2023-2024 NOC COURSE DESCRIPTIONS
ACCOUNTING
ACCT 1113 BASIC BUSINESS RECORDS I
The basic principles and practices of record keeping for businesses.
ACCT 1123 BASIC BUSINESS RECORDS II
The basic principles of record keeping for small businesses designed primarily for secretarial or occupational students.
Prerequisite: ACCT 1113 Basic Business Records I.
ACCT 1133 PAYROLL ACCOUNTING
A study of payroll procedures, taxing entities, and reporting requirements of local, state, and federal taxing authorities in a manual and computerized environment. Prerequisite: ACCT 1203 Fundamentals of Accounting or ACCT 2103 Accounting I Financial. Traditionally offered every odd year fall semester only.
ACCT 1203 FUNDAMENTALS OF ACCOUNTING
An introduction to the fundamental principles of double entry accounting as applied to practical business situations. Emphasis is given to development of financial statements, debit and credit rules of accounting, the accounting cycle, special journals and payroll accounting. Traditionally offered every even year fall semester only.
ACCT 2003 SURVEY OF ACCOUNTING
Introduction to financial and managerial accounting concepts and objectives. This course provides a survey of accounting concepts and procedures that will enable students to be informed users of financial information in a business setting. May not be used for degree credit with ACCT 2103 and ACCT 2203.
ACCT 2103 ACCOUNTING I—FINANCIAL
An introduction to financial accounting concepts, principles and development of financial information. Course work includes the accounting processes and principles of accrual accounting. Prerequisite: MATH 1483 Math Functions or MATH 1513 Algebra for STEM or concurrent enrollment with instructor permission.
ACCT 2123 MICROCOMPUTER ACCOUNTING I
An introduction to microcomputer applications related to accounting systems. Topics include general ledger; accounts receivable; accounts payable; inventory; payroll; and correcting, adjusting, and closing entries. Students will use a computer accounting software package to complete the financial accounting cycle for a sole proprietorship. Prerequisite: ACCT 1203 Fundamentals of Accounting or ACCT 2103 Accounting I-Financial. Traditionally offered in fall semester only.
ACCT 2203 ACCOUNTING II—MANAGERIAL
An introduction to managerial accounting concepts and objectives, cost system designs, planning and control of sales and costs, analysis of costs and profits and accounting for managerial decision making. Prerequisite: ACCT 2103 Accounting I-Financial.

AGRICULTURE
AGRI 1113 INTRODUCTION TO AGRICULTURAL ECONOMICS
An introduction to the role of agriculture within the U.S. economy. Topics will include economic analysis of the relationships between resources, production, income and consumption; discussion of economic systems; and economic applications for production and marketing. Prerequisite: math proficiency through MATH 1483 Math Functions.
AGRI 1124 INTRODUCTION TO ANIMAL SCIENCES
An introduction to production systems for the meat animal species: cattle, sheep, goats, swine and poultry. This course will examine global animal production, end-products and grading standards, an overview of the different breeds of livestock, biological aspects of production, and an introduction to management practices for each of the various species.
AGRI 1223 INTRODUCTION TO PLANT AND SOILS SCIENCE
An introduction to plant and soil systems and the interactions necessary to produce the food and fiber to feed the world. Historical aspects, plant growth, nutrition and function, soil classification, analysis and fertility, crop production systems, and utilization will all be discussed.

AGRI 2123 LIVESTOCK FEEDING
Nutrients, their functions and the nutrient composition of feedstuffs; feed classification; nutrient requirements of the various classes of livestock; balancing rations for different kinds of production. Prerequisite: math proficiency through MATH 1483 Math Functions.

AGRI 2124 FUNDAMENTAL OF SOIL SCIENCE
Formation and classification of soils, principal chemical, biological and physical properties of soils in relation to plant growth; soil fertility, productivity, and land use. Prerequisite: CHEM 1014 Concepts of Chemistry or CHEM 1315 Chemistry I or concurrent enrollment. Offered spring semester only.

AGRI 2222 LIVE ANIMAL EVALUATION
Modern tools for livestock selection including performance records, pedigree information, visual appraisal, and the principles of using these tools to evaluate critically cattle, sheep, swine, and horses.

AGRI 2253 MEAT ANIMAL AND CARCASS EVALUATION
Evaluation of livestock animals, carcasses and wholesale cuts of beef, pork, and lamb. The course will also include factors determining grades, yields, and values in the three primary livestock species: cattle, swine, and sheep. Meat quality and general principles of meat science will also be discussed.

AGRI 2303 DEVELOPMENT OF AGRICULTURAL LEADERSHIP
This course focuses on the development of leadership skills used in the agricultural industry and career fields. The course emphasis will be on enabling students to identify the key attributes of leadership by exploring their unique values system, vision, self-awareness, personal strengths and team building skills. Students will also learn valuable skills in resume writing, job interview and portfolio building.

AGRI 2431 LIVESTOCK JUDGING
Principles of live animal evaluation and techniques for communicating the ideal concepts of selection for both market and animal breeding. Participation in competitive livestock judging contests is required and is subject to academic eligibility.

AGRI 2450 SUPERVISED STUDY-AGRICULTURE
Course addresses special problems in agriculture through research and study.

AGRI 2460 AGRICULTURAL INTERNSHIP
Internship of various disciplines of agriculture for career determination. Experiences with actual businesses in agriculture allow the student to investigate the specific job requirements and work environment involved with a particular sector of agriculture. Report must be completed at end of internship.

AGRI 2523 INTRODUCTION TO SHEEP PRODUCTION AND MANAGEMENT
A study of all aspects of sheep production including, but not limited to, managing nutrition, production, selection, reproduction, lambing, health, shearing, exhibition preparation, and showmanship. Students will have hands-on training throughout the course and will have opportunity to exhibit sheep as members of the NOC Sheep Show team at various national exhibitions.

ARTS
ARTS 1113 ART APPRECIATION
The study of art from a variety of different backgrounds and cultures as both product and process. Aesthetic judgment making in evaluation of art from different times and places is stressed. (Meets requirement for humanities elective and International Dimension)
ARTS 1193 CERAMICS I
Ceramics I covers a variety of building techniques, glazing and ceramics terminology, including surface decoration and firing processes.

ARTS 1203 ART HISTORY SURVEY I
This course covers a study of the arts, artists and their cultures from Prehistoric Man through the Early Renaissance. (Meets requirement for humanities elective)

ARTS 1303 ART HISTORY SURVEY II
This course covers a study of arts, artists and their cultures from the Early Renaissance to the present. (Meets requirement for humanities elective)

ARTS 1313 DRAWING I
Drawing I will develop the students' understanding of the basic concepts of drawing and their powers of observation. Students will work with various media, exploring the basic elements of shape, line, proportion, value and space while utilizing a variety of sources and environments.

ARTS 1323 DRAWING II
A continuation of Drawing I with emphasis on composition, color, development of ideas and the complex use of drawing mediums and materials. Prerequisite: ART 1313 Drawing I.

ARTS 1433 FUNDAMENTALS OF TWO-DIMENSIONAL ART
A study of two-dimensional design and application of art elements (shape, line, color, value, composition, space, form) in a variety of materials.

ARTS 2113 FIGURE DRAWING I
Figure Drawing I includes the study in gesture and finished drawings of the model. Emphasis will be placed on pose, composition, a variety of media and the study of human anatomy. Students are encouraged to develop personal and expressive drawings.

ARTS 2193 CERAMICS II
Advanced techniques in wheel-thrown forms, hand building and surface decoration. Participation in glaze formulating and supervised firings. Prerequisite: ART 1193 Ceramics I.

ARTS 2333 SCULPTURE I
Sculpture I is a creative approach to sculpture techniques and form exploration using a variety of media, stressing the development of technical and conceptual skills.

ARTS 2433 SCULPTURE II
A continuation of ART 2333 Sculpture I, using a variety of media and advanced techniques to complete a series of studio assignments. Prerequisite: ART 2333 Sculpture I.

ARTS 2450 SUPERVISED STUDY- ART
Independent study.

ARTS 2460 INTERNSHIP IN ART
Allows students opportunity to study art in the workforce.

ARTS 2563 FUNDAMENTALS OF THREE-DIMENSIONAL ART
A study of three-dimensional design and application of art elements using a variety of materials and processes. Students will engage in critical analysis and complete a series of studio assignments.

ARTS 2853 PAINTING I
Painting I will develop skills in opaque painting, stressing form and content, visual appreciation, and individual expression. Still life, figure, and landscape problems are included.

ARTS 2863 PAINTING II
A continuation of ART 2853 Painting I. Projects will stress form and content, visual appreciation, and individual expression. Prerequisite: ART 2853 Painting I.
ARTS 2933 WATERCOLOR PAINTING I
Watercolor I will develop skills in transparent water color painting, stressing form and composition, visual perception, and individual expression.

ARTS 2943 WATERCOLOR PAINTING II
A continuation of Water Color Painting I (ART 2933), with stress on form and composition, visual perception, individual expression, and color theory. Prerequisite: ART 2933 Watercolor Painting I.

ARTS 2951 PORTFOLIO/GALLERY SEMINAR
Preparation for graduate art exhibition: Poster design, portfolio and resume development, marketing strategies, art preparation, installation of art in the Eleanor Hays Art Gallery.

ASTRONOMY (currently Enid-campus only program)

ASTR 1014 SURVEY OF ASTRONOMY
Studies the large-scale structure of the Universe and our place in it. The origin, evolution and general properties of planets, stars and galaxies are presented. Lab required. (Meets general education lab science requirement.)

ASTR 1523 PLANETARY SCIENCE
Origin and evolution of the solar system is studied, along with characteristics of terrestrial planetary atmospheres. Course also reviews characteristics of gas giant planets and ice moons, asteroids, and comets, as well as discoveries and characteristics of extra-solar planetary systems and aspects of colonization. (Meets 3 credit hours of general education science requirement but not lab science requirement.) Offered spring semester only.

ASTR 1533 SEARCH FOR LIFE
Topics include various strategies involved in the search for extraterrestrial life, the origin and evolution of planets and processes necessary for life to develop on planets. Also presented are strategies for interplanetary and interstellar travel and the exploration and colonization of space. (Meets 3 credit hours of general education science requirement but not lab science requirement.) Offered fall semester only.

ASTR 2563 GALAXIES AND COSMOLOGY
Course examines the origin of matter, energy, and forces in the early universe, as well as characteristics of various types of galaxies and the large-scale structure of the universe. General relativity and concepts of curved space are presented. (Meets 3 credit hours of general education science requirement but not lab science requirement.)

ASTR 2513 OBSERVATORY METHODS
Techniques of using telescopes and astronomical instruments, astronomical data collection and processing are covered, along with concepts of optics, CCD imaging systems and procedures for photometry and spectroscopy. A research project utilizing the NOC Observatory is required.

BIOLOGICAL SCIENCE

BIOL 1114 GENERAL BIOLOGY
Introductory non-majors biology course with lab. This course includes the fundamental concepts and principles of molecular and cellular biology with emphasis on evolution, and the morphological and physiological processes of prokaryotes, protists, fungi, plants and animals. Includes appropriate laboratory work and demonstrations to implement the fundamental principles of concepts learned in theory. No prerequisites. (Meets general education lab science requirement.)

BIOL 1124 GENERAL BIOLOGY FOR MAJORS
Introductory majors biology course with lab. Course will provide an in-depth study of the principles of biology with emphasis placed on the molecular and cellular components, metabolism, genetics, evolution, and ecology. Appropriate laboratory work and demonstrations will be added to implement fundamental principles and concepts learned in theory. This course is recommended for students majoring in Biology, Pre-Medicine, Pre-Pharmacy, Nursing, Veterinary
Medicine, and for those students who wish to take an advanced biology course. No prerequisites. (Meets general education lab science requirement.)

**BIOL 1214 INTRODUCTION TO ENVIRONMENTAL SCIENCE**

An introductory course that emphasizes the impact of humans on the environment. A survey of a broad range of environmental issues from a scientific viewpoint emphasizing the study of the structure and function of ecosystems, basic ecological and thermodynamic principles with applications to air, water, and land; human demography, population growth, food supply, and energy issues; extinction; and alternative futures. Students will examine environmental problems and ascertain how social dynamics affect policy and the decision-making process. Includes appropriate laboratory work and demonstrations to implement the fundamental principles and concepts learned in theory. No prerequisites. (Meets general education lab science requirement.)

**BIOL 1314 GENERAL BOTANY**

Introductory majors course with lab, covering plant growth, development, and reproduction from molecular, cellular, physiological, and anatomical aspects. Genetics, classification, economical, and environmental aspects will be surveyed, including key concepts in biology. Includes appropriate laboratory work and demonstrations to implement the fundamental principles and concepts learned in theory. Prerequisites: None required; however, students are encouraged to complete BIOL 1114 General Biology or BIOL 1124 General Biology for Majors prior to enrollment in this course. Offered spring semester only. (Meets general education lab science requirement.)

**BIOL 1414 GENERAL ZOOLOGY**

Introductory majors course with lab, covering biological principles and concepts as related to the study of animals with emphasis on structure, function, behavior, and evolution. Topics include taxonomy and systematics anatomy and physiology, ecology, genetics, and evolution. Includes appropriate laboratory work and demonstrations to implement the fundamental principles and concepts learned in theory. Prerequisites: None required; however, students are encouraged to complete BIOL 1114 General Biology or BIOL 1124 General Biology for Majors prior to enrollment in this course. (Meets general education lab science requirement.) Offered spring semester only.

**BIOL 2024 ENTOMOLOGY**

Basic structure, function, and classification of insects and closely-related animals. Coverage of insects in ecosystems and development of control programs that reduce reliance on chemical pesticides, including Integrated Pest Management. Lab will include identification and labeling of insects, and the procurement of an insect collection representing major orders. Prerequisites: BIOL 1114 General Biology, BIOL 1124 General Biology for Majors, or BIOL 1414 General Zoology. Offered fall semester only.

