

# Course Descriptions

## ACCOUNTING

### ACCT 1602 General Accounting 3 Credit Hours

General Accounting includes the theory and practice associated with double-entry accounting. Special emphasis is placed on the accounting cycle, accounting for control of cash, the voucher system, and payroll accounting. (General Accounting cannot be substituted for Accounting I.)

### ACCT 1611 Microcomputer Account Appl 3 Credit Hours

This course emphasizes the use of the microcomputer for special journals, subsidiary journals, accounting for the control of cash, and payroll accounting. A review of accounting theory and mechanics is included.

**Prerequisite:** BSTC 1036 Computer Concepts & Appl with a grade of C or better AND ACCT 1602 General Accounting with a grade of C or better  
Classes use Quickbooks

### ACCT 1614 Accounting I 3 Credit Hours

This course emphasizes the fundamental principles and practices involved in financial accounting. Basic accounting procedures for the single proprietorship type of business must be mastered in this course.

**Prerequisite:** ACCT 1602 General Accounting with a grade of C or better or one year high school accounting.

### ACCT 1616 Accounting II 3 Credit Hours

Accounting II is a continuation of the first principles course in financial accounting, Accounting I. Basic procedures in the financial accounting and statement analyses of partnerships and corporations are emphasized.

**Prerequisite:** ACCT 1614 Accounting I with a grade of C or better

### ACCT 1618 Managerial Accounting 3 Credit Hours

This course emphasizes the managerial uses of accounting information, including performance measurement, cost control, planning for the future, and analysis of fund flows.

**Prerequisite:** ACCT 1616 Accounting II with a grade of C or better or concurrent enrollment in ACCT 1616 Accounting II

### ACCT 1625 Technical Accounting Capstone 1 to 3 Credit Hours

This capstone course will review the accounting cycle and require the student to apply all previously learned concepts in accounting, payroll and the use of the computer as it relates to accounting. It will also emphasize strategies for seeking, obtaining and retaining employment including attitudes, work ethics, teamwork, client service skills, resumes and job interviewing skills.

**Prerequisite:** ACCT 1614 Accounting I with a grade of C or better AND ACCT 1616 Accounting II with a grade of C or better

### ACCT 1640 Accounting-Business Operations 3 Credit Hours

This course will introduce the student to investing decisions faced by managers. These decisions will be presented within a framework of planning, performing, and evaluating activities. The course will be taught from the perspective of the decision-maker as a user of accounting information.

### ACCT 1641 Accounting-Invest & Financing 3 Credit Hours

This course will introduce the student to operating decisions and financial decisions faced by managers. These decisions will be presented within a framework of planning, performing, and evaluating activities. The course will be taught from the perspective of the decision-maker as a user of accounting information.

**Prerequisite:** ACCT 1640 Accounting-Business Operations with a grade of C or better

## ADULT HEALTH CARE

### ADHC 1987 Med, Ther, & Supportive Serv 1 Credit Hours

This course is designed to provide the student with a review of basic knowledge of medications and their safe administration. It covers the effects of medications on body systems, specifically in the elderly population, as well as explores new medications. This course fulfills the state requirement of 10 continuing education hours for the CMA.

**Prerequisite:** Student must be a Certified Medication Aide.

## AGRICULTURE

### AGRI 1100 Agriculture in our Society 3 Credit Hours

An overview of the interaction of the agricultural industry with society at large for students pursuing an agricultural field of study. This course provides back ground information and resources regarding the historical, political, economic, social, production, environmental, and international issues affecting the agricultural industry and food supplies.

**Fulfills:** Social Science Requirement

### AGRI 1105 Crop Protection 3 Credit Hours

This course is designed for students needing an understanding of the principles and practices related to the management of weeds, diseases, and insects in crop protection. This course emphasizes IPM (Integrated Pest Management) as the foundation of pest management. Special emphasis is placed upon preparing students to pass the Kansas Commercial Applicator's License for pest control.

### AGRI 1106 Principles of Animal Science 3 Credit Hours

This course introduces students to animal science, providing a foundation for further learning in animal agriculture, and stimulates interest in pursuing additional courses and experiences in the animal sciences. Students majoring in animal science are provided basic principles and concepts preparing them for more specialized and advanced courses. This course is the prerequisite for all other animal science courses. Nonmajors will receive information allowing them to understand animal agriculture and its role in our society and economy.

### AGRI 1108 Farm Crop Production 3 Credit Hours

A study of traditional and nontraditional farm crops in Kansas including resources and techniques used to produce these crops using BMPs (Best Management Practices). This course emphasizes mitigating agricultural and economic risk.

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## **AGRI 1110 Fundamentals Animal Nutrition 3 Credit Hours**

This course builds on the foundation provided in AGRI 1106, Principles of Animal Science. Fundamentals of Animal Nutrition is designed to create a basic understanding of animal nutrition, including nutrient digestion and metabolism, feedstuff characteristics, and principles for formulating nutritionally balanced diets.

**Prerequisite:** AGRI 1106 Principles of Animal Science with a grade of D or better or consent of instructor.

## **AGRI 1114 Plant Science 5 Credit Hours**

This course is an overview of the morphology, physiology, ecology, and propagation of flowering plants with emphasis on the production of crop plants.

**Fulfills:** Laboratory Course, Natural Science Requirement

## **AGRI 1115 Introduction to Soils/Lab 5 Credit Hours**

This course is an overview of the physical, chemical, and biological processes involved in the formation, classification, distribution, behavior, and management, and ecology of soils.

**Prerequisite:** A course in general college chemistry or consent of instructor.

## **AGRI 1116 Prin of Agriculture Economics 3 Credit Hours**

A study of economic principles with emphasis on their application to the agricultural industry and the relationship of the US and global economies to agriculture.

**Fulfills:** Social Science Requirement

## **AGRI 1120 Range and Forage Management 3 Credit Hours**

This course is designed to provide students with a basic understanding of the ecology and sustainable use of permanent native and introduced pastures in livestock production and the types of annual forages, best management practices, and their uses in livestock production.

**Prerequisite:** or consent of instructor.

## **AGRI 1123 Beef Cattle Production 3 Credit Hours**

This course introduces students to beef cattle production, including the beef cow herd, stocker/backgrounder operations and feedlot enterprises. Studies include understanding the biological and economic principles to sustain profitable beef cattle systems, applying these principles to permit effective decision making. Class discussion will promote understanding, communication, and cooperation among all segments of the beef industry.

**Prerequisite:** AGRI 1106 Principles of Animal Science with a grade of D or better or consent of instructor.

## **AGRI 1125 Fertilizer Management 3 Credit Hours**

This course is an overview of essential plant nutrients of crop production, their functions in plants, sources of these nutrients, environmental considerations, and the rules and regulations regarding their proper environmental and economic use.

## **AGRI 1128 Horse Science 3 Credit Hours**

This course introduces students to the husbandry and management techniques necessary to care for the horse; whether a performance, working, or pleasure animal. Studies focus on the responsibilities and techniques necessary for every day care, managing reproduction, and reviewing the diseases, wounds, and unsoundness common for the horse. Other facets covered include equitation, nutrition, and preventative medicine required for the horse. Studies are designed to promote decision making processes necessary for good horsemanship, satisfying ownership, and successful husbandry.

**Prerequisite:** AGRI 1106 Principles of Animal Science with a grade of C or better

## **AGRI 1139 Concepts for Agriculture 3 Credit Hours**

This course will introduce students to an overview of the language, terms, mathematics, and scientific concepts commonly used in production agriculture and related industries.

## **AGRI 1150 Economic Entomology 4 Credit Hours**

This course is designed to provide students working towards a career in crop or livestock production the overall background in insect biology, pest control, and economic pest management to identify pest management strategies that are economically and environmentally sustainable.

## **AGRI 1155 Agriculture Orientation 2 Credit Hours**

This course provides an overview of the many careers pathways available within the agriculture industry; identifies the training, education and skills required for these careers, and assists students in developing a plan to address weaknesses and further develop strengths.

## **AGRI 1181 Occupational Work Experience I 1 to 4 Credit Hours**

A minimum of 100 clock hours for each credit hour per semester at selected work stations under the supervision of a coordinator is required for the course. Students will be required to fill out a report of their job experiences and hours worked.

**Prerequisite:** Enrollment by consent of instructor.

## **AGRI 1212 Commerical Drivers License 3 Credit Hours**

This course provides information and techniques necessary to successfully acquire a Commercial Driver's License. The student will be taught and required to demonstrate the skills essential for proficiency while operating a commercial motor vehicle. Students will understand changing conditions, demands, traffic situations, and hazards that are essential in the professional driver's job. Students successfully completing this course will receive a Barton certificate of completion.

## **AGRI 1213 Intro to GPS/Precision Agri 3 Credit Hours**

This course is designed to provide students a basic understanding of the principles equipment, and applications of global positioning systems (GPS) and precision agriculture technologies currently used and under development for crop production.

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## **AGRI 1214 CDL Behind the Wheel** **2 Credit Hours**

This course provides information and techniques necessary to successfully meet the Federal Motor Carrier Safety Administration Behind the Wheel (BTW) curriculum and acquirement of a Commercial Driver's License. The student will be taught and required to demonstrate the skills essential for proficiency while operating a commercial motor vehicle (CMV). Students will understand changing conditions, demands, traffic situations, and hazards that are essential in the professional driver's job. Students successfully completing this course will receive a Barton certificate of completion.

## **AGRI 1216 Farm Machinery and Technology** **3 Credit Hours**

This course is designed to create basic competencies in operating beef cattle production equipment, including computer technology. Classroom work and field trips will increase student awareness and understanding of the function, operation, and maintenance of equipment used in the beef cattle industry. Equipment covered includes front-end loaders, skid steers, feed trucks, feed mills, and cattle handling equipment. Special emphasis is placed on safe equipment use and includes a thorough review of the Occupational Safety and Health Administration's (OSHA) regulations for the beef cattle industry. As computer technology is a major component of the beef cattle production, emphasis is placed on computer related technologies and their role in the industry.

## **AGRI 1217 CDL Theory** **3 Credit Hours**

This course provides information necessary to meet Federal Motor Carrier Safety Regulations (FMCSA) for Theory Entry Level Driver Training. Students will understand the components needed for driver/commercial motor vehicle (CMV) interaction, practices required for safe operation of a CMV, and introduces students to high level skills necessary to recognize and handle potential hazards. This course is a pre-requisite for Commercial Driver's License – Behind The Wheel (BTW). Students successfully completing this course will receive a Barton certificate of completion.

## **AGRI 1218 Beef Cattle Operations** **3 Credit Hours**

This course introduces students to the management and regulatory factors affecting decisions made in a beef cattle enterprise. They will understand state and federal governmental agencies' role in the beef industry, the importance of Beef Quality Assurance programs, and the application of the Hazard Analysis and Critical Control Point system. The student will also be able to describe animal husbandry techniques important to beef production. Emphasis is placed on the safety and welfare of the general public, the people working on a beef enterprise, and the beef cow herd.

## **ANTHROPOLOGY**

## **ANTH 1816 Cultural Anthropology** **3 Credit Hours**

A survey of culture and its importance for man and his society, viewed through both past and present.

**Fulfills:** Social Science Requirement

## **ANTH 1823 Linguistic Anthropology** **3 Credit Hours**

This course investigates the relationship of human language to the development of world cultures.

**Fulfills:** Social Science Requirement

## **ARTS**

## **ARTS 1200 Art Appreciation** **3 Credit Hours**

This course is an introduction to art appreciation intended to provide a foundation in the basic concepts, materials and processes of the visual arts, as well as a brief history of art in Western and non Western societies. Through analysis of examples drawn from the past and the present, it assists the student in recognizing the universal qualities in human aesthetic response and the special differences that define every culture.

**Fulfills:** Humanities Requirement

## **ARTS 1201 Art History Survey I** **3 Credit Hours**

This course is an introduction to the first half of art history. It consists of a study of the art produced from prehistoric times through the Gothic period. The course will study the evolution of architecture, sculpture, painting, and the crafts. Patron, techniques, values, concepts, philosophies, and materials used by artists will be studied. Major movements, themes, artworks, and artists will be studied as well as how the art is a reflection of the society that produced it. This course will include the art and cultures of both Western and non-Western societies.

**Fulfills:** Humanities Requirement

## **ARTS 1202 Design I** **3 Credit Hours**

This course is an introduction of two-dimensional composition through the study of the elements and principles of design. A variety of projects are assigned to explore each concept studied. Design is the use of the art elements arranged according to the principles. These basic concepts are fundamental to the development of artistic expression and interpretation. This course is a foundation on which other studio courses will build.

**Fulfills:** Humanities Requirement, Studio Course (AA up to 3 hrs)

## **ARTS 1203 Art History Survey II** **3 Credit Hours**

This course is an introduction of the second half of art produced from the late Gothic and early Renaissance period through the Modern Age. The course will study the evolution of architecture, sculpture, painting, and the crafts in the context of the societies in which they were created. Patrons, techniques, values, concepts, philosophies, and materials used by artists will be studied. Major movements, works of art and artists will be studied. This course will include the art and cultures of both Western and non-Western societies.

