of teaching the rhythms of dance steps and placement of dance. This course is restricted to PE majors and minors, and corporate fitness majors.

KIN 225. Careers and Leadership in Kinesiology and Pre-Professional Health Sciences. 2 Hours.

This course provides an in-depth exploration of the expanding career landscape within kinesiology and the pre-professional health sciences. Designed for students pursuing pathways such as physical therapy, occupational therapy, chiropractic medicine, physician assistant studies, athletic training, medicine, and emerging kinesiology professions, the course emphasizes developing strong leadership, communication, and career-readiness skills. Students will examine the scope of practice across multiple health and human performance fields, learn strategies for navigating the challenge of change, and build essential tools for career success including résumés, LinkedIn profiles, and professional networks. Through interactive activities, discussions, and applied assignments, students will strengthen their leadership capacity while gaining clarity and confidence in their future career direction.

KIN 231. Methods of Teaching Aquatics. 2 Hours.

Instruction and participation in the basic swimming strokes, water games, and aquatic exercises.

KIN 299. Special Topics in Human Performance. 1-3 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

KIN 300. Principles of Coaching Methods. 2 Hours.

This course provides students with the foundational content to successfully complete the American Sport Education Program coaching certification. The curriculum covers essentials to prepare coaches to step on the field for the first time. There is a focus on principles of coaching, behavior, teaching, physical training, and management. Topics include coaching philosophy and style, sport management, season and practice planning, and teaching technical and tactical skills. Students completing the course and certification will be published on the ASEP national coaching registry. Prerequisite: Students must be Physical Education or Corporate Fitness and Wellness majors or Coaching minors before enrolling in this course.

KIN 301. Psychomotor Development and Learning. 3 Hours.

Provides an understanding of the changes that occur in motor behavior over the entire life span. Participants will have opportunities to discuss issues relating to various motor development theories and to the different influences affecting an individual's motor development. Participants will have opportunities to observe and analyze fundamental motor patterns as they are performed in various settings. Participants will also learn about how a person learns new motor patterns. Emphasis is placed on the identification of components of correct form, the detection of incorrect form, and the appropriate use of skill cues to prompt participants toward correct form.

KIN 310. Organization and Administration of PE and Athletics. 2 Hours.

Provides a study of administration and management concepts and management responsibilities relevant to teaching and non-teaching career fields.

KIN 315. Curriculum, Assessment, and Technology in Health and Physical Education. 3 Hours.

Specific exploration of how curriculum in health and physical education is designed with an emphasis in how assessment plays into that process. Topics include curriculum design, assessment design, assessment use for curriculum and for learning, grading policies, technology use, technology for assessment, and more. Prerequisite: ED 320. Restricted to PE majors, PE minors, Health Ed minors, and HPE majors.

KIN 325. Personal Training Methods. 2 Hours.

This course is designed to provide prospective physical educators, coaches, and corporate fitness majors with instruction, practice, and teaching experience in personal training and lifestyle management coaching. Fundamental terminology, personal training skills, strategies, and techniques will be emphasized. Students will practice developing personal training programs tailored to fit the ability, fitness level, and desired outcomes of prospective clients. Prerequisite: Students must complete ESR 226 before enrolling in this course.

KIN 334. Nutrition for Physical Performance. 2 Hours.

Provides information on how nutritional habits affect physical performance. An emphasis will be placed on knowledge of the six basic nutrients, food groups, calories, and energy expenditure.

KIN 340. Elementary Physical Education Methods and Activities. 2 Hours.

Provides prospective teachers with an understanding of contemporary reflective approaches to teaching elementary physical education grades K-5. Curriculum and lesson content will be geared towards meeting the National Standards & Grade-Level Outcomes for K-12 Physical Education (SHAPE America) and teacher education INTASC standards and dispositions. Participants will learn and practice a variety of teaching methods that will be utilized in peer and field teaching experiences: a) planning for quality instruction, b) effective and appropriate instructional practices, c) classroom management, d) evaluation, reflection, and improvement of instruction. Course content will allow students to learn and practice teaching skills. In addition, this course is a prerequisite for KIN 341 and it is highly recommended that this is taken prior to KIN 391.

KIN 341. Practicum for Elementary Physical Education. 3 Hours.

Provides prospective physical education teachers with active participation in the complete process of teaching developmentally appropriate physical education to children in grades K-12. This approach to teaching is based on evidence based-practices and serves as the content for national standards for K-12 physical education (SHAPE America). Participants will receive a minimum of 30 contact hours with children during which time they will practice and refine instructional skills taught in KIN 340. This course should be taken with ED 323L. Prerequisites: KIN 340 and KIN 301 and Admission to Teacher Education.

KIN 360. Administration of School Health Programs. 3 Hours.

The development and administration of the public school health program, with emphasis being placed on health services, healthy living, and health instruction. Special emphasis placed on developing and administering health instruction material for the elementary through senior high school program based upon the guidelines and recommendations of the North Dakota Department of Public Instruction.

KIN 362. Principles and Methods of Teaching School Health. 3 Hours.

Provides prospective teachers with an understanding of a contemporary and reflective approach to teaching health in the public schools grades K-12. This approach to teaching is based on learner-centered instructional strategies. Participants will learn and practice skills that will be most useful to them as beginning teachers such as: (a) establishing the learning environment; (b) planning appropriate and meaningful learning experiences; and (c) using effective teaching behaviors to implement the lesson plans.

KIN 365. Human Sexuality for School Education. 3 Hours.

Provides prospective teachers with the knowledge needed to teach human sexuality in school settings. This includes anatomy of biological systems, sexual health and diseases, and relationship health. Restricted to PE major, PE minor, Health Ed minor and HPE major. Restricted to sophomore, junior or senior status.

KIN 391. Secondary Physical Education Methods and Practicum. 4 Hours.

This course has two major components. First, methods coursework is done at MSU which provides teaching strategies for classroom management, planning, instruction, and assessment of teacher as well as student behavior. Current theories of motivation are explored and applied in this course. Second, 45 contact hours with secondary students will provide extensive opportunity to apply current practices learned in the classroom. Prerequisites: KIN 301, Admission to Teacher Education, and it is highly recommended that students take KIN 340 prior to enrolling in this course. Course restricted to Physical Education majors.

KIN 396. Study Abroad. 0-16 Hour.

Students registered in this study abroad will have international fitness and educational experiences that will enhance their worldview of their disciplines. Department Approval Required. This course can be repeated up to four times, or for a maximum sixteen credits, whichever limit is hit first.

KIN 407. Exercise and Sport Psychology. 2 Hours.

Provides knowledge of the psychological aspects of exercise participation and motivation. Emphasis will be placed on behavior change in relation to active lifestyles. Covers concepts such as motivation, theories of behavior, theories of motivation, communication, self-confidence, and goal-setting skills. Prerequisite: PSY 111.

KIN 412. Research Design and Epidemiology. 2 Hours.

This course provides students with the opportunity to learn about evidence-based practice in sport and exercise sciences topics. This will be a comprehensive course providing students with the skills necessary to design a research project. Students will understand epidemiology in sport and exercise science.

KIN 431. Kinesiology. 3 Hours.

Provides study of joint movements and muscle action as related to physical activities. Prerequisite: BIOL 115 or BIOL 220.

KIN 433. Physiology of Exercise. 3 Hours.

Provides a comprehensive study of the physiological effect of muscular exercise and training upon organs and systems of the body.

KIN 441. Evaluation of Psychomotor Performance. 3 Hours.

Designed to provide the corporate fitness and physical education major with an understanding of contemporary methods used to measure and evaluate psychomotor skills and performance. Emphasis will be placed on learning and practicing techniques necessary for proper evaluation of health and performance related to physical fitness and selected sport skills.

KIN 442. Adapted Physical Education. 3 Hours.

Provides practical methods and teaching applications that can be used in a mainstreamed or adapted group games, dance, and individual and dual sports. Learn about common disabilities and how to adapt instruction to include all participants in physical activity. Prerequisite: KIN 215.

KIN 494. Special Topics in Physical Ed. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

KIN 496. Coaching Activities Practicum. 2 Hours.

Coaching minors work with experienced coaches in the field to gain practical experience in a field setting. All practicums arranged by the department. Prerequisite: KIN 210 and KIN 300.

KIN 497. Practicum in CFWM and ESR. 1-18 Hour.

160 to 360 hours of practicum experience at two to four sites in a recreation, wellness, fitness center, clinical, or athletic performance setting. Students must take at least two credits at a time, with 20 hours of clinical experience required per credit. This course can be repeated up to eighteen times, or for a maximum eighteen credits, whichever limit is hit first. Restricted to junior and senior corporate fitness and wellness management or exercise science and rehabilitation majors. Prerequisite: ESR 226, KIN 325, and KIN 431 or KIN 433 courses must be completed.

LANG 101. Beginning Classical Greek I. 4 Hours.

Introduction to the language of the ancient Greek world. Students will learn a substantial amount of vocabulary as well as key morphological and syntactic constructions. Throughout, students will be exposed to snippets from authors ranging from Plato and Sophocles to Homer and Aristophanes. There will also be occasional forays into Mycenaean Greek and epichoric inscriptions.

LANG 102. The Structure of Language. 3 Hours.

This course introduces students to the nature of language and its interaction with non-linguistic entities. All aspects of language will be covered, ranging from sounds to words to sentences to meaning to conversations. The course will also touch on how languages evolve through time, why they always seem to be in flux, and attempts made to save dying ones.

LANG 104. Native Languages of America. 3 Hours.

This is an introduction to linguistic analysis using the languages native to North America as our template. Students will examine particular languages with an eye towards their sounds, word forms, and word order. Additionally, students will observe the historical development and cultural significance of particular native languages. Languages native to North Dakota such as Hidatsa, Mandan, Arikara, Lakota, Nakota, Dakota, Chippewa, and Cree will be highlighted.

LANG 105. Writing Systems. 3 Hours.

A history of the principle writing systems of the world and a discussion of how they work. In addition to studying cuneiform, Egyptian hieroglyphs, Chinese characters, Japanese kana and kanji, Korean hangul, Mayan glyphs, Hindi's devanagari, Linear A and B, Cree's alphasyllabary, Russian's cyrillic, Cherokee's syllabary, Hebrew and Arabic's consonantal writing systems, ample time will be spent tracing the history and development of the Roman alphabet's individual letters.

LANG 107. Language and the Brain. 3 Hours.

This course will examine how language and cognitive processes interact using approaches from linguistics and brain sciences. Topics may include language representation in the brain, cognition, psycholinguistics, language acquisition, language processing, brain imaging methodologies, speech and language disorders, and speech perception.

LANG 120. Ojibwe Language. 3 Hours.

This course is an introduction to the Ojibwe language. Coupled with cultural teachings, this course focuses on developing listening, speaking, writing, and reading skills in the language.

LANG 206. Latin and Greek in Scientific Terminology. 3 Hours.

This course familiarizes students with the Latin and Greek building blocks which are so fundamental to much terminology in the natural sciences. The morphological structure of Latin and Greek words will be explored as will the semantic ranges of the most common and useful affixes and roots.

LANG 298. Syntax and Morphology. 3 Hours.

To introduce ESL (English as a Second Language) students to the richness of English affixes as well as to the rules of sentence formation. Specifically: 1. To familiarize students with the breadth of affixes English possesses 2. To ensure that students appreciate the different types of affixes, distinguishing, inflectional from derivational affixes 3. To deepen students' understanding of how derivational affixes can alter the meaning of a root in predictable ways. 4. To deepen students' understanding that some derivational affixes also change the phonetics and stress of the original root 5 To trace the historical development of some of these affixes and search for either cognates or affixes with similar function in the languages of the students.

LANG 299. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

LANG 390. Foreign Language Methods. 4 Hours.

Practical Methods for teaching foreign languages. Examines theories of second language acquisition and research in effectiveness of various teaching strategies. Includes a 60-hour practicum in high school classes with some practice teaching. This course is limited to and required of world language majors and minors in the BSE program. Does not count towards the residency requirements for the world languages BSE major or minor. Prerequisite: Admission to Teacher Education or department consent.

LANG 394. Independent Study General Lang. 1-4 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

LANG 404. TA Foreign Language Seminar. 3 Hours.

This course is designed to provide structure to the experience of teaching world languages as a Fulbright Language Teaching Assistant (FLTA).

LANG 451. Study Abroad Recap. 1-6 Hour.

After completing a significant period of immersion in the target culture, students take this course at Minot State University the semester upon returning. The world language faculty assist students in reflecting upon their study abroad experience while narrowing down topics for a senior capstone. This course is restricted to declared world languages BA/BSE majors and minors. It does not count towards the residency requirement for the world languages BA/BSE major or minor; exceptions by department consent. This is taken at Minot State University the semester after returning from study abroad. Prerequisite: Restricted to students who are World Language majors.

LANG 499. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

LANG 95. Foreign Language Experience. 0 Hours.

This is a service course in which students could use their language skills by tutoring in the schools, volunteering in the courthouse and hospitals, or presenting language lessons in the nursing homes with songs and parties. This course may be repeated up to four times.

LAT 101. Beginning Latin I. 3 Hours.

Introduction to the grammar and language of the Roman Empire with emphasis on Latinate words surviving into English. Throughout, students will be exposed to snippets from real Latin authors, e.g., Caesar, Vergil, Cicero, Ovid.

LAT 102. Beginning Latin II. 3 Hours.

A continuation of Latin 101 with an introduction to more advanced grammar topics such as the subjunctive, indirect discourse, conditional sentences, and the supine. Increasingly more advanced literary texts are also introduced.

LAT 201. Intermediate Latin I. 3 Hours.

A continuation of Latin 102 with primary focus on reading prose. Reading selections will come from Caesar's "Gallic Wars", Cicero's "Pro Caelio", Augustus' "Res Gestae", Suetonius' "The Twelve Caesars", and portions of Jerome's Vulgate Bible. Prerequisite: Student must complete Latin 102 before enrolling in this class.

LAT 202. Intermediate Latin II. 3 Hours.

To continue in the reading of original Latin prose authors such as Cicero, Caesar, Tacitus, and Suetonius as well as to explore the works of various poets such as Vergil, Horace, and Catullus. A final portion of the class will offer an overview of the development of the Latin language into the Romance languages. Prerequisite: Students must complete Latin 201 before enrolling in this course.

LEAD 101. Introduction to Leadership. 3 Hours.

LEAD 101 introduces students to basic components of personal leadership development, including the examination of leadership theories and styles, personal identity, diversity, communication, power, and ethics. Students will engage in self-reflective and experiential learning activities in order to make connections between course materials and real-world application.

LEAD 199. Special Topics in Leadership. 1-6 Hour.

LEAD 199 allows to students to apply leadership processes and concepts to situations and experiences. Offerings may include examination of current events, travel abroad opportunities, or special projects and programs. Students will engage in self-reflective and experiential learning activities in order to make connections between course materials and real-world application. This course can be repeated up to two times, or for a maximum six credits, whichever limit is hit first.

LEAD 201. Collaborative Leadership. 3 Hours.

LEAD 201 focuses on leadership through the lens of team development and organizational structures. In particular, this course will emphasize the role of leadership in change processes, decision-making, and problem-solving with teams.

LEAD 211. Leadership in the Movies. 3 Hours.

This course will examine both leadership theory and practice and how that leadership has been portrayed in film. Part of the course will be devoted to an "outline" of leadership practices and a review of the empirical data that support the outline. The multidisciplinary nature of this course will lead students to potentially address topics in Psychology (group dynamics), Organizational Management, Organizational Communication, History, Culture and Political Change and/or Social Issues in America.

LEAD 301. Experiences in Leadership. 3 Hours.

LEAD 301 provides an opportunity for students to gain practical experience through a supervised leadership practicum. Students will work with their course instructor and field supervisor to develop a plan of study. Furthermore, students will also examine contemporary leadership topics through readings, speakers, and class discussions they can then apply to their practicum experiences. This experience culminates with a public presentation.

LEGL 322. Criminal Law. 3 Hours.

This course is a critical examination of the development and function of U.S. substantive criminal law. The course analyzes issues such as definitions of criminal acts and omissions, defenses and justifications, elements of a crime, parties to crimes, and also specific crimes against the person, property crimes, substance abuse crimes, - to name just a few. Prerequisite: CJ 201.

LEGL 350. Criminal Procedure. 3 Hours.

This course is designed to expose students to the rules and procedures by which criminal prosecutions are governed in the U.S. The course begins with examining the rules and procedures of police investigations and continues throughout the process of criminal justice. Examples of questions that criminal procedure addresses are: When can a police officer conduct a search of a home? Do police always have to knock and announce when conducting a search with a warrant? Students will also examine the historical foundations of these rules and procedures, and search and seizure. Prerequisite: CJ 201.

LEGL 365. Law and Society. 3 Hours.

This course is designed to introduce students to the intricate relationship between law and society. Students will be exposed to various perspectives on the development, functions, and purposes of law. Particular attention will be devoted to exploring law as an instrument of social change, social control, and dispute resolution. Prerequisite: CJ 201.