**BIOL 2104 HUMAN ANATOMY**

A single semester majors course with lab. A study of the microscopic and gross anatomy of the human body. Areas of emphasis will include cytology, histology, and organ systems. Includes appropriate laboratory work and demonstrations to implement the fundamental principles and concepts learned in theory, which includes dissection of non-human mammals. Prerequisite: BIOL 1114 General Biology, BIOL 1124 General Biology for Majors, or BIOL 1414 General Zoology. Offered spring semester only.

**BIOL 2124 MICROBIOLOGY**

Introductory majors course with a 3-hour lab per week. General principles of the biology of microorganisms, including bacteria, viruses, algae, fungi, protozoa and archaea, with emphasis on their morphology, physiology, immunology, and disease aspects. Includes appropriate laboratory to emphasize techniques of staining, culturing and identification of pathogenic and nonpathogenic organisms. Designed for students in the pre-professional, paraprofessional and health occupation areas. Prerequisites: BIOL 1114 General Biology, BIOL 1124 General Biology for Majors, or BIOL 1414 General Zoology, and CHEM 1315 Chemistry I. *Students who are enrolled in the RN Nursing Program and have successfully completed first semester nursing courses may be eligible to have the Chemistry prerequisite requirement waived. (Meets general education Biological Science requirement.)
BIOL 2204 HUMAN PHYSIOLOGY
A single semester majors course with lab. Study of the functions of the human body. Emphasis includes cytology, organ systems and the interrelationships of the systems. Includes appropriate laboratory work and demonstrations to implement the fundamental principles and concepts learned in theory. Prerequisite: BIOL 1114 General Biology, BIOL 1124 General Biology for Majors, or BIOL 1414 General Zoology and CHEM 1315 Chemistry I. (Meets general education Biological Science requirement.)

BIOL 2214 HUMAN ANATOMY AND PHYSIOLOGY
An introduction to the anatomical and physiological principles and concepts as related to the human body. A course designed for 2-year nursing students and students enrolled in cooperative Career Tech programs. Includes appropriate laboratory work and demonstrations to implement the fundamental principles and concepts learned in theory which includes dissection of nonhuman mammals. Prerequisites: BIOL 1114 General Biology, BIOL 1124 General Biology for Majors, or BIOL 1414 General Zoology. (Meets general education lab science requirement.)

BIOL 2403 INTRODUCTION TO WILDLIFE CONSERVATION
A survey course on the many aspects of wildlife conservation. Principles of conservation and management, ecology, mathematical modeling, law enforcement, endangered species preservation, genetic diversity conservation, predator management, and inter-governmental agencies relationships are emphasized. Required field trips. Prerequisite: BIOL 1114 General Biology, BIOL 1124 General Biology for Majors, BIOL 1314 General Botany, or BIOL 1414 General Zoology. Offered spring semester only.

BIOL 2450 SUPERVISED STUDY IN BIOLOGY
Independent study course in biological sciences for specific and advanced fields of study that utilize one or more components of the scientific method in conducting field or laboratory research: literature review, development of methodologies, data collection, data analysis, the writing of a report/scientific paper, and/or giving a presentation. Consent of instructor required. Credit 1 to 3 hours.

BIOL 2460 INTERNSHIP IN BIOLOGY

BUSINESS ADMINISTRATION
BADM 1103 INTRODUCTION TO BUSINESS
An introduction to business, survey of basic functions, principles and practice of business in the nation and the world.

BADM 1113 DIGITAL AND FINANCIAL LITERACY
An introductory course covering the various problems of individual/ consumer financial management with emphasis on personal budgeting, consumer loans and installment loans, credit cards and charge accounts, personal insurance, savings accounts, investments, social security, housing options, commercial bank services, financial institutions services, personal taxes, wills, estate planning, retirement planning, career planning, financial planning, and leasing arrangements. Various software applications (word processing, spreadsheet development, presentation and money management tools) are utilized to emphasize the importance and connection of financial management to the current digital age.

BADM 1203 INTRODUCTION TO ENTREPRENEURSHIP
An introduction to the opportunities and challenges facing entrepreneurs in a dynamic marketplace. Topics include the analysis of personal strengths and weaknesses as they relate to launching an entrepreneurial career, an overview of the study of entrepreneurship, the principles of recognizing and exploiting viable business ventures, and foundational concepts of planning, financing, starting and managing a new business through the creation of a business plan.

BADM 1303 INTRODUCTION TO HOSPITALITY MANAGEMENT
Study of hotels, restaurants, tourism and the hospitality industry from a global perspective. Emphasizes the scope of the industry including an analysis of ethical issues and career opportunities, essential management functions of the hospitality enterprise including marketing, human resources, accounting, finance, and information technologies.
BADM 2113 BUSINESS COMMUNICATIONS
A survey course of communication skills needed in the business environment. Course content includes writing memoranda, letters, reports, resumes, and electronic messages; delivering oral presentations; and developing interpersonal skills. Critical thinking and problem solving skills are emphasized. Development of these skills is integrated with the use of technology. Prerequisite: English Composition I (ENGL 1113) and typing ability.

BADM 2313 BUSINESS LAW
Course presents a history of the development of business law. Topics covered include general law of contracts, negotiable instruments, insurance, employer and employee, principal and agent and ethical issues in business decision making.

BUSINESS MANAGEMENT AND MARKETING

MKTG 2143 MARKETING
A survey course for students who have prior coursework and understanding in business, includes a survey of all aspects of marketing: consumer behavior issues, products, pricing, distribution, promotion, research, strategy, and trends. Traditionally offered in the spring semester only.

MGMT 2233 HUMAN RESOURCE MANAGEMENT
An introduction to the development, application, and evaluation of policies, procedures, and programs for the recruitment, selection, development, and utilization of human resources in an organization. Traditionally offered spring semester only.

MGMT 2240 BUSINESS INTERNSHIP
A course that consists of interrelated work between the student and business or industry in which students combine classroom theory with on-the-job training or observation. By instructor permission only.

MGMT 2263 PRINCIPLES OF MANAGEMENT
An introduction to the fundamental principles of management such as planning, organizing, leading, and controlling the basic processes of a firm. Traditionally offered in fall semester only.

CHEMISTRY

CHEM 1014 CONCEPTS IN CHEMISTRY
An introduction to the chemical nature and properties of inorganic compounds. Topics presented include a historical development of theoretical principles, atomic and molecular structures, inorganic nomenclature, states of matter, properties of gases and solutions, acids/bases and salts, chemical equilibrium, nuclear and chemical reactions and descriptive chemistry of selected elements. Laboratories are designed to reinforce theory principles. Prerequisite: college-level math (not zero-level) or concurrent enrollment. (Meets general education lab science requirement.)

CHEM 1315 GENERAL CHEMISTRY I
Basic concepts of chemistry, including physical and chemical properties, formulas, equations, nomenclature, atomic structure, gases, thermochemistry, periodicity and bonding. Suitable for students in engineering, pre-medicine, physical sciences, and biological sciences. Laboratories are designed to reinforce theory principles. Prerequisite: Completion of or concurrent enrollment in MATH 1513 Algebra for STEM or MATH 1483 Math Functions for non-Physics students only. (Meets general education lab science requirement.)

CHEM 1414 GENERAL CHEMISTRY II
Continuation of General Chemistry I including solutions, solids and liquids, chemical kinetics, equilibria, acid-base concepts, solubility, oxidation-reduction and free energy concepts. Laboratories are designed to reinforce theory principles. Prerequisite: Chemistry I (CHEM 1315). (Meets general education lab science requirement.)

CHEM 1515 GENERAL CHEMISTRY I FOR ENGINEERS
Survey course for engineers needing only one semester of chemistry. Thermodynamics, atomic structure, solid state, materials, equilibria, acids and bases, and electrochemistry. Prerequisites: Concurrent enrollment or completion of MATH 1513 Algebra for STEM or enrolled in a higher math course.
CHEM 2014 PROCESS ORGANIC CHEMISTRY
Terminal course in organic chemistry covering general principles, methods of preparation, reactions and uses of both acyclic and cyclic compounds. Recommended for Process Tech majors, agriculture majors, home economics majors, pre-pharmacy and pre-veterinary medicine. Laboratories are designed to reinforce theory principles. Prerequisite: CHEM 1014 Concepts in Chemistry or higher level chemistry course. (Meets general education lab science requirement.) Offered spring semester only.

CHILD DEVELOPMENT
CHDV 1023 INTRODUCTION TO EARLY CHILDHOOD EDUCATION
This course covers the history and realities of the early childhood profession. Students will cover the legal and ethical responsibilities that early childhood professionals must follow. Students will be able to identify best practices for developmentally appropriate environments for children in a variety of settings. They will be able to evaluate goals and objectives for early childhood settings. (Fall and Spring)

CHDV 1043 CHILDREN’S MUSIC, MOVEMENT, & ART
Emphasizes the acquisition of knowledge of and the ability to develop and implement learning experiences, using the concepts and tools of inquiry in music, movement and creative arts and perpetual motor development. Understanding and appreciating the role of the arts in the development of young children, providing them with meaningful experiences in the arts is also covered. Course combines class-room instruction, hands on activities and observations of young children in group care to develop competence in the design and implementation of curriculum and instructional strategies related to music, movement and creative arts. (Fall only)

CHDV 1053 CHILDREN’S HEALTH, SAFETY, & NUTRITION
Students will be able to identify and implement best practices for health, safety and nutrition in a variety of early childhood settings, incorporating policies and procedures for early childhood settings along with national and state standards. (Fall and Spring)

CHDV 2013 BEHAVIOR, DEVELOPMENT AND GUIDANCE OF CHILDREN
This course will cover child development from birth to eight years of age emphasizing the causes of behavior in young children in a child care setting will be introduced. Strategies necessary in implementing positive child guidance techniques within an environment of acceptance and positive regard for all children and families will be explored. Students will be able to demonstrate an ability to communicate and work collaboratively with families. (Fall and Spring)

CHDV 2023 CHILDREN WITH SPECIAL NEEDS
Emphasis on implementing practical strategies and inclusive practices. Provides understanding of conditions which affect children’s development and learning, including risk factors, developmental variations and developmental patterns of specific disabilities. Addresses how to create and modify environments and experiences to meet individual needs of children with disabilities, developmental delays and special abilities. Course includes opportunities to evaluate and demonstrate appropriate use of assistive technology with young children and a review of state and federal legislation on providing services for children with disabilities and their families. Course combines lecture, hands-on and observations. (Spring only)

CHDV 2033 CHILDREN’S LANGUAGE ARTS & LITERATURE
This course will explore language development for children birth to eight years, including the interrelationships among listening, speaking, pre-writing and pre-reading skills. The student will be able to observe and outline developmental milestones of language development and communication in children. Focus on the educators’ and families’ roles in
promoting emergent literacy in a developmentally appropriate setting. The student will review children’s literature and design effective techniques to enhance language development with emphasis on a multicultural approach. (Fall only)

**CHDV 2043 CHILD & FAMILY IN SOCIETY**
This course focuses on an understanding of how children develop within the context of the family and society. Students will demonstrate their knowledge of how diverse families, an early childhood setting and society can work together for the optimum development of children, with emphasis on American subcultures. Methods for communication, parent involvement within these settings will be discussed. (Summer only)

**CHDV 2113 CHILD DEVELOPMENT IN THE HUMAN LIFESPAN**
The study of development across the lifespan from conception to death. The principles of development, developmental theories, and the dynamics of development through a global multicultural approach within the context of the family, society, and culture.

**CHDV 2143 PRESCHOOL PROGRAMMING**
This course covers how to create, evaluate, and select developmentally appropriate materials, equipment and environments that support children’s learning specific to children three years to six years. The course will focus on the design, implementation of curriculum with emphasis on developmentally, individually, culturally and creatively appropriate practices. Students will demonstrate the planning process and determine concepts and skills with assessment and evaluation based on preschoolers and their individual differences. (Fall Only)

**CHDV 2243 INFANT & TODDLER PROGRAMMING**
This course covers how to create, evaluate, and select developmentally appropriate materials, equipment and environments that support children’s learning specific to children’s birth through 36 months. The course will focus on the design, implementation of curriculum with emphasis on developmentally, individually, culturally and creatively appropriate practices. Students will demonstrate the planning process and determine concepts and skills with assessment and evaluation based on infant and toddlers and their individual differences. (Spring only)

**CHDV 2313 ADMINISTRATION & MANAGEMENT OF CHILD CARE PROGRAMS**
This course is an overview of administration of an early childhood program. Setting goals and developing objectives for staff recruitment, personnel policies and supervision will be discussed. State and national standards, along with how to implement developmentally appropriate practice, will be addressed. Students will study recordkeeping along with development and implementation of a budget. (Spring only)

**COMMUNICATIONS (SEE ALSO MASS COMMUNICATIONS)**

**COMM 1653 RADIO BROADCASTING**
The class covers the basic skills needed to operate and perform announcer responsibilities. An emphasis will be placed on digital and analog equipment operations and production techniques.

**COMM 1713 INTRODUCTION TO ORAL COMMUNICATION**
The class is an overview of the principles and techniques used to prepare, evaluate and present a speech in a formal environment. The class also covers the evaluation process in different communication situations.

**COMM 2010 SPEECH ACTIVITY PARTICIPATION- RADIO**
The student will be involved in the daily programming of the campus radio station by participating as a student radio announcer. Prerequisite: permission of instructor (4 credit hours maximum).

**COMM 2213 INTERPERSONAL COMMUNICATION**
This course covers the essential elements needed for students to have effective communication skills with other individuals, including the global and cultural significance of individual and small group communication. The course will
cover listening, non-verbal communication, interviewing skills, conflict resolution, and leadership communication styles.