**Fulfills:** Humanities Requirement

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## **ARTS 1205 Graphic Design 3 Credit Hours**

An introductory course to visual intelligence and graphic design problem solving. This course will emphasize a grasping of the fundamental techniques, concepts, and principles of visual communication.

**Fulfills:** Humanities Requirement, Studio Course (AA up to 3 hrs)

**Prerequisite:** ARTS 1202 Design I or ARTS 1214 Drawing I or consent of instructor.

## **ARTS 1206 Directed Independent Study/Art 1 to 3 Credit Hours**

This course is designed for those individuals who have taken all or most all of the art courses and wish to continue their advancement in a particular area. The student will explore in depth specific media, subject matter, and techniques agreed upon with the instructor. The student will develop a higher level of ability to achieve visual communication with forms.

**Fulfills:** Humanities Requirement, Studio Course (AA up to 3 hrs)

**Prerequisite:** Enrollment by consent of instructor

## **ARTS 1209 Watercolor Painting I 3 Credit Hours**

Further exploration into the technique of painting in various water-soluble media, with attention being placed on the development of personal skills and techniques. The course will also be concerned with a study of some of the experimental techniques that can be used to produce a watercolor painting.

**Fulfills:** Humanities Requirement, Studio Course (AA up to 3 hrs)

## **ARTS 1210 Painting I 3 Credit Hours**

An introduction to the techniques of painting in either oil or acrylic. Painting problems in the nature of still life, landscape, or abstraction will be used to aid in the development of each student's expressive ability. The course will include a study of the technical processes of the media, a study of composition and instruction on framing and display of the work. Students are encouraged to work in their own chosen style because this course focuses on personal development.

**Fulfills:** Humanities Requirement, Studio Course (AA up to 3 hrs)

## **ARTS 1211 Watercolor Painting II 3 Credit Hours**

Further exploration into the technique of painting in various water-soluble media, with attention being placed on the development of personal skills and techniques. The course will also be concerned with a study of some of the experimental techniques which can be used to produce a watercolor painting.

**Fulfills:** Humanities Requirement, Studio Course (AA up to 3 hrs)

**Prerequisite:** ARTS 1209 Watercolor Painting I

## **ARTS 1212 Painting II 3 Credit Hours**

The continued development of the processes and techniques of painting in either oil or acrylic. This course will deal with painting problems set up during a conference with the instructor. Emphasis will be placed on the advancement of expressive skills and development of an individual style.

**Fulfills:** Humanities Requirement, Studio Course (AA up to 3 hrs)

**Prerequisite:** ARTS 1210 Painting I

## **ARTS 1214 Drawing I 3 Credit Hours**

An introduction to basic freehand drawing. Emphasis will be placed on object representation through descriptive and expressive means. The control of line, value, and spatial illusions will be worked on with a variety of media. The course will emphasize coordination of the eye and hand.

**Fulfills:** Humanities Requirement, Studio Course (AA up to 3 hrs)

## **ARTS 1216 Drawing II 3 Credit Hours**

Further exploration of basic drawing through a study of form and space in a variety of drawing media and subjects.

**Fulfills:** Humanities Requirement, Studio Course (AA up to 3 hrs)

**Prerequisite:** ARTS 1214 Drawing I

## **ARTS 1217 Painting Seminar 1 to 3 Credit Hours**

An advanced painting course concerned with a continued development of processes and techniques based on design fundamentals in painting. An in depth study of a particular technique and artist will be incorporated into the course. Emphasis will be placed on personal interpretation, creativity and development of an individual style.

**Fulfills:** Humanities Requirement, Studio Course (AA up to 3 hrs)

**Prerequisite:** ARTS 1212 Painting II AND ARTS 1210 Painting I

## **ARTS 1222 Ceramics I 3 Credit Hours**

This course is an introduction to the basic knowledge of clay and clay processes as applied in art/craft forms. Students will learn forming methods of pinch, coil, slab, and wheel construction. The nature and origin of clay will be studied. Surface decoration and glazing will be studied. Emphasis is on technology, terminology and clay as an expressive art material.

**Fulfills:** Humanities Requirement, Studio Course (AA up to 3 hrs)

## **ARTS 1223 Introduction to Ceramics 1 Credit Hours**

Introduction to ceramics will familiarize the student with how a ceramic studio functions. Emphasis will be placed on learning about safety in the studio, ceramic materials and ceramic techniques. This introductory course includes how to process clay from its wet stage to its final firing in a kiln. The class will include demonstrations, lectures and hands on projects.

**Fulfills:** Humanities Requirement, Studio Course (AA up to 3 hrs)

## **ARTS 1224 Ceramics II 3 Credit Hours**

An introduction to using the potter's wheel and further development of hand building techniques in clay. The emphasis is on clay as an expensive art material. Glaze formulation and firing procedures are studied. By expanding the knowledge of material and techniques, the student will explore how to give form to their imagination through clay.

**Fulfills:** Humanities Requirement, Studio Course (AA up to 3 hrs)

**Prerequisite:** ARTS 1222 Ceramics I



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## **ARTS 1225 Ceramics Seminar-Potters Wheel 3 Credit Hours**

An introduction to throwing various utilitarian forms on the potter's wheel. The development of personal skills and techniques using clay and the potter's wheel will be stressed.

**Fulfills:** Humanities Requirement, Studio Course (AA up to 3 hrs)

**Prerequisite:** Enrollment by consent of instructor

## **ARTS 1232 Individual Art Projects 1 to 3 Credit Hours**

This course is designed for those individuals who have taken all or most of the art courses and wish to continue their advancement in a particular area. The student will explore in-depth specific media, subject matter, and techniques agreed upon with the instructor. The student will develop a higher level of ability to achieve visual communication with the forms.

**RESTRICTION:** Consent of Instructor.

**Fulfills:** Humanities Requirement, Studio Course (AA up to 3 hrs)

**Prerequisite:** Enrollment by consent of instructor

## **ARTS 1234 Photography I 3 Credit Hours**

To provide the basic skills in the technical processes of black and white photography. The course will cover film loading, picture taking, developing, printing, and mounting of the photograph. Photograph composition and the use of the photograph, as an art form will be studied.

**Fulfills:** Humanities Requirement, Studio Course (AA up to 3 hrs)

## **ARTS 1235 Photography II 3 Credit Hours**

A studio/discussion course in documentary and special effect photography. The course will involve short and long term projects (photo essays) dealing with nature and society, special effects, darkroom, digital manipulation, and processing procedures.

**Fulfills:** Humanities Requirement, Studio Course (AA up to 3 hrs)

**Prerequisite:** ARTS 1234 Photography I

## **ARTS 1237 Elementary School Art 3 Credit Hours**

This course is a study of concepts, materials, and techniques in art appropriate for teaching in the elementary grades. The prospective teacher will study children's artistic development, learn to formulate art lesson plans, observe art instruction, and complete projects utilizing school art materials.

## **ARTS 1245 Computer Graphics 3 Credit Hours**

This computer art and design course is designed to introduce students to the basics of computer technology and how designers and artists use this tool to solve visual problems in graphic design and studio art. Emphasis will be placed on individual expression and acquiring skills to effectively communicate with the use of a computer. Students will be introduced to the fundamentals of computer graphics through lecture, presentations, discussion and hands-on experiences.

**Fulfills:** Humanities Requirement, Studio Course (AA up to 3 hrs)

**Prerequisite:** ARTS 1202 Design I with a grade of D or better or ARTS 1205 Graphic Design with a grade of D or better

## **ARTS 1246 Digital Photography I 3 Credit Hours**

This course covers the visual and technical aspects of digital photography. Students will learn about exposure, depth of field, resolution, white balance settings, file compression, formats, composition, and design. They will also learn about digital image acquisition, manipulation, storage, display, and the ethics of the digital image process.

## **ARTS 1251 Textile and Fibers 3 Credit Hours**

This is a basic course in textile and fibers which includes familiarization with tools and methods of weaving, macrame, knitting, crochet, surface design and dyeing. This course is not restricted to art majors.

**Fulfills:** Studio Course (AA up to 3 hrs)

## **ARTS 1280 Arts Capstone 1 Credit Hours**

This course is a capstone course for the Art Program. Students who have declared an art emphasis will participate in this course before their graduation from Barton Community College. The student will develop skills and knowledge to design and prepare a portfolio. College admissions, scholarship applications, pursuing employment opportunities and or entry into juried exhibitions will require a portfolio. The student will prepare career material that will include the portfolio as well as a resume and business card.

## **AUTOMOTIVE**

### **AUTO 1024 Auto Body Repair I 3 Credit Hours**

This course is a study of the basic fundamentals and theory of auto body repair and repainting. The primary purpose is to acquaint the student with the proper repair techniques on modern automotive body work.

### **AUTO 1026 Auto Body Repair II 3 Credit Hours**

This course is designed as a continuation of 1024 with emphasis on major body repair, frame straightening, and painting.

**Prerequisite:** AUTO 1024 Auto Body Repair I or POWR 1024

### **AUTO 1036 Auto Body Repair III 3 Credit Hours**

This course is designed to further develop those competencies, which were begun in the prerequisite courses. At the successful completion of this course, students will be able to perform those tasks with little, if any, supervision.

**Prerequisite:** AUTO 1026 Auto Body Repair II or POWR 1026

### **AUTO 1060 Occupational Internship I 1 to 6 Credit Hours**

This course is designed to provide the student with practical work experience and on-the-job training within his or her chosen career field. Students will engage in experiences to enhance the development of their professional automotive career.

### **AUTO 1100 Intro to Automotive Technology 3 Credit Hours**

In this course students will explore and become acquainted with safety and environmental concerns, tools/equipment, electronic service information, workplace skills and career opportunities specific to the automotive repair industry.

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## **AUTO 1102 Brakes I**

**3 Credit Hours**

In this course students explore theory and perform analysis/ service to the brake hydraulic, disc, drum and parking brake system of the automobile.

## **AUTO 1104 Brakes II**

**3 Credit Hours**

In this course students will expand their knowledge and application of maintenance and service of hydraulic, disc, drum, and mechanical parking brake systems. While expanding their knowledge of learning and application of regenerative brake systems, ABS components and operation, ABS Diagnosis and Service, and Electronic Stability Control Systems.

## **AUTO 1106 Steering & Suspension I**

**3 Credit Hours**

In this course students will explore suspension and steering theory. They will learn how to properly inspect steering and suspension components and perform light duty repairs and/or recommend more complicated service procedures.

## **AUTO 1107 Steering and Suspension II**

**2 Credit Hours**

In this course students will explore suspension and steering theory, and perform maintenance and service of suspension and steering systems.

## **AUTO 1108 Engine Repair I**

**3 Credit Hours**

In this course students explore theory and perform analysis/ service of engine systems of the automobile.

## **AUTO 1110 Engine Repair II**

**3 Credit Hours**

In this course students explore theory and perform analysis/service to engine systems of the automobile.

**Prerequisite:** AUTO 1108 Engine Repair I with a grade of D or better

## **AUTO 1112 Electrical I**

**3 Credit Hours**

In this course students will explore basic electrical theory; interpret electrical measurements, and perform basic electrical wire and terminal repair.

## **AUTO 1114 Electrical II**

**3 Credit Hours**

In this course students will explore theory and perform analysis/repair of the battery, starting, charging, lighting and accessory systems of the automobile.

**Prerequisite:** AUTO 1112 Electrical I

## **AUTO 1116 Electrical III**

**4 Credit Hours**

Electrical III is a capstone course designed to build upon students' cumulative knowledge of automotive electrical/ electronic systems. Students will perform analysis and repair of electrical systems in a live-shop environment.

**Prerequisite:** AUTO 1114 Electrical II

## **AUTO 1118 Automotive Air Conditioning**

**4 Credit Hours**

In this course students explore theory and perform analysis/service to the automotive heating and air conditioning systems of the automobile.

## **AUTO 1120 Engine Performance I**

**3 Credit Hours**

In this course students will explore engine theory and perform maintenance and service of engine mechanical, electrical, fuel, and ignition systems.

## **AUTO 1122 Engine Performance II**

**3 Credit Hours**

In this course students will explore theory, evaluate performance, and service the emission control system of the automobile.

**Prerequisite:** AUTO 1120 Engine Performance I

## **AUTO 1124 Engine Performance III**

**4 Credit Hours**

Engine Performance III is a capstone course designed to build upon students' cumulative knowledge of engine mechanical, powertrain management and emission control systems. Students will evaluate test results and perform engine performance related repairs in a live-shop environment.

**Prerequisite:** AUTO 1122 Engine Performance II

## **AUTO 1126 Manual Transmissions**

**3 Credit Hours**

In this course students explore theory and perform analysis/ service of manual transmissions and drive train systems of the automobile.