LEGL 370. Court Processing and Sentencing. 3 Hours.

Provides students with a comprehensive analysis of the U.S. court system; the function of state and federal district, appellate, and supreme courts is reviewed; students are introduced to the influence of extra-legal factors and their differential impact on offender processing; contemporary criminal justice issues facing the court system are also examined. Prerequisite: CJ 201.

LEGL 372. Juries. 3 Hours.

The primary objective of this course is to offer students a comprehensive, critical analysis of the jury system in the United States. A few of the issues to be examined are: jury selection and service, jury nullification, jury decision-making, information processing, juries and tort awards, and juror competence. A special emphasis will focus on the capital jury process and decision-making. Prerequisite: CJ 201.

LEGL 374. Comparative Criminal Justice Systems. 3 Hours.

This course is designed to provide students with an in-depth study of comparative criminal justice and legal traditions and systems around the world. Students will be able to comprehend, analyze, and critique differences and similarities among various international criminal justice systems and the U.S. criminal justice systems. The course also includes discussion of the dynamics of selected international and transnational crimes, for example, cybercrime, corruption, drug trafficking, and money laundering. Prerequisite: CJ 201.

MATH 103. College Algebra. 4 Hours.

Topics include relations and functions, equations and inequalities, complex numbers; polynomial, rational, exponential, and logarithmic functions; systems of equations; matrices; sequences and series; and the binomial theorem. Prerequisite: ASC 93 or qualifying placement score. Required Corequisite: MATH 103L if a placement score qualifies for ASC 93.

MATH 103L. College Algebra Lab. 2 Hours.

College Algebra lab provides students in Math 103 with an extended experience in a lab setting working on algebra skills. Lab meets 4 hours per week. This class uses S/U grading. Required Corequisite to MATH 103 if a placement score qualifies for ASC 93. Withdrawing from this class will also withdraw you from MATH 103.

MATH 104. Finite Mathematics. 4 Hours.

This course addresses areas that have application in the economic, behavioral, social, and life sciences. Topics include linear modeling, systems of linear equations and inequalities; matrix operations; linear programming; mathematics of finance; combinatorics, probability, and expected value; and descriptive statistics. Appropriate use of mathematical technology will be integrated throughout the course. This course does not serve as a prerequisite for any other math course. Prerequisite: ASC 93 or qualifying placement score.

MATH 105. College Trigonometry. 2 Hours.

Topics include angle measure, trigonometric and inverse trigonometric functions, trigonometric identities and equations, parametric and polar coordinates, and general applications. Prerequisite: ASC 93 or qualifying placement score.

MATH 107. Precalculus. 4 Hours.

Topics include equations and inequalities; polynomial, rational, exponential, logarithmic, trigonometric, and inverse trigonometric functions; trigonometric identities and equations and applications. Prerequisite: ASC 93 or qualifying placement score.

MATH 110. Mathematics in Society. 3 Hours.

This course covers a broad range of mathematics that a person would encounter in their daily life. Topics include statistical interpretation, data visualization, probability, growth models, finance, politics and voting, logic and sets, and the intersection of mathematics and the arts. Throughout, appropriate use of mathematical technology will be emphasized. Prerequisite: ASC 93 or qualifying placement score.

MATH 110L. Mathematics in Society Lab. 1 Hour.

Mathematics in Society Lab provides students in MATH 110 with an extended experience in a lab setting working on the application of mathematics in their daily life. This class uses S/U grading. Required Corequisite to MATH 110 if a placement score qualifies for ASC 92 Beginning Algebra. Withdrawing from this class will also withdraw you from MATH 110.

MATH 146. Applied Calculus. 3 Hours.

Introduction to differential and integral calculus with applications from areas such as social science and business. Topics include limits, derivatives, integrals, exponential and logarithmic functions, and applications. Prerequisite(s): MATH 103 with a C or better or qualifying math placement score.

MATH 147. Applied Calculus II. 4 Hours.

Use of fundamental calculus concepts to solve applications from areas such as social science and business. Topics include definite integrals, trigonometric functions, introduction to differential equations, infinite sequence and series, probability, and applications. Prerequisite: MATH 146 with a C or better or qualifying math placement score.

MATH 165. Calculus I. 4 Hours.

Topics include limits, continuity, differentiation, Mean Value Theorem, integration (indefinite and definite integrals), Fundamental Theorem of Calculus, and applications. Prerequisite(s): MATH 107 with a C or better, ENGR 107 with a C or better or MATH 103 and MATH 105 with a C or better or qualifying math placement score.

MATH 166. Calculus II. 4 Hours.

Topics include methods of integration, applications of integration, polar equations, sequences, series, power series, and applications. Prerequisite: MATH 165 with a C or better.

MATH 201H. Environmental Mathematics. 3 Hours.

Exploration of environmental issues using mathematical models together with real world data. Topics may include: ecology, health sciences, economics, genetics, and other environmental issues. Possible field experience. Prerequisite(s): ASC 93 with a C or higher or qualifying math placement score.

MATH 205. Math Proof and Problem Solving. 3 Hours.

A course on mathematical proofs and axiomatic systems. Topics may include set theory, formal logic, combinatorics, or graph theory. Prerequisite: MATH 165.

MATH 208. Discrete Mathematics I. 4 Hours.

Introduction to discrete mathematics with an emphasis in computer science and applications developing the ability to think abstractly using ideas of logic and proof. Students will study concepts of logic circuits and computer addition, algorithm analysis, recursive thinking, computability, automata, cryptography, and combinatorics. Students discover that the ideas of discrete mathematics are essential to computer science. Prerequisite: Any of MATH 103, MATH 105, MATH 107, MATH 165, or MATH 146, all with a C or better.

MATH 210. Elementary Statistics. 4 Hours.

An examination of introductory statistics concepts, including sampling, descriptive statistics, probability, correlation, regression, binomial and normal distributions, confidence intervals and hypothesis testing of one and two populations, ANOVA, and Chi-square tests. Technology will be used to enhance learning and mirror statistical applications and practices in the larger world. Prerequisite(s): ASC 93 with a C or better or qualifying math placement score. Required corequisite: MATH 210L if a placement score qualifies for ASC 93.

MATH 210L. Elementary Statistics Lab. 2 Hours.

Elementary Statistics lab provides students in MATH 210 with an extended experience in a lab setting working on statistics skills. Lab meets 4 hours per week. This class uses S/U grading. Required Corequisite to MATH 210 if a placement score qualifies for ASC 93. Withdrawing from this class will also withdraw you from MATH 210.

MATH 265. Calculus III. 4 Hours.

Functions of more than one variable, multiple integrals, line integrals, Green's and Stoke's theorem. Prerequisite: MATH 166 or MATH 165 and ENGR 201.

MATH 266. Differential Equations. 4 Hours.

First-order equations, second- and higher-order linear equations, modeling with differential equations (linear and nonlinear models), series methods, The Laplace Transform, systems of equations, and numerical methods. Prerequisite: MATH 166 or MATH 265.

MATH 277. Mathematics for Elementary Teachers I. 3 Hours.

A course for elementary education majors. Topics include problem solving, number systems (natural numbers through the reals), number theory, and proportional reasoning. Technology and manipulatives are used throughout the course. Prerequisite: ASC 93 with a C or better or qualifying math placement score.

MATH 294. Intro to Research in Math. 1-2 Hour.

Students explore topics, expand their mathematical knowledge, and begin to conduct introductory research under the direction of a faculty mentor. The number of credits is proportional to the time committed to the research (1 SH = 3 hours of student work per week on average). This course may be repeated for up to 4 credits total. Instructor permission required. This course can be repeated up to four times, or for a maximum four credits, whichever limit is hit first.

MATH 299. Special Topic. 1-4 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

MATH 305. Linear Algebra. 4 Hours.

Systems of linear equations, matrices, determinants, real vector spaces, subspaces, linear independence, bases, rank, linear transformations, eigenvalues and eigenvectors, and diagonalization. Prerequisite: MATH 107 or advanced placement.

MATH 314. Mathematical Programming. 2 Hours.

Symbolic, numerical, and graphical computing using mathematical software packages. MATLAB will be used during fall semesters and Mathematica will be used during spring semesters. This course can be repeated up to four credits.

MATH 315. Mathematical Programming and Modeling. 4 Hours.

Basic skills and techniques of formulation, simulation, analysis, and testing of mathematical models for describing and predicting a variety of phenomena in physics, chemistry, biology, business, economics, medicine, and social and environmental sciences utilizing mathematical software for symbolic, numerical, and graphical computing. Prerequisite: MATH 165.

MATH 320. Number Theory. 3 Hours.

Unique factorization, residue theory, Diophantine equations, quadratic equations, and reciprocity. Prerequisite: MATH 205.

MATH 325. Algebra and Functions for Teachers. 3 Hours.

A study of algebra and functions for pre-service teachers. Course includes analysis, applications, and pedagogical approaches for the following secondary school topics: seeing structure in expressions; arithmetic with polynomials and rational functions; creating and reasoning with equations and inequalities; interpreting and building linear, quadratic, exponential, and trigonometric functions.

MATH 330. Geometry & Trigonometry for Teachers. 3 Hours.

A study of axiomatic geometry and trigonometry for pre-service teachers. Course includes analysis, applications, and pedagogical approaches for the following secondary school topics: Congruence; Similarity, Right Triangles, and Trigonometry; Circles; Expressing Geometric Properties with Equations; Geometric Measurement and Dimension; Modeling with Geometry. Additional undergraduate axiomatic geometry topics include Projective Geometry, Hyperbolic Plane Geometry, and Elliptic Plane Geometry.

MATH 345. Linear Models. 4 Hours.

Statistical methods, including topics from: sampling, hypothesis testing, nonparametric statistics, resampling, simple and multiple regressions, and the general linear model. Computer statistical packages will be integrated into the course. Prerequisite: DATA 211, MATH 210, PSY 241 or BIOL 240.

MATH 346. Experimental Design. 4 Hours.

Statistical methods including topics from analysis of variance; fixed and random factors; block, nested, and crossed designs; factorial, fractional factorial and confounded designs; split plot designs; and multivariate analysis. Computer statistical packages will be integrated into the course. Prerequisite: DATA 211 or MATH 210.

MATH 377. Mathematics for Elementary Teachers II. 3 Hours.

A course for elementary education majors. Topics include probability, statistics, and geometry. Calculators, computer software, and manipulatives are used throughout the course. Prerequisite: ASC 93 with a C or better or qualifying math placement score.

MATH 378. Mathematics for Elementary Teachers III. 3 Hours.

A required general education course for elementary education majors. Topics include algebraic reasoning and habits of mind, problem solving, set theory, probability, and statistics. Students will learn how to communicate, explain, and demonstrate mathematics using various physical models, conceptual models, manipulatives, and other relevant tools through the study of student errors and implementation of classroom activities. Prerequisites: MATH 277 and MATH 377. Corequisite: ED 221L.

MATH 380. History and Philosophy of Mathematics. 2 Hours.

An introduction to the history and philosophy of mathematics. Topics include ancient origins; foundations of logic; medieval and renaissance mathematics; intuitionism and formalism; mathematical technology; the axiom of choice; and modern advancements.

MATH 381. Secondary Math Practicum. 1 Hour.

This course will require a minimum of 60 clock hours in a practicum experience. The experience will take place in a grade 6-12 setting. Prerequisite(s): Admission to Teacher Education. Prereq/Coreq: MATH 391.

MATH 385. Directed Project in Mathematics Education. 0.5 Hours.

A course offered for eight weeks of the semester where the general topic and specific goals and activities are agreed upon by the student and the instructor. While presentation is not a requirement, all projects have a goal of producing presentable results.

MATH 391. Methods of Teaching Secondary Mathematics. 3 Hours.

An opportunity for students planning to teach math in the secondary schools to understand and apply content topics which align with ND Math Education standards and ND teacher education standards. Prerequisite(s): Admission to Teacher Education.

MATH 392. Praxis Subject Area Exam Preparation. 0.5 Hours.

A course offered for eight weeks of the semester to prepare students for the mathematics content exam required for graduation and teacher licensure in North Dakota.

MATH 394. Independent Study General Math. 1-4 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

MATH 420. Abstract Algebra. 4 Hours.

A study of algebraic structures. Topics include sets, mappings, relations, and operations; axiomatic development of familiar algebraic systems; examples and basic algebraic properties of groups, rings and fields. Prerequisite: MATH 165.

MATH 445. Probability and Statistics. 4 Hours.

Introduction to probability: discrete and continuous random variables, distribution functions, and special probability distributions. Prerequisite: MATH 146 or MATH 166.

MATH 446. Applied Statistics. 4 Hours.

This course introduces modern applied statistical modeling with an emphasis on data-driven decision-making. Topics include exploratory data analysis, data visualization, regression and classification methods, resampling techniques, model assessment and validation, and introductory generalized linear models. Students will work with real-world datasets and use statistical software to perform analyses, interpret results, and present findings. Applications are drawn from business, engineering, social sciences, and data science. Prerequisite: MATH 146 or MATH 165.

MATH 450. Real Analysis. 3 Hours.

An introduction to rigorous theory of calculus. Topics covered include the real number system, sequences, limits, continuous functions in \mathbb{R} , continuous functions of several variables, metric spaces uniform convergence, interchange of limit operations, infinite series, mean value theorems and their applications, and Riemann integrals. Prerequisite: MATH 265.

MATH 460. Complex Analysis. 3 Hours.

Analytic functions, conformal maps, Cauchy integral formula, and residue theorem. Prerequisites: MATH 265 and MATH 450.

MATH 466. Partial Differential Equations. 3 Hours.

Solve standard partial differential equations (Laplace's equation, transport equation, heat equation, wave equation) by separation of variables and transform methods, including eigenfunction expansions, Fourier, and Laplace. Other topics include boundary value problems, orthogonality, and Fourier series. Prerequisites: MATH 265 and MATH 266.

MATH 470. Numerical Analysis. 4 Hours.

Error analysis, numerical differentiation and integration, linear systems, and numerical solutions to differential equations. Prerequisites: MATH 265, MATH 305, and MATH 315.

MATH 475. Math Education Capstone. 1 Hour.

A capstone course designed for students to demonstrate competence in math program learning outcomes. Students will work on preparation for the mathematics content exam required for graduation/teacher licensure in North Dakota and work with faculty on a directed project in the area of math education. All projects will include a goal of producing presentable results. Restricted to Senior Status.

MATH 494. Directed Research in Math. 1-4 Hour.

Students conduct research under the direction of a faculty mentor. The general topic and specific goals and activities are agreed upon by the student and the mentor. While publication or presentation is not a requirement, all projects have a goal of producing publishable/presentable results. The number of credits is proportional to the time committed to the research (1 SH = 3 hours of student work per week on average). This course can be repeated up to eight times, or for a maximum eight credits, whichever limit is hit first. Instructor consent required.

MATH 499. Special Topics. 1-4 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

MGMT 301. Fundamentals of Management. 3 Hours.

Focuses on the nature of management, the evolution of management thought, strategic management and planning concepts, decision making and creative problem solving, and motivation and leadership in a changing environment.

MGMT 303. Human Resource Management. 3 Hours.

Includes an examination of policies, programs, procedures, staffing, performance expectations, wage and salary administration, laws, ethics, and research related to human capital. Prerequisite: MGMT 301 or PSY 111.

MGMT 416. Operations Management. 3 Hours.

Introduces the concepts, issues, and problems of operations management. Operations processes are analyzed and solutions are recommended. Prerequisites: Student must complete BOTE 247, MATH 210, and MGMT 301 before enrolling in this course.

MGMT 436. Organizational Behavior Principles and Practices. 3 Hours.

Includes the principles, concepts, and processes that interpret human behavior at the individual, group, and organizational levels. MGMT 303 is a prerequisite or corequisite for MGMT 436.

MGMT 438. Talent Management and People Analytics. 3 Hours.

This course introduces talent management strategies and people analytics. First, the course will introduce you to the concept of a performance culture, including motivational theories, managing attributions, and the importance of system strength. Second, the course provides application sessions on managing performance and potential through succession planning, compensation benchmarking, and incentivization strategies. Third, the course will expose you to talent management analytics. Prerequisite: MGMT 303. Restricted to sophomore, junior, or senior status.

MGMT 465. Strategic Management. 3 Hours.

Strategic management is an analysis of the objectives of business firms and the development and evaluation of strategies and policies designed to meet these objectives. Cases are emphasized. Prerequisites: Students must complete MGMT 301 and MRKT 321 prior to enrolling in this class. FIN 353 is a prerequisite or a corequisite. Restricted to students with senior status.

MHA 297. Addiction Studies Practicum. 2 Hours.

The course will focus on introducing students to the addiction counseling profession. You will learn about professional behavior, supervision, ethics, documentation, and coping in a stressful profession. Along with the one-hour seminar, you will also be required to complete 40 hours of a community internship at a licensed addiction treatment facility. Prerequisite: PSY 111.

MHA 338. Professional Relations and Ethics. 3 Hours.