COMPUTER SCIENCES
CMSC 1013 VISUAL BASIC PROGRAMMING
An introduction to Visual Basic programming. This course includes graphical user interface design, event driven programming, tool box controls and properties, basic control structures and dynamic arrays. Traditionally offered in the Spring semester only.
CMSC 1113 COMPUTER CONCEPTS
An introduction to beginning level application software use, vocabulary, and introductory hardware and software concepts. Hands-on use of microcomputers will introduce computer operating systems; file management; internet; use of system tools; word processing, spreadsheet, database and presentation software.
CMSC 2123 BUSINESS TECHNOLOGIES AND APPLICATIONS
Computer concepts, terminology and software applications. An overview of hardware and software components, file structures, management information systems, futuristic trends, database management systems, system analysis and design and data communications. Also included is an introduction to database, spreadsheet and word processing software application packages and application programming. Prerequisite: CMSC 1113 Computer Concepts or BADM 1113 Digital and Financial Literacy.
CMSC 2203 PYTHON PROGRAMMING
An overview of programming using the Python language that includes hardware, the operating environment and language interpreter, internal computer data representation, the Python logical and arithmetic operators and operator precedence, flow of control, user and file input/output, user-defined functions, arrays, classes and objects. Traditionally offered in the fall semester only.
CMSC 2303 JAVA PROGRAMMING
An overview of programming using the Java language plus practical object-oriented principles focusing on how to develop Java applications, including fundamental control structures, file, input/output, and a study of arrays. Traditionally offered in the spring semesters only.
CMSC 2313 PROGRAMMING WITH C++
An overview of programming using the language C++ that includes fundamental control structures, files, input/output, and arrays. Traditionally offered in the fall semesters only.

CRIMINAL JUSTICE ADMINISTRATION
CRMJ 1113 INTRODUCTION TO CRIMINAL JUSTICE
This course is a survey of the American Criminal Justice System to include all components, police, courts and corrections. It defines each component’s function. The course also examines one component’s effect on the other components through historical development and modern concepts.
CRMJ 1223 CRIMINAL LAW-ADMINISTRATION OF JUSTICE
This course is the study of substantive criminal law through both general and specific elements of the major crimes of our society. Prerequisite: CRMJ 1113 Introduction to Criminal Justice
CRMJ 1333 CRIMINAL EVIDENCE
This course is the study of the basic rules of evidence applicable to criminal law and criminal procedure. The course also explains the exceptions to those rules and procedures.
CRMJ 1523 INTRODUCTION TO CORRECTIONS
This course analyzes the history of, theories of, and descriptions of the corrections system of justice. Contemporary correctional practices and functions of agencies and personnel will be presented and discussed to identify best practices.
CRMJ 2113 CRIMINAL INVESTIGATION
This course explains the techniques and skills of the investigation of crimes that affect our society. This process includes fact gathering, testing of hypotheses and the problem of proof.

**CRMJ 2233 JUVENILE DELINQUENCY**
This course studies the organization, functions and jurisdiction of juvenile agencies and juvenile court. It also includes the study of the special problems juveniles face in our society.

**CRMJ 2450 SUPERVISED STUDY IN CRIMINAL JUSTICE**
Credits in this course area are confined to student independent studies and practicum programs.

**CRMJ 2460 INTERNSHIP IN CRIMINAL JUSTICE**
This course offers an introduction to the opportunities and challenges of the criminal justice system. Career exploration experiences allow the student to investigate specific job requirements and work environments. Reports must be completed during the internships.

**DEVELOPMENTAL STUDIES AND LEARNING ASSISTANCE**

**DEVS 1101 ACADEMIC SUCCESS STRATEGIES**
This course is designed to assist students who have been suspended and readmitted under probation to determine the behaviors that led to their suspension and the behavioral changes necessary to succeed in college. It includes information on goal setting, time management, study skills, test taking, and the academic community.

**DEVS 1102 CRITICAL THINKING**
This course is designed to help students develop the cognitive skills needed to effectively identify, analyze and evaluate arguments and truth claims as it relates to college studies with an emphasis on scientific research, theory and application. The course is also designed to teach, enhance and/or improve the students’ methodology to prepare for more effective reasoning skills and improved cognitive skills to be used not only in college, but also in life.

**DEVS 1112 WORLD OF WORK**
Assists students in exploring career options through increased understanding of self and expanded knowledge of occupational information. Includes a study of decision-making process and present and future changing world of work.

**DIGITAL MEDIA, ANIMATION AND DESIGN (all courses restricted to DMAD majors only)**

**DMAD 1113 INTRODUCTION TO DIGITAL VIDEO – 2D ANIMATION**
A study of time based animation, introduces the student to basic concepts and theories of compositing, sequencing, editing, rendering, and organization. Students will also learn how to communicate ideas and information through the use of these elements.

**DMAD 1133 INTRODUCTION TO 3D ANIMATION**
This course will introduce students to the basic concepts and possibilities of computer animation using the most popular industry standard 3D program, along with general animation concepts as modeling, texturing, animation and basic rendering. The goal of this class is to build familiarity with the tools, terminology, and ideas involved in the 3D world.

**DMAD 1213 GRAPHIC DESIGN**
This course trains students in an environment that balances visual art with design software. This class emphasizes the design of visual communications where students acquire concepts and problem-solving skills as they relate to the marketing of products through graphic and motion graphic design.

**DMAD 1233 DIGITAL FILMMAKING**
This course is an introduction to the art and techniques of digital cinema combined with multimedia technology. Students will be exposed to a variety of software that incorporates interactivity and digital video. Over the course of the semester, teams will work through the three phases of a digital film production: pre-production, production and post-production. Emphasis is placed on the short form video and the manipulation of footage to include graphic and 3D elements, compositing imagery and other visual effects.
DMAD 2313 MOTION GRAPHICS I
By adding concepts of motion and timing to text and graphics, students will create dynamic graphics for broadcast video, titling, animation and interactive applications. Particular emphasis will be placed on the integration of motion messages with graphics, video and still images for the on-screen environment and spot advertisements.

DMAD 2323 3D ANIMATION II
This course builds on the concepts and skills introduced in Introduction to 3D Animation. Students will continue to develop practical knowledge of 3D animation and expand their skills using Maya for intermediate level polygon and NURBS modeling, texturing, animating and includes an introduction to rigging.

DMAD 2333 3D ANIMATION III
This course further develops the student’s skills in different 3D applications. This course will emphasize more advanced studies on texturing, proportions, movement, focus points and light intensity to gather more experience to develop a time/space relationship of a 3D conceptual model.

DMAD 2343 TEXTURING
This course will focus on different texturing methods that include UV mapping and creating custom color, bump, specular, reflection and other texture maps for 3D models created by students in previous projects assigned.

DMAD 2353 DIGITAL VIDEO II – POST-PRODUCTION
This course explores short-form video and its relationship to new digital technology, focusing specifically on digital post-production. The projects for this course are theme-based and provide students with a conceptual root by which to develop an artistic timing skill necessary in the field of Digital Media. This course will employ various media types such as motion graphics, motion menus, animations, sound, and video. Students will complete the course by implementing their final rendered project and post it to their Vimeo Channel.

DMAD 2373 MOTION GRAPHICS II
This course extends the skills and concepts from Motion Graphics I by teaching advanced features such as expressions, compositing and visual effects. Students will also incorporate 3D elements from Maya into After Effects for their specified projects.

DMAD 2383 MULTIMEDIA PROJECT
This capstone project brings all of the separate multimedia elements together into a comprehensive multimedia package including web, video, sound, 2D and 3D animation. These projects will be structured to simulate real-world, commercial multimedia production. Major projects will include the student’s personal biography for an interactive DVD and on-line portfolio.

DMAD 2393 EMERGING NEW MEDIA
This course develops practical applications in the creation of digitally mediated communication for entertainment using concepts and skills for creating real world production experience in designing content creation. A range of the newest cutting edge media will be used for this course. This allows the student to exercise forward-thinking, conceptualization, innovation, critical thinking, and visualization for specific projects.

EARTH SCIENCE
ESCI 1214 EARTH SCIENCE
Subject matter content is composed of general concepts taken from the science areas of geology, astronomy, meteorology, and oceanography. A combination lecture, demonstration, discussion, and laboratory experience. (Meets general education lab science requirement.)

ESCI 2450 SUPERVISED STUDY IN SCIENCE
Independent study course in the earth sciences for specific and advanced fields of study that utilize one or more components of the scientific method in conducting field or laboratory research: literature review, development of methodologies, data collection, data analysis, the writing of a report/scientific paper, and/or giving a presentation.
Instructor permission required. Credit—1 to 3 hours.

ECONOMICS
ECON 2113 MACROECONOMIC PRINCIPLES
An introduction to the functioning of the aggregate economy. Topics include basic principles of demand and supply, national income accounting, business cycles, employment, inflation and price stabilization, fiscal policy, monetary policy, economic growth, and aspects of the international trade and finance. Prerequisite: MATH 1483 Math Functions or MATH 1513 Algebra for STEM or concurrent enrollment with instructor permission.

ECON 2123 MICROECONOMIC PRINCIPLES
An introduction to the specific components of economic systems with emphasis given to basic principles of demand and supply, elasticity, opportunity cost, utility analysis, production and cost, market structures, factor market, government regulations and international trade. Prerequisite: MATH 1483 Math Functions or MATH 1513 Algebra for STEM or concurrent enrollment with instructor permission.

ELECTRONICS TECHNOLOGY
ELEC 1123 ELECTRICALMOTOR CONTROLS
Students will study industrial electrical symbols and line diagrams, logic as applied to line diagrams and control circuits, AC contractors and motor starters, reversing circuits as applied to motor types, and electromechanical and solid state relays. Instruction will include application and installation of control devices and applications of photoelectric and proximity controls. Safety will be emphasized throughout the course.

ELEC 1253 DC ELECTRONICS
Fundamental course in direct current (DC) electric circuits. Instruction is provided in the basic laws associated with DC circuit theory and in the operation of resistors, capacitors, and inductors. This course is supplemented with projects and hands-on activities related to circuits and use of electronics test equipment. Students will be exposed to data measurement, interpretation, troubleshooting, and documentation of test results and conclusions.

ELEC 1263 AC ELECTRONICS/PHOTONICS
Fundamental course in AC circuit components, configurations, and characteristics. Content includes circuit theorems, AC quantities and calculations, component characteristics, circuit analysis, and applications.

ELEC 1363 ELECTRONIC DEVICES/STANDARDS
This course introduces theory, characteristics, and applications of most of the basic electronic devices, including solid devices used in industry. The course expands upon theory and applications of ELEC 1253 and ELEC 1263.

ELEC 2003 HYDRAULICS
This course is designed to integrate theory and application of fundamental fluid power principles and formulas. The course will offer students hands-on experience with functional characteristics of hydraulic components, including pumps, flow valves, pressure valves, directional valves, hydraulic motors, filters, cylinders, and accumulators. Students will learn field circuit/component adjustment techniques and in-depth troubleshooting.

ENGLISH
ENGL 0122 SUPPLEMENT TO COMPOSITION I
Designed to provide supplemental instruction for ENGL 1113 English Composition I. Extra practice in grammar, writing, focus, and audience analysis, in addition to topics covered in English Composition I. Students must be enrolled in ENGL1113 in the same semester as ENGL 0122. A student must have a 15-18 ACT score to enroll.

ENGL 0123 BASIC COMPOSITION
Designed to introduce or review sentence structure, punctuation and writing skills. Basic composition prepares students to master the skills necessary for writing effective college-level papers.

**ENGL 1113 ENGLISH COMPOSITION I**
This course includes the fundamentals of expository writing with emphasis on structure, development, sentence style and grammatical correctness.

**ENGL 1213 ENGLISH COMPOSITION II**
This course includes a review of the fundamentals of expository writing with emphasis on argumentation, research techniques and style, used in literary and personal writing. Prerequisite: ENGL 1113 English Composition I or equivalent.

**ENGL 1223 TECHNICAL WRITING**
This course emphasizes clarity, conciseness, correctness and accuracy that address technical and general audiences. Students will write letters, a proposal, a formal report and other documents that relate to technical topics in their major fields. Prerequisite: ENGL 1113 English Composition I or equivalent.

**ENGL 1413 INTRODUCTION TO LITERATURE**
A critical introduction to the major genres of English, American, and world literature—fiction, poetry, and drama. (Meets requirement for humanities elective.)

**ENGL 1450 LANGUAGE ARTS SEMINAR**
This course includes various fields of English studies, including literary travels, book discussions, poetry readings and seminars. This course is open to change according to the various needs of students and the discretion of Language Arts instructors. Credit hours earned will depend on the specific topic and study involved.

**ENGL 2113 SURVEY OF WORLD LITERATURE BEFORE 1650**
Reading, writing, and discussion of selected major writers from ancient and classical times to the beginnings of the European Enlightenment. Prerequisites: English Composition I (ENGL 1113) or equivalent. (Meets requirement for humanities elective and designation for International dimension)

**ENGL 2223 SURVEY OF WORLD LITERATURE SINCE 1650**
Reading, writing, and discussion of selected major writers from the European Enlightenment to the present. Prerequisites: English Composition I (ENGL 1113) or equivalent. (Meets requirement for humanities elective and designation for International dimension.)

**ENGL 2233 ENGLISH GRAMMAR FOR EDUCATORS**
This course will review usage and mechanical guidelines through study of diagrams and in-class drills suitable for K-12 instruction.

**ENGL 2413 INTRODUCTION TO CREATIVE WRITING**
This course includes the study and practice of creative writing as it pertains to poetry, fiction, and creative nonfiction, both from a critical and personal perspective.

**ENGL 2423 INTRODUCTION TO FICTION WRITING**
A practical study of the techniques of fictional narrative, with particular emphasis on the development of narrative voice. Students will learn to identify specific rhetorical devices professional writers employ and apply those techniques to their own original works of fiction. Prerequisites: ENGL 1113, Composition I, and ENGL 2413, Introduction to Creative Writing, or permission of the instructor.

**ENGL 2433 INTRODUCTION TO POETRY WRITING**
A thorough overview of the basics of writing both traditional and experimental verse. Students will study genres, forms, sonic devices, and rhetorical strategies, with an emphasis on developing a unique voice through workshops and guided study of models both old and new. Prerequisites: ENGL 1113, Composition I, and ENGL 2413, Introduction to Creative Writing, or permission of the instructor.