## **AUTO 1128 Automatic Transmissions**

**5 Credit Hours**

In this course students explore theory and perform analysis/ service of Automatic Transmissions and Transaxle systems of the automobile.

## **AUTO 1130 Services Techniques I**

**3 Credit Hours**

Service Techniques I is a performance based course designed to provide practical work experience for first year automotive students. Projects that reinforce first semester coursework will receive highest consideration. Students who enroll in this course must provide their own tools.

**Prerequisite:** Minimal hand-tool requirement for students enrolled in Service Techniques: Sears 320 piece tool set or equivalent. Students who do not have minimal tool requirement are not eligible to enroll.

## **AUTO 1132 Services Techniques II**

**3 Credit Hours**

Service Techniques II is a performance based course designed to provide practical work experience for students entering their second year of automotive training. Projects that reinforce current semester coursework will receive the highest consideration. Students who enroll in this course must provide their own tools.

**Prerequisite:** Minimal hand-tool requirement for students enrolled in Service Techniques: Sears 320 piece tool set or equivalent. Students who do not have minimal tool requirement are not eligible to enroll.

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## **AUTO 1134 Services Techniques III** 3 Credit Hours

Service Techniques III is a performance based cap-stone course designed to provide practical work experience for second year students near the completion of their automotive training. Projects that best prepare students for employment will receive highest consideration. Students who enroll in this course must provide their own tools and participate in certain job shadow activities.

**Prerequisite:** Minimal hand-tool requirement for students enrolled in Service Techniques: Sears 320 piece tool set or equivalent. Students who do not have minimal tool requirement are not eligible to enroll.

## **AUTO 1140 Hybrid & Electric Powertrains** 1 Credit Hours

This course provides students the opportunity to examine AC/ DC high voltage systems utilized in hybrid and electric automobiles. Students will identify HV components, employ recognized safety precautions, and practice maintenance/ diagnostic procedures associated with hybrid and electric automobiles.

## **BUSINESS**

### **BUSI 1600 Introduction to Business** 3 Credit Hours

This course includes a survey of the field of business organization and management and the scope, the nature, and the involvement of the problems of business.

### **BUSI 1602 Introduction to Leadership** 1 to 3 Credit Hours

This course emphasizes the research findings about leadership, the practices of leaders, and skill development. This course is designed to fit with courses in management development that emphasizes the leadership function of management. The student will acquire a feel for how leadership is practiced and gain insights and information to enhance his/her leadership skills.

### **BUSI 1603 Introduction to Finance** 3 Credit Hours

This course provides an overview of major financial concepts in three major fields of finance; institutions, investments, financial management, and an integrated perspective on the interrelationships among them.

### **BUSI 1604 Small Business Management** 1 to 3 Credit Hours

This course stresses the opportunities in business ownership and principles governing the starting of small enterprise; importance, status problems, and management of small business.

### **BUSI 1607 Business Ethics** 3 Credit Hours

Business Ethics provides a practical approach to study moral and ethical issues which relate to problems in business. Although business ethics change daily, classic ethical principles remain constant. This class will study contemporary business topics with the reader in the decision maker's seat with thought-provoking cases and discussion questions.

### **BUSI 1608 Business Law I** 3 Credit Hours

This course deals with legal aspects of business as expressed through contracts, agency, negotiable instruments, and sales.

### **BUSI 1609 Business Statistics** 0 or 3 Credit Hours

An introduction to the basic concepts of statistics related to business and economics including elementary descriptive statistics, probability, various distributions, confidence intervals, sampling methods, hypothesis testing, and correlation and regression.

**Prerequisite:** MATH 1828 College Algebra with a grade of C or better OR MATH 1826 Intermediate & College Algebra with a grade of C or better OR appropriate placement score.

### **BUSI 1610 Business Statistics Lab** 0 to 1 Credit Hours

Computer lab focusing on applying statistical software to data analysis and decision making. Using Microsoft Excel software, hands-on applications include, but are not limited to, frequency distribution charts, histograms, descriptive statistics, linear regression, binomial probability, confidence intervals, and hypotheses testing.

**Prerequisite:** concurrent enrollment in BUSI 1609 Business Statistics or BUSI 1609 Business Statistics or STAT 1829 Elements of Statistics

### **BUSI 1647 Money & Banking** 3 Credit Hours

This course stresses the practical aspects of money and banking and emphasizes the basic monetary theory needed by banking students to apply knowledge acquired on the job. Emphasis is also placed on such problems as economic stabilization, types of spending, the role of gold, limitations of central bank control, government fiscal policy, balance of payments, and foreign exchange, showing their repercussions on the banking industry in affecting yield curves and the structuring of portfolios.

### **BUSI 1702 Supervisory Development** 3 Credit Hours

This course provides a practical approach to acquiring the skills needed by a supervisor. The course is designed to enhance the human relations skills in the managerial area and recognize the multifaceted roles of a supervisory position.

### **BUSI 1800 Business Communications** 3 Credit Hours

This course is designed to present the principles and develop the techniques of writing business correspondence and other forms of business communications. The use of correct business vocabulary will be stressed as it applies to written business communications.

**Prerequisite:** Keyboarding proficiency.

### **BUSI 1802 Payroll Procedures** 1 to 4 Credit Hours

This course is designed to acquaint the student with payroll procedures, including time records, methods of computing earnings, and the preparation of payroll records and federal reports.

### **BUSI 1803 Principles of Management** 1 to 3 Credit Hours

A course in management principles and functions that will allow students to learn and assess management skills that are needed in today's society and business. The management theory is studied in the grouping of the basic management functions: planning, organizing, leading and controlling. Additional elements including human relations, leadership, and ethics are also essential management skills.

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## **BUSI 1804 Human Relations in Business 3 Credit Hours**

Human Relations in Business is a course that emphasizes the importance of human relations as it applies to work within an organization as well as to everyday life. This course will prepare the student to function within diverse groups of people. It focuses on problem solving, group dynamics, teamwork, communication, leadership styles, and business etiquette. The impact of technology on human relations will also be discussed.

## **BUSI 1805 Marketing 3 Credit Hours**

This course is designed to introduce the student to the nature and operation of the market structure. Topics covered will include marketing research, new product introduction, marketing institutions and pricing, and marketing legislation.

## **BUSI 1806 Advertising 1 to 3 Credit Hours**

This course is a survey of advertising fundamentals introducing copywriting, layout, market research, and ad placement. The emphasis will be on print and electronic media but other advertising medium will be covered.

## **BUSI 1807 Customer Service 1 to 3 Credit Hours**

This course will focus on the needs and requirements of internal and external customers, the enhancement of customer relationships, the significance of market research with respect to customers, the design and redesign of customer service strategies, and differentiate between internal and external customers in a service and manufacturing organization.

## **BUSI 1814 Entrepreneurship I 3 Credit Hours**

Entrepreneurship I is a continuation of the Introduction to Entrepreneurship course and will build on the knowledge and skills gained in the pre-requisite course. The course will include skills and strategies in opportunity recognition, market assessment, social need, feasibility plans, structure, costs and sustainability. Course curriculum conforms to National Business Education Association (NBEA) and Ewing Marion Kauffman Foundation 2007 Standards.

**Prerequisite:** BUSI 1815 Intro to Entrepreneurship with a grade of C or better

## **BUSI 1815 Intro to Entrepreneurship 3 Credit Hours**

This course is designed to introduce the prospective business owner to the role of entrepreneurial businesses in the United States and the impact on the global economy. The student will evaluate the skills and commitment necessary to successfully operate a business along with the rewards and penalties. The course will include skills and strategies in opportunity recognition, market assessment, social need, feasibility plans, structure, costs & sustainability. Course curriculum conforms to National Business Education Association (NBEA) and Ewing Marion Kauffman Foundation 2007 Standards.

## **BUSI 1824 Introduction to Investments 3 Credit Hours**

This class provides a comprehensive approach to investments. Concepts build on one another providing a strong overview of today's most pertinent investment opportunities and challenges. The class will include securities markets and the investment environment; return risk and modern portfolio concepts; stocks, bonds and valuation techniques; mutual funds and portfolio management.

## **BUSINESS TECHNOLOGY**

## **BSTC 1001 Introduction to Computers 1 to 3 Credit Hours**

This is a computer literacy course designed to introduce students to what a computer is and how computers can be used. Topics covered include a brief historical survey of computers, components of computer hardware, applications and systems software, survey of programming languages, computer systems design and analysis, problem solving capabilities of a computer and the impact of computer technology on society. Students will also gain experience using microcomputers and packaged software such as word processing, spreadsheets, database management, graphics, and telecommunications.

## **BSTC 1023 Database Management Systems 1 to 3 Credit Hours**

This course introduces the theory of databases and Database Management Systems (DBMS) and implements a database using DBMS software. Database design methodology is discussed. A DBMS is used to create a database and generate solutions to implement a business application. Students create tables, forms, filters, queries, reports, and macros. Various types of data are imported and exported. Database security issues are examined.

**Prerequisite:** BSTC 1036 Computer Concepts & Appl with a grade of C or better

## **BSTC 1036 Computer Concepts & Appl 3 Credit Hours**

This course is an introduction to computer concepts in which focuses on concepts including hardware, operating systems, ethics and security; and applies hands-on interaction with software applications including word processing, spreadsheets, presentations, and database systems. On completion of this course, students will understand common computer terminology, utilize featured application software, and recognize relevant ethics and security issues associated with technology.

**Fulfills:** Computer Literacy Requirement, Foundation Course AA, AS, AGS, AAS

## **BSTC 1643 Human Resource Management 1 to 3 Credit Hours**

Human Resource Management focuses on human resource analysis, planning and staffing, performance evaluation and compensation, training and development of labor relations that co-exist between employers and employees.



# Course Descriptions

## **BSTC 1685 Spreadsheet Applications**

**3 Credit Hours**

A course emphasizing the use of spreadsheet applications software to solve business problems such as budgeting, accounting, forecasting, and scheduling. Included will be applications using formulas, editing, copying, sorting, recalculating, designing and using templates, generating graphs, and macros features. Planning techniques and potential uses of spreadsheets in business and industry will be discussed.

**Prerequisite:** BSTC 1036 Computer Concepts & Appl

## **BSTC 1699 Management Information Systems**

**3 Credit Hours**

This course will introduce the student to information systems, related technologies and the concepts, principles and processes in which information management is completed. Managing information systems will include knowledge of both business and technology and the relationship they share to improve an organizations' efficiency, productivity, communication, and allocation of financial resources. The emphasis of information management will include: Information concepts, Business strategy and integration of technology, Hardware/Software, Telecommunication/Networking, Business/IT Security and Privacy. This course is applicable to any student expecting to enter the workforce in today's technological society.

**Prerequisite:** BSTC 1036 Computer Concepts & Appl with a grade of C or better

## **BSTC 1837 Presentation Applications**

**1 Credit Hours**

A course that will allow students to learn and assess computer and presentation applications skills that are needed in today's society and business. This course will assist in learning essential presentational software features and computer skills that will contribute to the successful completion of a Certipoint Office Certification(s).

## **CARPENTRY**

### **CRPT 1001 Carpentry Basics**

**4 Credit Hours**

This course provides training for the construction of a residential home. Instruction will include construction details such as: layout, materials, assembly, tool and equipment operation, and reasons for alternative methods of construction. Foundation layout and framework, leveling instruments, floor and wall framing methods, roof framing, covering and exterior finish, the study of the framing square, building materials and remodeling projects are also covered.

**Prerequisite:** CRFT 1001 Introductory Craft Skills

### **CRPT 1010 Floors Walls Ceiling Framing**

**4 Credit Hours**

This course covers framing basics and procedures for layout of floor joists, sub-floor, and walls. In addition, wall components and assembly, ceiling construction, straightening, waterproofing, and the appropriate building codes will be covered.

**Prerequisite:** CRPT 1001 Carpentry Basics

### **CRPT 1020 Roof Framing**

**3 Credit Hours**

This course covers various types of roofs and provides instruction for the layout of gable and hip roofs and includes both stick built and truss built roofs. The course includes topics such as: spacing and layout, ceiling joists, rafter layout and cutting, roof design, code safety, stick framing, pre-fab trusses, use of a framing square, roof sheathing, valleys, hips, gables, soffits, ventilation.

**Prerequisite:** CRPT 1010 Floors Walls Ceiling Framing

### **CRPT 1030 Windows Doors and Stairs**

**3 Credit Hours**

This course covers the installation of windows and doors as well as the construction and installation of stairs. Course topics include: type and installation of windows and exterior doors, types of stairs, code issues related to stair building, and techniques for measuring and calculating rise, run, and stairwell openings, laying out stringers, and fabricating basic stairways.

**Prerequisite:** CRPT 1020 Roof Framing

## **CASE NEW HOLLAND INDUSTRIES**

### **CNHI 1132 Farm Machinery Repair**

**1 to 3 Credit Hours**

This course is a study of the theory, operations, repair, and adjustment of machines used on a farm operation.