The course will focus on understanding professional ethics, the role they play in client, public, and professional protection. The American Psychological Association and NAADAC ethics codes will be used as a guideline for understanding ethical principles that apply to addiction counseling and psychological fields. Students will review relevant North Dakota Century Codes and the Code of Federal Regulations 42 part 2 (CFR 42 part 2). Students will learn how to make ethical decisions, understand federal and state regulations, and how ethical codes relate to malpractice and liability. Specific areas which may be covered include confidentiality, record keeping, competence, training, impairment, dual relationships, conflict of interest, relationships with colleagues, forensic psychology, teaching, informed consent, and finances and marketing. Prerequisite: PSY 111.

MHA 344. Dynamics of Addiction. 3 Hours.

Emphasizes the history of drug abuse, theories, and controversies regarding chemical dependency, and multidisciplinary approaches to treatment. Prerequisite: PSY 111.

MHA 349. Psychopharmacology. 3 Hours.

An introduction to behavioral pharmacology, including the basics of pharmacology, psychology, and neuroscience needed to understand drugs of abuse. Prerequisites: PSY 111 and BIOL 115 or BIOL 220.

MHA 423. Introduction to Counseling. 3 Hours.

The course is designed to introduce students to the field of counseling, including the history, skills, and ethics involved in counseling. Students will also be exposed to different counseling theories, cultural issues related to counseling, and understand the steps involved from initial contact with the client to termination of treatment. Prerequisite: PSY 111.

MHA 424. Advanced Counseling. 3 Hours.

The course will build upon counseling theories and methods presented in the course "Introduction to Counseling". Students will be exposed to different treatment theories and methods designed to aid students in developing an integrated theoretical position of their own. The course emphasizes the treatment of addiction but the information and skills are applicable to mental health counseling in general. Practical counseling exercises and treatment documentation assignments provide students with necessary skill development. Daily course structure will be comprised of discussion and lectures. Students will need to be prepared for class ahead of time and be ready to discuss the material. Students will spend approximately six hours outside of class in the psychology clinic doing simulated diagnostic assessments and treatment sessions. Prerequisite: PSY 111.

MHA 476. Group Dynamics. 3 Hours.

The course focuses on studying methods of group therapy, understanding group dynamics, leadership, and ethics of group counseling. Group techniques and strategies will be taught with an emphasis on student developing a workable methodology of their own. Practical exercises in counseling will provide student with skill development. Students will role play group members and will lead simulated group sessions. Prerequisite: PSY 111.

MHA 485. Addiction Studies Practicum. 15 Hours.

Participation in the North Dakota consortia to provide experience in the addiction field. This is a four-and-a-half month, full-time experience, where the student actively participates as an addiction counselor in training. Course restricted to psychology or addiction studies majors.

MHA 486. Addiction Studies Practicum. 15 Hours.

Participation in one of the North Dakota consortia to provide experience in the addiction field. This is the second part of the nine-month practicum experience required for licensure as an addiction counselor. The course involves a four-and-a-half month, full-time experience, where the student actively participates as an addiction counselor in training. Course restricted to psychology or addiction studies majors.

MRKT 321. Marketing. 3 Hours.

Acquaints students with the principles, concepts, and perspectives underlying marketing functions, including the conception, pricing, promotion, and distribution of products, services, and ideas, and the role of marketing in society.

MRKT 324. Integrated Marketing Communications. 3 Hours.

Acquaints students with the role of integrated marketing communications concepts and practices in enhancing the equity of brands, and provides thorough coverage of all aspects of an IMC program: advertising, promotions, packaging, and branding strategies, point of purchase communications, marketing-oriented public relations, and event and cause-oriented sponsorships. Prerequisite: MRKT 321.

MRKT 421. Applied Research. 3 Hours.

Explores the necessary steps involved in the applied research process including (i) defining research problems, (ii) research designs, (iii) measurement, (iv) sampling, (v) data collection, (vi) data analysis, (vii) interpretation, and (viii) reporting and presenting findings. Prerequisites: Students are required to have completed one of the following: MATH 210, PSY 241, DATA 211, or an equivalent.

MRKT 422. Consumer Behavior. 3 Hours.

Studies the consumer decision-making process in the purchase of goods and services. Emphasis is placed on developing and understanding the determinants of consumer behavior and the appropriate application of marketing strategies. Prerequisite: MRKT 321 or permission of instructor.

MRKT 488. Marketing Strategy. 3 Hours.

Management of marketing organizations and integration of functions, with emphasis on planning and designing strategies and applying tools and techniques for problem solving and decision making. Prerequisites or Corequisites: BUS 420 and MRKT 421.

MUSC 099. Recitals/Concerts. 0 Hours.

This zero-credit course is a weekly gathering of all music majors, minors, and faculty for performances and presentations on a variety of music topics related to private study, chamber music, professionalism, performance practices, and education. Outside of class, students are expected to attend recitals and concerts from the MSU Department of Fine and Performing Arts calendar. The final grade will be either Satisfactory (S) or Unsatisfactory (U). This course can be repeated up to sixteen times.

MUSC 100. Music Appreciation. 3 Hours.

Designed for the non-music major, may be used as partial fulfillment of General Education requirement (CCS3). The student shall develop a broad knowledge of music from western civilization, from medieval chant to present day literature as well as skills in listening and writing about music.

MUSC 101. Fundamentals of Music. 2 Hours.

Designed for the non-major. The fundamentals of music are gained through studying music theory, reading music notation, playing recorder, ukulele, and keyboard instruments, and composing.

MUSC 102. Private Piano. 1-4 Hour.

Course restricted to majors. This course can be repeated up to twenty-four times, or for a maximum twenty-four credits, whichever limit is hit first.

MUSC 103. Private Harpsichord. 1 Hour.

Course restricted to majors. This course can be repeated up to twenty-four times, or for a maximum twenty-four credits, whichever limit is hit first.

MUSC 105. Women's Chorus. 1 Hour.

An auditioned touring performance choir open to all sopranos and altos on campus designed to cover a variety of literature both traditional and multi-cultural, specifically for treble voices. Students will explore music from a variety of eras and styles, connecting with one another outside of their respective majors while singing and performing the great treble choir repertoire. This course can be repeated up to twenty-four times, or for a maximum twenty-four credits.

MUSC 106. Private Organ. 1-4 Hour.

This course can be repeated up to twenty-four times, or for a maximum twenty-four credits, whichever limit is hit first.

MUSC 108. Elective Private Study. 1 Hour.

Meant for non-music majors, this course allows for students to take 1.0 credit of private study in the area of their choice, with approval of the instructor and based upon available load. This course can be repeated up to ten times, or for a maximum ten credits.

MUSC 109. Elective Private Study. 0.5 Hours.

Meant for non-music majors and minors, this course allows for students to take 0.5 credits of private study in the area of their choice, with approval of the instructor and based upon available load. This course can be repeated up to ten times, or for a maximum five credits.

MUSC 110. Audio/Video Technology. 1 Hour.

This course is designed to provide working knowledge of A/V hardware and software owned by the Division of Performing Arts and to gain experience operating the sound, lighting, and rigging systems in Ann Nicole Nelson Hall. As part of the course, students will serve as the booth worker for multiple events in ANNH and complete projects in multi-track recording, streaming, podcasting, and video production. Restricted to Music majors.

MUSC 111. Private Voice. 1-4 Hour.

This course can be repeated up to twenty-four times, or for a maximum twenty-four credits, whichever limit is hit first.

MUSC 112. Diction for Singers I. 2 Hours.

Introduces rules, concepts, and practice of proper pronunciation and articulation for singing in English and Italian using the International Phonetic Alphabet. Develops specific language skills necessary for solo vocal and choral singing and teaching.

MUSC 113. Diction for Singers II. 2 Hours.

Introduces rules, concepts, and practice of proper pronunciation and articulation for singing in French and German using the International Phonetic Alphabet. Develops specific language skills necessary for solo vocal and choral singing and teaching. [Course offered every spring semester.]

Prerequisite: Students must complete MUSC 112 before enrolling in this course.

MUSC 114. Western Plains Opera Production. 1 Hour.

The Western Plains Opera Production course will provide students a variety of opportunities for growth through both the performance and technical aspects of a fully-staged professional music production. This course can be repeated up to twelve times, or for a maximum twelve credits.

MUSC 115. Opera-Musical Production. 1 Hour.

Techniques of production and staging dramatic musical works, employing operas, scenes from operas, and musical theater. Prerequisite: consent of instructor. This course can be repeated up to sixteen times, or for a maximum sixteen credits.

MUSC 116. Private Strings. 1-4 Hour.

Repeatable for credit.

MUSC 117. Private Guitar. 1-4 Hour.

This course can be repeated up to twenty-four times, or for a maximum twenty-four credits, whichever limit is hit first.

MUSC 120. Concert Choir. 1 Hour.

A large auditioned touring performance choir made up of a diverse group of music majors and students from all over campus who sing the great a cappella and accompanied repertoire. Students will explore music from a variety of eras and styles, connecting with one another outside of their respective majors while singing and performing the great choral repertoire. This course can be repeated up to sixteen times, or for a maximum sixteen credits.

MUSC 122. Musicianship I. 3 Hours.

The first of a four-semester sequence studying the language of music through notated, aural, and descriptive daily work. In this course, students will gain fluency in the foundational language of music theory; learn how to create music using a variety of traditional, improvised, and technological means; set foundations for music reading and dictation; apply musical terms in descriptive writing about music, both familiar and new. Corequisite: MUSC 122L.

MUSC 122L. Music Foundations Lab. 0 Hours.

This lab course is an additional support hour per week, required for students enrolled in MUSC 122 who have not yet passed the Music Foundations entrance exam. Corequisite: MUSC 122.

MUSC 123. Musicianship Lab I. 1 Hour.

A co-requisite course, meant to support learning in MUSC 122 through daily performance exercises on keyboard, fretted instruments, and in the primary area of study.

MUSC 124. Musicianship II. 3 Hours.

The second of a four-semester sequence studying the language of music through notated, aural, and descriptive daily work. In this course, students will develop their understanding of diatonic theory through traditional two- and four-part voice writing as well as composition and analysis of commercial and art-music styles; create music through a variety of traditional, improvised, and technological means; develop music reading and dictation; apply musical terms in descriptive writing about music, both familiar and new. Prerequisite: MUSC 122. Corequisite: MUSC 125.

MUSC 125. Musicianship Lab II. 1 Hour.

A corequisite course, meant to support learning in MUSC 124 through daily performance exercises on keyboard, fretted instruments, and the in the primary area of study.

MUSC 126. Private Brass. 1-4 Hour.

This course can be repeated up to twenty-four times, or for a maximum twenty-four credits, whichever limit is hit first.

MUSC 127. MSU Singers. 1 Hour.

An auditioned and select touring performance chamber choir dedicated to the polyphonic, liturgical, and non-liturgical music of the Renaissance and beyond. This ensemble offers students a unique opportunity to connect with one another outside of their respective majors while singing and performing the great chamber choir repertoire. This course can be repeated up to twelve times, or for a maximum twelve credits.

MUSC 129. Private Composition. 1-4 Hour.

Instructor approval required. This course can be repeated up to twenty-four times, or for a maximum twenty-four credits, whichever limit is hit first.

MUSC 131. Private Percussion. 1-4 Hour.

This course can be repeated up to twenty-four times, or for a maximum twenty-four credits, whichever limit is hit first.

MUSC 133. Private Woodwinds. 1-4 Hour.

This course can be repeated up to twenty-four times, or for a maximum twenty-four credits, whichever limit is hit first.

MUSC 144. Chamber Ensembles. 1 Hour.

Brass, String, Percussion, Woodwind, Keyboard, and Vocal students are welcome to join on approval of the instructor(s), either as an elective or in fulfillment of their Small Ensemble requirements.

MUSC 145. Percussion Ensemble. 1 Hour.

Rehearsals are arranged and membership subject to approval of director. This course can be repeated up to twelve times, or for a maximum twelve credits.

MUSC 150. Orchestra. 1 Hour.

The Minot Symphony Orchestra is a University-community organization. Open to qualified students upon approval of the conductor. The goals of the course are: to rehearse and perform works of the orchestral repertoire; to improve large ensemble playing skills; to gain knowledge of the different performance practice and styles. This course can be repeated up to sixteen times, or for a maximum sixteen credits.

MUSC 153. Collaborative Piano. 1-3 Hour.

Learning and application of collaborative piano skills. If not a piano major, passage of sophomore level piano proficiency exam or instructor consent is required. This course can be repeated up to three times, or for a maximum nine credits, whichever limit is hit first.

MUSC 160. Concert Band. 1 Hour.

Ensemble consisting of woodwind, brass, and percussion instrumentalists dedicated to performance and artistic achievement at the highest level. Open to all students with prior experience performing on traditional woodwind, brass, or percussion instruments, subject to director approval. This course can be repeated up to sixteen times, or for a maximum sixteen credits.

MUSC 165. Jazz Ensemble. 1 Hour.

The Jazz Ensemble is the Division of Performing Arts' standard big band, rehearsing and performing material from the swing era to the present. Students learn specifics of big band performance practices, ensemble playing, and improvisation. Open to qualified students subject to approval of director. This course can be repeated up to twelve times, or for a maximum twelve credits.

MUSC 167. Jazz Combo. 1 Hour.

Jazz combo is an ensemble of variable instrumentation, generally including piano, bass, and drums, with the possible addition of wind and brass players. The ensemble will rehearse and perform material of a variety of jazz composers, create new arrangements, and compose original music. Everyone in the ensemble will improvise. Open to qualified students subject to approval of director. This course can be repeated up to twelve times, or for a maximum twelve credits.

MUSC 177. Functional Piano. 1 Hour.

Learning and application of basic functional piano skills for sophomore level music majors. Prepares students to proceed to MUSC 178 and subsequently pass the piano proficiency exam. Prerequisite: MUSC 125, and restricted to Music and Music Education Majors. This course can be repeated up to two times, or for a maximum two credits.

MUSC 178. Functional Piano. 1 Hour.

Learning and application of basic functional piano skills for sophomore music majors. Prepares students to pass the piano proficiency exam. Prerequisite: MUSC 177 Functional Piano, Restricted to Music and Music Education Majors. This course can be repeated up to three times, or for a maximum three credits.

MUSC 180. Class Guitar I. 1 Hour.

Beginning technique in chord and melody playing is developed in class ensemble.

MUSC 184. Ukulele I. 1 Hour.

This course begins with the basics of ukulele playing: holding, strumming, and playing easy chords. Students will demonstrate a continued understanding of playing the ukulele through songs and individual and group projects. Projects include finding songs that interest the student, creating new, appropriate to the song, strumming patterns for songs, and discovering how to figure out chords to songs. Students will leave confident in song leading and ukulele playing skills.

MUSC 185. Ukulele II. 1 Hour.

The second Ukulele class is for students who already know basic chords and strumming on the ukulele. The course will continue stretching the skill level of students to learn and implement new chords into new songs. In addition, students will learn to play melodic lines, which means moving the ukulele beyond an accompaniment instrument while learning basic music theory. Students will find their own songs, create new strumming patterns, and continue to lead songs and play melodic lines. Prerequisite: MUSC 184 or instructor permission.

MUSC 187. Beginning Class Piano. 1 Hour.

An entry level course for students wanting an introduction to playing the piano. Students will learn basic piano technique, read music notation on the grand staff, and play chords from a lead sheet. This course prepares students to take Intermediate Class Piano. This course is not open to music majors. Students with prior experience reading music on the piano may be placed in Intermediate Class Piano.

MUSC 188. Intermediate Class Piano. 1 Hour.

An intermediate level course for students wanting to learn to play the piano. Students will build on skills acquired in Beginning Class Piano, including basic piano technique, reading music notation on the grand staff, and playing chords from a lead sheet. Prerequisite: MUSC187 or instructor permission. This course is not open to music majors. Students with prior experience reading music on the piano may be placed in Intermediate Class Piano. Students with no prior experience should complete Beginning Class Piano before taking this course.

MUSC 200. Music in the Elementary Classroom. 2 Hours.

Designed for elementary education majors, this course will introduce the student to the basic elements of music, the importance of music in the curriculum, the methods and materials appropriate for music teaching in the elementary classroom, and how to integrate music into other subject areas to further student success. Emphasis will be placed on acquiring musical skills through active music-making experiences, including learning the ukulele, group reflections, and micro-teaching experiences designed to demonstrate applicable musical and pedagogical knowledge.

MUSC 200L. Music in the Elementary Classroom Lab. 1 Hour.

Practical application of concepts and procedures covered in MUSC 200 Music in the Elementary Classroom.

MUSC 201. World Music. 3 Hours.

An introduction to non-western music in order to encourage and enhance cultural diversity. The aim of this course is very simple: to gain a basic understanding of different cultures of the world through their musical and cultural traditions. May be used as partial fulfillment of the Humanities requirement.

MUSC 202. Private Piano. 1-3 Hour.