**ENGL 2450 SUPERVISED STUDY IN LANGUAGE ARTS**

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*Life changing.*
This course involves a one-on-one discussion and study with a language arts instructor to meet a student’s specific language arts need.

**ENGL 2453 INTRODUCTION TO NONFICTION WRITING**
A practical study of the techniques of contemporary nonfiction, with particular emphasis on the development of individual voice. Students will learn to identify specific rhetorical devices professional writers employ, and apply those techniques to their own original works of nonfiction. Prerequisites: ENGL 1113, Composition I, and ENGL 2413, Introduction to Creative Writing, or permission of the instructor.

**ENGL 2543 SURVEY OF BRITISH LITERATURE TO 1800**
Reading, writing, and discussion of selected works of major British and Irish authors from the beginning to the Romantic Period. Prerequisite: English Composition I (ENGL 1113). (Meets requirement for humanities elective.) Offered spring semester only.

**ENGL 2653 SURVEY OF BRITISH LITERATURE FROM 1800 TO THE PRESENT**
Reading, writing, and discussion of selected works of major British and Irish authors from the Romantic Period to the present. Prerequisite: English Composition I (ENGL 1113). (Meets requirement for humanities elective.) Offered fall semester only.

**ENGL 2773 SURVEY OF AMERICAN LITERATURE TO 1877**
Reading, writing, and discussion of selected major writers from Bradford to Whitman. Prerequisite: English Composition I (ENGL 1113). (Meets requirement for humanities elective.) Offered fall semester only.

**ENGL 2883 SURVEY OF AMERICAN LITERATURE FROM 1877 TO THE PRESENT**
Reading, writing and discussion of selected major writers from Whitman to the contemporaries. Prerequisite: English Composition I (ENGL 1113). (Meets requirement for humanities elective.) Offered spring semester only.

**ENGINEERING**

**ENGR 1111 INTRODUCTION TO ENGINEERING**
An introduction to the study and practice of engineering. Review of the expected behavior and role of engineers in society. An introduction to engineering ethics; safety issues, and the relationship to social, global and contemporary issues.

**ENGR 2111 ENGINEERING MECHANICS I**
Laboratory experience, which serves to combine the elements of theory and practice using open-ended problems and engineering design. Problem solving methods used in the study of Statics, and the application of computers for technical calculations, problem solving, data acquisition and processing. Prerequisite: Concurrent enrollment in ENGR 2113 Statics.

**ENGR 2113 STATICS**
Topics include: resultants of force systems, static equilibrium of rigid bodies, statics of structures, distributed forces, centroids, internal forces, friction and moment of inertia. Shear and moment diagrams. Prerequisites: MATH 2144 Calculus I and I PHYS 2014 Engineering Physics I or PHYS 1114 General Physics I. Concurrent enrollment in ENGR 2111 is required. Offered spring semester only.

**ENGR 2121 ENGINEERING MECHANICS II**
Laboratory experience, which serves to combine the elements of theory and practice using open-ended problems and engineering design. Problem solving methods used in the study of Dynamics, and the application of computers for technical calculations, problem solving, data acquisition and processing. Prerequisite: Concurrent enrollment in ENGR 2123 Dynamics.

**ENGR 2123 DYNAMICS**
Analyzing the kinematics and kinetics of particles, systems of particles and rigid bodies from a Newtonian viewpoint.
utilizing vector algebra and calculus. Also analyzing situations using the work-energy and impulse-momentum principles. 

Prerequisite: ENGR 2113 STATICS.

**ENGR 2433 THERMODYNAMICS**

The solving or problems related to the study of the first and second laws of thermodynamics, ideal gases: mixture of ideal gases; and heat pump, vapor and gas-powered systems and refrigeration cycles. Use of algebra and calculus to solve equations of state. Prerequisites: CHEM 1315, General Chemistry I or CHEM 1515 Chemistry for Engineers, and PHYS 2014, Engineering Physics I. Enrollment in a one credit hour lab is also required. Offered fall semester only.

**ENGR 2533 ELECTRICAL SYSTEMS**

Topics include electrical circuit components: AC and DC circuit analysis; mesh and nodal formulation of network equations; transient and steady state response to sinusoidal and step sources; Ohm’s and Kirchhoff’s Laws; Thevenin and Norton circuits; source transformations; energy, power, Laplace Transform and matrix representations.

**GEOGRAPHY**

**GEOG 2243 FUNDAMENTALS OF GEOGRAPHY**

This introductory course addresses five fundamental themes in geography: location, place, relationships within place, migration and regions. Because geography knowledge is important to an understanding of important national and international problems addressed in the daily news, current events will be included in this class.

**GEOG 2253 WORLD REGIONAL GEOGRAPHY**

A regional study of the world with emphasis on socioeconomic, cultural and environmental conditions found within each region. Additional topics will cover landscape-culture, political and historical events necessary to better understand each region. Maps and vocabulary are an essential part of this class.

**GEOLOGY**

**GEOL 1114 PHYSICAL GEOLOGY**

The study of the physical systems of earth including mountain building, plate tectonics, volcanism, earthquakes, seafloor spreading, erosion and deposition. Laboratory emphasis is on the study of rocks, minerals, geological and topographical map reading and the usage of standard geological equipment. (Meets general education lab science requirement.)

**GLOBAL STUDIES**

**GLBL 2001: INTRODUCTION TO STUDY ABROAD**

This course is designed to address issues of travel and study abroad to enable students to get the most out of their international experience. Students will gain insight on various travel and study abroad resources that are available, current issues related to student travel, and will research specific information on the country or region relevant to their travels. Prerequisite: instructor permission and enrollment in a NOC study abroad program. (typically offered in an 8-week format)

**GLBL 2113: GLOBAL STUDIES IN HUMANITIES**

A faculty-supervised studies course involving a student researching a particular country or region’s cultural fields such as literature, music, arts, anthropology, religion, and/or historical and philosophical ideals. Prerequisite: instructor permission (Meets requirement for humanities elective and International dimension)

**GLBL 2123: GLOBAL CULTURE AND SOCIETY**

A faculty-supervised studies course involving a student researching a specific cultural field in a particular country or region. Students may examine cultural fields such as literature, music, visual and performing arts, anthropology, religion, language, history, and philosophy. Prerequisite: instructor permission (Meets requirement for humanities elective and International Dimension)

**GLBL 2133 INTRODUCTION TO INTERNATIONAL BUSINESS CULTURES**
An introduction to the issues related to cross-cultural business practices. Students will examine all or several of the following areas of a specific country or region: intercultural communications and behavior, globalization, global business environments, historic or ideological impacts on business, and the influence of culture in the arena of global business. (Study abroad course requires instructor permission. Meets requirement for humanities elective and International dimension)

**GLBL 2143 INTRODUCTION TO GLOBAL POLITICAL ISSUES**

A faculty-supervised studies course that will focus on various contemporary global political issues and their historical roots. Students will also examine key international organizations, institutions, and other actors as they relate to global political issues related to a specific country or region. Prerequisite: instructor permission (Meets requirement for International dimension).

**HEALTH AND PHYSICAL EDUCATION- ACTIVITY**

**HPEA 1221 WEIGHT TRAINING**

Instruction and participation in the use of free weights and various weight machines for the purpose of developing muscular strength and endurance.

**HPEA 1511 CHEERLEADING**

Credit given for a full semester of participation in cheerleading and/or pompoms.

**HEALTH AND PHYSICAL EDUCATION THEORY**

**HPET 1113 NUTRITION**

Course designed to introduce students to the basics of good nutrition. Emphasis will be placed on the five food groups, the six nutrients and food related disorders. Students will learn how to eat a healthy diet based on their personal needs.

**HPET 1132 SPORTS OFFICIATING**

Game administration and fundamental principles, rules, mechanics and techniques of officiating fall semester sports: football, volleyball and basketball. Laboratory work in the intramural program will be required.

**HPET 1142 SPORT OFFICIATING II**

Game administration and fundamental principles, rules, mechanics and techniques of officiating spring semester sports: basketball, baseball and softball. Laboratory work in the intramural program will be required.

**HPET 1223 HEALTH EDUCATION AND WELLNESS**

A course directed toward the acquisition of knowledge and appreciation concerning health for effective living.

**HPET 1232 PERSONAL TRAINING PRACTICUM I**

Students will observe and discuss personal training techniques used in various workout settings to enhance performance. Twenty five hours of observation required. Offered fall semester only.

**HPET 1233 INTRO TO PERSONAL TRAINING I**

This course is designed to introduce the field of personal training. It will introduce coursework relevant to personal training, such as screening and evaluating clients for safe participation, exercise prescription and other personal training topics. Offered fall semester only.

**HPET 1242 PERSONAL TRAINING PRACTICUM II**

Students will apply personal training techniques with various active populations of society. They will continue to discuss personal training techniques used in various workout realms. Seventy five hours of observation required. Offered spring semester only.

**HPET 1243 INTRO TO PERSONAL TRAINING II**

This course is designed to bridge the gap between clinical exercise science-related coursework and the practical application skills of personal training. A Certified Personal Trainer (CPT) credential* is available through the National Council on Strength and Fitness (NCSF) upon completion of the course. Offered spring semester only. *Upon successful
passing of the National Council on Strength and Fitness Certified Personal Trainer (CPT) Exam, students will have earned the title of NCSF-CPT. Sitting for the exam is optional.

**HPET 1950 PHYSICAL EDUCATION FIELD EXPERIENCE**

HPE&R majors will be required one semester of work assignments within the department and under the supervision of a faculty member. They will help in setting up and running athletic contests, assisting in swimming pool and fitness center operations and work in various classes.

**HPET 1952 INTRODUCTION TO HPE&R**

A study of the field of physical education/health concerning its foundational principles, aims, objectives, contributions, future, directions, problems, vocational opportunities and career possibilities. Offered fall semester only.

**HPET 2052 INTRODUCTION TO COACHING**

A course designed to give students an early exposure to the coaching field; a study of the different theories, philosophies and problems encountered in coaching. Offered spring semester only.

**HPET 2212 FIRST AID**

This course provides knowledge and practical experience in the emergency care of injuries and sudden illness, including cardiopulmonary resuscitation. CPR certification is available to the student through the course.

**HPET 2382 ATHLETIC TRAINING PRACTICUM I**

Students will observe injury evaluation, the use of therapeutic modalities, prophylactic taping and rehabilitation techniques used by Athletic Trainers to enhance performance. Offered fall semester only.

**HPET 2450 SUPERVISED STUDY IN HPE&R**

Independent Study, only for HPE&R majors.

**HPET 2482 ATHLETIC TRAINING PRACTICUM II**

Students will apply therapeutic modalities, prophylactic taping, and rehabilitation techniques to athletes. Furthermore, they will continue observing the evaluation of athletic injuries. Offered spring semester only.

**HPET 2633 CARE & PREVENTION OF ATHLETIC INJURIES**

A general introduction to different forms of therapy in treatment of athletic injuries—care, treatment and prevention.

Health and Physical Education- Varsity Sports

**HPEV 2211 WOMEN’S VARSITY BASKETBALL**

Credit for a full semester participation in varsity basketball.

**HPEV 2231 WOMEN’S VARSITY VOLLEYBALL**

Credit for a full semester participation in varsity volleyball.

**HPEV 2241 MEN’S VARSITY BASKETBALL**

Credit for a full semester participation in varsity basketball.

**HPEV 2251 MEN’S VARSITY BASEBALL**

Credit for a full semester participation in varsity baseball.

**HPEV 2261 WOMEN’S VARSITY SOFTBALL**

Credit for a full semester participation in varsity softball.

**HPEV 2271 WOMEN’S VARSITY SOCCER**

Credit for a full semester participation in varsity soccer.

**HPEV 2291 MEN’S VARSITY SOCCER**

Credit for a full semester participation in varsity soccer.

**HEALTH STUDIES**

**HLTH 1113 MEDICAL TERMINOLOGY**

This course will introduce students to Latin and Greek base terminology used in the fields of medicine and health care.
Students will learn a word-building system with specific emphasis on root words, prefixes, suffixes and abbreviations used in defining, spelling and pronouncing medical terms. This course is intended for students whose degree is in the medical field. It is recommended that students take this class prior to enrollment in BIOL 2104 Human Anatomy, BIOL 2204 Human Physiology and BIOL 2214 Human Anatomy & Physiology.

HISTORY

HIST 1113 HISTORY OF ANCIENT WORLD CIVILIZATION
The course focuses on the history of the ancient civilizations of the world. Included is an overview of the historical development of politics, religion and society in civilizations that existed prior to 1500. The course provides a frame of reference with which to comprehend the principal events and eras in World history. (Meets requirement for humanities elective and designation for International dimension.)

HIST 1223 HISTORY OF MODERN WORLD CIVILIZATION
The course focuses on the history of the modern civilizations of the world. Included is an overview of the historical development of politics, religion and society in the civilizations that have existed since 1500. The course provides a frame of reference with which to comprehend the principal events and eras in World history. (Meets requirement for humanities elective and designation for International dimension.)

HIST 1483 AMERICAN HISTORY TO 1877
An introductory survey spanning discovery of the new world, colonization, national development and concluding with the Reconstruction era.

HIST 1493 AMERICAN HISTORY SINCE 1877
A general survey of the key individuals and many social, economic and political developments that have influenced and molded the nation from the end of the Reconstruction era to the present.

HIST 1713 HISTORY OF EASTERN CIVILIZATION
This course covers the history of the major regions of eastern civilizations including East Asia, South Asia, West Asia, and Africa. From pre-history to approximately 1700 A.D. the origins, development and evolution of these civilizations will be discussed. (Meets requirement for humanities elective and designation for International dimension.)

HIST 2213 HISTORY OF NATIVE AMERICAN CIVILIZATION
The course is a study of the historical development of Native American civilization with emphasis upon the art, music, literature, religion, law, and way of life of the Native American society. [Formerly ANTH 2363 Native American Culture] (Meets requirement for humanities elective)

HIST 2323 OKLAHOMA HISTORY
A regional historical approach dealing with Oklahoma from the earliest time of European exploration to the present. Topics include the establishment of Indian Territory, allotments and homesteads, biographical studies, contemporary politics and an introduction to historical literature.