### **CNHI 1180 Planting Equipment**

**1 to 3 Credit Hours**

This course will cover different types of planting equipment used in the agriculture industry.

### **CNHI 1183 MFWD Tractors Large Frame**

**1 to 3 Credit Hours**

This course is designed to acquaint the technician with the various operational systems utilized on large frame MFWD tractors 250-400 HP. Particular emphasis will be placed on electronic and hydraulic control systems operation, diagnostics, and repair.

### **CNHI 1184 MFWD Tractors Medium Frame**

**1 to 3 Credit Hours**

This course is designed to acquaint the technician with the various operational systems utilized on Medium frame MFWD tractors 150-250 HP. Particular emphasis will be placed on electronic and hydraulic control systems operation, diagnostics, and repair.

### **CNHI 1185 Self Propelled Sprayers**

**1 to 3 Credit Hours**

This course is designed to familiarize the individual with the self-propelled sprayer. The student will study the different systems of the sprayer, its operation, and steps necessary to efficiently diagnose in-field concerns/issues with the machine.

### **CNHI 1188 Midrange Combines 5, 6, 7**

**1 to 3 Credit Hours**

This course is designed to acquaint the technician with the various operational systems utilized on midrange combines; class 5, 6, & 7. Particular emphasis will be placed on electronic and hydraulic control systems operation, diagnostics, and repair.

# Course Descriptions

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## **CNHI 1192 Flagship Combines 7, 8, 9** 1 to 3 Credit Hours

This course is designed to acquaint the technician with the various operational systems utilized on flagship combines class 7, 8, 9. Particular emphasis will be placed on electronic and hydraulic control systems operation, diagnostics, and repair.

## **CNHI 1193 Combine Productivity** 1 to 3 Credit Hours

This course is designed to acquaint the technician with the theory of operation and adjustments necessary to efficiently harvest crops with a combine.

## **CNHI 1194 Intermediate & Large Square** 1 to 3 Credit Hours

This course is devoted to intermediate and large square balers capable of producing bales up to 4 feet X 4 feet and up to 8 feet in length. Particular attention will be devoted to the knotter system.

## **CNHI 1195 Large Round Balers** 1 to 3 Credit Hours

This course will cover in detail the operation, maintenance, and repair of round balers.

## **CNHI 1199 Self Propelled Windrowers** 1 to 3 Credit Hours

This course is designed to familiarize the individual with self-propelled windrowers. The student will study the different systems of the windrower, their operation, and steps necessary to produce windrowers necessary for the next step in the hay harvesting process.

## **CNHI 1202 2WD Tractor Systems 45-100 HP** 1 to 3 Credit Hours

The class is primarily hands-on in nature and through the use of the manuals, mock-ups, cutaways, and practice, students will become adept at identifying, analyzing and fixing issues with all systems on tractors 45 to 100 horsepower.

## **CNHI 1205 Articulated 4WD Tractor System** 1 to 3 Credit Hours

This course is designed to acquaint the technician with the various operational systems utilized on large articulated tractors. Particular emphasis will be placed on electronic and hydraulic control systems operation, diagnostics, and repair.

## **CNHI 1210 Precision Farming Systems** 1 to 3 Credit Hours

This course is designed to develop those skills necessary for the student to accurately and correctly diagnose, repair, and utilize precision farming systems.

## **CNHI 1215 Skid Steer Loader Operation** 1 to 3 Credit Hours

This course emphasizes skid steer loader operation and diagnostics. Particular attention will be given to electrical/electronic control systems and hydraulic systems commonly found on this type of equipment. The class includes classroom and hands-on instruction supported by detailed manuals, mock-ups, cutaways, and live training equipment.

## **CNHI 1216 Crawler Tractor/Dozer Systems** 1 to 3 Credit Hours

This course is designed to acquaint the technician with the various operational systems utilized on crawler-type earthmoving dozers. Particular emphasis will be placed on electronic and hydraulic control systems operation, diagnostics, and repair.

## **CNHI 1217 Excavator Systems & Diagnostic** 1 to 3 Credit Hours

This course is designed to acquaint the technician with the various operational systems utilized on excavators. Particular emphasis will be placed on electronic and hydraulic control systems operation, diagnostics, and repair.

## CHEMISTRY

## **CHEM 1802 Fundamentals of General Chem** 0 or 5 Credit Hours

This one semester course provides a study of inorganic and organic chemistry with less emphasis on problem solving than the College Chemistry sequence and more on the practical aspects of chemistry. This course is designed for those persons who need chemistry as a one-year terminal course, such as pre-agriculture, pre-baccalaureate nursing, home economics, nutrition, and similar majors.

**Fulfills:** Laboratory Course, Natural Science Requirement

**Prerequisite:** MATH 1821 Basic Algebra with a grade of C or better OR MATH 1806 Technical Mathematics with a grade of C or better (or higher level math course) OR having passed Module 5 in College Preparatory Mathematics OR appropriate math placement score.

## **CHEM 1804 Elementary Organic Chemistry** 5 Credit Hours

A brief course in organic chemistry with emphasis given to the practical aspects of organic chemistry. This course is designed for those persons who need organic chemistry as one-semester course, such as pre-agriculture, pre-baccalaureate nursing, nutrition, and similar majors.

**Prerequisite:** CHEM 1802 Fundamentals of General Chem with a grade of C or better or CHEM 1806 College Chemistry I with a grade of C or better

## **CHEM 1806 College Chemistry I** 0 or 5 Credit Hours

This course stresses the conceptual and mathematical approach to understanding general chemistry and prepares the student to follow a science oriented four-year program. It provides students with the necessary tools to handle problems of both a theoretical and practical nature. The students taking this course are usually declared Chemistry, Physics, Engineering, Pre-Med, etc., majors.

**Fulfills:** Laboratory Course, Natural Science Requirement

**Prerequisite:** CHEM 1802 Fundamentals of General Chemistry OR High School Chemistry and Algebra II or equivalent.

# Course Descriptions

## **CHEM 1808 College Chemistry II** 0 or 5 Credit Hours

This course is the second semester of the College Chemistry series. This course stresses the conceptual and mathematical approach to understanding general chemistry and prepares the student to follow a science oriented four-year program. It provides students with the necessary tools to handle problems of both a theoretical and practical nature. The students taking this course are usually declared Chemistry, Physics, Engineering, Pre-Med, etc., majors. This course is a continuation of College Chemistry I.

**Fulfills:** Laboratory Course, Natural Science Requirement

**Prerequisite:** CHEM 1806 College Chemistry I with a grade of C or better

## **CHEM 1814 Organic Chemistry I** 5 Credit Hours

This course is the first half of a two-semester course in organic chemistry and provides students with the knowledge of the physical and chemical properties of carbon compounds with emphasis on the mechanisms of organic reactions, the nomenclature of the compounds and methods of organic synthesis. This course is designed for those students who need a good understanding of organic chemistry.

**Fulfills:** Laboratory Course, Natural Science Requirement

**Prerequisite:** CHEM 1808 College Chemistry II with a grade of C or better

## **CHEM 1816 Organic Chemistry II** 5 Credit Hours

This course is the second half of a two-semester course in organic chemistry and provides students with the knowledge of the physical and chemical properties of carbon compounds with emphasis on the mechanisms of organic reactions, the nomenclature of the compounds and methods of organic synthesis. This course is designed for those students who need a good understanding of organic chemistry.

**Fulfills:** Laboratory Course, Natural Science Requirement

**Prerequisite:** CHEM 1814 Organic Chemistry I with a grade of C or better

## **CHEM 1821 Fundamentals of Biochemistry** 3 Credit Hours

This course is a study of the chemistry and metabolism of carbohydrates, lipids, proteins, and nucleic acids with an emphasis on medically related concepts, structures, pathways and mechanisms in biochemistry. This serves as a preparatory course for the MCAT/GRE/DAT examinations.

**Fulfills:** Non-Laboratory Course

**Prerequisite:** CHEM 1804 Elementary Organic Chemistry or CHEM 1814 Organic Chemistry I

## **CHILD CARE & GUIDANCE**

### **CHLD 1500 Intro to Early Childhood Ed** 3 Credit Hours

An introduction to the early childhood profession including an emphasis on professionalism and developmentally appropriate practice. Topics include an overview of history of early education, theoretical program models, different types of early childhood programs, community resources, professional organizations, and contemporary trends and issues in programs for children ages birth to age eight.

### **CHLD 1504 Early Childhood Curriculum** 3 Credit Hours

A study developed to give students practice in developing program planning techniques and units of learning which will be used in the curriculum of early childhood education programs. Students will gain experience in designing a curriculum that will meet the three developmental needs of children who are students in an early childhood education center.

**Prerequisite:** CHLD 1553 Creative Experiences for Child AND CHLD 1554 Creative Activities

### **CHLD 1505 Preschool Child** 3 Credit Hours

To develop an understanding of the principles of development and growth of children from conception to eight years of age singularly and in group settings.

### **CHLD 1506 Child Care Practicum** 3 Credit Hours

On the job practical experience in a licensed child care center. This particular experience aids the student in knowing if this is the career to pursue.

**Prerequisite:** CHLD 1500 Intro to Early Childhood Ed with a grade of D or better

### **CHLD 1507 Child Health-Safety & Nutrit.** 3 Credit Hours

A study of the basic health, nutrition, and safety management practices for all young children.

### **CHLD 1508 Child Care Internship** 3 Credit Hours

Internship in a licensed child care center; to learn to work with professionals in the field, to learn the type of dedication needed, and to observe the working operations of a child care center.

**Prerequisite:** CHLD 1506 Child Care Practicum AND CHLD 1509 Child Care Practicum II and Internship in a licensed Child Care Facility

### **CHLD 1509 Child Care Practicum II** 3 Credit Hours

This course involves working directly with children and working with administrative aspects at a licensed child care center. The course includes classroom participation and evaluation, curriculum planning and teaching experiences.

**Prerequisite:** CHLD 1506 Child Care Practicum

### **CHLD 1512 Child Abuse and Neglect** 3 Credit Hours

This course is designed to educate the student regarding the subject of abuse and neglect of children. The course will discuss the various types and indicators of abuse and neglect as well as prevention issues. Kansas laws will be discussed, as will current community, state, and federal efforts to deal with this problem.

### **CHLD 1513 Child Play and Games** 1 to 3 Credit Hours

This course is designed to stress the importance of play learning attitudes and environments. Students learn the importance of movement in relation to what children learn, and that play environments should encourage children to explore, imagine, invent, and express feelings.

# Course Descriptions

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**CHLD 1549 Early Childhood Program Admin 3 Credit Hours**  
Designed to give students an insight into the day care center. Course covers needs assessment, staff enrichment, board of directors, financial responsibilities, directors' responsibilities, and development of facility, licensing, equipping, staffing, and publicizing a center.

**CHLD 1550 Early Childhood Career Develop 1 Credit Hours**  
This course provides an overview of the many career pathways available within the early childhood industry and identifies the training, education and skills required for these careers. It also addresses necessary employment skills and professional development options and requirements.

**CHLD 1551 Infant & Toddler Edu & Care 3 Credit Hours**  
This course includes the study of infant and toddler development with emphasis on how to create and maintain developmentally appropriate environments for very young children. Demonstration of the subject matter is included.

**CHLD 1553 Creative Experiences for Child 3 Credit Hours**  
This course is a study of constructing and maintaining a developmentally appropriate environment for young children that fosters aesthetic sensitivity and creativity. It focuses on the selection, construction, use of materials for experiences that encourage the young child's creativity and development through visual arts.

**CHLD 1554 Creative Activities 3 Credit Hours**  
This course is a study of constructing developmentally appropriate learning activities for young children that foster creativity across the curriculum. It focuses on the selection, construction, use of materials for activities that encourage the child's creativity in music, body movement, dramatic play, language, mathematics, science, nutrition, and social studies.

**CHLD 1560 Social Emotional Development 3 Credit Hours**  
To develop an understanding of the principles of the social and emotional development and growth of children from conception to five years of age singularly and in group settings. The successful completion of this course is a component of the Kansas Association of Infant Mental Health Level 1 endorsement.

**CHLD 1565 Preschool Language & Literacy 3 Credit Hours**  
This course is designed to teach students how to recognize and implement appropriate environmental strategies that support early literacy development and appropriate early experiences with books and writing. Emphasis is placed on speaking and listening, as well as reading and writing readiness. Upon completion of the course, students will be able to select, plan, implement, and evaluate appropriate early literacy experiences.

**CHLD 1566 Interaction Tech w/ Children 3 Credit Hours**  
This course introduces the practical principles and techniques for observing and guiding young children. It provides students with a developmental approach to the acquisition of interaction techniques conducive to healthy social-emotional and self-concept growth in children from birth to eight years. Demonstration of the subject matter is included.