Upper division private study. This course can be repeated up to six times, or for a maximum twelve credits, whichever limit is hit first.

MUSC 203. Music Theatre Studio. 1 Hour.

Performance of major roles of Musical Theatre in studio projects. Emphasis on the student's integration of singing, acting, and movement into a unified performance. This course can be repeated up to eight times, or for a maximum eight credits.

MUSC 206. Private Organ. 1-3 Hour.

Upper division private study. This course can be repeated up to six times, or for a maximum twelve credits, whichever limit is hit first.

MUSC 207. History of Pop and Rock Music. 3 Hours.

Music history is incomplete without an understanding of those transformational artists from the most recent century. Just as Bach, Beethoven, and Stravinsky wrote music that reflected and characterized their times, so Elvis Presley, Bob Dylan, The Beatles, and many more wrote and performed music that helps us understand the last 60+ years. Drawing on pop and rock music from the early 20th century to the present, this course will explore the social and historical underpinnings that inspired the music, the generations who identified with the artists and their unique sounds, and will give students tools and information to better analyze and understand the music that they love.

MUSC 208. Sex, Crimes, and the Sublime on the Musical Stage. 3 Hours.

Designed for music majors and non-majors alike, students will develop knowledge of repertoire from the musical stage, from Carousel to Hamilton and Mozart to Jake Heggie. Along with watching and listening to selections from these shows, students will analyze from a social and cultural perspective and reflect on the overt and covert social and cultural implications that underpin these great and impacting works of dramatic art.

MUSC 211. Private Voice. 1-3 Hour.

Upper division private study. This course can be repeated up to six times, or for a maximum twelve credits, whichever limit is hit first.

MUSC 216. Private Strings. 1-3 Hour.

Upper division private study. This course can be repeated up to six times, or for a maximum twelve credits, whichever limit is hit first.

MUSC 217. Private Guitar. 1-3 Hour.

Upper division private study. This course can be repeated up to six times, or for a maximum twelve credits, whichever limit is hit first.

MUSC 222. Musicianship III. 3 Hours.

The third of a four-semester sequence studying the language of music through notated, aural, and descriptive daily work. In this course, students will use creative projects, listening, analysis, and discussion to develop their understanding of music innovations from the late-19th through mid-20th centuries. Important topics include rhythm and meter, non-functional tonal harmony, modes of the diatonic scale, synthetic scales, set theory, atonality, serialism, indeterminacy, graphic notation, and more. Students will create music through a variety of traditional, improvised, and technological means, develop music reading and dictation skills, and apply musical terms in descriptive writing about music, both familiar and new. Prerequisite: MUSC 124.

MUSC 223. Musicianship III Lab. 1 Hour.

Concepts from Musicianship III will be applied to keyboard, fretted instruments, voice, and the primary area of study. This semester will focus more on traditional ear-training, covering sight-singing, rhythmic reading, transcription, movement, improvisation, and dictation. Though minimum exam levels are established for passage of each semester, students are allowed to work at their own pace and encouraged to progress as far as they can. Prerequisite: MUSC 125. Corequisite: MUSC 222.

MUSC 224. Musicianship IV. 2 Hours.

The summative course in the four-semester Musicianship sequence, studying the language of music through notated, aural, and descriptive daily work. This semester is intended as a comprehensive look at music theory up to modern practices, an introduction to 18th-century counterpoint, and an exploration of personal and professional applications for Musicianship skills. Students will continue to develop their ability to discuss and describe music, both familiar and new, in written and spoken form. Prerequisite: MUSC 222.

MUSC 225. Musicianship IV Lab. 1 Hour.

Concepts from Musicianship IV will be applied to keyboard, fretted instruments, voice, and the primary area of study. The fourth and final semester will focus more on traditional ear-training, covering sight-singing, rhythmic reading, transcription, movement, improvisation, and dictation. Though minimum exam levels are established for passage of each semester, students are allowed to work at their own pace and encouraged to progress as far as they can. Prerequisite: MUSC 223. Corequisite: MUSC 224.

MUSC 226. Private Brass. 1-3 Hour.

Upper division study. This course can be repeated up to six times, or for a maximum twelve credits, whichever limit is hit first.

MUSC 229. Private Composition. 0.5-4 Hour.

Instructor approval required. This course can be repeated up to twenty-four times, or for a maximum twenty-four credits, whichever limit is hit first. Prerequisites: MUSC 122, MUSC 124, MUSC 222, and music majors of junior and senior status.

MUSC 231. Private Percussion. 1-3 Hour.

Upper division private study. This course can be repeated up to six times, or for a maximum twelve credits, whichever limit is hit first.

MUSC 233. Private Woodwinds. 1-3 Hour.

Upper division private study. This course can be repeated up to six times, or for a maximum twelve credits, whichever limit is hit first.

MUSC 250. Basic Conducting. 2 Hours.

Basic Conducting is a course designed to help student musicians acquire introductory conducting skills and the knowledge needed to pursue advanced training in conducting. Typically taken in the sophomore year, this course has a prerequisite of MUSC 124.

MUSC 260. Introduction to Music History. 3 Hours.

Survey of the history and traditions of western civilization through its music. Students will focus on the musical content and trace developmental trends through the common periods of music history. This course is restricted to music majors, music minors, and students pursuing the music concentration. This course fulfills a General Education Requirement in the Humanities.

MUSC 292. Music Curriculum, Planning, and Assessment K-12. 2 Hours.

Music Curriculum, Planning, and Assessment K-12 is a course designed to guide music education majors through the process of developing sequential curricula in K-12 school music programs. Students will also acquire methods and develop strategies to effectively plan, deliver, and assess instruction in music classrooms. Prerequisite: ED 260.

MUSC 299. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

MUSC 301. Music Methods for the Elementary Teachers. 2 Hours.

This methods course for the classroom teacher builds knowledge and skills for integrating music and movement into the elementary curriculum. Prerequisites: MUSC 101 or MUSC 122L and Admittance to Teacher Education.

MUSC 305. Musical Theatre History. 3 Hours.

History of Musical Theatre, primarily focusing on American Musical Theatre, from its defining influences and roots to the present. Topics to be covered include significant productions, composers, lyricists, librettists, choreographers, directors, designers, and actors.

MUSC 306. Music History and Literature I. 3 Hours.

This course will develop the students' knowledge of Western Civilization through its musical history and literature dating from ancient Greece to 1750. Students will focus on analytical and listening skills to further their understanding of musical styles.

MUSC 307. Music History and Literature II. 3 Hours.

This course will develop the students' knowledge of Western Civilization through its musical history and literature dating from 1750 to the present. Students will focus on analytical and listening skills to further their understanding of musical styles.

MUSC 315. Entrepreneurship and Music. 3 Hours.

The musician of the 21st century is creative, innovative, and adaptable to the ever-changing world. The modern-day musician has the ability to generate their own musical opportunities. This project-based class will introduce elements of advertising principles (traditional and electronic), social media strategies and marketing, website construction, promotional writing, networking principles, and basics personal finance.

MUSC 325. Vocal Pedagogy. 3 Hours.

This course explores topics relating to healthy approaches in the development of successful singing. Attention will focus on the post-puberty voice. Students will become familiar with current and historical leaders in the field of voice teaching and research and develop skills in IPA (International Phonetic Alphabet). Students will develop diagnostic skills through listening to singing examples, and will learn to customize vocalizes to address the need of the singer. Prerequisites: Restricted to majors or consent of instructor.

MUSC 340. Voice Methods. 1 Hour.

This course investigates basic vocal pedagogy methods, introducing essential tools for teaching singing. Student will study international phonetic alphabet to assist foreign language diction skills, and explore repertoire suited for the beginning singer. Prerequisite: restricted to major or consent of instructor.

MUSC 341. String Methods. 1 Hour.

A practical class involving the playing and techniques of teaching the bowed, orchestral string instruments (violin, viola, cello, and string bass) at the elementary level. Teaching materials and string pedagogy are also considered.

MUSC 342. Woodwind Methods. 1 Hour.

The purpose of this course is to give the student an introduction to the techniques of playing and teaching woodwinds. Teaching methods, proper playing position, embouchure, common problems and errors made by students, equipment, maintenance and repair of the instruments, and both pedagogical and performance literature will be presented.

MUSC 343. Brass Methods. 1 Hour.

Teaching techniques and performance proficiency on each of the brass family instruments.

MUSC 344. Percussion Methods. 1 Hour.

Techniques and methods of playing and teaching percussion.

MUSC 347. Chamber Music Literature. 2 Hours.

Students will develop their knowledge of the chamber music repertoire through survey and analysis.

MUSC 348. Song Literature. 2 Hours.

This course provides a comprehensive survey of art-song repertoire, spanning from the early Baroque era to the present. The class explores the evolution of this repertoire, examining both its musical and textual elements. Students will engage in musical analysis, textual interpretation, and the performance of art-songs. Key composers and poets will be studied, alongside practical techniques for curating and performing a successful song recital program.

MUSC 350. Advanced Conducting. 2 Hours.

Objectives of this course are developing and refining gestures which convey musical meaning, to refine interpretive skills, and to develop an ability to critique and improve one's own conducting. Prerequisites: Restricted to students who are music majors with junior or senior status.

MUSC 380. Junior Seminar I. 1 Hour.

The first of a two-semester-sequence meant to build upon the Sophomore Screening process, following up student essays on professional goals and interests with a guided exploration of those aspirations: designing a website, arranging or writing music, creating a podcast, starting a concert series, fund-raising, teaching lessons, grant-writing, conducting research, and more. Students will work independently on their own projects under the guidance of faculty. This goal of the first semester is to explore multiple options, identifying a specific project or projects for continued work in MUSC 381. Must have junior or senior status and be a Music major.

MUSC 381. Junior Seminar II. 1 Hour.

The second of a two-semester-sequence meant to help students explore personal interests and develop their professional identity. Following up on projects identified as part of MUSC 380, students will spend this semester working independently on professionally-applicable projects under the guidance of faculty. Prerequisite: MUSC 380 and have junior or senior status.

MUSC 390. Instrumental Methods in Secondary Education. 3 Hours.

Instrumental Methods in Secondary Education is a course designed to prepare music education majors to teach instrumental music (band/orchestra) in middle school and high school settings. In addition to studying various pedagogical approaches to teaching instrumental music in schools, students will observe and reflect on professional teaching practices, create professional documents, and experience teaching in the secondary school setting through practicum experiences. Prerequisites: MUSC 250 and admittance to Teacher Education.

MUSC 391. Choral Methods in Secondary Education. 3 Hours.

Examination of and practice with methods, philosophies, musical content, and curriculum for teaching choral skills in secondary choral settings. Prerequisites: MUSC 250 and admittance to Teacher Education.

MUSC 392. Elementary Music Methods. 3 Hours.

Elementary General Music Methods and Materials skills, knowledge, methods, and materials needed for successful teaching in the elementary general music setting. Prerequisites: MUSC 224 and admission to Teacher Education.

MUSC 397. Elementary Music Field Experience. 1 Hour.

This course works in conjunction with MUSC 392. Thirty hours of observation/ teaching experience in an elementary music classroom, applying and practicing methods and materials derived in MUSC 392. Prerequisites: MUSC 224 and admission to Teacher Education.

MUSC 442. Piano Pedagogy. 3 Hours.

Learning and application of piano teaching methods and applied music instruction management. Prerequisite: Passage of sophomore level piano proficiency exam.

MUSC 480. Senior Project. 1-2 Hour.

Capstone project representing accomplishment in designated applied study area. Music majors pursuing a Performance Concentration should take MUSC 480 for 2 credits. This course can be repeated up to two times, or for a maximum four credits, whichever limit is hit first.

MUSC 494. Independent Study Honors Music. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

MUSC 499. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

NURS 221. Pre-Professional Development. 1 Hour.

Facilitates the development of professional behaviors, roles, and responsibilities. Provides opportunity for professional development, community service, and continuing education. Nursing elective graded pass/fail. Guidelines available through Department of Nursing. Prerequisite: Pre-nursing or nursing major.

NURS 222. Math for Meds. 1 Hour.

Enables the student to develop calculation skills, using the dimensional analysis technique, to safely calculate and administer medications.

NURS 253. Nursing Perspectives. 3 Hours.

Focuses on introductory concepts of the discipline of professional nursing. Open to the general University student. CS = 45*.

NURS 255. Nursing Foundations. 5 Hours.

Applies basic theoretical concepts to professional nursing in appropriate practice settings. Prerequisites: Admission to nursing. CS = 60; C/L = 90*.

NURS 264. Health Assessment. 4 Hours.

Applies methods required for a nursing health assessment in classroom and laboratory setting. Prerequisites: Admission to nursing. CS = 45; C/L = 45*.

NURS 299. Special Topics. 1-4 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

NURS 325. Adult Health I. 5 Hours.

Focuses on nursing care of adults experiencing common, chronic, and/or progressive health problems with predictable outcomes in selected body systems, including concepts of absorption, oxygenation, digestion, regulation, perfusion, cell injury and inflammation, altered immune responses, and perioperative principles. Principles and practices of intravenous therapy are applied to the adult client. Concepts important in understanding health and illness in the elderly are included. Clinical experiences occur in laboratory, medical/surgical areas, simulation, and perioperative settings. Prerequisites: Admission to nursing. CS = 45; C/L = 90*.

NURS 335. Adult Health II. 5 Hours.

Focuses on nursing care of adults, who experience common, chronic, and/or progressive health problems in selected body systems. Concepts of sensation, elimination, regulation, perfusion, movement/coordination, perceptual dysfunction, and abnormal cell growth are included. Concepts important in understanding health and illness in the elderly are included. Principles and practices of intravenous therapy are applied to the adult client. Clinical experiences occur in the laboratory, medical/surgical areas, and rehabilitation settings of the hospital. Prerequisites: Admission to nursing. CS = 45; C/L = 90*.

NURS 344. Child Health Nursing. 4 Hours.

Applies theories, concepts, and competencies in providing nursing care for infants, children, and adolescents within families. Clinical experiences will occur in a variety of settings. Prerequisites: Admission to nursing. CS = 30; C/L = 45*.

NURS 354. Psychiatric Mental Health Nursing. 4 Hours.

Applies psychosocial concepts and theories in psychiatric-mental health nursing within a nursing process framework for care of persons with mental health conditions. CS = 30; C/L = 90. Prerequisites: Student must complete NURS 325, NURS 335, PSY 270, and be admitted into the nursing program before enrolling in this class.

NURS 361. Women's Health. 1 Hour.

Apply current theories and concepts in women's health and health practices within families. Prerequisite: Restricted to students who are admitted into the nursing program.

NURS 363. Nursing Theory and Research. 3 Hours.

Surveys contribution of theory and research to the development of the discipline of nursing. Focuses on nursing theories, conceptualizations, and research utilization for decision making within professional nursing. Prerequisite: Admission to nursing. CS = 45*.

NURS 364. Maternal Newborn Nursing. 4 Hours.

Applies current theories, concepts, and competencies in evidence based maternal-newborn nursing. Provides experiences in caring for women, childbearing, families and newborns in the hospital, clinic, and community. Compares the nursing roles in maternal-newborn nursing. CS - 30; C/L = 90. Prerequisite: Student must have completed NURS 335 prior to enrolling in this class.

NURS 383. Professional Nursing I. 3 Hours.

Professional Nursing I introduces the student to the nature of baccalaureate nursing, including the Department of Nursing Philosophy and curricular concepts. Students explore various nursing roles and theories in a variety of traditional and nontraditional settings. Prerequisite: acceptance into BSN program.

NURS 397. Nursing Internship. 3-6 Hour.

Fostering development of clinical nursing skills and decision making in approved health care agencies. Guidelines available through Department of Nursing. Prerequisite: admission to nursing. One semester credit hour = minimum of 45 hours of clinical study. This course can be repeated up to two times, or for a maximum six credits, whichever limit is hit first. Prerequisite: NURS 335.

NURS 399. Independent Study General Nurs. 1-4 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

NURS 410. Nursing Informatics. 3 Hours.

This course explores the evolution of healthcare informatics, addressing foundational concepts, current challenges, and health information management systems. Emphasis is placed on leveraging technology to enhance decision-making and improve health outcomes for individuals, families, and communities. Students will apply informatics principles to clinical practice, proposing strategies to utilize technology for improving patient safety and optimizing work efficiency. Additionally, the course focuses on identifying, collecting, processing, and managing healthcare information and data. Prerequisite: Admitted into BSN Completion Program.

NURS 421. Nursing Leadership Development. 1 Hour.

Provides opportunities to implement leadership skills in professional roles and community service. Promotes activities in professionalism, continuing education, and networking. Guidelines available through Department of Nursing. Prerequisites: NURS 256 and 264; and admission to nursing.

NURS 456. Public Health Nursing. 5 Hours.

Demonstrates population-focused community-oriented nursing through the synthesis of nursing theory and public health theory applied to promoting, preserving, and maintaining the health of populations and grounded in social justice. Provides experience in a variety of urban, rural, and frontier community settings. Prerequisite: NURS 344, NURS 354, NURS 361 and NURS 364. Admission to nursing. CS = 45; C/L = 90*.