HIST 2450 SUPERVISED STUDY IN HISTORY
Independent study.

HUMANITIES

HUMN 1133 WORLD RELIGIONS
This course covers a study of the major religions of the world such as Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity and Islam with a view to understand the general beliefs and history of each religion. Prerequisite: ENGL 1113 English Composition I or equivalent. (Meets requirement for humanities elective and designation for International dimension.)

HUMN 2103: Introduction to American Studies (currently offered at OSU as AMST 2103)
Interdisciplinary study of American civilization through case studies of American cultural groups and perceptions in order to understand the multiple roles of culture in American life. It will also investigate concepts of American cultural diffusion including: Americanization, McDonaldization, sports, entertainment, and politics. (Meets requirement for OSU Diversity dimension)

**HUMN 2113 HUMANITIES-ANCIENT ARTS AND CULTURE**
This course involves the study of literature, the graphic arts and music in relation to the historical and philosophical settings of ancient and medieval periods from a global perspective. Prerequisite: ENGL 1113 English Composition I or equivalent. (Meets requirement for humanities elective and designation for International dimension.)

**HUMN 2223 HUMANITIES-MODERN ARTS AND CULTURE**
This course involves the study of literature, the graphic arts and music in relation to the historical and philosophical settings. Covers the period from the end of the European Middle Ages to the present from a global perspective. Prerequisite: ENGL 1113 English Composition I or equivalent. (Meets requirement for humanities elective and designation for International dimension.)

**HUMN 2450 SUPERVISED STUDY IN HUMANITIES**
This course involves a one-on-one discussion and study with a humanities instructor to meet a student’s specific humanities need.

**HUMN 2550 HUMANITIES STUDIES ABROAD**
(Meets requirement for humanities elective and designation for International dimension)

**FOREIGN LANGUAGES**

**LANG 1125 ELEMENTARY SPANISH I**
Pronunciation, elements of grammar, easy readings, conversation and composition. Courses (LANG 1114 and 1224) are not for students having had two years of Spanish in high school.

**LANG 1213 AMERICAN SIGN LANGUAGE**
This course is an introduction to American Sign Language (ASL) and the deaf culture. It addresses signs and elements of grammar associated with ASL building the receptive and expressive skills necessary to communicate basic vocabulary and simple phrases used in everyday life. Prerequisites: There are no prerequisites.

**LANG 1235 ELEMENTARY SPANISH II**
Listening and responding skills are emphasized along with grammar, geography and culture. Prerequisite: 4 or 5 hours Spanish. Offered on sufficient demand.

**LEADERSHIP**

**LEAD 1331 LESSONS IN LEADERSHIP**
An introduction to leadership to promote the growth and development of student leaders through implementation of campus pride projects and leadership team service projects.

**LEAD 2313 INCLUSION LEADERSHIP**
A year-long leadership and mentoring program for college sophomores and high school seniors focusing on inclusion and diversity in a global society utilizing technology.

**MASS COMMUNICATIONS (SEE ALSO COMMUNICATIONS)**

**MCOM 1013 INTRODUCTION TO MASS COMMUNICATIONS**
This is a survey course emphasizing communication theory, mass media history and ethics, and the operation and structure of the American communication system.

**MCOM 1113 WRITING FOR MASS MEDIA**
The course will cover the basic skills and terminology associated with the broadcast journalism profession. The student
will learn to gather, record, edit and broadcast information for a produced newscast. An emphasis will be placed on the difference between print and broadcast journalistic style.

**MCOM 1123 NEWS REPORTING & WRITING**
Fundamentals of news reporting skills with emphasis on developing a broad range of skills in writing in specialized areas including interviewing techniques, beat reporting, court reporting, alternatives to the inverted pyramid, sports reporting, investigative writing, editorial writing, newspaper ethics and media law. Prerequisite: Writing for Mass Media (MCOM 1113).

**MCOM 1133 BEGINNING PHOTOGRAPHY**
Basic photographic techniques and digital applications. A study of the fundamentals of photography for the beginning student or hobbyist interested in gaining a familiarization of basic concepts. The class will study the controls found on adjustable cameras, basic photographic techniques, composition, available light and flash photography, black & white and color images, and basic digital photography workflow.

**MCOM 2013 PRINCIPLES OF ADVERTISING**
Survey of advertising industry, media functions, careers in advertising, social and economic aspects, budgets, appropriations, rate structures, terminology, basic elements and purposes of advertising.

**MCOM 2023 PHOTOJOURNALISM**
The application of photography for journalistic coverage of feature, news, and public relations needs. Students will examine various styles, digital imaging, and ethics.

**MCOM 2033 PRINCIPLES OF PUBLIC RELATIONS**
This introductory course provides a general overview of the theories and practices of public relations, including its historical development as a discipline, its international nature, and its current role in law, ethics, and globalized communication for both organizations and society.

**MCOM 2223 BROADCAST JOURNALISM**
Basic skills and terminology of broadcast journalism. Gathering, recording, editing and casting of news material for on-air use are explored. Special emphasis on differences between print and broadcast journalistic style.

**MCOM 2240 MULTIMEDIA PRACTICUM**
Fundamentals of layout and design as used in a magazine and newspaper approaches are applied to the student newspaper and yearbook in the desktop publishing environment with practical skills in writing, advertising, photography and editing.

**MCOM 2283 INDUSTRY ISSUES**
This is a seminar course dealing with current topics affecting the field of photography and digital imaging. Students will be expected to identify the specific area of photography in which each wants to work. Students will make short and long range goals, prepare a resume, make industry contacts, perform job searches, study interview skills and study the basics of running a photography business. Students will finalize their student portfolio. They will attend relevant industry conferences and visit current working photographers and industry related businesses. Prerequisite: Students should be in the final semester of the Photography and Digital Imaging major.

**MCOM 2450 SUPERVISED STUDY IN JOURNALISM**
This class is an independent study agreement between the instructor and student. The requirements will be developed and supervised by the instructor.

**MCOM 2460 INTERNSHIP IN JOURNALISM**
This is an internship agreement between the student, instructor and media supervisor to allow the individual student to gain practical experience in the daily operations of the participating media facility.

**MATHEMATICS**

**MATH 0021 SUPPLEMENT TO MATH APPLICATIONS**
This course is intended for supplemental instruction for Math Applications. The topics covered may include solving equations, using formulas, graphing, percents, exponents, geometry, as well as other topics of concern that may arise. Students must be enrolled in a Math Applications class. PREREQUISITES: ACT 0-18 or appropriate test scores.

**MATH 0031 SUPPLEMENT TO MATH FUNCTIONS**
This course is intended for supplemental instruction for Math Functions. The topics covered may include solving equations, using formulas, graphing, using the graphing calculator, rates of change and interpreting solutions. Students must be enrolled in a Math Functions class. Prerequisites: ACT 0-18 or appropriate test scores.

**MATH 0122 SUPPLEMENT TO ALGEBRA FOR STEM**
Designed to provide supplemental instruction for topics covered in Algebra for STEM. Extra practice on factoring, solving quadratics, graphing, working with radical and rational expressions, in addition to other topics from Algebra for STEM that may require attention. Students must be enrolled in an Algebra for STEM class. Prerequisite: ACT 17-18 or appropriate test scores.

**MATH 0123 PRE-STEM ALGEBRA**
Designed to provide in-depth applications of algebra necessary to complete college-level mathematics. Includes topics such as factoring, rational expressions, simplifying radical expressions, quadratic equations and graphing linear equations in two variables. This course meets the deficiency requirements for students who do not meet entrance requirements by either high school course work or equivalent placement scores. Prerequisite: ACT 0-16 or appropriate placement scores.

**MATH 0132 STATISTICS SUPPLEMENT**
This course is intended for supplemental instruction for Statistics. The topics may include solving equations, using formulas, inequalities, graphing, probabilities, confidence intervals, hypothesis testing and regression. Prerequisite: ACT 0-18 or appropriate placement scores.

**MATH 1104 TECHNICAL MATH-ALGEBRA/TRIGONOMETRY**
A course designed for those students entering the electronics field. Students will study algebraic fractions, fractional equations, graphs, simultaneous equations, determinants, exponents and radicals, quadratic equations, network amplification, angles, phasor algebra and logarithms. In addition, this course involves the study of right angles, trigonometric functions, trigonometric tables, trigonometric identities and equations and applied trigonometry to electronic problem solving.

**MATH 1133 TECHNICAL MATH**
A course designed for students entering technical fields. Topics to be included are fundamental concepts of basic mathematics, the metric system and conversions, algebra equations and formulas, graphing, exponents and logarithms, geometry and trigonometry, and statistics. Prerequisite: "C" or better in MATH 0123 Concepts of Algebra or appropriate placement score. Offered fall semester only.

**MATH 1233 PROBABILITY AND STATISTICS**
This course is an introduction to statics, probability and data interpretation for non-mathematics majors. Topics include the following: Organizing data, measures of central tendency, variation, and position, the normal distribution, counting techniques, basic probability, data interpretation, and real work application. This course was specifically designed for Pre-Education majors and will satisfy one of the math requirements for pre-education majors (elementary education, special education, early childhood education). This is not a replacement for Elementary Statistics. Prerequisite: "C" or better in MATH 1483 Math Functions, MATH 1493 Math Applications, or MATH 1513 Algebra for STEM.

**MATH 1483 MATH FUNCTIONS**
This course is designed to analyze functions using equations, graphs, and tables from the viewpoint of rates of change. It explores linear, exponential, logarithmic, and other functions with applications to the natural sciences, agriculture, business, and the social sciences. Not appropriate for students in math, science, or engineering majors. Prerequisite: Appropriate test scores.

**MATH 1493 MATHEMATICAL APPLICATIONS**
A college level math course that fulfills the general education requirement. This course is intended for students who are not destined for an engineering-oriented, science-oriented or business-oriented calculus course. The topics covered will include but not be limited to statistical topics, application of loans, application of percent, compound and simple interest, APR, geometric topics, and credit card fee methods. Application to natural sciences, business, economics, and social sciences will be explored. This is a terminal mathematics course and will not be used as a prerequisite to any other mathematics course, but will fulfill the general education math requirement. Prerequisite: Appropriate test scores.

**MATH 1513 ALGEBRA FOR STEM**
This course includes advanced topics in solving and graphing equations and inequalities, quadratics, polynomial and rational functions, theory of equations, systems of equations, matrices and determinants, logarithmic and exponential functions. Applications of these topics will include, but are not limited to, exponential growth and decay, compound and continuous interest, variation, work and rate problems. Prerequisite: “C” or better in MATH 0123 Pre-STEM Algebra or equivalent placement scores.

**MATH 1613 PLANE TRIGONOMETRY**
This course includes topics in trigonometric identities, functions, graphs of trig functions, solutions of trigonometric equations, applications with right triangles, laws of sines and cosines, vectors and application of vectors, polar coordinates, graphs, application to sciences and allied subjects. The content emphasis is pre-calculus. Prerequisite: “C” or better in MATH 1513 Algebra for STEM or concurrent with MATH 1513.

**MATH 1715 ALGEBRA FOR STEM & TRIGONOMETRY**
This course includes advanced topics in solving and graphing equations and inequalities, quadratics, polynomial and rational functions, theory of equations, geometric sequences and summations; trigonometric equations, applications with right triangles, laws of sines and cosines, vectors, polar coordinates, and graphics. Applications of these topics will include, but are not limited to, exponential growth and decay, compound and continuous interest, variation, work and rate problems, vectors, various sciences and allied subjects. Prerequisite: “C” or better in MATH 0123 Pre-STEM Algebra or equivalent placement scores.

**MATH 1813 PREPARATION FOR CALCULUS**
A conceptual approach to the algebra and trigonometry needed for calculus. Trigonometry from the perspective of the unit circle and right triangles, behavior of trigonometric functions, and basic identities. Functions arising in calculus and the notion of an inverse function, especially in the context of trigonometric, logarithmic, and exponential functions. Rates of change and the limiting process. Prerequisite: “C” or better in MATH 1513 Algebra for STEM.

**MATH 2023 ELEMENTARY STATISTICS**
This course includes the following topics: descriptive measures, probability, sampling distributions, estimation and hypotheses testing, regression and correlation. This course is appropriate for business, economics, natural science, health science, social science and education majors. Prerequisite: Appropriate test scores or other college-level math. Course will transfer to OSU as STAT 2013 or 2023.

**MATH 2103 ELEMENTARY CALCULUS**
An introduction to differential and integral calculus, with applications appropriate for students of Business, Economics, Accounting, Natural Sciences and Social Science. Prerequisite: MATH 1483 Math Functions or MATH 1513 Algebra for STEM.

**MATH 2144 CALCULUS I**
The first of a three semester sequence in integrated analytics and calculus. The course includes the following topics: Introductory Analytic Geometry, lines, slopes, circles, functions, limits, indeterminate forms, differentiation of algebraic, trigonometric and other transcendental functions, applications of differentiation, basic integration techniques and applications. Prerequisite: “C” or better in MATH 1513 Algebra for STEM and MATH 1613 or MATH 1715. Offered spring semester only.

**MATH 2154 CALCULUS II**
The second of a three-semester sequence in integrated analytics and calculus. The course includes the following topics: advanced techniques of integration of transcendental functions and their inverses; infinite sequences and series, including Taylor series and Power series; sketching graphs and applying calculus techniques to conic sections, polar coordinates, and parametric equations; vectors and the geometry of space. Prerequisite: “C” or better in MATH 2144 Calculus I within the past two years. Offered fall semester only.

**MATH 2164 CALCULUS III**
The third of a three-semester sequence in integrated analytics and calculus. The course includes the following topics: vector-valued functions, functions of several variables, multiple integration, and vector analysis consisting of vector and conservative vector fields, line integrals, Green’s Theorem. Prerequisite: C or better in MATH 2154 Calculus II within the past two years. Offered spring semester only.