**CHLD 1567 Early Intervention Birth-Five 3 Credit Hours**  
This course introduces the policies and evidence based practices that define and support families related to young children with developmental delays and disabilities. The challenges, complexities and rewards of living and working with young children with developmental delays and disabilities will be demonstrated. Evidence supports connection between early learning experiences and later school and work performance. This course will bring together recommended practices to help educators, other practitioners, families and administrators provide early intervention and quality learning experiences for children from birth to five years. Demonstration of the subject matter is included.

**CHLD 1568 Intro to Autism Spectrum 3 Credit Hours**  
This course will provide purposeful explorations of early interventions, behavior modification and intervention, sensory processing and common social emotional factors and their affiliation with Autism Spectrum Disorders.

## COMMUNICATIONS

**COMM 1200 Interpersonal Communication 3 Credit Hours**  
This course is designed to help students develop skills in communication and to acquire an understanding of verbal and non-verbal communications as a vital human relations factor in our society.  
**Fulfills:** Foundation Course AA, AS, AGS, AAS, Humanities Requirement, Oral Communication Requirement

**COMM 1210 Oral Interpretation 3 Credit Hours**  
Oral Interpretation is the act of attaching to prose or poetry, the meaning intended by the author or poet and using audible symbols and visible bodily action to elicit from an audience response to the meaning. The course is designed to expand the dramatic capabilities of the reader, give one insight into the creativity of the written word, and develop one's skills in oral communication.

**COMM 1212 Fundamentals of Debate 3 Credit Hours**  
This course is designed for the novice collegiate debater to study the skills and methodology of argumentation and persuasion in the debate format. Students will learn the correct process of argumentation, research, analogy and persuasive presentation. Those seeking professions in speech communication, public relations, law and salesmanship will find this course valuable.

# Course Descriptions

## **COMM 1217 Nonverbal Communication 3 Credit Hours**

This course is designed to help students become more aware of nonverbal communication as a vital factor in human communication by studying the research, practice, and principles underlying nonverbal behaviors. Topics include kinesics, proxemics, paralinguistics, haptics, and olfactics.

**Fulfills:** Humanities Requirement

**Prerequisite:** COMM 1200 Interpersonal Communication with a grade of D or better or COMM 1230 Public Speaking with a grade of D or better

## **COMM 1220 Organizational Communication 3 Credit Hours**

This course is designed to teach and analyze the functions of organizational communication necessary to obtain and become successful in an organizational setting. This includes maintaining effective employer/employee relationships, providing effective supervisory skills, using persuasion in the marketplace and business world, and understanding the non-verbal communication factors inherent within an organization.

**Fulfills:** Humanities Requirement

## **COMM 1222 Technical Communication 3 Credit Hours**

This course is designed primarily for students who need training and practice in writing skills pertaining to their own fields. It will involve familiarity with the journals, with research techniques, report and letter writing and basic mechanical skills.

## **COMM 1230 Public Speaking 3 Credit Hours**

This course includes a study of the theoretical principles underlying effective communicative behavior, and the practical application of those principles in various communicative exercises and assignments. The course is designed to increase the awareness of the importance of speech communication in today's society and develop competency of speakers.

**Fulfills:** Foundation Course AA, AS, AGS, AAS, Humanities Requirement, Oral Communication Requirement

## **COMM 1232 Competitive Forensics 1 Credit Hours**

Practical use and performance of intercollegiate forensic activities including Parliamentary Debate, International Public Debate, Extemporaneous Speaking, Impromptu Speaking, and Public Address.

**Fulfills:** Performance Course, Physical Education Requirement

## **COMM 1234 Persuasion 3 Credit Hours**

Practical use and performance of persuasion in public speaking, as well as a careful analysis of persuasion and its related theories in the fields of politics, marketing, and public policy.

**Prerequisite:** COMM 1230 Public Speaking with a grade of D or better

## **COMM 1235 Storytelling 3 Credit Hours**

This course is designed to acquaint the student with storytelling techniques which can be utilized in various age level classrooms. Students will learn how to choose, prepare and present appropriate stories.

## **COMM 1315 Introduction to Film 3 Credit Hours**

This course is an introduction and overview of the art of motion pictures. Students will learn film production and various techniques employed for the process of film making. Students will analyze film development, the cultural impact of motion pictures, and contributors to the film industry. Students will critically appraise motion pictures.

**Fulfills:** Humanities Requirement

## **COMM 1700 Introduction to Mass Media 3 Credit Hours**

This course is designed to look at the media from a structural and descriptive point of view. It will examine the eight major media including newspaper, television, and radio, books, magazines, movies, recorded music and the Internet and will show their role in our society.

**Fulfills:** Humanities Requirement

## **COMM 1704 Beginning Reporting 3 Credit Hours**

This basic journalistic writing course will cover news writing for all branches of the news media. It will emphasize gathering and writing actual news stories from campus and community resources.

**Fulfills:** Humanities Requirement

## **COMM 1705 Advanced Reporting 3 Credit Hours**

The advanced journalistic writing course will cover various aspects of writing including news, news features, features, investigative reporting, editorials, and columns. It will emphasize gathering and writing actual news stories from campus and community resources.

**Fulfills:** Humanities Requirement

**Prerequisite:** JOUR 1704 Beginning Reporting with a grade of C or better or COMM 1704 Beginning Reporting with a grade of C or better

## **COMPUTER PROGRAMMING**

### **PRGM 1005 BASIC Programming 3 Credit Hours**

This course is designed as an introduction of structured programming concepts. Topics include syntax and semantics of Visual Basic language, fundamental algorithm development, formatting, arrays, and file processing.

### **PRGM 1007 Foundation of Computer Science 3 Credit Hours**

This course is an introduction to computer science for computer science and computer information system majors. It provides an introduction to computer science concepts and covers a breadth of topics including: computer history, hardware, software, binary, data storage, operating systems, networking, problem solving, programming, applications, security, privacy, and ethics.

### **PRGM 1030 Java Programming 3 Credit Hours**

This course is an introduction to the Java programming language. Topics covered in this course include: Java language conventions and rules, data types and operators, control structures, methods, object-oriented programming, arrays and strings, class hierarchies, and files. Multiple programming projects.



# Course Descriptions

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## **PRGM 1033 Web Programming**

**3 Credit Hours**

Web Programming provides an in-depth coverage of client side scripting and an introduction to server side scripting. Topics covered include HTML5, Cascading Style Sheets (CSS), JavaScript, Canvas, mobile applications, and PHP.

## **PRGM 1037 Computer Science I**

**4 Credit Hours**

This course is an introduction to the concepts of procedural programming. The course emphasizes good problem-solving techniques to develop algorithms which are implemented in a high level language. Topics include: problem-solving theory, algorithm and program design methodology using control structures, procedures, arrays, testing, recursion, and object-oriented programming. Multiple programming projects.

**Prerequisite:** PRGM 1007 Foundation of Computer Science with a grade of C or better

## **PRGM 1038 Computer Science II**

**3 Credit Hours**

Computer Science II is an intermediate level programming course which introduces students to common data structures and algorithms utilized in programming. Students are also introduced to algorithm analysis. Topics to be covered in this course include: lists, stacks, queues, trees, graphs, hashing, recursion, sorting/searching algorithms, and algorithm efficiency.

**Prerequisite:** PRGM 1037 Computer Science I with a grade of C or better

## **PRGM 1039 Object-Oriented Programming**

**3 Credit Hours**

This course introduces object-oriented programming concepts using a high level language. Topics covered in this course include: objects, classes, methods, attributes, constructors, overloading, member access, arrays of objects, inheritance, polymorphism, overriding methods, abstract class, and interfaces. Multiple programming projects are required.

**Prerequisite:** PRGM 1037 Computer Science I with a grade of C or better

## **CORRECTIONS**

### **CORR 1001 Introduction to Corrections**

**3 Credit Hours**

This is an introductory study of the field of corrections. It covers the correctional process of probation, institutions, and parole. It also covers a survey of correction careers and correction theories.

### **CORR 1002 KS Dept of Corr Basic Training**

**1 to 15 Credit Hours**

This course provides credit for the basic training required for all newly hired correctional officers within the Kansas Department of Corrections (KDOC). This is an orientation and training program designed to provide an overview of the KDOC and a basic level of knowledge, skills and performance based training abilities.

### **CORR 1004 Case Management in Corrections**

**3 Credit Hours**

In this course students will examine the offender case management process from sentencing to reintegration in the community. Emphasis will be placed on the examination of correctional case management strategies and intervention techniques.

### **CORR 1005 Psychology of Criminal Conduct**

**3 Credit Hours**

This course covers the basics of criminal psychology, with instruction on the definition and variability of criminal conduct, various theories, general personality and social psychology approach, developmental aspects, prediction of behavior and classification of offenders, prevention and rehabilitation, punishment and alternatives, exceptional offenders, and applications.

### **CORR 1006 Corr Supervision & Off Mgmt**

**3 Credit Hours**

Provides students with current information on management and supervision in the correctional facility, focusing on recruiting, training, directing and motivating people. Students will have an understanding of various disorders affecting criminal personality which is critical to effective management of offenders.

### **CORR 1008 Special Populations Correction**

**3 Credit Hours**

This course focuses on unique needs and issues of specialized inmate populations. The class also addresses management strategies and programming necessary to humanely incarcerate these groups and to prepare them for successful reintegration into free society. Focus populations will include the medically and mentally ill, the mentally challenged, women, juveniles convicted as adults, the elderly, high risk inmates, and those with unique or non-mainstream religious needs.

### **CORR 1010 Correctional Instit & Issues**

**3 Credit Hours**

This course takes an in-depth look at contemporary issues facing corrections employees. Students are encouraged to think analytically about punishment. By establishing a greater social context, corrections is presented against the backdrop of social forces; namely, political economic, religious, and technological forces that affect the corrections system.

### **CORR 1011 Cultural & Relig Div in Corr**

**3 Credit Hours**

This course provides information and guidelines for dealing with inmates from various cultural and religious backgrounds. Coursework will start with the history of religion in prison and reveal why it is important for correctional personnel to understand the religious inmate and his/her practices.

### **CORR 1012 Ethical Decision Making**

**3 Credit Hours**

This course is an examination of the ethical considerations facing the correctional employee. Topics include determining moral behavior, developing moral and ethical behavior, ethics and corrections, ethics and the courts, policy and management issues and professionalism.

### **CORR 1013 Legal Issues in Corrections**

**3 Credit Hours**

This course will provide students with current and practical information on how to avoid lawsuits in the correctional setting. Students will gain knowledge about federal and state legal liabilities and some of the complex areas of the law affecting correctional institutions.

# Course Descriptions

## **CORR 1023 Oral Comm in the Corr Environ 3 Credit Hours**

This course highlights the application of human communication skills in the corrections workplace. Focus will be on communications between correctional staff and also between correctional staff and inmates. Emphasis will be on self concept, perception, verbal and nonverbal messages, interpersonal relationships and small group communication.

## **CORR 1024 Corrections Report Writing 3 Credit Hours**

This course is designed to include the basic concepts of written communications adapted to the specific tasks encountered in the corrections profession. There will be heavy concentration in dealing with conflict and cooperation, proper grammar and writing informative and proper corrections reports. The actual class time will be spent in group discussions, structured exercises to build vocabulary, written communication, oral communication and narrative report writing for the corrections field.

## **CRAFTS**

## **CRFT 1001 Introductory Craft Skills 3 Credit Hours**

This course introduces students to the construction trades. The course covers safety, construction math, hand tools, power tools, blueprint reading, rigging, communication skills, and employability skills.

## **CRFT 1010 Safety Orientation OSHA 10 1 Credit Hours**

This course provides construction safety and health training to entry level workers. Instruction includes information regarding; construction industry and workplace occupation safety & health guidelines, worker's rights, employer responsibilities, and the correct procedures to file a complaint.

## **CRIMINAL JUSTICE**

## **CRIM 1600 Intro to Criminal Justice 3 Credit Hours**

Provides an introduction to the historical development and the internal and external issues of the various components of the criminal justice system including police, corrections and the courts. The student will illustrate how these interrelated components result in the administration of justice today.

## **CRIM 1603 Pro Responsibility in CJ 3 Credit Hours**

Explores the major components involved in the study of ethics, particularly as it applies to the field of criminal justice. Focus is placed on the code of conduct and ethics of the criminal justice profession and the standards held to in their professional role. The aim of the course is to produce professionals who are not only critical thinkers, but who have the skills necessary to pursue sound ethics in their day-to-day decisions and activities.

## **CRIM 1606 Intro to Law Enforcement 1 to 3 Credit Hours**

An introduction to law enforcement operation and procedures including organization and administration. Emphasizes the police role in society and operational procedures including trial processes, human relations, career orientation and research areas.

## **CRIM 1610 Criminology 1 to 3 Credit Hours**

This course will endeavor to shed light upon the complexities of criminology, crime causation, and reaction of offenders. Some of the topics include: crime and criminology, casual analysis, psychogenic approaches, the social-psychology of criminal careers, patterns of sexual deviation, murders and assaultists, criminality among respectable citizens, treatment of offenders, and the results of treatment.