NURS 457. Public Health for the Professional Nurse. 5 Hours.

Demonstrates population-focused community-oriented nursing through the synthesis of nursing theory and public health theory applied to promoting, preserving, and maintaining the health of populations and grounded in social justice. Provides experience in a variety of urban, rural, and frontier community settings. Prerequisite: NURS 363 and NURS 383. Admission to BSN Completion Program. CS = 45; C/L = 90*.

NURS 464. Adult Health III. 5 Hours.

Focuses on advanced nursing care of adults experiencing acute, complex, and potentially unstable illnesses and injuries. Concepts, principles, and theories relating to adaptation and life support management of regulatory systems are included. Clinical experiences include laboratory simulation and life system support settings, including critical care areas, dialysis, and emergency/trauma services. Prerequisite: Admission to nursing and senior status. CS = 45; C/L = 90*.

NURS 471. Nursing Review. 1 Hour.

Provides a systematic review of essential nursing content required for licensure. Prerequisites: Student must complete NURS 456 and NURS 464 before enrolling in this class.

NURS 472. Trends and Issues. 2 Hours.

Evaluates current issues and trends impacting upon professional nursing practice. Introduces strategies to empower nurses for professional nursing with emphasis on legal, ethical, and political economic frameworks, career management; health care policy. Prerequisites: Admission to nursing and faculty approval. CS = 30*.

NURS 473. Nursing Leadership and Management. 3 Hours.

Analyzes theories and concepts of leadership and management for the professional nurse in dynamic nursing care delivery systems. Prerequisite: Admission to nursing. CS = 45*.

NURS 483. Professional Nursing II. 3 Hours.

Professional Nursing II will provide the student with an opportunity to examine professional nursing in a changing health care delivery system including the current and future focus of nursing care. Prerequisite: Acceptance into RN to BSN completion program.

NURS 493. Professional Nursing III. 3 Hours.

This integrative capstone course provides the student opportunity to design and implement a project in collaboration with faculty by integrating leadership and management concepts into nursing practice in a health care system. Prerequisite: acceptance into RN to BSN completion program.

NURS 494. Independent Study Honors Nurs. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

NURS 496. Study Abroad. 1-6 Hour.

Provides opportunities for MSU faculty-led study trips to appropriate locations. Focuses on becoming more culturally knowledgeable about global health care by immersion in a nursing culture of a different country. Will include additional requirements beyond travel itself. May be repeated for credit for different countries. This course can be repeated up to three times, or for a maximum twenty-four credits, whichever limit is hit first.

NURS 497. Nursing Practicum. 6 Hours.

Integrates management concepts in clinical nursing practice in selected health care systems with the collaborative guidance of faculty and clinical preceptors. Prerequisites: Admission to nursing. C/L = 270*.

NURS 499. Special Topics in Nursing. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

PHIL 100. Critical Thinking. 3 Hours.

The study of effective thinking, both logic and evaluative.

PHIL 101. Introduction to Philosophy. 3 Hours.

Basic problems, concepts, and methods of philosophy.

PHIL 102. Philosophy of Human Nature. 3 Hours.

Focuses on what it means to be a human being and the so-called "nature-nurture controversy."

PHIL 201. Philosophy of Religion. 3 Hours.

A critical examination of the reasonability of religious belief. The existence of God, the problem of evil, and other topics will be discussed.

PHIL 210. Ethics. 3 Hours.

This course studies 1. moral reasoning 2. traditional concepts and ethical theories and 3. the application of these concepts and theories to practical moral issues, e.g., the study of biomedical ethics, environmental ethics, legal ethics, and/or business ethics.

PHIL 299. Special Topics in Philosophy. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

PHIL 322. Business Ethics. 3 Hours.

Business Ethics is a detailed examination of how the world of business intersects with important ethical issues. The course will address all of (but not limited to) the following: 1) The nature of business ethics. 2) An examination of the leading theories of ethics. 3) Examine what is known as Ethics in the Marketplace. 4) Discuss the relationship of ethics to environmental issues. 5) Look at ethical issues involving both consumers and manufacturers. 6) Become familiar with issues surrounding job discrimination. Numerous cases/examples from the real world will be interwoven along the way. The student will be challenged to both understand ethical theories and to more fully understand how such theories might be applied to real life business situations.

PHIL 330. Modern Philosophy. 3 Hours.

This course engages with central topics in modern philosophy by studying major thinkers of the time, from Descartes to Kant.

PHIL 355. The Enlightenment. 3 Hours.

The course is a general overview of the historical, cultural, political, and philosophical elements of European Enlightenment. Topics covered included but are not limited to the following: the rise of science, the roles of reason, the attack on "tradition," and the development of Democracy and human rights.

PHIL 380. Existentialism. 3 Hours.

A careful examination of major existentialist thinkers (Kierkegaard, Nietzsche, Sartre, etc.) and dominant existential themes: alienation, mortality, the meaning of life, and God.

PHIL 383. Asian Philosophy. 3 Hours.

A critical examination to the leading eastern worldviews: Buddhism, Hinduism, Confucianism, Taoism, and the eastern views.

PHIL 394. Advanced Philosophy. 3 Hours.**PHIL 399. Independent Study General Phil. 1-4 Hour.**

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

PHIL 494. Independent Study Honors Phil. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

PHIL 499. Special Topics in Philosophy. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

PHYS 105. Physical Science by Inquiry. 4 Hours.

In this course students will be involved in an in-depth inquiry-based exploration of basic principles of physical science which are often taught in elementary school. It covers topics of properties of matter, light and color, electric circuits, and kinematics. Inquiry based units are supplemented with material on the history of scientific development.

PHYS 110. Astronomy. 4 Hours.

A study of the universe that begins with the earth as a planet, the planets, and the satellites of our solar system, and moves out through stellar astronomy to galaxies and into the very fabric of the universe. It includes an evaluation of the methods and techniques of astronomy. Offered fall semester. Both day and night laboratories. Lecture, 3 hours; laboratory, 2 hours.

PHYS 211. College Physics I. 4 Hours.

Elementary laws and principles of mechanics and fluids. Lecture, 3 hours; laboratory, 3 hours. Prerequisite: MATH 103.

PHYS 212. College Physics II. 4 Hours.

Elementary laws of electricity and magnetism, optics, and modern physics. Lecture, 3 hours; laboratory, 3 hours. Prerequisite: PHYS 211.

PHYS 222H. -Honors General Physics II. 5 Hours.

Electricity; Gauss' laws and potential difference; magnetism; Maxwell's equations; optics; introduction to modern physics. Emphasis on sophisticated quantitative reasoning, order of magnitude estimation, in-depth application of calculus, and physical underpinnings of other sciences and technology. Lecture, 3 hours; laboratory, 2 hours; recitation, 2 hours. Corequisite: Math 166 Prerequisite: Honors program admission.

PHYS 251. University Physics I. 5 Hours.

Newton's Laws; work and energy; impulse and momentum; angular momentum; oscillations; gravity; wave motion; thermodynamics. Lecture, 3 hours; laboratory, 2 hours; recitation, 2 hours. Corequisite: MATH 165.

PHYS 252. University Physics II. 5 Hours.

Electricity; Gauss' laws and potential difference; magnetism; Maxwell's equations; optics; introduction to Modern Physics. Lecture, 3 hours; laboratory, 2 hours; recitation, 2 hours. Prerequisite: PHYS 251. Corequisite: MATH 166.

PHYS 299. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

PHYS 499. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

POLS 115. American Government. 3 Hours.

Principles of American government, political behavior, institutions.

POLS 116. State and Local Government. 3 Hours.

Structures, politics, and behavior in state and local governments.

POLS 220. International Politics. 3 Hours.

The study of how different governments of the world interact. Topics covered include theories and models related to international conflict and consensus; world, regional, and non-governmental international organizations; diplomacy; and political interaction between nations.

POLS 275. Contemporary Community Issues. 3 Hours.

This course is designed to develop your understanding of the different communities you are a member of and the issues facing them in the 21st century. Drawing on theories and concepts from various disciplines, we will expand on how communities and the issues associated with them are defined, constructed, and addressed at multiple levels of society. Specifically, we will examine various political and social issues facing our communities including but not limited to: crime, ecology, inequalities, health care, and the family. We will also set those issues in their larger state, national and global context, address the impact of that context and the proposed possible outcomes for the future.

POLS 299. Special Topics. 1-6 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

POLS 375. Contemporary Political Issues. 3 Hours.

This course is designed to develop your understanding of the larger political world and the issues facing it in the 21st century. Drawing on theories and concepts from various disciplines, we will expand on how political issues are defined, constructed and addressed at multiple levels of society. Specifically, we will look at various political issues and policies facing the United States, including but not limited to: crime, ecology, inequalities, health care and the family. We will also set those issues in their larger global context, address the impact of that context and the proposed possible outcomes for the future.

POLS 425. Society and the Graphic Novel. 3 Hours.

Graphic Novels - like any form of social commentary - has a history of addressing the issues and social changes of the day. This course will take critical look at how the Graphic Novels have addressed the social, issues today and historically. Topics included but are not limited to: gender, race, sexuality, politics, and religion. Drawing on primary source materials and analytical texts, the course examines not only society is reflected in Graphic Novels, but also how Graphic Novels impact larger social discussions.

POLS 95. Political Science Experience. 0 Hours.

Political Science Experience provides students with a diverse selection of applied experiences to gain more critical understand of a variety of political and cultural topics at all levels - International, National, State, and Local. The experience requires students to actively engage in the political process - broadly defined. This course can be repeated up to eight times.

PSY 111. Introduction to Psychology. 3 Hours.

A survey of the scientific study of behavior and mental processes. Topics studied include development of normal and abnormal behavior, learning, biopsychology, development, memory, personality, cognition, therapy, and social psychology. This course is a prerequisite to most other psychology courses.

PSY 112. Foundations of Psychology. 3 Hours.

Designed for psychology and addiction studies majors, this course will emphasize the tools necessary to advance in these fields. Prerequisites: Students must complete PSY 111 before enrolling in this class, and declare a major in Psychology or Addiction Studies.

PSY 204. Introduction to Cyberpsychology. 3 Hours.

This survey course delves into the emerging field of cyberpsychology, exploring the psychological impact of technology on individuals, groups, and society. The course includes a comprehensive introduction to the psychology of digital spaces and human-computer interaction. Topics include identity formation in online spaces, social engineering, advertising, cybercrime, learning, and connections to mental health.

PSY 241. Introduction to Statistics. 4 Hours.

This course examines basic concepts in measurement, scaling, descriptive statistics, binomial and normal distribution, applied probability, and z-scores. In addition, this course introduces inferential statistics and hypothesis testing, including t-test, analysis of variance, correlation and linear regression, and the chi-square test statistic. Basic software applications will also be examined. Prerequisites: ASC 093 with a C or better, or qualifying math placement test score, or ACT math sub-test score of 21 or higher. Required co-requisite PSY 241L if ACT math sub-test score is 18-20 or qualifying pre-algebra math placement test is 60-78.

PSY 241L. Introduction to Statistics Lab. 1 Hour.

Introduction to Statistics level lab provides students in PSY 241 with an extended experience in a lab setting working on statistical skills. Lab meets 2 hours per week. This class is S/U. Required co-requisite to PSY 241 if ACT math sub-test score is 18-20. Withdrawing from this class will also withdraw you from PSY 241.

PSY 242. Research Methods in Psychology. 4 Hours.

A study of the scientific methods as it is used in the investigation of problems in psychology. A variety of types of research methodologies, as well as the advantages and disadvantages of their use. Ethical implications of the use of various methodologies will also be discussed. Prerequisites: PSY 241, Math 210, or departmental approval.

PSY 250. Developmental Psychology. 3 Hours.

This course is designed to give learners a foundational understanding of human development from the pre-natal period (before birth, including genetic influences) to death. This course will take a chronological approach and cover each developmental time period in terms of physical, cognitive, and socioemotional development to emphasize change both across the lifespan and within domains. Prerequisite: PSY 111.

PSY 255. Child and Adolescent Psychology. 3 Hours.

Overview of theories of human development from conception through adolescence including the physical, cognitive, language, social, and educational aspects. Prerequisite: PSY 111.

PSY 261. Psychology of Adjustment. 3 Hours.

This course will present psychological research about improving adjustment and overall quality of life. Factors affecting adjustment include gender, personality, self-esteem, ability to communicate effectively, health, experience of stress, changes with aging, and coping processes. Factors also include things like social influence and pressure, relationships with others, career preparation, work, and stages of life. The desired outcome is for students to use this knowledge to actively take charge of their own lives, effectively adjusting to an ever-changing world. Prerequisite: PSY 111.

PSY 270. Psychological Disorders and Treatments. 3 Hours.

The course is an over view of mental health disorders. Topics include research methods used for studying psychopathology, historical perspectives, diagnostic criteria and classification, etiology, and treatments for mental health disorders. Prerequisite: PSY 111.

PSY 299. Special Topics in Psychology. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

PSY 313. Industrial Organizational Psychology. 3 Hours.

This course will examine human behavior in industrial and organizational settings. Psychological principles are applied to selection, placement, and training. The effectiveness of individuals and groups within organizations, including leadership and control, conflict and cooperation, motivation, and organizational structure and design, is examined.

PSY 315. Careers in Psychology. 1 Hour.

This course explores the diverse career paths available within the field of psychology. Students will examine various domains such as clinical, counseling, educational, industrial-organizational, and research psychology. Through lectures, guest speakers, and interactive discussions, participants will gain insights into the skills, qualifications, and experiences required for success in each area.

PSY 342. Research Methods II. 4 Hours.

An application of scientific methods as it is used in the investigation of problems in psychology. A variety of types of analyses, as well as the advantages and disadvantages of their use will be explored. Includes hands on experience in designing, running, analyzing, interpreting, and reporting psychological projects. Prerequisites: PSY 111, PSY 242, and PSY 241 or MATH 210 or DATA 211.

PSY 376. Social Psychology. 3 Hours.

An interdisciplinary approach to the study of behavior of individuals in relation to social stimulus situation. Prerequisite: PSY 111.

PSY 379. Psychology of Adulthood and Aging. 3 Hours.

Overview of theories of human development from young adulthood through old age focusing on demands of personal adjustment, family, work, retirement, and community life. Prerequisites: PSY 111 and PSY 255 or PSY 250.

PSY 410. Cognitive Psychology. 3 Hours.

Examines the research dealing with the processing of sensory information, attention, short-term and long-term memory, decision making and problem solving, as well as related topics. Prerequisite: PSY 111.

PSY 411. Introduction to Personality Theories. 3 Hours.

Examines the basic concepts of personality development as viewed by the psychoanalytic, learning, humanistic, and trait-type theorists. Special emphasis is placed on the comparison of various perspectives. Prerequisite: PSY 111.

PSY 435. Psychology of Learning. 3 Hours.

Introduces the psychology of how people learn, including discussion of research methods, major theoretical frameworks, and implications for learning settings. Students will consider biological, behavioral, and cognitive approaches to learning, as well as questions surrounding motivation, cultural construction of knowledge, and current issues in learning. Prerequisite: PSY 111. Restricted to junior or senior status.

PSY 460. Sensation and Perception. 3 Hours.

Focus on the principles of our sensory systems and the laws which govern the sensory processes. The course includes research and theories on the visual system, auditory system, chemical senses, and the skin senses. Prerequisites: PSY 111 and BIOL 115 or BIOL 220.

PSY 465. Introduction to Behavioral Neuroscience. 3 Hours.

An introduction to the neuroanatomical and neurophysiological bases of behavior, including learning, reinforcement, eating and drinking, sleep, sexual behavior, and mental disorders. Prerequisites: PSY 111 and BIOL 115 or BIOL 220.

PSY 473. Behavior Modification. 3 Hours.

Description of behavioral principles and procedures for assessment and treatment that can be used helping professionals to enhance behavioral development. Class projects are required. Prerequisite: PSY 111.

PSY 491. Senior Seminar in Psychology. 3 Hours.

Overview of psychology as a discipline and a synthesis of biological and psychological factors in human behavior. Prerequisites: PSY 111, PSY 241 or MATH 210, senior status, psychology major, and must have completed all Psychology core courses.

PSY 493. Thesis Proposal. 3 Hours.

Students will formulate an original research proposal based upon the scientific literature. With the guidance of a faculty member, the student will develop a hypothesis and methods to test the hypothesis. The student will select a thesis committee, write a research proposal, and meet with their thesis committee to approve the proposal. Prerequisites: PSY 111, PSY 241 or MATH 210 or DATA 211 and PSY 242.

PSY 494. Directed Behavioral Research. 1-4 Hour.

This course provides students with the practical applications of research designs. Although a resulting publication is not required for the course, it is desired outcome. Students will need to work with a faculty Sponsor on a specific research project. This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

PSY 495. Service Learning. 3 Hours.

This course provides students with the ability to work in meaningful community service coupled with instruction about the service and reflection on their service. Prerequisite: Students must be psychology majors in their junior or senior year before enrolling in this course.