**MATH 2233 ELEMENTARY MATH STRUCTURES**
This course is a study of the fundamental structures of mathematics for non-mathematics majors. Topics include the following: critical thinking, problem solving, sets and set theory, number theory, real number operations, basic algebra skill and graphing. This course was specifically designed for Pre-Education and FSCD majors and will satisfy the college level math requirement for pre-education majors (elementary education, special education, early childhood education). FSCD majors can use this course as an approved elective. Prerequisite: “C” or better in MATH 1483, 1493, or 1513.

**MATH 2243 GEOMETRIC STRUCTURES**
This course is a study of the fundamental structures of geometry for non-mathematics majors. Topics include the following: line and angle relationships, triangles, quadrilaterals, circles, area, volume, and introduction to trigonometry. This course was specifically designed for Pre-Education and will satisfy the college-level math requirement for pre-education majors (elementary education, special education, early childhood education). Prerequisite: “C” or better in MATH 1483, 1493, or 1513.

**MATH 2373 TECHNICAL MATH-APPLIED CALCULUS**
Application is to the field of electronics. This course is a study of functions, average rate of changes, exact rates, limits, derivatives, applied derivatives, differentials, higher derivatives, integrals, applied integrals, logarithmic and exponential functions, Maclaurin’s series, Taylor series, Fourier series and Laplace transforms.

**MATH 2613 DIFFERENTIAL EQUATIONS**
Basic definitions and techniques of solving differential equations, techniques for solving first and higher order differential equations and their applications, operator methods, Laplace transforms, solution of systems of differential equations. Offered spring semester only. Prerequisite: “C” or better in MATH 2154 Calculus II. Offered spring semester only.

**MUSIC**

**MUSC 1003 FUNDAMENTALS OF MUSIC**
The study of musical notation and terminology along with the major and minor modes and intervals. This course is not designed for the advanced student nor the student with the ability to enter the Music Theory course sequence.

**MUSC 1110 RECITAL ATTENDANCE**
Noncredit activity, required for Music majors.

**MUSC 1113 MUSIC APPRECIATION**
A survey of music with emphasis on analysis and perceptive listening from the Baroque through the twentieth century of International musical styles. (Meets requirement for humanities elective and designation for International dimension.)

**MUSC 1131 EAR TRAINING & SIGHT SINGING I**
The study of basic aural skills in sight singing through the use of Solfege.

**MUSC 1133 MUSIC THEORY I**
The study of the basic rudiments of tonal music, covering major and minor scales, key signatures, intervals, triads and correlated with keyboard skills. Taken concurrently with MUSC 1131 Ear Training & Sight Singing.

**MUSC 1141 EAR TRAINING & SIGHT SINGING II**
A continuation of MUSC 1131 with the addition of basic melodic dictation and chord identification. Prerequisite: MUSC 1131 Ear Training & Sight Singing I.

**MUSC 1143 MUSIC THEORY II**
The continuation of MUSC 1133 with the addition of diatonic harmony through part writing and analysis. Prerequisite: MUSC 1133.

**MUSC 1000 PRIVATE INSTRUCTION (FOR FRESHMEN AND SOPHOMORES)**
Credit will vary from 1-4 hours. Private brass, organ, piano, voice, strings, woodwinds, and percussion.

Applied Instrument Class

**MUSC 1211 APPLIED INSTRUMENT- LOW BRASS CLASS**
**MUSC 1221 APPLIED INSTRUMENT- HIGH BRASS CLASS**
**MUSC 1311 APPLIED INSTRUMENT- WOODWIND CLASS**
**MUSC 1411 APPLIED INSTRUMENT- PERCUSSION CLASS**
**MUSC 1511 APPLIED INSTRUMENT- STRINGS CLASS**
**MUSC 1521 APPLIED INSTRUMENT- GUITAR CLASS**

**MUSC 1513 MUSIC LITERATURE**
The study of the music literature, style and performance practices of the Baroque through the twentieth century period. Prerequisite: MUSC 1113 Music Appreciation or MUSC 1133 Music Theory I and MUSC 1143 Music Theory II. (Meets requirement for humanities elective)

Applied Voice- Class

**MUSC 1611 APPLIED VOICE CLASS**
Voice class for non-music majors and instrumental music majors seeking voice lessons. Basic voice pedagogy is applied in this class.

**MUSC 1623 MUSIC BUSINESS I**
A series of lectures designed to acquaint students with various aspects of business opportunities as related to the entertainment industry. Such lectures include, but are not limited to, music publishing and recording, resume writing and artist management.

**MUSC 1633 MUSIC BUSINESS II**
A continuation of Music Business I. Prerequisite: MUSC 1623 Music Business I.

Applied Piano- Class

**MUSC 1711 APPLIED PIANO CLASS I**
The study of the basic skills of piano technique. Students take this course in conjunction with MUSC 1133 and MUSC 1131.

**MUSC 1721 APPLIED PIANO CLASS II**
A continuation of MUSC 1711 with the addition of major scales and literature study. Prerequisite: MUSC 1711.

**MUSC 1731 APPLIED PIANO CLASS III**
A continuation of MUSC 1721 with the addition of minor scales and minor harmonization. Intermediate level piano literature. Prerequisites: MUSC 1711, 1721.

**MUSC 1741 APPLIED PIANO CLASS IV**
A continuation of MUSC 1731 with the addition of further development of the foundations for the proficiency skills required of all music majors. Prerequisites: MUSC 1711, 1721, 1731.

**MUSC 1991 MUSIC THEATRE SEMINAR**
Life changing.

An in-depth overview of performance practices centering on songs and scenes from the Music Theatre genre, as well as monologues from plays and musicals. For non-majors.

**MUSC 2040 MUSIC THEATRE ACTIVITY**
Individual involvement in Music Theatre productions. May be repeated (4 credit hours maximum). Prerequisite: Permission of instructor.

**MUSC 2131 EAR TRAINING & SIGHT SINGING III**
A continuation of MUSC 1141 with the addition of rhythmic, melodic, and basic choral dictation. Prerequisite: MUSC 1141 Ear Training & Sight Singing II.

**MUSC 2133 MUSIC THEORY III**
The continuation of MUSC 1143 with the addition of non-chord tones, diatonic and secondary seventh chords. Chromatic harmony is touched upon. Prerequisite: MUSC 1143 Music Theory II.

**MUSC 2141 EAR TRAINING & SIGHT SINGING IV**
A continuation of MUSC 2131 with the addition of advanced rhythmic, melodic, chordal identification and choral dictation. Prerequisite: MUSC 2131 Ear Training & Sight Singing III.

**MUSC 2143 MUSIC THEORY IV**
The continuation of MUSC 2133 with the addition of twentieth-century techniques including polyharmony, atonality, and serialism. Prerequisite: MUSC 2133 Music Theory III.

**MUSC 2221 COMPREHENSIVE JAZZ MUSICIANSHP**
Advanced instrumentalists in a class setting studying the art of improvisation in regard to chord progressions.

**MUSC 2331 JAZZ IMPROVISATION**
A study of style in regard to contemporary performance.

**MUSC 2441 PIANO PEDAGOGY**
Emphasis on materials and methods related to a graded program for studio piano instructors.

**MUSC 2450 SUPERVISED STUDY- MUSIC**
Independent study.

**MUSC 2460 MUSIC BUSINESS INTERNSHIP**
For students who have completed Music Business I & II. Supervised experience is arranged in the student’s area of interest. Students must have permission from Music Business advisor to enroll. Prerequisite: MUSC 1633 Music Business II.

**MUSC 2611 WIND ENSEMBLE-CONCERT BAND**
Performance of band literature in an ensemble situation. Repeated credit may not be included in credits required for graduation.

**MUSC 2621 STRING ENSEMBLE**
Traditional ensemble work with string instruments.

**MUSC 2631 COLLEGE CHOIR**
Choral ensemble performance. Repeated credit may not be included in the credits required for graduation.

**MUSC 2641 ORCHESTRA**
The performance of orchestral literature in an ensemble situation. Repeated credit may not be included in the credits required for graduation.

**MUSC 2650 MUSIC SEMINAR**
Topics of study within the applied contemporary field.

**MUSC 2651 MUSIC COMPUTER SEMINAR**
A survey of computer-aided music with emphasis on sequencing and music notation.

**MUSC 2653 CONTEMPORARY ARRANGING**
A study of vocal range and distribution; instrumental transposition and ranges; arranging vocal and instrumental ensembles and combination.

MUSC 2711 WIND ENSEMBLE - JAZZ BAND
Performance of the literature of jazz. Repeated credit may not be included in the credits required for graduation.

MUSC 2731 VOCAL ENSEMBLE- ROUSTABOUTS
Performance of the literature of pop music. Enrollment by audition and permission of instructor only. Student must be concurrently enrolled in MUSC 1000 Private Instruction.

MUSC 2831 MADRIGAL/CHAMBER SINGERS
Performs Madrigal literature during the fall and Chamber literature during the spring. Open by audition only.

NURSING

NURS 1002 NURSING BOOT CAMP I
Nursing Boot Camp is a fast-paced, highly interactive, five-day course that promotes self-examination, empowerment, and thoughtful planning on the part of each learner. Concepts regarding the individual, teaching/learning, communication, and learning resources are explored. The nursing process and nursing education are examined carefully in the context of professional nursing. Principles pertaining to time management, learning, studying, and test-taking are also discussed and applied. Prerequisite: Formal approval by the Nursing Division is required before being admitted into this course.

NURS 1202 NURSING BOOT CAMP II
Nursing Boot Camp II is a highly interactive, collaborative learning based, five-day course that promotes the development of observation and clinical reasoning skills on the part of each learner. Through the use of video captured points in a client’s life, learners are challenged to recognize data that is relevant and significant during each phase of a client’s development of a common illness. Illnesses examined are COPD, depression, diabetes mellitus and heart failure. Learners work primarily in small teams and use available resources and the Nursing Process to discover how nurses could have intervened in each stage of illness development to impact the quality of the client’s health and life. Prerequisite: Fundamentals of Nursing (NURS 1114) and Fundamentals of Nursing Practicum (NURS 1124) or successful completion of advanced standing testing for Fundamentals of Nursing.

NURS 1113 CRITICAL THINKING IN HEALTH CARE SYSTEMS
An introduction to critical thinking concepts in health care systems. This course is designed to introduce topics that include basic principles of critical thinking, the impact of changes in health care to our thinking process, multidisciplinary approaches and expanding roles in health care.

NURS 1114 FUNDAMENTALS OF NURSING
Fundamentals of Nursing is designed to orient the beginning student to the practice of nursing. It incorporates principles of the sciences and humanities and bases practice on the nursing process. The course centers on the concepts of safe practice and serves as a conceptual framework for application in a practicum setting. Prerequisite: Formal approval by the Nursing Division is required before being admitted into this course. Designed to be taken concurrently with NURS 1124 Fundamentals of Nursing Practicum.

NURS 1121 NURSING TREATMENTS
This course is designed to assist the nursing student in understanding principles of pharmacology and diagnostics. Prerequisite: Formal approval by the Nursing Division is required before being admitted into this course.

NURS 1124 FUNDAMENTALS OF NURSING PRACTICUM
In Fundamental's Practicum the learner will have the opportunity to utilize the nursing process as a vehicle for meeting basic health needs of clients in actual care settings. The course is designed to allow the learner to apply theoretical knowledge to direct client care. Prerequisite: Formal approval by the Nursing Division is required before being admitted into this course.

NURS 1234 NURSING OF ADULTS I
Nursing of Adults I is designed to build upon learning acquired in Fundamentals. The focus is on knowledgeable use of the nursing process as it relates to the holistic (basic and higher needs) care of the adult client who is experiencing a health interruption such as an illness of a medical/surgical nature and/or psychosocial nature.

Prerequisites: Fundamentals of Nursing (NURS 1114) and Fundamentals of Nursing Practicum (NURS 1124) or successful completion of advanced standing testing for Fundamentals of Nursing. General Biology (BIOL 1114) or General Chemistry (CHEM 1315), General Psychology (PSYC 1113). Designed to be taken concurrently with Nursing Adults I Practicum (NURS 1244).

**NURS 1244 NURSING OF ADULTS I PRACTICUM**

Nursing of Adults I Practicum incorporates planned hospital and clinical experiences, which increase the learner’s understanding of the disease process and effective nursing care. The learner incorporates understanding of the relationship of the nursing process to holistic (basic and higher) client care including therapeutic communication techniques. Designed to be taken concurrently with Nursing of Adults I (NURS 1234).

**NURS 1253 TRANSITION TO REGISTERED NURSING**

Transition to Registered Nursing is designed for Licensed Practical Nurses enrolling in the associate degree nursing program. The course assists LPN students to build upon previous nursing education and clinical practice as they transition to the RN role. Areas of focus include thinking and reasoning processes used in making clinical judgments, legal and ethical responsibilities, professional role development and developing comprehensive assessment skills.

Prerequisites: LPNs with formal approval by the Nursing Division; should be taken within one year of entering the first nursing practicum course. Offered fall and summer semesters.

**NURS 1353 INTRODUCTION TO PSYCHIATRIC NURSING**

Introduction of Psychiatric Nursing is designed to enhance the knowledge base of LPNs wishing to enter the nursing program in the fall semester. The focus is on the use of the nursing process as it relates to the holistic care of the client experiencing a health interruption of a psychosocial nature. The Practicum incorporates planned clinical experiences, which increase the learner’s understanding of the disease processes and effective nursing care. The learner incorporates understanding of the relationship of the nursing process to holistic client care including therapeutic communication techniques. Prerequisites: LPNs with formal approval by the Nursing Division. Offered summer semester only.

**NURS 2071 SEMINAR IN NURSING I**

Designed to assist nursing students to identify and understand safe pharmacological practice principles in the management of nursing care for commonly-prescribed medications. Prerequisite: Fundamentals of Nursing (NURS 1114) and Practicum (NURS 1214) or LPN Bridge Courses.

**NURS 2072 SEMINAR IN NURSING II**

This course is designed to assist the nursing student in transitioning to the new role of graduate nurse. Discussion and analysis of the development of nursing as a profession including the history and controversies, as well as political concerns influencing the relationship of nursing and society; also includes discussion of nursing organizations, career opportunities, interview skills and management of client care. Prerequisite: Nursing Seminar I (NURS 2071).