## **CRIM 1612 Criminal Investigation 3 Credit Hours**

Explores issues including the effective interview and interrogation techniques, crime scene management and lab processes, crime scene documentation methods, case preparation and court presentation.

## **CRIM 1614 Criminal Law 3 Credit Hours**

This course examines the history, scope and nature of law. It focuses on the parties to a crime; classification of offenses; criminal acts and intent, the capacity to commit crime; and criminal defenses. It will cover the elements of misdemeanor and felony crimes.

## **CRIM 1621 KLETC 12 Credit Hours**

This course provides credit for the training required for law enforcement officers in the state of Kansas through the Kansas Law Enforcement Training Center or other appropriate Law Enforcement Academy.

## **CRIM 1623 Criminal Profiling 3 Credit Hours**

This course involves learning the techniques of socio- psychological profiling to establish leads and detect patterns in unsolved cases and/or classify and predict the behavior patterns of repeat offenders, particularly serial murderers, arsonists, rapists, and child molesters.

## **CRIM 1648 Law Enforce Ops and Procedures 3 Credit Hours**

Examines the role of police in society and the application of key concepts to policing scenarios. Students identify, discuss and assess critical police practices and processes to include deployment, arrest procedures, search strategies and other operational considerations.

## **CRIM 1650 Corrections Internship 1 to 3 Credit Hours**

Individual study in a specialized area of the criminal justice corrections system with emphasis on practical experience in one or more of the operational agencies.

## **CRIM 1651 Introduction to Corrections 3 Credit Hours**

This course is an introduction to the study of the relationship between criminal justice and the correctional system from verdict to release from supervision. The course focuses on the structure, philosophical and historical nature of penal institutions, roles of sentencing, institutional practices and policies and post-conviction remedies.

# Course Descriptions

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**CRIM 1655 Law Enforcement Internship**      **1 to 3 Credit Hours**  
Internship in law enforcement is designed to acquaint the pre-service student with the basic operations of a law enforcement agency, and to allow the in-service student the opportunity to further develop knowledge of the agency.

**CRIM 1658 Police Firearms**      **1 to 3 Credit Hours**  
This course is designed to give police officers or potential officers valuable insight in handling police firearms. All students will be given instruction in all aspects of firearms safety, firearms operation, marksmanship, and knowledge of firearms.

**Prerequisite:** Student must pass a criminal background check dated one week prior to the start of class. The background check is at the expense of the student. Background check may be completed at [www.kansas.gov/kbi](http://www.kansas.gov/kbi)

**CRIM 1659 CJ Interview & Report Writing**      **3 Credit Hours**  
This course will provide a broad overview of the types of reports written to support a variety of tasks associated with a criminal justice career. Students are required to gather pertinent information and then record that information by writing a variety of report narratives representative of those prepared by individuals working in a profession within the criminal justice system. Additionally, this course covers the fundamentals of interviewing and interrogating witnesses and suspects in a non-custodial and custodial environment.

**CRIM 1661 Criminal Procedures**      **3 Credit Hours**  
Introduces basic court system procedures and the jurisdiction of the courts. It also focuses on the constitutional and other legal requirements that affect law enforcement practices and procedures. Specific topics include confessions and interrogations, identification procedures, arrest, search and seizure, and admissibility of evidence.

**CRIM 1667 Crime Scene Investigation**      **1 to 5 Credit Hours**  
This course teaches the techniques in the collection, presentation, analysis and interpretation of physical evidence: footprints, tool marks, hair, blood, fibers, stain, handwriting, fingerprints, and ballistics. This includes scene searches, recording, and some photography.

**Prerequisite:** CRIM 1600 Intro to Criminal Justice

**CRIM 1668 Police Defense Tactics**      **3 Credit Hours**  
This course is designed to consider the purpose and methods of defensive tactics for police officers, and the identification of police hazards and effective techniques in coping with them. It teaches one to observe persons, places, and incidents as well as techniques to handle them.

**CRIM 1685 Criminal Justice Capstone**      **3 Credit Hours**  
This capstone course will review the criminal justice system and require the student to apply all previously learned concepts through simulations and research. It will also emphasize strategies for seeking, obtaining and retaining employment including attitudes, work ethics, teamwork, resumes and job interviewing skills.

**Prerequisite:** Sophomore Criminal Justice Majors Only/Consent of the Instructor

**CRIM 1686 Agency Administration**      **3 Credit Hours**  
Conducts a practical analysis of modern administration theory and supervisory, management principles and their application to the unique operating problems of criminal justice organization.

**Prerequisite:** Sophomore Criminal Justice Majors Only/Consent of the Instructor

**CRIM 1687 Juvenile Offender**      **3 Credit Hours**  
This course will cover the nature and extent of juvenile justice in America and will examine reform efforts affecting youths involved in the court system. Specific areas to be highlighted include the Revised Kansas Code for the care of children, landmark juvenile laws which have shaped modern day juvenile legal statutes, and the nature of juvenile justice being different from adult criminal justice throughout the process of law enforcement, courts, corrections, and aftercare.

## DANCE

**DANC 1001 Barton Dance Theatre-Perform**      **2 Credit Hours**  
This is a performance based course designed for the pre-professional dance student to further their knowledge and skills in dance as a performing art form. Course work will enhance students' dance performance and technical qualities as a member of the Barton Dance Theatre, the resident dance company of Barton Community College.

**Fulfills:** Performance Course, Physical Education Requirement

**Prerequisite:** By audition only

**DANC 1003 Dancing for Mobility**      **1 Credit Hours**  
This is a movement class using rhythm and various styles of dance to engage mature adults of any age in activity with a focus on enhancing mobility. The exercises are designed for people of all levels of experience and mobility needs who wish to improve balance, and overall mind-to-body connection.

**DANC 1010 Dance Composition I**      **3 Credit Hours**  
This is an introductory-level course in the art of making dances. The class explores movement improvisation as a means for developing movement phrases and the fundamental elements of dance-space, time, weight, and energy flow. Students will learn how to combine motivated movement within a structure to create original choreography.

**Prerequisite:** DANC 1020 Modern Dance I with a grade of D or better or DANC 1030 Modern Dance II with a grade of D or better

**DANC 1016 Tap Dance I**      **2 Credit Hours**  
This course introduces and develops on the principles of tap dance including weight shift, rhythm, and tap vocabulary. Students will gain an appreciation of tap dance as an art form. Student participation in a formal performance is optional, not mandatory.

# Course Descriptions

## **DANC 1020 Modern Dance I** **2 or 3 Credit Hours**

This course is a beginning level class in the practice of modern dance technique. Students will learn concepts in alignment, placement, body conditioning for dance, neuromuscular coordination and control and concepts in manipulating the elements of movement: space, time and force/energy. Students will work creatively to create original dance combinations. Floor exercises, standing center floor exercises, center floor movement combinations and across the floor combinations will prepare the beginning student to practice and create in concert dance.

## **DANC 1030 Modern Dance II** **2 or 3 Credit Hours**

This is an intermediate level dance technique course designed as a continuation of Modern Dance I. Students will learn about and practice foundational modern dance techniques. Creative movement and dance improvisation will be employed to create student generated dance works. Student participation in a formal performance is optional, not mandatory. **Prerequisite:** DANC 1020 Modern Dance I with a grade of D or better

## **DANC 1035 Ballet I** **2 or 3 Credit Hours**

This is a dance technique course designed to introduce students to the first year of ballet technique at college level. Students will develop strength, flexibility, and knowledge required for proficiency in classical ballet. Student participation in a formal performance is optional, not mandatory.

## **DANC 1036 Ballet II** **2 or 3 Credit Hours**

This is an intermediate level course which focuses on the second year of college ballet technique. Designed as a continuation of Ballet I, students will advance in technical skill and expand their knowledge of ballet history, terminology, and etiquette. Student participation in a formal performance is optional, not mandatory.

**Fulfills:** Studio Course (AA up to 3 hrs)

**Prerequisite:** DANC 1035 Ballet I with a grade of D or better

## **DANC 1040 History of Dance I** **3 Credit Hours**

This course is a study of significant human accomplishments in the area of dance as an art form. Material examined will include the development of generated patterned body movement by early humans, dance's function to ancient civilizations, key characteristics of folk and ethnic dancing, the development of dance as an art form in the Renaissance, and the cultural impact historical dance has on current forms of theatrical dance as well as our everyday life.

**Fulfills:** Humanities Requirement

## **DANC 1100 Jazz Dance I** **2 Credit Hours**

This is a dance technique course designed to introduce jazz dance. Students will develop the skills required or an understanding and a proficiency in the genre of jazz dance. Student participation in a formal performance is optional, not mandatory.

## **DANC 1102 Jazz Dance II** **2 Credit Hours**

This is an intermediate jazz dance technique course designed to build upon material from Jazz Dance I. Students will increase the skills required for an understanding and a proficiency in the genre of jazz dance. Student participation in a formal performance is optional, not mandatory.

**Prerequisite:** DANC 1100 Jazz Dance I with a grade of D or better

## **DIETARY MANAGER**

## **DIET 1630 Sanitation & Mgmt of Food Syst** **3 Credit Hours**

This course is a study of sanitation and safety and management of food services. Course content includes safe food handling, meal service, menus, standardized recipes, food preparation, food production systems, delivery of meals and snacks, evaluation of food acceptance, and the quality process.

## **DIET 1631 Nutrition Therapy** **2 Credit Hours**

This course is a study of basic nutrition and medical nutrition therapy and includes digestion, food preferences, nutrition screening, nutrition assessment, physicians' orders, menus, supplemental feedings, modified diets, continuous quality improvement, medical records, nutrient intake calculation, and state and federal regulations.

## **DIET 1632 Human Resource Management** **3 Credit Hours**

The study of human resource management and business operations as they pertain to dietary managers. Course content covers staffing, scheduling, and managing of personnel, as well as managing a budget, purchasing, and implementing cost effective procedures.

## **DIET 1633 Fld Exp Sani & Mgt of Food Sys** **3 Credit Hours**

This course offers field experience in the study and application of sanitation principles, food protection, Hazard Analysis Critical Control guidelines, and food preparation. This course is to be completed in the student's participating facility and part of which is completed under the supervision of a Registered Dietitian preceptor.

## **DIET 1634 Field Experience in Nutrition** **3 Credit Hours**

This course offers field experience in the study and application of nutrition therapy through modified diets, nutrition screening, and nutrition assessments. This course is to be completed in the student's participating facility and part of which is completed under the supervision of a Registered Dietitian preceptor.

## **DIET 1635 Fld Exp in Human Resources Mgt** **2 Credit Hours**

This course offers field experience in the study and application of personnel management, communication, and business operations within a foodservice department. This course is to be completed in the student's participating facility and part of which is completed under the supervision of a Registered Dietitian preceptor.

# Course Descriptions

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## **DIET 1637 Critical Concepts**

**1 Credit Hours**

This course is a study of critical concepts to becoming a Certified Dietary Manager. Course content includes an overview of nutrition, food service, sanitation, staffing needs, and business operations. This is a pass/fail course designed to help students for the national exam.

## **ECONOMICS**

### **ECON 1610 Principles of Macroeconomics**

**3 Credit Hours**

An introduction to the basic history, principles, and problems of modern economics; determinants of national income, employment, resource allocation, and price level; the monetary and banking system; and economic instability.

**Fulfills:** Social Science Requirement

### **ECON 1612 Principles of Microeconomics**

**3 Credit Hours**

An introduction to the market mechanism, price and distribution theory, public policy, international growth, and contemporary economic issues.

**Fulfills:** Social Science Requirement

### **ECON 1615 Personal Finance**

**3 Credit Hours**

This course is primarily concerned with the management of money from the viewpoint of the individual. Topics to be covered include the consumer's credit buying, borrowing, saving and investing, the purchase of insurance, real estate and other major items, and the problems of taxation and wills.

**Fulfills:** Social Science Requirement

## **EDUCATION**

### **EDUC 1102 Storytelling**

**3 Credit Hours**

This course is designed to acquaint the student with storytelling techniques, which can be utilized in various age level classrooms. Students will learn how to choose, prepare and present appropriate stories.

### **EDUC 1103 Student Success**

**1 to 3 Credit Hours**

Introduction to the college experience through participation in small group meetings and informational lectures. Study of such topics as personal responsibility, college resources, academic skills, including communication and critical thinking, academic and career planning and goal setting, and social issues that challenge many college students.

### **EDUC 1105 Barton Playbook**

**1 Credit Hours**

This course is designed to help new students understand and comply with the expectations and challenges of a student-athlete specific to collegiate academics and athletics, to develop the tools to increase academic success, to promote earning in a supportive environment, and to foster connections with college resources.

### **EDUC 1128 Foundations of Modern Educ**

**3 Credit Hours**

The course is designed to provide the student with the groundwork for entering the teaching profession. The course will address itself to the real issues in education and place the emphasis on where the action is and where it appears likely to be in education. Supervised laboratory experiences are an integral part of the course.