PSY 496. Senior Research Thesis. 3 Hours.

Students will formulate an original research topic and write a paper in that topic. Restricted to psychology majors and senior status.

PSY 497. Psychology Practicum. 3 Hours.

Placement in an applied setting for practical experience. Prerequisite: Students must be a psychology major in their junior or senior year before enrolling in this class.

PSY 499. Special Topics in Psychology. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

PSY 95. Senior Psychology Major Field Test. 0 Hours.

Students should register for this course when they enroll in PSY 491 Senior Seminar. Students will take the ETS Psychology Major Field Test in this course. Prerequisites: PSY 111, PSY 241 or MATH 210, senior status, psychology major, and must have completed all Psychology core courses. Corequisite: PSY 491 and restricted to Psychology majors.

RAD 102. Introduction to Radiologic Technology. 1 Hour.

Designed to acquaint first-year student (freshman) radiologic technology students with the depth and breadth of this field. Students visit the radiology department of a local hospital. The course is presented by the education coordinator of a local school of radiologic technology. Lecture, 1 hour.

RAD 405. Radiologic Technology Clinical. 1-15 Hour.

Students spend 24 months in a hospital environment. Education includes both didactic and clinical studies. Restricted to students who have been admitted to the Radiologic Technology degree program. This course can be repeated up to six times, or for a maximum seventy credits, whichever limit is hit first.

SCI 100. Engineering and Science for Industry. 3 Hours.

Students discover how scientists and engineers use their education and expertise in different subjects to contribute to our continued quality of life, drive innovation, shape our economy, support national security, and ensure a sustainable future. Students will encounter diverse careers for engineers, scientists, and professionals in the industries that provide energy and materials to our society. The course features a series of field expeditions and travel experiences, networking with industry professionals, and experiential learning to acquire fundamental skills relevant to their majors.

SCI 110. Introduction to Meteorology. 4 Hours.

This course focuses on developing an understanding of the interrelationships between the Earth's Hydrosphere, Atmosphere, Geosphere, and Cryosphere. Topics include, but are not limited to, El Nino/La Nina, severe weather, remote sensing, real-time weather, physical conditions that drive local, regional, and global weather patterns, and climate. The course is designed to help students develop a more positive attitude toward science and to increase their confidence to do science.

SCI 120. Introduction to Scientific Research. 1 Hour.

This course provides a foundational overview of the scientific research process and prepares students to participate in undergraduate research across various scientific fields. Designed for students with limited research background, students will learn to read and interpret scholarly articles, understand basic research terminology, and recognize the characteristics of rigorous scientific inquiry. Students will also be guided to explore research opportunities on campus and in the state, practice communicating professionally with faculty mentors, and examine expectations for responsible and ethical research conduct. By the end of the course, students will build the early skills, confidence, and professional habits needed to participate in novel research projects and to pursue future academic or applied research opportunities.

SCI 220. Plant Products Seminar 2. 1 Hour.

A continuation of SCI 120, looking more deeply into various aspects of the botanical plant products industry. Students will participate in reviews of relevant literature, group discussion, guest lectures from industry leaders, and/or field trips. Lecture, 1 hour. Prerequisite: SCI 120.

SCI 240. Research Methods. 2 Hours.

This course will introduce students to library skills, computer skills, and communication skills used to plan and carry out research projects. Students will search for, read, and discuss journal articles; write and edit project proposals; and learn basic data management and analysis skills. Prerequisite: sophomore, junior, or senior status.

SCI 299. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

SCI 300. AI in Healthcare. 3 Hours.

This course explores the transformative role of artificial intelligence (AI) in modern healthcare. Students will learn fundamental AI and machine learning concepts, including data science techniques, and their applications in various healthcare domains. The course covers AI's impact on medical diagnosis (image analysis, NLP of records, diagnostic tools), drug discovery and development (AI-driven design, personalized medicine), and healthcare operations (predictive analytics, automation, patient engagement). Advanced topics include ethical considerations (bias, privacy), AI in genomics and precision medicine, mental health, and healthcare policy/regulation. This course provides a foundational understanding of AI in healthcare. Restricted to sophomore, junior or senior status.

SCI 301. Biogeochemical Cycles. 3 Hours.

A broad overview of global biogeochemical process, including the origin of elements, Earth evolution, evolution of biogeochemical cycles, biogeochemical cycles of major elements such as carbon, nitrogen, phosphorous, and sulfur, cycles of select trace elements, interactions of biogeochemical cycles, biogeochemistry of various ecosystems, and environmental biogeochemistry. Lecture, 3 hours. Prerequisite: Student must take BIOL 127, CHEM 127, or GEOL 127 before enrolling in this course.

SCI 391. Teaching Science in Secondary Schools. 3 Hours.

Study of science teaching in middle school and high school grades with emphasis on clinical experience. Basic techniques for all disciplines are individualized in practice. Emphasis on teaching an investigative approach to science. Prerequisite: Admission to Teacher Education.

SCI 394. Independent Study General Sci. 1-4 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

SCI 426. Elementary Science Methods. 4 Hours.

Study of basic concepts of science within a framework of elementary school teaching methodology. Interpretation of science content, learning theory, curriculum approaches, instructional strategies, and lesson planning are emphasized. Includes extensive clinical experience. Lecture, 4 hours. Prerequisite: Admission to Teacher Education and ED 320. Corequisites: ED 320, ELED 421, ELED 422, ELED 423, ELED 424.

SCI 480. Seminar. 2 Hours.

Students present and discuss original student research project in both written and oral forms. To enroll, students must have completed their research and must have written the Introduction, Methods, and Results components of the research paper. Prerequisites: senior status and a completed research project.

SCI 494. Directed Research in Science. 1-6 Hour.

Students conduct research under the direction of a faculty mentor. The general topic and specific goals and activities are agreed upon by the student and the mentor. The number of credits is proportional to the time committed to the research, with 32-48 hours of work per semester per credit hour expected. Students should make arrangements with a supervising faculty member before registering for this course. This course can be repeated up to six times, or for a maximum six credits, whichever limit is hit first.

SCI 95. Interconnecting Perspectives in Science. 0 Hours.

Science 095 examines how to present important scientific concepts to students from a diversity of backgrounds including different cultures, different learning styles, different ages, different genders, different physical abilities and different intellectual abilities.

SOC 110. Introduction to Sociology. 3 Hours.

An introduction to the basic insight, concepts, theories, and methods of the discipline. The course encourages students to think critically, to apply sociological knowledge, and to develop a global perspective. Topics for discussion include culture, social interaction, deviance, sexuality, stratification, race relations, gender, family, economics, politics, technology, and social change. SOC 110 is a prerequisite for all 300 and 400 level SOC courses.

SOC 178. -Introduction to Applied Research. 2 Hours.

The course is designed to prepare students for practical research applications. The focus of the course is on facilitating understanding of the construction and use of research in preparation for conducting original research. Prerequisite or Corequisite: SOC 278.

SOC 200H. Idea of Society. 3 Hours.

The idea of society is perhaps one of the most difficult abstractions in our repertoire. This course introduces the student to various perspectives that seek to explain both the historical and contemporary meaning of society. Honors Program admission or 3.30 cumulative GPA and permission of the instructor is required. This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

SOC 201. Social Problems. 3 Hours.

A sociological analysis of major social problems.

SOC 202. Popular Culture and Society. 3 Hours.

A sociological focused introduction to Popular Culture and its place in society and the social structure. Major theories and subjects of the study of popular culture will be addressed. The course offers a range of theoretical and methodological approaches to considering producers, audiences, and meanings of the culture of everyday life in a variety of historical and cultural contexts.

SOC 210. Introduction to Anthropology. 3 Hours.

Examination of customs, institutions, and social organization of preliterate societies. Brief consideration of physical and biological aspects of human development.

SOC 236. Sociology of Sport. 3 Hours.

Sports are a large part of social life in the U.S. and around the world. People grow up playing sports and/or spend countless hours watching them. This course focuses on how the world of sports is a microcosm of society and an arena through which we can understand more about our society's dynamics, values, and problems. The course covers a broad range of historical and contemporary sports issues through a sociological lens. Focus will be given to the intersections between sports and topics such as gender, race, inequality, health, politics, economics, culture, and more. The overarching theme of the course is to understand the complex, interconnected relationship between sports and society.

SOC 255. Diversity in Families. 3 Hours.

An introduction to diverse family issues and concerns in global perspective. The course examines the changing functions, patterns, and structures of the family as a major social institution. Topics include changing patterns of dating, mate selection, cohabitation, marriage, dual career families, adoption, divorce, and remarriage.

SOC 269. Culture and Sexuality. 3 Hours.

This course will examine ethical, cultural, psychological, social, and political issues related to sexual relationships and sexual behavior. Specific issues covered include sexual consent and sexual responsibility; harassment and freedom of speech; privacy; censorship and pornography; impact of media on sexual relationships; and university and governmental regulation of intimate relationships, such as interracial relationships and student-professor relationship. Prerequisite(s): SOC 110 or SOC 200H.

SOC 275. Contemporary Community Issues. 3 Hours.

This course is designed to develop your understanding of the different communities you are a member of and the issues facing them in the 21st century. Drawing on theories and concepts from various disciplines, we will expand on how communities and the issues associated with them are defined, constructed, and addressed at multiple levels of society. Specifically, we will examine various political and social issues facing our communities including but not limited to: crime, ecology, inequalities, health care, and the family. We will also set those issues in their larger state, national, and global context, address the impact of that context and the proposed possible outcomes for the future.

SOC 278. Social Research Methods. 3 Hours.

Study of the basic methods of empirical social science research. Topics include techniques and theory of research design, formulating and testing hypotheses, measurements, sampling, modes of observation, data management, and elementary data analysis.

SOC 279. Aging and Life Course. 3 Hours.

Study of relationship between society, culture, and social institutions shape one's perception of aging, death and dying. Focus given on structures that define, ritualize, and commodify the processes associated with Death and Dying.

SOC 298. Sociology of Education. 3 Hours.

This course examines education through a sociological lens, focusing on how education impacts society and how society impacts education. Using sociological theories and perspectives, students will critically examine the structure and process of education.

SOC 299. Special Topics in Sociology. 1-8 Hour.

This is a flexible course that may be taught depending on student needs. The design of the course is to present the student an opportunity to concentrate on various topics. This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

SOC 345. Critical Media Analysis. 3 Hours.

Critical analysis of modern media and its impact on social interaction, social institutions, popular culture, and everyday perceptions. Drawing on historical and contemporary theoretical and empirical work, an emphasis will be placed on the intersectionality of social institutions and media consumption practices as well as how the structure of those institutions and practices shape social interaction.

SOC 357. Sociology of Religion. 3 Hours.

A sociological analysis of religious belief, behavior, organization, and the relation between religion as an institution and the larger society of which it is a part. Prerequisite: SOC 110.

SOC 361. Comparative Ethnic Studies. 3 Hours.

Examination of the social, political, legal, and economic development of ethnic inequality in our American society. Topics include prejudice and discrimination, majority and minority relations, institutionalized racism, intergroup contacts, migration, immigration, affirmative action, and equal opportunity programs. Prerequisite: SOC 110.

SOC 369. Studies in Deviance. 3 Hours.

This course examines how so-called deviant identities, communities, desires, and practices are socially, historically, and culturally constructed. Particular emphasis is placed on non-traditional forms of deviancy. Discussion topics include transgender issues, queer theory, body modification, religious fanaticism, and militia groups. Prerequisite: SOC 110.

SOC 374. Cultural Studies. 3 Hours.

This course provides students with a basic understanding of the dynamics of culture and its impact on global change. Areas covered include: institutional structures of culture, cultural history and legacies, production and distribution of culture, effects of culture on meaning, and social action. Prerequisite: SOC 110.

SOC 378. Applied Social Science Research. 3 Hours.

The course is designed to prepare students for practical research applications. The focus of the course is on facilitating the construction and use of research methods in preparation for conducting original research.

SOC 381. Sociology of Health and Illness. 3 Hours.

This course is a sociological analysis of health and medicine that will encourage students, including future medical professionals, to examine health and illness through a sociological lens. Topics include mental health, contested illness, doctor and patient interactions, the social construction of illness, and more. Restricted to sophomore, junior or senior status.

SOC 394. Independent Study General Soc. 1-4 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

SOC 399. Senior Readings. 1-6 Hour.

Intended for students close to completing their major/minor sociology requirements. This course provides a forum for students to test the knowledge and skills they have acquired throughout their course of study by re-examining specific issues pertinent to sociology. Topics to be discussed range from civic, political, and religious participation through race, ethnicity, and gender issues. This course can be repeated up to six times, or for a maximum six credits, whichever limit is hit first. Prerequisites: SOC 110, three credits of sociology, and consent of instructor.

SOC 401. Research/Practicum/Internship. 1-6 Hour.

The course allows students the option of developing a major paper involving a literature review or empirical research or placement in applied setting for practical experience. Community and/or campus settings are available. Prerequisite: Student must complete SOC 110 OR SOC 200H before enrolling in the class.

SOC 420. Drugs and Society. 3 Hours.

An examination of public policy and the social construction of drugs and drug use. Includes the history of drug legislation, the interactional experiences of drug users, harm reduction and rehabilitation vs. criminalization, social effects, drug culture, and legalization debates. Prerequisite(s): SOC 110 or SOC 200H.

SOC 422. Globalization. 3 Hours.

This course examines globalization in its political, economic, and social dimensions. Students will engage with the interdisciplinary globalization literature through research, discussion, and debate on the historical origins of globalization, the economic opportunities and dangers of global trade and financial flows, and global politics. Restricted to sophomore, junior or senior status.

SOC 425. Society and the Graphic Novel. 3 Hours.

Graphic Novels - like any form of social commentary - has a history of addressing the issues and social changes of the day. This course will take a critical look at how the Graphic Novel has addressed social issues today and historically. Topics include, but are not limited to: gender, race, sexuality, politics, and religion. Drawing on primary course materials and analytical texts, the course examines not only how society is reflected in Graphic Novels, but also how Graphic Novels impact larger social discussions.

SOC 463. Sociology of Gender. 3 Hours.

This course focuses on the social, political, legal, and economic dimensions of contemporary women's issues. Topics include the feminization of poverty, reproductive technology, single parenthood, childcare policies, aggression against women, and institutionalized sexism.

SOC 475. Social Movements. 3 Hours.

Designed to familiarize students with the theories, methods, and analytical frameworks for understanding social change and development social movements in a global context. Topics covered include gender and race/ethnicity issues, social movements, and collective behavior, economic development, and globalization.

SOC 477. Sociological Theory. 3 Hours.

This course introduces students to major theorists who shaped the development of sociological thought. It explores the theoretical heritage of sociology to develop an appreciation for theory as an approach to examination and understanding of the social world. A major focus of the course is the function and practical application of sociological theory to understand ourselves and the world in which we live. Prerequisite: Student must complete SOC 110, or SOC 201 or SOC 200H before enrolling in the class.

SOC 494. Independent Study Honors Soc. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

SOC 499. Special Topics in Sociology. 1-8 Hour.

This is a flexible course that may be taught depending on student needs. The design of the course is to present the student an opportunity to concentrate on various topics. This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

SPAN 101. Beginning Spanish I. 3 Hours.

For beginners or those entering with one or two years of high school Spanish. Introduction to listening, speaking, reading, writing, and culture.

SPAN 102. Beginning Spanish II. 3 Hours.

A continuation of Beginning Spanish I. Prerequisite: SPAN 101.

SPAN 120. -Basic Spanish for Travel and Business. 3 Hours.

This course is designed to help students attain basic business conversation skills in Spanish. It will also provide a broad introduction to Spanish grammar and also cultural insight to business practices in the Spanish speaking world. Current events and topics related to the Hispanic World will also be discussed.

SPAN 130. Spanish for Healthcare Professions. 3 Hours.

Have you ever wished you knew some Spanish to interact with your patients? This course will teach you vocabulary, phrases, and basic grammar in Spanish that are relevant to the healthcare setting. The goal of the course is to facilitate multicultural communication in medical contexts at a basic level.

SPAN 194. Independent Study. 1-3 Hour.

Independent or directed study of special topics in the study of Spanish. This course can be repeated up to two times, or for a maximum six credits, whichever limit is hit first. Prerequisite: Spanish minor.

SPAN 201. Intermediate Spanish I. 3 Hours.

Review of basic Spanish with increased practice in conversation, reading, and writing. Prerequisite: SPAN 102, three years of high school Spanish, or consent of instructor.

SPAN 202. Intermediate Spanish II. 3 Hours.

Continuation of SPAN 201. Prerequisite: SPAN 201.

SPAN 230. -Sounds of Spanish. 3 Hours.

This course will address the sound system of Spanish. Topics will include basics of the articulatory system, characteristics and patterns of Spanish sounds, and variation in Spanish sounds. We will also discuss the difference between Spanish and English sounds; this analysis should help you achieve a more native-like pronunciation of Spanish.