**NURS 2334 MATERNAL CHILD NURSING**

Maternal-Child Nursing is designed to introduce the student to the nursing care of maternity clients, children and their families. The maternity phase of life is a normal event which influences the entire family. Another focus of the course is the common health interruptions occurring in the childhood years. Growth and development is a normal progression which influences the child. Concepts of health are focused on the woman from conception through postpartum and on the well child in addition to the ill child. Normal physiologic changes of the mother and the fetus/newborn are stressed. Anticipatory guidance for growth and development are also stressed. Common health problems are also presented. The nursing process, the application of biophysical and psychosociospiritual principles, communication and Maslow’s hierarchy of needs are employed within the framework of family-centered nursing. Prerequisites: Fundamentals of Nursing (NURS
1114) and Practicum (NURS1124). Nursing of Adults I (NURS 1234) and Practicum (NURS 1244), Nursing Seminar I (NURS 2071), Principles of Sociology (SOCI 1113) and Human Anatomy & Physiology (BIOL 2214). Designed to be taken concurrently with Maternal Child Nursing Practicum (NURS 2344).

**NURS 2344 MATERNAL-CHILD PRACTICUM**
The focus of the practicum is to provide the student the opportunity to incorporate theoretical knowledge in actual client care situations in maternity and pediatric settings in the acute-care setting and in community-based settings. The nursing process, the application of biophysical and psychosociospiritual principles, communication and Maslow’s hierarchy of needs are employed within the framework of family-centered maternity nursing. The student is expected to individualize and use the concepts and knowledge learned in earlier courses and apply them to the maternity and pediatric clients as well as the families. Designed to be taken concurrently with Maternal-Child Nursing (NURS 2334).

**NURS 2415 NURSING OF ADULTS II**
Nursing of Adults II is designed to build upon learning acquired in all previous nursing courses. Emphasis is placed on care of the client(s) experiencing common complex health interruptions with relatively predictable outcomes. An interdisciplinary approach is used to plan holistic care for the adult and the family in the hospital as well as in the community-based settings. Prerequisites: Fundamentals of Nursing (NURS 1114) and Practicum (NURS 1124), Nursing of Adults I (NURS 1234) and Practicum (NURS 1244), Maternal Child Nursing (NURS 2334) and Practicum (NURS 2344), Microbiology (BIOL 2124). Designed to be taken concurrently with Nursing of Adults II Practicum (NURS 2425).

**NURS 2425 NURSING OF ADULTS II PRACTICUM**
The focus of practicum is on use of the nursing process as it relates to the care of individual clients and small groups of clients. Experience is planned in the hospital and community setting, as well as in specialty areas. Experience is provided for the student to work as a team member and team leader. Attention is given to persons in late adulthood by identifying adaptations to aging as well as health interruptions. Designed to be taken concurrently with Nursing of Adults II (NURS 2415).

**NUTRITION**

**NUTR 2123 INTRODUCTION TO HUMAN NUTRITION**
An introduction to the basic principles of nutrition, including the chemical characteristics of nutrients and their functions in the human body. Students will examine the nutritional requirements and nutrient deficiencies that may occur during the different physiological phases of life. Prerequisites: none required, however students are encouraged to complete BIOL 1114 General Biology or BIOL 1124 General Biology for Majors prior to enrollment in this course. (Meets general education science requirement for non-lab science.)

**ORIENTATION**

**ORNT 1101 FRESHMAN ORIENTATION**
A required course designed to promote a student’s educational success.

**PHILOSOPHY**

**PHIL 1113 INTRODUCTION TO PHILOSOPHY**
This is a survey course designed to introduce the student to the problems of philosophy, including discussions on the nature of reality, value, ethics, political ideals, religion, and theory of knowledge. This course will cover philosophical methods and historical backgrounds. Prerequisite: ENGL 1113 English Composition I or equivalent. (Meets requirement for humanities elective.)

**PHIL 2213 ETHICS**
This course provides students with a discussion of moral problems such as the nature of good, right action, moral virtue,
human freedom, and moral responsibility within the context of the major ethical philosophies. (Meets requirement for humanities elective.)

**PHIL 2223 BUSINESS ETHICS**
A study of the nature of moral judgments, moral values, freedom and responsibility as it applies to the individual in both a personal and business setting. This course will help the student develop a framework for resolving ethical issues with analytical grounding in the basic theory of ethics. (Meets requirement for humanities elective.)

**PHIL 2450 SUPERVISED STUDY IN PHILOSOPHY**
Independent study in philosophy. Instructor permission required.

**PHYSICAL SCIENCE**
**PHSC 1114 GENERAL PHYSICAL SCIENCE**
A lecture, lab, demonstration and participation course designed to help students understand the basic concepts of physics and chemistry. The course is recommended for elementary education majors and non-science majors. (Meets general education lab science requirement.)

**PHYSICS**
**PHYS 1114 GENERAL PHYSICS I**
Physics for liberal arts students, pre-professional students in biological and health fields (pre-medicine, pre-nursing, pre-therapy, etc.) and technology students; includes topics from mechanics, heat, fluids, and thermodynamics. Laboratories are designed to reinforce theory principles. Prerequisite: MATH 1513 Algebra for STEM. (Meets general education lab science requirement.) Offered fall semester only on Enid campus.

**PHYS 1214 GENERAL PHYSICS II**
A continuation of PHYS 1114 General Physics I. Includes topics from waves and sound, electricity, magnetism, light, and optics. Laboratories are designed to reinforce theory principles. Prerequisite: MATH 1513 Algebra for STEM and PHYS 1114 General Physics I. (Meets general education lab science requirement.) Offered spring semester only on Enid campus.

**PHYS 2014 ENGINEERING PHYSICS I**
Calculus-based general physics course for science and engineering students. Includes topics from mechanics, heat, thermodynamics, waves and sound. Laboratories are designed to reinforce theory principles. Prerequisite: MATH 2144 Calculus I or concurrent enrollment. (Meets general education lab science requirement.) Offered spring and summer semesters only.

**PHYS 2104 CONCEPTS IN PHYSICS**
An introductory course designed to explain the basic concepts of motion and forces, matter, energy conservation, thermodynamics, fluid flow, electrical circuits and magnetism. Recommended for process technology and elementary education majors as a model course to learn and teach science. Laboratories are designed to reinforce theory principles. Prerequisite: MATH 1483 Math Functions or MATH 1513 Algebra for STEM or concurrent enrollment. (Meets general education lab science requirement.)

**PHYS 2114 ENGINEERING PHYSICS II**
A continuation of PHYS 2014 Engineering Physics I. Includes topics from electricity, magnetism, light and optics. Laboratories are designed to reinforce theory principles. Prerequisite: PHYS 2014 Engineering Physics I or equivalent. (Meets general education lab science requirement.) Offered fall semester only.
PHYS 2450 SUPERVISED STUDY IN PHYSICS
Independent study.

PHYS 2812 APPLIED PHYSICS
This course is designed for students majoring in technology programs or those requiring exposure to applications of physics. The course covers the study of mechanics, relativity, heat, thermodynamic and harmonic motion, heat, sound, optics and modern energy sources with practical applications used to reinforce the theory. (Meets general education lab science requirement.)

POLITICAL SCIENCE
Poli 1113 American National Government
American National Government is an introduction to the federal system of government found in the United States. The course of study includes the roles of Congress, the Presidency, Judiciary, Bureaucracy, interest groups, and political parties.

Poli 2113 Comparative Politics
This course provides an introductory survey of the various political states of the world, focusing on history, geography, political culture, political institutions, and processes. (Meets requirement for International Dimension.)

Poli 2133 State and Local Government
This course studies the nature and makeup of the state, county, municipal, and other grassroots level governments. It examines their place in a federal system and how they operate to include the officials that exist in such systems.

Poli 2450 Supervised Study in Political Science
Independent study arranged with faculty member.

PROCESS TECHNOLOGY
PTEC 1113 Introduction to Process Technology
Introduction to process operations in the petrochemical industry including: operator roles, responsibilities and expectations; plant terminology; safety and environmental responsibilities; applied organic and inorganic chemistry; applied physics; plant equipment, utility systems; product handling; flow diagrams; general process overviews; basics of process control; and plan organizations. This course will expose students to an overview of the Process Technology associate degree program, including the mental and physical requirements of the Process Technician career. Plant tours will be conducted. Prerequisite: MATH 1483 Math Functions or MATH 1513 Algebra for STEM or concurrent enrollment.

PTEC 1124 Process Troubleshooting
This course utilizes heat, mass and energy balances and operating data to identify and correct process abnormalities using techniques such as “cause and effect” and “root cause” analysis. Students will acquire and develop troubleshooting techniques associated with petrochemical processes through group exercises in a work team environment. Prerequisite: PTEC 2124 Systems. Offered spring semester only.

PTEC 1313 Safety, Health, and Work Practices
Introduction to occupational safety, health and environmental practices and associated equipment including: safety mindset and attitude; personal safety equipment; general safety policies and procedures; hazards communication; HAZWOPER/emergency response; first aid and CPR; industrial hygiene; exposure monitoring; and environmental compliance. This course will give students an overview of various governmental regulations mandated by OSHA, EPA, SARA, RCRA, DOT, NFPA, etc. Prerequisite: MATH 1483 Math Functions or MATH 1513 Algebra for STEM or concurrent enrollment. Offered spring semester only.

PTEC 2014 Process Technology I-Equipment
This course covers the functions and details of equipment used in processes including piping, pumps, compressors,
drums, towers, reactors, heaters, and boilers. Students will review the specific uses and critical parameters of each type of equipment studied. Prerequisite: PTEC 1113 Intro to PTEC. Offered spring semester only.

**PTEC 2024 INDUSTRIAL INSTRUMENTATION**

This course is designed to introduce the student to a simple pneumatic control loop. Specifically, the student will be introduced to pressure, temperature, level and flow transmitters and the various transducers used in the detection of changes in process variables; pneumatic controllers, valve positioners, control valve types, pneumatic relays and the null-balance system are also included as part of the control loop. Prerequisite: PTEC 1113 Intro to PTEC. Offered fall semester only.

**PTEC 2124 PROCESS TECHNOLOGY II- SYSTEMS**

A familiarization with the general types of processes found in the chemical and refining industry including: distillation and fractionation; reaction; absorption; adsorption; extraction; stripping; cracking; reforming; alkylation; delayed coking; hydro-processing; and sulfur recovery. This course also includes an explanation of product blending and water treatment, as well as steam and electrical power generation. Prerequisites: PTEC 2014 Equipment and PTEC 2024 Instrumentation. Offered fall semester only.

**PTEC 2214 PROCESS TECHNOLOGY III- OPERATIONS**

This course will concentrate on the duties, responsibilities and expectations of the Process Operator with emphasis on understanding and adherence to procedures associated with start-up, shutdown, normal and temporary plant operations. Equipment monitoring, preventive maintenance, training and response to abnormal and emergency operating conditions are stressed as they apply to the work crew and operations team. Students will receive a “sense of reality” regarding the career of a Process Technician, including tips on adjusting to shift work, diversity in the workplace and communicating with the work team and customers. Prerequisite: PTEC 2124 Systems. Offered spring semester only.

**PTEC 2243 PRINCIPLES OF QUALITY**

The history of Quality will be explored from Deming’s theories to current applications in today’s petrochemical industry. Internal and external customer/supplier relationships of a business which affect the qualitative aspects of quality and the statistical methods, which affect the quantitative aspects of measuring quality, will be stressed throughout this course. Students will be exposed to the benefits of continuous improvement and quality work as they pertain to developing a high performance work team. Prerequisite: PTEC 1113 Intro to PTEC. Offered fall semester only.

**PTEC 2301 INDUSTRIAL OBSERVATION**

Students who have already completed an internship during a semester or summer may receive credit by completing a report on their experiences, as well as presenting their observations and knowledge gained to a first year PTEC class.

**PTEC 2314 OIL & GAS PRODUCTION I**

Oil and Gas Production I will familiarize students with the job of the oil and gas production technician. Specifically, students will be able to discuss the history of the oil and gas market, concepts surrounding exploration and geology, as well as fundamentals of drilling and well completion, and describe and learn the operations of the equipment and systems used by oil and gas technicians today.

**PTEC 2443 PIPELINE OPERATIONS & CONTROLS**

This course will concentrate on the duties, responsibilities, and expectations of the Pipeline Technician with emphasis on understanding and adherence to procedures associated with tankage, pipeline flow rate, and pressure monitoring. Training and response to abnormal and emergency operating conditions are stressed. Students will study expectations for the career of a Pipeline Technician, including tips on adjusting to shift work, diversity in the workplace, and communicating with the work team and customers. Prerequisite: PTEC 2124 Systems.

**PTEC 2450 SUPERVISED STUDY – CERTIFICATE PREPARATION**

Independent study course in preparation for an accredited examination for work in a process technology field. Examples
of exams include but are not limited to the Waste Water Treatment Operator State Examination, Environmental Technician, exams provided by the American Society of Safety Engineers. Consent of instructor required. Credit 1-3 hrs.

PROFESSIONAL DEVELOPMENT
PRDV 1001 WORKPLACE ESSENTIALS I
This course will address the following topics: Finding a Job—Resume Writing, Interviewing and Networking; and Job Advancement—Professional Attire, Self-Confidence, Positive Demeanor, Working with Management, Office Politics, and Phone/Email/Correspondence Etiquette.

PRDV 1011 WORKPLACE ESSENTIALS II
Advanced version of PRDV 1001 with work-specific readings

PRDV 1021 WORKPLACE MANAGEMENT I
This course will address topics related to stress and time management, including Emotion Regulation, Time Management, “Clocking in,” Work Ethic, Working Well under Pressure, Resilience Training, Persistence, Growth Mindset, Ability to Accept and Learn from Criticism, and Flexibility/Adaptability/Patience/Self-Awareness/Perceptiveness

PRDV 1031 WORKPLACE MANAGEMENT II
Advanced version of PRDV 1021 with work-specific readings

PRDV 1041 WORKPLACE LEADERSHIP I
This course will address supervisory skills needed in the workplace, including Meeting Management, Facilitating Skills, Conflict Resolution, Problem Solving, Difficult Personalities and Unexpected Situations, Influence/Persuasion/Negotiation, Listening, and Teamwork.