### **EDUC 1134 Education Field Experience**

**2 Credit Hours**

This course is designed to give students experience in a classroom setting. Students will examine and reflect upon the roles and responsibilities of effective teachers, characteristics of the teaching/learning environment, and look at an overview of teaching as a career choice.

**Prerequisite:** EDUC 1128 Foundations of Modern Educ with a grade of C or better or concurrent enrollment in EDUC 1128 Foundations of Modern Educ or consent of instructor. Student must present a negative TB test and criminal background check no later than the second class meeting. The background check and TB test are at the expense of the student. Background check may be completed at [www.kansas.gov/kbi](http://www.kansas.gov/kbi)

### **EDUC 1136 Children's Literature**

**3 Credit Hours**

This course is a survey of children's literature with an emphasis on how to recognize, select, and present good literature, while motivating children in the reading process. This course is recommended for students majoring in English, Library Science, Early Childhood and/or Elementary Education, as well as, parents of young children. This course can be utilized as a general education course for humanities in the area of literature for students obtaining an AAS degree in Early Childhood.

**Fulfills:** Social Science Requirement

### **EDUC 1142 Intro Instructional Technology**

**3 Credit Hours**

Introduction to Instructional Technology is an introductory course that provides an exciting hands-on look at the possibility and potential of computer technology for education. The goal of this course is for K-12 per-service teachers to begin to use a wide variety of computer-based technology for both professional and instructional use.

### **EDUC 1163 American Sign Language**

**3 Credit Hours**

This course will provide academic credit for active participation in various settings. The topics vary from general information about American Sign Language, vocabulary, phrases, sentence structures, and part of course outline or method of evaluation.

## **EMERG MGMT -HOMELAND SECURITY**

### **EMHS 1100 Introduction to Terrorism**

**3 Credit Hours**

This course serves as a basic introduction to terrorism. Historical background, definitions, tactics, ideologies, and terrorism's impact on twenty-first century civilization around the world will be explored. Both current and historical events are analyzed within course context to provide experiential learning and development of critical thinking skills.



# Course Descriptions

## **EMHS 1900 Emergency Planning 3 Credit Hours**

This course is designed for persons who are involved in developing an effective emergency planning system. The course offers training in the fundamentals of the emergency planning process, including the rationale behind planning. The focus is on an effective all-hazard emergency planning operations planning process to save lives and protect property threatened by disaster.

## **EMHS 1905 Dev & Managing Volunteer Res 3 Credit Hours**

This course offers training in identifying volunteer resources and recruiting, assigning, training, supervising, evaluating, and motivating volunteers. The course also addresses coordinating with voluntary agencies, Voluntary Organizations Active in Disaster (VOAD), community-based organizations such as church groups, food banks, professional groups, as well as business and industry. Special issues such as spontaneous volunteers, stress management and legal issues of volunteers are also addressed. "This course does not address volunteer firefighters because of the vast technical scope of the topic."

## **EMHS 1906 Exercise Design, Mgmt & Eval 3 Credit Hours**

This course is designed to introduce students to the fundamentals of emergency management exercise design, management and evaluation. Students will design an exercise, identify the logistics necessary for execution and management of the exercise, and develop an exercise evaluation plan. Students will also be introduced to the concept of a comprehensive exercise program used to improve on the four phases of emergency management. The course instruction will follow and meet the guidelines established by the Federal Emergency Management Agency exercise design and evaluation courses and the Department of Homeland Security Exercise and Evaluation Program.

## **EMHS 1907 Haz Mat Response Operations 3 Credit Hours**

This course provides students with the skills needed to manage or respond to a hazardous materials incident at the awareness or operations level. Topics include Hazardous Materials Laws, Regulations and Standards, Recognitions and Identification, Information Resources, Protection, Protective Actions, Product Control and Air Monitoring, Terrorism Awareness, HAZMAT and Law Enforcement issues. The course follows National Fire Prevention Agency (NFPA) 472 guidelines.

## **EMHS 1908 Mitigation for Emergency Mgmt 3 Credit Hours**

This course is designed to introduce students to the fundamentals of mitigation as a means to reduce hazard risks to our communities and citizens.

## **EMHS 1909 Basic Skills Emergency Manager 3 Credit Hours**

This course is designed to improve the first responders and emergency managers skills in the areas of leadership and influence, decision-making and problem solving, and communication.

## **EMHS 1910 Emergency Management Seminar 3 Credit Hours**

This course is designed to explore the issues and strategies of emergency management in the following key areas: Legal Issues, Policy & Politics, Organizational Management, Historical and Current Situations, and Economics of Emergency Management.

## **EMHS 1952 Basic Incident Command System 3 Credit Hours**

This course is designed to train students in the basic levels of the Federal Emergency Management Agency (FEMA) Incident Command System (ICS) and the National Incident Management System (NIMS). Students will manage resources and personnel for incidents ranging from ceremonies to natural disasters. The course instruction will follow and meet the guidelines established by the (FEMA) courses IS100, IS200, and IS700.

## **EMHS 1962 Disaster Site Worker 3 Credit Hours**

This course will train students in accordance with OSHA regulations pertaining to construction standards and Safety for Disaster Site Workers that are set forth in the Code of Federal Regulations (CFR) 29, part 1926. This course will also introduce students to the operational skills and procedures required to provide support services, (e.g. utility, demolition, debris removal, or heavy equipment operation) or site clean-up services in response to natural and man-made disasters. All workers at disaster sites need to be aware of the differences between disaster sites and regular construction or demolition worksites and to be able to determine appropriate protective measures for ensuring disaster site worker safety.

## **EMHS 1963 Intro to Emergency Management 3 Credit Hours**

This course provides emergency preparedness personnel with an overview of the skills needed at the community and state levels for emergency operations involving all hazards. This class is appropriate for business and industry, firefighters, Emergency Managers, EMS, police and other interested parties.

## **EMHS 1964 Comm Emergency Response Team 2 Credit Hours**

This course provides the student with the skills required by Federal Emergency Management Agency (FEMA) to serve as a Citizen Emergency Response Team (CERT) member within their community. Training is to provide the private citizens who complete this course with the basic skills they will need to respond to their community's immediate needs in the aftermath of a disaster when emergency services are not immediately available. By working together, CERTs can assist in saving lives and protecting property using the basic techniques in this course.

## **EMHS 1980 Occupational Internship I 1 to 3 Credit Hours**

This course provides students with the opportunity to explore career interests while applying the knowledge and skills learned in the classroom in a workplace setting. The experience also helps students gain a clearer sense of what they still need to learn and provides an opportunity to build professional networks.

# Course Descriptions

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## EMERGENCY MEDICAL TRAINING

### **EMTS 1500 Emergency Medical Technician 12 Credit Hours**

This program is designed for individuals interested in providing medical care to patients in the pre-hospital setting. The program will provide the participant with opportunities to gain information, skills, and attitudes necessary for certification and practice as an EMT in Kansas. Students completing this course will receive a Barton certificate of completion and with permission of the program director, will be eligible to sit for the National Registry of EMT Certification Exam.

**Prerequisite:** Consent of instructor or program director.

### **EMTS 1505 EMT Refresher Seminar 1 to 2 Credit Hours**

This course is designed to maintain certification of the Emergency Medical Services Training in accordance to the Kansas Board of EMS (KSBEMS) and the National Registry of EMT (NREMT).

### **EMTS 1506 EMS Instructor/Coordinator 9 Credit Hours**

This course provides the student with the necessary skills, knowledge, and attitudes to obtain endorsement as a Kansas Board of EMS Training Officer and Instructor Coordinator. This course exceeds the approved curriculum recommended by the National Association of Emergency Medical Services Educators.

**Prerequisite:** Consent of instructor or program director.

### **EMTS 1512 Cardiopulmonary Resuscitation 1 to 3 Credit Hours**

This course covers the knowledge and skills required to provide temporary and immediate care to a person who has ceased breathing or has suffered a cardiac arrest. Successful completion of this course provides for certification by American Heart Association First Aid; and Adult, Child, and Infant CPR.

### **EMTS 1513 Advanced Emergency Med Tech 10 Credit Hours**

This program is designed for individuals interested in providing Advanced Emergency Medical Technician (AEMT) level care in the pre-hospital setting. The program will provide the participant with opportunities to gain information and skills necessary for certification and practice as an AEMT in Kansas, which includes intravenous therapy and medication administration. Students completing this course will receive a Barton certificate of completion and with permission of the program director, will be eligible to sit for the National Registry of EMT Certification Exam.

**Prerequisite:** Must be certified as an EMT and consent of instructor or program director.

### **EMTS 1527 Emergency Medical Responder 7 Credit Hours**

This program is designed for individuals interested in providing medical care to patients in the pre-hospital setting. The program will provide the participant with opportunities to gain information, skills, and attitudes necessary for certification and practice as a Kansas First Responder. Students completing this course will receive a Barton certificate of completion and with permission of the program director, will be eligible to sit for the National Registry of EMT Certification Exam.

**Prerequisite:** Consent of instructor or program director.

### **EMTS 1540 Paramedic I**

**12 Credit Hours**

This course is intended to make students aware of Emergency Medical Services as a total systems concept. It further identifies the Paramedic concept, function, roles and responsibilities of the Paramedic within the system as well as the legal aspects of pre-hospital medicine and an introduction to legislation affecting pre-hospital medicine. This course will also expose the student to the basics of anatomy and physiology of the human body. All aspects of EMS communications will be reviewed, to include medical terminology, radio technology, verbal and written communication. This course covers the physiologic effects and clinical applications for pharmacology in the pre-hospital setting. Students will learn to recognize, assess, and manage emergency situations that result from external mechanisms of injury and the pathophysiology involved in traumatic injuries. This course adheres to Kansas Administrative Regulations (K.A.R.), Article 10 Section 109-10-5.

**Prerequisite:** EMT and invitation from Director following successful completion of application/testing process

### **EMTS 1541 Paramedic II**

**12 Credit Hours**

This course is intended to make students aware of Emergency Medical Services as a total systems concept. It further identifies the Paramedic concept, function, roles and responsibilities of the Paramedic within the system as well as the legal aspects of prehospital medicine and an introduction to legislation affecting prehospital medicine. This course will also expose the student to the basics of anatomy and physiology of the human body. All aspects of EMS communications will be reviewed, to include medical terminology, radio technology, verbal and written communication. This course covers the physiologic effects and clinical applications for pharmacology in the prehospital setting. Students will learn to recognize, assess, and manage emergency situations that result from external mechanisms of injury and the pathophysiology involved in traumatic injuries. This course adheres to Kansas Administrative Regulations (K.A.R.), Article 10 Section 109-10-5.

**Prerequisite:** EMTS 1540 Paramedic I and consent of instructor.

### **EMTS 1542 Paramedic III**

**12 Credit Hours**

This course is intended to make students aware of Emergency Medical Services as a total systems concept. It further identifies the Paramedic concept, function, roles and responsibilities of the Paramedic within the system as well as the legal aspects of prehospital medicine and an introduction to legislation affecting prehospital medicine. This course will also expose the student to the basics of anatomy and physiology of the human body. All aspects of EMS communications will be reviewed, to include medical terminology, radio technology, verbal and written communication. This course covers the physiologic effects and clinical applications for pharmacology in the prehospital setting. Students will learn to recognize, assess, and manage emergency situations that result from external mechanisms of injury and the pathophysiology involved in traumatic injuries. This course adheres to Kansas Administrative Regulations (K.A.R.), Article 10 Section 109-10-5.

**Prerequisite:** EMTS 1541 Paramedic II and consent of instructor.

# Course Descriptions

## EMTS 1543 Paramedic IV

16 Credit Hours

This course is intended to make students aware of Emergency Medical Services as a total systems concept. It further identifies the Paramedic concept, function, roles and responsibilities of the Paramedic within the system as well as the legal aspects of prehospital medicine and an introduction to legislation affecting prehospital medicine. This course will also expose the student to the basics of anatomy and physiology of the human body. All aspects of EMS communications will be reviewed, to include medical terminology, radio technology, verbal and written communication. This course covers the physiologic effects and clinical applications for pharmacology in the prehospital setting. Students will learn to recognize, assess, and manage emergency situations that result from external mechanisms of injury and the pathophysiology involved in traumatic injuries. This course adheres to Kansas Administrative Regulations (K.A.R.), Article 10 Section 109-10-5.

**Prerequisite:** EMTS 1542 Paramedic III and consent of instructor.

## ENGLISH

### ENGL 1105 ESOL Lab

1 Credit Hours

A course designed to help non-native speakers increase their fluency in the English language through a computer based program designed to improve English pronunciation and listening and speaking skills.

**Fulfills:** Developmental Course

### ENGL 1108 ESOL Conversational English

1 Credit Hours

A course in the development of speech skills, the pronunciation of English and English sentence patterns, and finding meaning in spoken English. Students will practice listening strategies to assist in comprehension, expand their vocabulary, and participate in small group discussions. Through a variety of practice activities, the student will learn to integrate English sounds, stress, rhythm, and intonation into clear, fluent speech. Students will be introduced to slang, idioms, and informal words and expressions as encountered in everyday conversation.