SPAN 296. Study Tour. 1-3 Hour.

MSU faculty-led study trips to appropriate locations. Will include additional requirements beyond travel itself. This course can be repeated up to two times, or for a maximum six credits, whichever limit is hit first. Does not count towards the Spanish minor.

SPAN 299. Special Topics. 1-8 Hour.

Varying areas of content, issues, or themes in the study of Hispanic language, literature, culture, and civilization. This course can be repeated up to two times, or for a maximum eight credits, whichever limit is hit first.

SPAN 320. Hispanic Cinema. 3 Hours.

An exploration of socio-cultural, historical, and political issues in non-mainstream Hispanic cinema. Supplementary readings in English translation. Films projected in Spanish, with English subtitles. Taught in English.

SPAN 350. Latin Dance and Culture. 3 Hours.

This course will introduce you to various forms of Latin Dance. Elements of culture, history, and language will be incorporated.

SPAN 394. Independent Study. 1-4 Hour.

Independent or directed study of special topics in the study of Spanish. This course can be repeated up to two times, or for a maximum eight credits, whichever limit is hit first.

SPAN 399. Special Topics. 1-8 Hour.

Varying areas of content, issues, or themes in the study of Spanish. This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

SPAN 496. Study Tour. 1-18 Hour.

MSU faculty-led study trips to appropriate locations. Will include additional requirements beyond travel itself. This course can be repeated up to two times, or for a maximum eighteen credits, whichever limit is hit first.. May count towards the Spanish minor.

SPED 101. Introduction to Intellectual and Developmental Disability Services. 3 Hours.

A survey of the various types of developmental disabilities, the philosophy of service, person-centered planning, working with families, job coaching, and legal and ethical considerations for persons with developmental disabilities.

SPED 110. Introduction to Exceptional Children. 3 Hours.

A survey course examining exceptionalities of learning with a focus on understanding current social and educational responsibilities.

SPED 111. Health Care in IDD I. 3 Hours.

This course concentrates on basic medication concepts and procedures, health and wellness issues, nutrition information, and oral hygiene.

SPED 112. Health Care in Developmental Disabilities II. 3 Hours.

This course focuses on the most common types of seizures and provides information on how to observe, report, and assist persons during seizures. Included also are techniques of positioning, turning, and transferring persons with physical disabilities. This course provides an introduction to issues in sexuality and also teaches how to support independent living skills in persons with intellectual disabilities.

SPED 113. American Sign Language I. 3 Hours.

This course is designed to introduce students to American Sign Language. Students develop basic vocabulary and conversation skills. Fundamental aspects of Deaf Culture are incorporated.

SPED 114. Sign Language Lab. 1-6 Hour.

The goal of this lab is to practice and review skills learned in ASL classes. The lab provides an opportunity to enhance acquisition of the fundamental elements of American Sign Language. Emphasis is placed on the progressive development of basic expressive and receptive skills through the use of supplementary learning media and materials, increased exposure to native language users, and guidance from proficient instructors. This course can be repeated up to six times, or for a maximum six credits, whichever limit is hit first.

SPED 115. American Sign Language II. 3 Hours.

This course is a continuation of ASL I. Students will expand vocabulary and conversation skills. Focus is on a greater understanding of ASL and its cultural features. Prerequisite: Student must complete SPED 113 before enrolling in this class.

SPED 116. Intro to Sign Lang Interpreting. 3 Hours.

An introductory course providing an overview of the profession of Sign Language Interpreting.

SPED 117. Manually Coded English. 3 Hours.

An introduction to Signing Exact English and finger spelling. A basic sign vocabulary is presented.

SPED 120. Intro to Positive Behavior Supports. 3 Hours.

This course focuses on principles of behavior; defining, recording, and charting behavior, and how to write behavioral objectives. It teaches positive behavior support strategies and how to design and implement positive behavior support plans.

SPED 140. Human Development. 3 Hours.

A study of the sequence of human development from conception to late childhood, adolescence through adulthood, with emphasis on motor, language, cognitive, emotional, and social characteristics.

SPED 141. Foundations of Early Childhood Special Education. 2 Hours.

In this course, students will review typical and atypical development of children ages birth to age 5 and receive introduction to service delivery models for early intervention and early childhood special education, including best practices in intervention.

SPED 198. Special Education Practicum I: Collaboration & Law. 1 Hour.

This practicum provides pre-professional experience related to CEC's High Leverage Practice Domain of Collaboration. Candidates gain practical field knowledge of team-work and collaboration among educators to implement special education services as well as the laws and regulations that pertain to these services at the local, state and federal level.

SPED 201. Behavior Supports for Inclusive Educational Settings. 3 Hours.

This course introduces foundational behavioral principles for inclusive educational settings, including evidence-based concepts from ABA, PBS, and classroom management. Learners practice defining and measuring behavior, examining behavioral function, and applying the basic steps of FBA and mock BIP development. Emphasis is on ethical practice and data-based decision making within MTSS frameworks to support diverse learners.

SPED 202. Intro to Sensory Disabilities. 3 Hours.

In this introductory course in sensory disabilities, students will learn the dimensions of deaf/hard of hearing, visual impairments, and dual impairments. The content will cover the etiology of sensory disabilities that can result in additional learning challenges. In addition, historical foundations and research evidence upon which educational best practice is based for sensory disabilities is identified.

SPED 210. Intro to Ed of Children w/DHH. 3 Hours.

A foundations course which surveys the history of the education of children who are deaf or hard of hearing. An introduction to present techniques as well as historical philosophies is presented. Prerequisite: SPED 110.

SPED 213. American Sign Language III. 3 Hours.

This advanced course is a continuation of ASL I & II as a tool to enrich their vocabulary and understanding of the structure of ASL. Topics relating to Deaf Culture will be discussed throughout the course as well as opportunities to increase fluency in the language. Prerequisites: SPED 113 and SPED 115.

SPED 215. Interpreting I. 3 Hours.

This course focuses on strengthening ASL and English proficiency through discussion and practice and is designed for interpreting students with a foundation in ASL. The overall goal of the course is to improve ASL and English proficiency in a measured sequence, moving from simpler to more complex material with a strong emphasis on comprehension throughout. Course topics include main idea comprehension, summarizing, lexical substitution, paraphrasing propositions, paraphrasing discourse, as well as discovering the difference between form and meaning. Prerequisites: SPED 113, SPED 115 and SPED 213.

SPED 216. Interpreting II. 3 Hours.

Cognitive processing skills underlie the more complex aspects of simultaneous interpreting. This 3-credit course focuses on developing specific cognitive processes through a combination of lecture, discussion, and skill-building. Topics include comprehension, memory, immediate and delayed repetition, and pattern inference in both ASL and English. Also included are Fingerspelled word recognition, number comprehension in ASL. Prerequisites: SPED 113, SPED 115 and SPED 213.

SPED 220. Promoting Inclusive Opportunities. 3 Hours.

The course introduces a value-based process for developing and evaluating major program goals for persons with disabilities including the relationship of assessment to goal setting and person-centered planning. Students will apply instructional interventions including assistive technology applications for persons with intellectual disabilities. Strategies for promoting relationships between people with disabilities and other community members and guidelines for leisure program planning and implementation will be discussed.

SPED 223. Dual Diagnoses: ID and Mental Health Disorders. 2 Hours.

An overview of issues related to supporting people who experience both intellectual disability and mental health disorders including identification of the need for services, treatment options, and standards for service provision. The course provides information for program coordinators on assessment of mental health disorders, collaboration with community-based team members, pharmacological and behavior support, and cognitive behavioral therapies and approaches with individuals with intellectual disabilities.

SPED 225. Assisting People with Traumatic Brain Injury. 2 Hours.

This course provides a comprehensive overview of Traumatic Brain Injury (TBI) and how to assist people with TBI and their families. It discusses community resources, assessment issues and strategies, as well as the role of employment consultants in working with people with TBI.

SPED 233. Experience in SPED. 1 Hour.

This orientation course introduces students to professional standards, codes of ethics, and program expectations related to special education. Learners will begin shaping their teaching philosophy, explore current issues in the field, and strengthen professional development skills. Emphasis is placed on collaboration, reflective practice, and fostering an inclusive professional identity within a supportive cohort community.

SPED 234. Disability and Society. 3 Hours.

This course prepares future leaders to understand new perspectives on viewing disability as a part of a diverse society. Learning experiences are designed to eliminate myths and preconceptions and prepare students to successfully encounter diversity as expressed by people with disabilities who may be colleagues, employees, neighbors, or members of the community.

SPED 250. Developing Communicative Interactions. 2 Hours.

This course is designed to provide training to personnel who work with persons with extensive and pervasive support needs. It is a multimedia training program in the area of social, communicative language skill development, and intervention. The course also discusses effective interpersonal communication.

SPED 255. Aging and IDD. 2 Hours.

This course is designed to address training needs of direct support professionals and human services personnel working with senior citizens with developmental disabilities in community programs. It covers demographic and philosophical considerations, health, social, and legal issues, and coordination of services.

SPED 296. Field Experience in IDD. 4 Hours.

Practical experience in the development of individual program plans, medication management; positioning, turning, and transferring techniques; management of seizure disorders; job coaching; participant empowerment; facilitation of services; community networking; facilitation of relationships; provision of person-centered supports; vocational, education, and career support; assessment, documentation; communication; positive behavior supports; and aging issues.

SPED 298. Special Education Practicum II: Behavior Instruction. 1 Hour.

This Practicum provides pre-professional experience related to CEC's High Leverage Practice Domain of Instruction in Behavior and Academics. Candidates gain practical field knowledge of classroom management practices, school discipline, MTSS and instructional strategies that align with evidence-based practices in special education for creating positive learning environments for all students.

SPED 299. Special Topics in Special Ed. 1-8 Hour.

Research in current trends related to various topic areas in the field of special education. This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

SPED 302. Language and Communication Interventions. 3 Hours.

Students will learn the characteristics of culture and use of language as it relates to diversity across cultures. Additional focus will be on communication and social interaction alternatives and typical and atypical language development. Students will learn augmentative and alternative communication strategies to support and enhance the verbal and non-verbal communication skills of individuals with exceptional learning needs.

SPED 303. American Sign Language Fingerspelling, Numbers, and Specialized Vocabulary. 3 Hours.

This course will provide students with advanced skills in fingerspelling, specialized vocabulary knowledge and numbers in American Sign Language as preparation for a career in Interpreting. Prerequisites: SPED 113, SPED 115, SPED 213 or equivalent.

SPED 310. Introduction to Intellectual Disability and Autism Spectrum Disorder. 3 Hours.

In this survey course, students will explore definitions and issues related to individuals with intellectual disability (ID) and autism spectrum disorder (ASD). In addition, trends and practices will be discussed in the areas of developmental disabilities. Students will understand the impact of learners' academic and social abilities, attitudes, interests, and values on instruction and career development. Prerequisite: Student must complete SPED 110 before enrolling in this class.

SPED 311. Introduction to Autism Spectrum Disorder. 3 Hours.

This course will examine the historical perspective of the autism spectrum as well as the etiology, early detection, assessment, diagnosis, and characteristics of persons with ASD throughout the lifespan. Participants will learn a variety of interventions and instructional strategies appropriate in non-educational settings in order to improve an individual's social, behavior and communication skills among other quality of life outcomes. Prerequisite: Students must complete either SPED 101 or SPED 110 before enrolling in this course.

SPED 312. Intermediate Sign Language. 3 Hours.

A course in American Sign Language that focuses on increasingly complex aspects of the language including vocabulary, grammar, concepts, and discourse. Students further develop their fluency in the language. Course content is beyond the third level of ASL. Prerequisites: SPED 113, SPED 115 and SPED 213.

SPED 316. Intermediate Interpreting. 3 Hours.

This course focuses on building translation and then consecutive interpreting skills through discussion and practice and is designed for senior interpreting students. The overall goal of the course is to introduce and refine translation and consecutive interpreting skills in a measured sequence, moving from simpler to more complex material with a strong emphasis on comprehension and equivalence throughout. Course topics include preparing to translate, analyzing and transferring the message, determining priorities in translation, and testing the translation. Topics related to consecutive interpreting include history of consecutive, fidelity, comprehension, memory, reformulation, self-monitoring, and correction. Prerequisite: SPED 216 or consent of instructor.

SPED 318. Interpreting III. 3 Hours.

This course is designed to build and strengthen simultaneous interpreting skills between English and American Sign Language (ASL). Topics include consecutive interpreting, bridging to simultaneous, sources of error, comprehension, message transfer, reformation, self-monitoring, and correction techniques. There is a continuous emphasis on self-analysis.

SPED 320. Interpreter Certification Preparation. 2 Hours.

This course discusses various aspects of the Educational Interpreter Performance Assessment (EIPA) as well as the National Association of the Deaf-Registry of Interpreters for the Deaf national examinations.

SPED 330. Survey of Deaf Culture. 3 Hours.

This survey course provides an overview of the rich and vibrant language and culture of individuals who are Deaf in North America.

SPED 340. Assessment in SPED. 3 Hours.

Students will learn to administer and interpret a variety of assessment instruments appropriate for diverse learners. The focus will include the use of legal provisions and ethical principles, screening, pre-referral, referral and classification practices and procedures, for individuals with exceptional learning needs. In addition, curriculum-based assessment will be used to evaluate instruction and monitor student progress.

SPED 341. Assessment in Developmental Disabilities. 4 Hours.

Students will gain knowledge in the fundamental concepts of assessment and purposes of various assessment methods in developmental disabilities. Students will also acquire skills in planning for assessment, instrument selection, administration, scoring, interpreting, and reporting assessment results. Practical application of assessment skills for person-centered planning is required. Prerequisite: Students must complete SPED 101 before enrolling in this course.

SPED 379. Leadership in SPED. 3 Hours.

The student will engage in service-learning activities that benefit individuals with diverse learning needs, their families, and community. Students will gain leadership skills through these activities and will understand how their dispositions uphold high standards of competence and integrity. Students will focus on collaboration, partnerships, and ethical and professional practices in the field of special education.

SPED 398. Special Education Practicum III: Data-Driven Planning. 1 Hour.

This practicum provides pre-professional experience related to CEC's High Leverage Practice Domain of Data-Driven planning. Candidates gain practical field knowledge of the cycle of collecting student assessment data and using it to design instruction, analyzing their instructional practices, and making necessary adjustments that improve student outcomes. Practical application of informal and formal assessment tools is included.

SPED 410. Introduction to Learning and Emotional/Behavioral Disabilities. 3 Hours.

Students will understand the characteristics of individuals with specific learning disabilities, emotional/behavior disorders, and other common conditions such as ADD/ADHD. Students will understand prevalence, etiology, and diagnostic criteria of these disabilities as well as gain awareness of evidence-based practices to support these learners. Prerequisite: Sped 110.

SPED 412. Advanced Sign Language. 3 Hours.

A course in American Sign Language that focuses on advanced levels of concept expression and dialogue for a myriad of settings. Prerequisite: SPED 312 or equivalent.

SPED 420. Inclusive Practices. 3 Hours.

Students will learn methods for differentiating instruction to meet the needs of a diverse range of learners in inclusive settings. Concepts of the shared model of Response to Intervention (RTI) and Universal Design for Learning (UDL) will be emphasized. A variety of co-teaching practices will be modeled within this course. In addition, collaborative partnerships with school personnel and community members for integrating individuals with exceptional learning needs will be demonstrated.

SPED 433. Field Experience. 2 Hours.

Advanced practical experience in interpreting and sign language.

SPED 440. Instructional Interventions for People with DD. 3 Hours.

This course is designed so students can attain knowledge of theories and research that form the basis for instructional interventions for adults with developmental disabilities. Students will learn how to develop and select instructional content and strengthen their understanding of resources and strategies for adults who require a Person-Centered Plan. The course focuses on how to identify functional skills in a variety of domains, write goals and objectives, develop a task analysis, design intervention plans, collect and graph baseline and instructional data, and then make data-based decisions. Prerequisite: Students must complete SPED 101 before enrolling in this course.

SPED 441. Methods for High Incidence Disabilities. 3 Hours.

Students will have knowledge of theories and research that form the basis for curriculum development and instructional practice for students identified as having high incidence disabilities. Students will develop and select instructional content with resources and strategies for students described as needing intermittent or limited levels of support. Students will learn to make responsive adjustments to lesson planning and instructional pedagogy based on assessment and data-based decision making. Students will develop and implement comprehensive individualized education programs in collaboration with various team members. Prerequisite: SPED 110 and admission to Teacher Education.

SPED 442. Methods for Low Incidence Disabilities. 3 Hours.

Students will have knowledge of theories and research that form the basis for curriculum development and instructional practice for students who have been identified as having low incidence disabilities. Students will develop and select instructional content with resources and strategies for students described as needing extensive and pervasive levels of support. Students will learn to make responsive adjustments to lesson planning and instructional pedagogy based on assessment and data-based decision making. Students will develop and implement comprehensive, annual individualized education programs in collaboration with various team members. Students will demonstrate techniques in transferring, positioning, lifting, and CPI training. Prerequisite: SPED 110 and admission to Teacher Education.