PRDV 1051 WORKPLACE LEADERSHIP II
Advanced version of PRDV 1041 with work-specific readings

PVD 2321 Professional Development
Professional Development is designed to assist students in the transition from college to their career. To be effective in a career and in life depends on preparation, attitude, hard work, personal qualities, and the right strategies. This course focuses on practical tips and strategies that will help students succeed in the work environment. Emphasis will be on time management/organizational skills; resume development posting; interview, communication, and presentation skills; dressing for success and first impression management; and etiquette. For Business majors, this course should be taken in the last semester of their degree plan.

PSYCHOLOGY
PSYC 1113 GENERAL PSYCHOLOGY
This introduction to psychology examines each of the contemporary theoretical perspectives in psychology. The relationship of behavior, cognition and emotion are explored in such issues as learning, memory, development, motivation, personality, abnormal behavior and therapy design.

PSYC 2113 HUMAN SEXUALITY
This course seeks to identify the impact of sexuality on all aspects of the person. Using the perspectives of behavioral science we examine the history of sexuality, gender development, sexual anatomy, communication in sexual relationships, the meaning of intimacy, the human sexual response and other cultural issues of sexuality. Prerequisite: ENGL 1113 English Composition I or instructor’s permission.

PSYC 2213 DEVELOPMENTAL PSYCHOLOGY
This course is an examination of the physical, emotional, cognitive, linguistic, behavioral and social changes that occur in human development. Fundamental concepts, research, and theories will be explored through a lifespan model. Prerequisites: ENGL 1113 English Composition I and PSYC 1113 General Psychology or instructor’s permission.
**PSYC 2233 SOCIAL PSYCHOLOGY**
This is a scientific study of social forces influencing human behavior with an emphasis upon the individual in a social context. The course will examine the social self, group processes, attitudes and attitude formation, conformity, persuasion, aggression and other social forces and variations that impact the individual within society. Prerequisite: ENGL 1113 English Composition I

**PSYC 2333 INTRODUCTION TO ADDICTIVE BEHAVIORS**
This course is an introduction to the psychological, physiological, and sociological theories of substance abuse, alcohol, and other addictive behaviors. The course will cover the addiction process and its effects upon the individual, family, and society. Treatment strategy perspectives from the behavioral science, medical, and legal models will be introduced. Prerequisite: ENGL 1113 English Composition I

**READING**

**READ 0123 CRITICAL CONTENT READING AND SCIENTIFIC REASONING**
This course consists primarily of reviewing and learning basic reading skills, then practicing and applying those skills to content area reading. This course meets the deficiency requirement for students who do not meet entrance requirements by either high school coursework or test scores.

**READ 1113 COLLEGE READING SKILLS & TECHNIQUES**
This course focuses on increasing reading rate, reading material in different content areas (textbooks, articles, research), and taking effective notes from reading material.

**RESPIRATORY CARE**

**RESP 1114 - INTRODUCTION TO RESPIRATORY CARE PROCEDURES**
This course will explore the usage and purpose of supportive treatments for patients with pulmonary diseases and disorders using the American Association of Respiratory Care (AARC) clinical practice guidelines and protocols. The fundamentals of respiratory care covered by this course will include but not be limited to: Patient Assessment, Safety, History of Respiratory Care, Leadership and Professionalism, and Moral and Legal aspects of Respiratory Care. This course also includes Cardiopulmonary Anatomy and Physiology. Prerequisite: Admission to RT Program.

**RESP 1121 CLINICAL APPLICATIONS 1**
This course provides introductory knowledge of the clinical setting and delivery of respiratory care, with an emphasis on the scope of therapeutic modalities delivered to patients. Included are medication nebulizers, oxygen therapy, IPPB, NPPV, chest physiotherapy, cardiopulmonary resuscitation and related life-saving maneuvers. Prerequisite: Admission to the Respiratory Care Program.

**RESP 1214 - RESPIRATORY THERAPY PROCEDURES II**
Respiratory Procedures II continues the training of students in the essential procedures which Respiratory Therapists perform in the clinical setting. Clinical Pharmacology is also included in this course; the basic concepts and principles in pharmacology, drugs used to treat the respiratory system, and critical care and cardiovascular drug classes. Prerequisites: RESP 1114 and Clinical Applications I

**RESP 1223 CLINICAL APPLICATIONS II**
Continuation of Clinical Applications I, increasing knowledge of the clinical setting and delivery of respiratory care, with an increased emphasis on the scope of therapy delivered. Included here are oxygen therapy, IPPB, chest physiotherapy, cardiopulmonary resuscitation and related life-saving maneuvers, airway management including the use of various artificial airways, arterial puncture, arterial blood gas interpretation, bronchial hygiene, electrocardiograms, pulmonary function testing and bedside pulmonary mechanics. Prerequisites: Clinical Applications I

**RESP 1312 PULMONARY PATHOLOGY**
This course is a comprehensive study of the etiology, diagnosis, pathogenesis, pathophysiology, treatment, and prognosis.
of various types of pulmonary pathologies. Prerequisites: RESP 114, RESP 1214 and Clinicals through Clinical Applications II

**RESP 1323 CLINICAL APPLICATIONS III**
Continuation of Clinical Applications II with increasing knowledge of the clinical setting and delivery of respiratory care with an increased emphasis on the scope of therapy delivered including oxygen therapy, IPPB, chest physiotherapy, cardiopulmonary resuscitation and related lifesaving maneuvers, and airway management including the use of various artificial airways. Prerequisites: Clinical Applications I and II

**RESP 2114 RT PROCEDURES III**
This course will teach the basics and parameters of Advanced Cardiac Life Support, Applied Anatomy and Physiology, Acute and Critical Care in accordance with the American Association of Respiratory Care guidelines and protocols. This course will also teach the basics and parameters of continuous mechanical ventilation, including special procedures. Students will learn acid-base physiology as it applies to ventilator changes. Laboratory applications will include proficiency in ventilator classification and functions and well as ventilator set-up and making ventilator setting changes in accordance with the American Association of Respiratory Care guidelines and protocols. Prerequisites: RESP 114, 1214, 1312 and Clinicals through Clinical Applications III

**RESP 2123 ADVANCED CLINICAL APPLICATIONS I**
This course is a continuation of the practical application of theories previously presented with emphasis on the care and management of the critically ill and mechanically ventilated respiratory patient. Rotations will include the intensive care unit and ER. Prerequisites: RESP 1121, 1123, and 1232

**RESP 2223 ADVANCED CLINICAL APPLICATIONS II**
This course is a continuation of the practical application of theories previously presented with emphasis on the care and management of the critically ill and mechanically ventilated respiratory patient and an introduction to pediatrics. Rotations will include the intensive care unit and ER, pediatric ICU.

**RESP 2233 ADVANCED CLINICAL APPLICATIONS III**
This course takes place in the Neonatal ICU focusing on Neonatal and Pediatric intensive care. Prerequisites: 1121, 1123, 1232,2123, and 2223

**RESP 2324 - RT PROCEDURES IV**
This course will build student understanding of Mechanical Ventilation, Advanced Cardiac Life Support, Applied Anatomy and Physiology, Acute and Critical Care in accordance with the American Association of Respiratory Care guidelines and protocols. Pediatrics and Neonatology are included in this course, principles and practices of Pediatric Advanced Life Support. This course includes NBRC Board Examination Review. Prerequisites: RESP 114, RESP 1214, RESP 1312, and Clinicals through Advanced Clinical Applications I

**SERVICE LEARNING**
Multi-disciplinary (i.e. ENGL 2450, HIST 2450, MATH 2450, etc.) course allowing students to earn one-hour additional credit for a course in which they complete a service learning project designed and approved by instructor to illustrate community engagement supporting subject area.

**SOCILOGY**

**SOCI 1113 PRINCIPLES OF SOCIOLOGY**
The dynamics of human society are explored in this survey course of sociology. Beginning with the classical theorists of sociology we construct a contemporary perspective of sociology that demonstrates the theories, research and work of sociologists. Issues such as culture, social interaction, socialization, stratification, multiculturalism, institutions, collective behavior and social change are viewed through the unique perspectives of sociology.

**SOCI 2013 MARRIAGE AND FAMILY**
The sociological relationship between marriage and family and other institutional structures and systems. The emphasis will be on contemporary American marriage and family, with cross-cultural comparisons. Male and female roles and relationships in mate selection, sexuality, marriage, divorce, and other intimate situations will be studied. Prerequisite: ENGL 1113 English Composition I or have instructor’s permission.

**SOCI 2223 SOCIAL PROBLEMS**

This course is the study of contemporary social problems using the sociological perspective. Using the major theories of sociology students will discuss cross-cultural descriptions, causes and varied solutions for problems such as poverty, gender, race, ethnicity, crime, violence, addictive behavior as well as institutional breakdown in American society. Prerequisite: ENGL 1113 English Composition I. Meets social science (S) and diversity (D) criteria in transfer to OSU’s SOC 2123 Social Problems.

**SOCI 2323 DIVERSITY AND INCLUSION IN 21ST CENTURY AMERICA**

This course presents historical context and examines how the United States has arrived at current categories of race, sex and gender, sexual orientation, social class and disability. Prerequisite: ENGL 1113 English Composition I.

**SOCI 2450 SUPERVISED STUDY SOCIOLOGY**

Independent study. Prerequisite: ENGL 1113 English Composition I.

**THEATRE**

**THTR 1213 BEGINNING ACTING**

An introduction to basic performance skills designed to develop the student actor’s imagination and perception through experience in improvisation, movement, voice and the dramatic monologue.

**THTR 1223 INTRODUCTION TO THEATRE**

An exploration of theatre as an art form, including history, philosophy and practices of theatre arts from Greece to present day. Included will be lectures and discussions of acting, directing, technical, audience and social influences on theatre. Designed to provide a basic understanding of theatre as an art form and to develop audience appreciation for theatre. (Meets requirement for humanities elective.)

**THTR 1243 STAGECRAFT I**

An introduction to technical aspects of the theatre arts including the design and construction of settings and properties, costumes and lighting.

**THTR 1262 STAGE MAKEUP**

An introduction to the art, technique and materials of makeup to create the impressions of character for the stage and theatrical productions.

**THTR 1990 MUSIC THEATRE SEMINAR**

Weekly Master Class environment designed to develop performance and auditioning skills. For Music Theatre majors.

**THTR 2020 THEATRE ACTIVITY PARTICIPATION**

Theatre credit for involvement in theatrical productions. Includes technicals, acting, and front of house for productions. May be repeated (four credit hours maximum). Prerequisite: Permission of instructor.

**THTR 2213 INTERMEDIATE ACTING**

A continuation of Beginning Acting. Students will add the element of scene study and focus will move to more advanced techniques of improvisation, movement and voice. Prerequisite: THTR 1213 Beginning Acting.

**THTR 2243 STAGECRAFT II**

A continuation of THTR 1243 Stagecraft I. Prerequisite: THTR 1243 Stagecraft I.

**THTR 2441 THEATRE DANCE I**

Practice and study of common dance movements used on stage when performing musical theatre. Study includes fundamentals of ballet and tap. Offered fall semester.
THTR 2491 THEATRE DANCE II
A continuation of elements learned in Theatre Dance I. Prerequisite: THTR 2441 Theatre Dance I.

THTR 2713 HISTORY OF THE THEATRE
Development of dramatic form, theatre architecture and production procedures from 500 B.C. to the present. Emphasis on the historical and cultural influences of the Western tradition. (Meets requirement for humanities elective.)

THTR 2813 HISTORY OF MUSICAL THEATRE
In this course students will study the events (both historical and cultural influences) that led to the development of the art form of Musical Theatre. Students will develop skills to better enjoy, critique and understand American musical theatre through a critical review of production elements and musical theatre practices from all eras. (Meets requirement for humanities electives)

THTR 2963 STAGE LIGHTING I
Stage lighting design, design of lighting instruments. Practical experience in lighting

THTR 2973 STAGE LIGHTING II
A continuation of Stage Lighting I. Prerequisite: THTR 2963 Stage Lighting I.

WIND
WIND 1113 SAFETY, HEALTH, AND WORK PRACTICE
Introduction to occupational safety, health and enviromental practices and associated equipment including: safety mindset and attitude; personal safety equipment; general safety policies and procedures; hazards communication; first aid and CPR; industrial hygiene; exposure monitoring; and enviromental compliance. This will give students an overview of various governmental regulations as appropriate to the Wind Industry.

WIND 1313 INTRODUCTION TO WIND ENERGY
This course is designed to familiarize the student with the evolution of wind technology, wind energy anatomy, wind farm design, and characteristics of energy sources. This course include tower rescue training/ climb test and first aid/CPR certification.

WIND 2313 WIND TURBINE MATERIALS AND ELECTRO-MECHANICAL EQUIPMENT
Identification and analysis of the components and systems of a wind turbine. Prerequisite: WIND 1313.

WIND 2413 WIND POWER DELIVERY SYSTEM
In-depth study of the components of the input and output electrical power delivery systems for wind generation. Prerequisite: ET 1243.

WIND 2323 WIND BUSINESS
Topics in business as they apply specifically to the wind energy industry.

WIND 2423 TURBINE TROUBLESHOOTING AND REPAIR
Practice of installation, operation, maintenance, troubleshooting and repair of wind turbine electro-mechanical systems.

WIND 2321 WIND ENERGY CAPSTONE
The Wind Energy Capstone course is designed to assist students in the transition from college to their career in wind energy. To be effective in a career and in life depends on preparation, attitude, hard work, personal qualities, and the right strategies. This course focuses on practical tips and strategies that will help students succeed in the wind energy work environment. Emphasis will be on time management/organizational skills; resume development posting; interview, communication, and presentation skills; first impression management; and etiquette.