SPED 444. Transition to Adult Life. 3 Hours.

Students will have knowledge in designing and using methods for assessing transition instruction for students of all ages with a special emphasis on students with a transition IEP (16-21). An emphasis on functional academics, vocational training, life and social skills development, recreation/leisure opportunities, and post-secondary training will be included. Students will understand their role in developing transitional individual education programs and how to work effectively with human services providers. Prerequisite: SPED 110 and admission to Teacher Education.

SPED 445. Collaboration in Special Education. 3 Hours.

This course examines issues and effective strategies for successful collaboration with interdisciplinary team members so students with disabilities can be included in the general education classroom. Students will understand the importance of fostering responsive, respectful, and beneficial relationships between families and professionals. Students will learn how to communicate and problem solve effectively with other team members including family members and legal guardians.

SPED 446. Interdisciplinary Teaming and Community Collaboration in Human Services. 3 Hours.

This course examines issues and effective strategies for successful collaboration with interdisciplinary team members so people with disabilities can be included in their communities and meet their personal outcomes. Students will describe the critical aspects that foster responsive, respectful, and beneficial relationships between families and professionals. Students will demonstrate how to communicate and problem solve effectively with other team members including direct support professionals, consultants, family members, and legal guardians. Prerequisite: Students must complete SPED 101 before enrolling in this course.

SPED 454. Models and Strategies in Employment for People with Developmental Disabilities. 4 Hours.

Students will learn effective models and strategies of individualized employment support for individuals with developmental disabilities from high school transition through retirement. Students will learn about and apply current best practices to support employment outcomes. Prerequisite: Students must complete SPED 101 before enrolling in this course.

SPED 491. Senior Seminar in IDD. 4 Hours.

Seminar on various topics for seniors in the field of intellectual and developmental disabilities.

SPED 494. Practicum in Special Education. 1-4 Hour.

Students will participate in a practicum with their school partners to design, implement, and evaluate instructional practices. Prospective special educators will develop and apply knowledge, skills, and dispositions essential to the roles for which they are being prepared. This course can be repeated up to four times, or for a maximum four credits, whichever limit is hit first. Prerequisite: SPED 110.

SPED 497. Advanced Field Experience in IDD. 8 Hours.

Students will participate in a final practicum in the field of human services and be supervised by agency personnel in a variety of adult agencies. Participating agencies include residential, vocational, recreational, social, protection, and advocacy as well as case management agencies serving adults with intellectual and developmental disabilities.

SPED 498. Special Education Practicum IV: Intensive Instruction. 1 Hour.

This practicum provides pre-professional experience related to CEC's High Leverage Practice Domain of Intensive Instruction. Candidates gain practical field knowledge and apply skills in delivering specially designed instruction in conjunction with a methods course. Prerequisite: Students must be admitted to teacher education. Corequisite: Students must be enrolled in SPED 441.

SPED 499. Special Topics in SPED. 1-8 Hour.

Research in current trends related to various topic areas in the field of special education. This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

SS 299. Special Topics in Social Science. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

SS 394. Independent Study General Ss. 1-4 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

SS 399. Readings in Social Science. 1-3 Hour.

Study and discussion of readings in social science, particularly those which cross disciplinary lines. This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

SS 494. Independent Study Honors Ss. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

SS 499. Special Topics in Social Science. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

SWK 101. Human Trafficking Awareness. 1 Hour.

An introduction to modern day slavery and how you can recognize and prevent it in your community. Topics will include how traffickers exploit both children and adults, victim identification, and how individuals can make a difference in ending human trafficking.

SWK 225. Self-Care for the Helping Professions. 2 Hours.

For students entering a variety of helping professions, this course will explore the relationship between Adverse Childhood Experiences and self-care practices to mitigate burnout, compassion fatigue, and vicarious trauma. By the end of the course, each student will have developed their individualized self-care plan that will be implemented immediately and throughout their career. Topics include self-awareness, relationships, gratitude, mindfulness, supervision, professional development, personal and professional boundaries, mental health, and physical health.

SWK 250. Interpersonal Skills. 3 Hours.

This course is designed to develop verbal and nonverbal interpersonal skills related to common, everyday interactions as well as those interactions germane to the Generalist Practice Planned Change Process. The course requires 25 hours of concurrent interpersonal skill building human service experience.

SWK 256. Development of Social Welfare. 3 Hours.

The course reviews and evaluates the history, philosophical assumptions, values, and development of social welfare programs and services throughout the United States. The course examines the socio-political-economic conditions which not only form but influence social welfare systems. In addition, the course discusses intersections between privilege and oppression. The course reviews multiple marginalized, oppressed, and underserved populations with which social work intersects and ways that social work can positively impact social, economic, environmental justice, and human rights.

SWK 299. Special Topics in Social Work. 1-4 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

SWK 330. Human Behavior and the Social Environment. 3 Hours.

This course reviews the biopsychosocial-cultural aspects of human development across the life span within the context of Generalist Practice. Students will apply knowledge of human behavior and the social environment, person-in-environment, and other multidisciplinary theoretical frameworks to provide social work across the life span. Prerequisites: Student must complete SOC 110 and PSY 111 before enrolling in this class.

SWK 331. Family Dynamics. 3 Hours.

This course applies a variety of theoretical perspectives, including systems theory and person-in-environment in order to use skills to engage, assess, intervene, and evaluate social work practice with families. Prerequisite: PSY 111.

SWK 335. Social Work Methods I. 3 Hours.

This course applies knowledge, values, and skills for entry level Generalist Practice Social Work with individuals and families using evidence-based skills and interventions. Students will develop skills to engage, assess, plan, intervene, and evaluate social work practice with individuals and families. Prerequisites: Admission to the Social Work Program.

SWK 340. Social Welfare Policy & Environmental Justice. 3 Hours.

This course examines social welfare policies and programs through a generalist practice framework, emphasizing policy analysis, advocacy, and evaluation in agency, community, and legislative contexts. Special attention is given to environmental justice, highlighting how environmental conditions and inequities intersect with social welfare and shape human well-being.

SWK 402. N.A. Children and Adolescents. 3 Hours.

This course will survey contemporary issues that Native American children and adolescents experience in today's society and how these issues affect their family life and issues related to delivery of services.

SWK 426. Social Work Methods II. 3 Hours.

This course applies knowledge, values, and skills for generalist social work practice with groups using evidence-based skills and interventions. Students will develop and utilize skills to engage, assess, intervene, and evaluate social work practice with groups. Prerequisite: Admission to the Social Work Program.

SWK 427. Social Work Methods III. 3 Hours.

This course applies knowledge, values, and skills for generalist social work practice with organizations and communities using evidence-based skills and interventions. Students will develop and utilize skills to engage, assess, intervene, and evaluate social work practice with organizations and communities. Prerequisite: Admission to the Social Work Program.

SWK 428. Crisis Intervention. 3 Hours.

This course introduces students to the theory and practice of crisis intervention with an emphasis on the use of short-term intervention and problem-solving techniques. This course emphasizes crisis theory and crisis intervention models applied to various crisis problems and populations at-risk. This course can be repeated up to two times for a maximum six credits. Prerequisite: Junior or Senior status.

SWK 430. Diversity, Oppression, and Social Change. 3 Hours.

This course focuses on enhancing knowledge and insight into the impact of oppressed individuals to include, but not limited to age, color disability, ethnicity, family structure, gender national origin, race, and sexual orientation. To promote self-awareness, a key component in cross-cultural social work practice, students will be challenged to thoughtfully and critically analyze their own identity development by examining personal beliefs and life-experiences with privilege and oppression. The person-in-environment assessment strategy will be applied as practical intervention strategy for future practice with diverse individuals.

SWK 442. Research Methods in Social Work. 3 Hours.

This course introduces students to the concepts and principles of social work research methodology. This course includes conceptualizing a social work problem, designing research strategy, making use of relevant literature, and organizing and evaluating relevant data. Prerequisite(s): MATH 210 or PSY 241.

SWK 490. Field Education. 12 Hours.

This course is a structurally and educationally directed learning experience in public and private human service agencies that utilizes social work knowledge, values, and skills. Prerequisite: Admission to the Social Work program. Corequisite: SWK 491.

SWK 491. Senior Seminar. 3 Hours.

The Senior Seminar course taken concurrently with Field Education promotes the integration of knowledge, values, and skills and field learning with a focus on professional and ethical issues. Corequisites: SWK 490 and senior status.

SWK 492. Field Supervision. 1 Hour.

Field Supervision provides a field instructor with an MSW degree and two years of post-graduate experience to facilitate one hour weekly supervision to students enrolled in SWK 490 Field Education when an individual with the required degree and practice experience is unavailable in the field setting. The course reinforces the Social Work perspective and competency-based education. Prerequisite: Senior Status. Corequisite: SWK 490 and SWK 491.

SWK 499. Special Topics. 1-8 Hour.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

THEA 110. Introduction to Theatre Arts. 3 Hours.

Basic introduction to the theory and principles of theatrical presentation including dramatic literature, acting, stagecraft, and dramatic analysis, with emphasis on practical application.

THEA 120. Intro to Drama Lit and Analysis. 3 Hours.

An introductory course in the literature of drama. Plays representative of important periods of theatre history are discussed and analyzed in their cultural context as well as for possible performance. Students work to understand the plays' potential meanings for modern audiences.

THEA 161. Acting I. 3 Hours.

A basic introduction to script analysis, scene work, and characterization. Exploring the actor's tools through voice, movement, and stage combat may be implemented depending on instructor.

THEA 162. Audition Techniques. 1 Hour.

The selection, rehearsal, and performance of theatrical scenes and monologues as well as musical theatre material for the purpose of auditions.

THEA 164. Musical Theatre Professional Preparation. 2 Hours.

Designed to prepare students to be successful at professional Musical Theatre auditions and to provide them with practical skills and information related to show business (i.e.: agents, managers, unions, negotiating, contracts, headshots, resumes, casting directors, etc.).

THEA 201. Theatre Practicum. 1 Hour.

Participation in a significant capacity in any communication arts sponsored theatrical production above and beyond the requirements of a specific course. Repeatable up to eight credits.

THEA 202. KCACTF Participation. 1 Hour.

Credit offered to those students selected for the KCACTF Irene Ryan Regional Scholarships as well as those students choosing to actively participate in the various regional events, i.e. Design Expo, Stage Management, Theatre Management Challenge, and those students interested in presenting work elsewhere. The course will include selection, preparation, and presentation of the required artifacts or audition pieces.

THEA 203. Music Theatre Studio. 1 Hour.

Performance of major roles of Musical Theatre in studio projects. Emphasis on the student's integration of singing, acting, and movement into a unified performance. This course can be repeated up to eight times.

THEA 221. Costuming. 2 Hours.

Introduction to the art of theatrical costuming from history through construction. Included will be an introduction to the design process.

THEA 222. Make-Up. 2 Hours.

Theory and practical laboratory work in stage make-up applications, including mask building.

THEA 250. Creative Drama. 3 Hours.

The study of creativity, and the relationship of drama and creative play culminating with activities centering around storytelling and children's theatre.

THEA 261. Performance Studies. 3 Hours.

An examination of "performativity" and explorations of performance beyond the confines of "theatre proper." Students will create works for the theatre which resist the limits of traditional narrative as well as experiment with the definition of performance.

THEA 270. Stagecraft. 3 Hours.

The course will begin with the stage managers approach to script analysis for a play in production and will conclude with the fundamental approach to the implementation of the scenic artist's designs for the stage through the study of set construction, painting techniques, and technical coordination.

THEA 275. Production and Design. 3 Hours.

The focus of the course will be design process, as applied to the creation of the theatrical environment, including analysis, research, communication, and implementation. Students will complete design projects in dramaturgy, stage management, costuming, scenery, sound, or lighting.

THEA 297. Internship. 1-2 Hour.

Hands-on experience in the discipline. This course can be repeated up to four times, or for a maximum eight credits, whichever limit is hit first.

THEA 299. Special Topics. 3 Hours.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

THEA 301. Movement I. 3 Hours.

Introduction to physical and movement elements of the actor's craft and stage performance, including neutral presence, alignment, walking, spatial awareness, self-awareness, and availability. Exercises will be given to strengthen and stretch the body. Techniques involving the application of yoga, pilates, ballet and Viewpoints will be applied to physical expression in character development and creation of object and animal essences. No previous fitness/movement training required, only a quest for play and healthier daily living.

THEA 302. Movement II. 3 Hours.

Participants will develop body awareness, improve posture, enhance muscle strength, increase range of motion, and further the art of muscle relaxation. Implementation and continuation of yoga/pilates matwork and ballet will increase strength, coordination, and flexibility for the stage performer. Final project will involve movement application with classical Shakespearean text. No previous fitness/movement training required, only a quest for play and healthier daily living.

THEA 303. Musical Theatre Dance. 3 Hours.

This course is designed to introduce the student to the basic principles and techniques characteristic of tap, jazz, and musical theatre dance styles. Warm-up, exercises, combinations in a variety of jazz and tap styles will provide opportunities for the student to develop an efficient use of weight, alignment, flexibility, articulation of footwork, coordination, endurance, strength, and musicality. A fun-filled class that culminates in song and dance routines for the stage.

THEA 305. Musical Theatre History. 3 Hours.

History of Musical Theatre, primarily focusing on American Musical Theatre, from its defining influences and roots to the present. Topics to be covered include significant productions, composers, lyricists, librettists, choreographers, directors, designers, and actors.

THEA 350. Theatre History, Criticism, and Literature I. 3 Hours.

A survey of the development of the theatre and drama, including dramatic analysis, performance theory and style, theater architecture, and individual contributions, from its beginning to 1642. Prerequisite: Student must complete THEA 120 or have instructor consent before enrolling in this class.

THEA 351. Theatre History, Criticism, and Literature II. 3 Hours.

A continuation of THEA 350 and the development of the theatre and drama, including dramatic analysis, performance theory and style, theatre architecture, and individual contributions, from 1642 to the present. Prerequisite: Student must complete THEA 120 or have instructor consent before enrolling in this class.

THEA 361. Acting II. 3 Hours.

In-depth study of modern trends in acting technique with special emphasis placed upon the creation of character through various acting styles, and continued emphasis on voice and movement.

THEA 385. Directing. 3 Hours.

Fundamentals of composition, picturization, blocking, stage business, and rehearsal as applied to the directing of plays.

THEA 386. Playwriting. 3 Hours.

A study of the basic principles of writing for the stage. Emphasis will be on developing short forms of productions, specifically the 10-minute play.

THEA 387. Playwrights Lab. 1 Hour.

Development of original student-written plays. Focus will be on revision of 10-minute scripts for production. Prerequisite: Student must complete THEA 386 or have the consent of the instructor before enrolling in this class. This course can be repeated up to four times, or for a maximum four credits.

THEA 394. Independent Study. 1-3 Hour.

Independent or directed study of special topics in the study of theatre. This course can be repeated up to two times, or for a maximum six credits, whichever limit is hit first.

THEA 401. Tour Show. 3 Hours.

This course is designed for the both the Theater and non-Theater major/minor to acquaint the student with the basic principles of acting, stage work, and touring. These principles include, but are not limited to: script reading and analysis; a technical production process that would accommodate a limited budget and specifics to be performed in various spaces and conditions; the research and preparation of materials that would allow a non-traditional audience member and teacher to view the production and be able to incorporate performance materials back into a regular classroom activity.

THEA 414. Theatre Management. 3 Hours.

This course will emphasize the business of theatre: Production Procedures from beginning to the end; grant writing, box office procedures, publicity policies, and audience development. Prerequisite: MGMT 301.

THEA 450. Contemporary Drama. 3 Hours.

A study of dramatic literature from 1952 to the present. Plays from England, Europe, and the Americas will be represented. Course may be repeated as the content changes. This course can be repeated up to eight times, or for a maximum eight credits, whichever limit is hit first.

THEA 480. Advanced Theatre Performance. 3 Hours.

The focus of the course may include: script analysis, dramaturgy, devising theatre, and vocal technique for the stage (including diction, pronunciation, and dialect as needed). Students will do a variety of projects leading to production concepts as discussed by the ensemble. The final project will be a finished theatrical performance directed and acted by class members. Prerequisites: THEA 161, THEA 301, THEA 361, and THEA 385.

THEA 499. Special Topics. 3 Hours.

This course can be repeated up to sixteen times, or for a maximum sixteen credits, whichever limit is hit first.

THEA 95. Theatre Experience. 0 Hours.

Students will produce, direct, manage, design, build, perform, and market a family/youth production. The ultimate goal is to either invite area schools to the performances in the Aleshire Theatre or to tour the production to the area schools. Repeatable four times.

UNIV 110. First Year Seminar. 2 Hours.

An academic course linked to other courses to form a first-year experience learning community. The course will inspire and support the transition to university life and learning and provide opportunities to engage with the campus and larger community. Topics vary according to the theme of the learning community.