**Fulfills:** Developmental Course

### ENGL 1109 ESOL Academic Vocabulary

1 Credit Hours

A course designed to help the non-native speaker increase his/her knowledge of the form, meaning, use, and pronunciation of the most common academic vocabulary words used in textbooks and by instructors. Students will learn how to use context clues and word parts to help decode meanings of new words. Students will practice and review academic words in written and spoken exercises.

**Fulfills:** Developmental Course

### ENGL 1110 ESOL Sentence Structure

1 Credit Hours

A course designed to help the non-native speaker improve his/her writing skills in English. The student will study the parts of speech, grammar, subject/verb agreement, and the mechanics of English sentence structure.

**Fulfills:** Developmental Course

### ENGL 1111 Intro to English Language

6 Credit Hours

A course in the development of speech skills, the pronunciation of English and English sentence patterns, some English reading comprehension, and an understanding of American customs and diversity. An introductory English class with emphasis on survival skills, it is open to all students whose first, primary or home language is not English, regardless of the student's age, place of residence ethnic background, academic plans or previous educational attainment.

**Fulfills:** Developmental Course

**Prerequisite:** Students's statement that English is not his/her primary language, and an Accuplacer ESOL score below 120. Students in Intro to English Language must concurrently enroll in Academic Vocabulary 1, Sentence Structure 1, Conversation 1, and ESOL Lab.

### ENGL 1113 English Study Skills

1 Credit Hours

The course is intended to meet the individual needs of the student who desires to improve his reading, increase his vocabulary, and sharpen his study skills in order to succeed in college. A variety of materials and techniques will be made available to the student to meet his or her needs. This course is designed so that anyone can benefit from it, but especially it will help those who are new to the college life or who seriously want to improve their skills. Frequent instructor-student conferences are held as the student progresses.

**Fulfills:** Developmental Course

### ENGL 1120 English-Speak Other Languages

3 Credit Hours

This course provides beginning English language learners with an integrated English communication experience. Students will develop skills in speaking, listening, reading and writing. Areas of study and practice will include commonly-used sounds; essential academic and social vocabulary; simple sentence structure; simple paragraphing; conversation; reading aloud; and public speaking. The class will also help new international students with their adjustment to attending college in the United States by addressing cultural differences, coping skills, and study skills.

**Fulfills:** Developmental Course

**Prerequisite:** ESOL Accuplacer total score 121 - 240 or successful completion of Intro to English Language. Students in ESOL I must concurrently enroll in Academic Vocabulary, Sentence Structure, Conversation, and ESOL Lab unless the student scores above 120 in any of the subtests (Sentence, Listening, Language Use).

### ENGL 1121 English Speakers Other Lang II

3 Credit Hours

In this intermediate-level course, students will work to improve their pronunciation, listening and reading comprehension, understanding of progressive and perfect verb tenses, public speaking effectiveness, sentence variety, and paragraph development.

**Fulfills:** Developmental Course

**Prerequisite:** ENGL 1120 English-Speak Other Languages with a grade of C or better or ESL Total Score score of at least 241

# Course Descriptions

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## **ENGL 1122 English Speakers Other LangIII 3 Credit Hours**

In this higher level course, students will work toward greater fluency in Standard English. Areas of concentration will include accent reduction, vocabulary building, use of phrasal verbs, understanding of active and passive voice, and basic essay skills.

**Fulfills:** Developmental Course

**Prerequisite:** ENGL 1121 English Speakers Other Lang II with a grade of C or better or ESL Total Score score of at least 361

## **ENGL 1125 ESOL Conversational English II 1 Credit Hours**

A course in the development of speech skills, the pronunciation of English and English sentence patterns, and finding meaning in spoken English. Students will practice listening strategies to assist in comprehension, expand their vocabulary, and participate in small group discussions. Through a variety of practice activities, the student will learn to integrate English sounds, stress, rhythm, and intonation into clear, fluent speech. Students will be introduced to slang, idioms, and informal words and expressions as encountered in everyday conversation.

**Fulfills:** Developmental Course

**Prerequisite:** ESL Listening score of at least 71

## **ENGL 1126 ESOL Academic Vocabulary II 1 Credit Hours**

A course designed to help the non-native speaker increase his/her knowledge of the form, meaning, use, and pronunciation of the most common academic vocabulary words used in textbooks and by instructors. Students will practice and review academic words in written and spoken exercises.

**Fulfills:** Developmental Course

**Prerequisite:** ESL Language Usage score of at least 71

## **ENGL 1127 ESOL Sentence Structure II 1 Credit Hours**

A course designed to help the non-native speaker improve his/her writing skills in English. The student will study the parts of speech, grammar, subject/verb agreement, and the mechanics of English sentence structure.

**Fulfills:** Developmental Course

## **ENGL 1190 Basic English 3 Credit Hours**

This course includes individualized and group instruction in language. Emphasis is placed on basic techniques designed to elicit effective reading and writing skills appropriate for the college level. The course content ranges from developing vocabulary and improving spelling to structuring sentences.

**Fulfills:** Developmental Course

## **ENGL 1194 Intermediate English 3 Credit Hours**

This course, designed for students with special needs, concentrates on improving language and writing skills necessary for successful performance in all college courses and in most careers.

**Fulfills:** Developmental Course

**Prerequisite:** ENGL 1190 Basic English with a grade of C or better or ASSET Writing Skills score of at least 30 or ACT English score of at least 11 or Compass Writing Skills score of at least 22 or Accuplacer Writing Skills score of at least 40 or Accuplacer NG Sentence score of at least 237

## **ENGL 1195 Integrated Reading & Writing 3 Credit Hours**

This course concentrates on improving reading and writing skills necessary for successful performance in all college courses and in most careers.

**Fulfills:** Developmental Course

**Prerequisite:** ENGL 1190 Basic English with a grade of C or better and ENGL 1108 Basic Reading with a grade of C or better or appropriate assessment score.

## **ENGL 1196 Integrated Reading & Write Lab 2 Credit Hours**

The course is designed to help students apply the reading and writing skills taught in the Integrated Reading and Writing lecture course.

**Fulfills:** Developmental Course

## **ENGL 1199 Principles Grammar Form &Style 3 Credit Hours**

Principles of Grammar, Form, and Style, ENGL 1199, includes a study of the parts of speech, phrases, clauses, sentence structure, and paragraph form. In this course, students should acquire and apply the basic skills, techniques, and attitudes necessary to compose college-level writing. This course is especially helpful for students who will be required to complete more advanced tasks in written communication at the business, professional, or college level - most immediately, in English Composition I or II.

## **ENGL 1200 Business English 3 Credit Hours**

This course stresses correct word usage, grammatical structure, punctuation and mechanics, and gives the students practice in writing various types of business communications. The course is recommended for business and career technical education students who need more experience in business English prior to their work experience.

**Fulfills:** Foundation Course AAS, Written Communication Reqrmt

**Prerequisite:** ENGL 1190 Basic English with a grade of C or better or ASSET Writing Skills score of at least 30 or ACT English score of at least 11 or Compass Writing Skills score of at least 22 or Accuplacer Writing Skills score of at least 40 or Accuplacer NG Sentence score of at least 237

## **ENGL 1204 English Composition I 3 Credit Hours**

This course offers an approach to purposeful writing stressing self-expression through written communication by logical presentation of ideas with emphasis on content, organization, and mechanics.

**Fulfills:** Foundation Course AA,AS,AGS,AAS, Written Communication Reqrmt

**Prerequisite:** (ENGL 1194 Intermediate English with a grade of C or better or ENGL 1195 Integrated Reading & Writing with a grade of C or better or ENGL 1122 English Speakers Other LangIII with a grade of C or better or ASSET Writing Skills score of at least 40 or ACT English score of at least 17 or SAT Verbal score of at least 490 or Compass Writing Skills score of at least 65 or Accuplacer Writing Skills score of at least 69 or Accuplacer NG Sentence score of at least 255) AND (READ 1109 Intermediate Reading with a grade of C or better or ASSET Reading Skills score of at least 40 or ACT Reading score of at least 18 or Compass Reading Skills score of at least 75 or Accuplacer Reading Skills score of at least 69 or Accuplacer NG Reading score of at least 255) or ESL Total Score score of at least 400



# Course Descriptions

## **ENGL 1205 Technical and Report Writing 3 Credit Hours**

The course involves the study of various composition techniques vital to a technical or professional writer. Structure, terminology, and types of reports are studied in depth.

**Fulfills:** Foundation Course AAS,AGS, Written Communication Reqrmt

## **ENGL 1206 English Composition II 3 Credit Hours**

This course builds on the skills mastered in the pre-requisite course and is a study of advanced problems in composition, emphasizing rhetorical and logical tools in argument development. A series of essays on controversial issues or problems, which lead to a final documented research essay, will train students both to interpret evidence well and to argue persuasively. The course will increase the student's ability to analyze and evaluate arguments and to express ideas clearly, concisely, logically and persuasively.

**Fulfills:** Foundation Course AA, AS, AGS, AAS, Written Communication Reqrmt

**Prerequisite:** ENGL 1204 English Composition I with a grade of C or better or ENGL 1209 English Composition I with Rev with a grade of C or better

## **ENGL 1209 English Composition I with Rev 5 Credit Hours**

An approach to purposeful writing stressing self-expression through written communication by logical presentation of ideas with emphasis on content, organization, and mechanics, while focusing on improving personal language and writing skills such as grammar, punctuation, and usage.

**Fulfills:** Written Communication Reqrmt

**Prerequisite:** (ENGL 1190 Basic English with a grade of C or better or ACT English score of at least 11 or SAT Verbal score of at least 270 or Compass Writing Skills score of at least 22 or Accuplacer Writing Skills score of at least 40 or Accuplacer NG Sentence score of at least 237) AND (READ 1109 Intermediate Reading with a grade of C or better or ASSET Reading Skills score of at least 40 or ACT Reading score of at least 18 or Compass Reading Skills score of at least 75 or Accuplacer Reading Skills score of at least 69 or Accuplacer NG Reading score of at least 255)

## **ENGL 1216 Creative Writing 3 Credit Hours**

This introductory course focuses on writing short fiction, poetry, drama, and personal essay. It is designed to stimulate and direct creative written expression, to help the emerging creative writer to understand and apply various creative writing conventions and techniques in all four genres, and to foster group discussion and critique within a workshop setting.

**Fulfills:** Humanities Requirement

## **ENGL 1236 Technical Communications 3 Credit Hours**

This course is designed primarily for the student who needs training and practice in writing skills pertaining to his/her own field. Through focusing on audience and purpose, students learn the technicalities and formats expected of technical writers when creating common pieces of business communication. Students apply their writing skills to create a variety of reports, letters, instructions, and ethics statements that pertain to their current jobs, areas of study, or future careers.

**Fulfills:** Foundation Course AAS, Written Communication Reqrmt

**Prerequisite:** ENGL 1200 Business English with a grade of C or better or ENGL 1194 Intermediate English with a grade of C or better or ENGL 1199 Principles Grammar Form & Style with a grade of C or better or ENGL 1204 English Composition I with a grade of C or better or ASSET Writing Skills score of at least 40 or ACT English score of at least 17 or Compass Writing Skills score of at least 65 or Accuplacer Writing Skills score of at least 69 or Accuplacer NG Sentence score of at least 255

## **FAMILY & CONSUMER SCIENCE**

### **HOME 1501 Basic Nutrition 3 Credit Hours**

Fundamentals of nutrition, including food nutrients, their sources, and utilization through body processes will be studied. Also diets for special needs and food fads.

## **FOREIGN LANGUAGE**

### **LANG 1900 Elementary German I 5 Credit Hours**

An introductory course in general education designed to develop the skills needed to communicate in German at a basic level in everyday situations. Throughout the course, emphasis will be placed on discussion skills, such as speaking, listening, and using cultural background information. Reading and writing skills, as well as a thorough study of basic grammatical structures are also seen as essential to achieve the main objective of communication. Lab work, taped conversations, videos, and exercises accompanying the text reinforce classroom work. Supplementary materials to expand vocabulary and understanding of the German language cultures will be introduced at appropriate times.

**Fulfills:** Humanities Requirement



# Course Descriptions

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## **LANG 1902 Elementary German II**

**5 Credit Hours**

This is the second semester of German and is a continuation of Elementary German I. This course is designed to develop the skills needed to communicate in German at the basic level in everyday situations. Throughout the course, emphasis will be placed on discussion skills, such as speaking, listening and using cultural background information. Reading and writing skills, as well as a thorough study of basic grammatical structures, are also seen as essential to achieve the main objective of communication. Lab work, taped conversations and exercises accompanying the text reinforce classroom work. Supplementary materials to expand vocabulary and understanding of the German language cultures will be introduced at appropriate times.

**Fulfills:** Humanities Requirement

**Prerequisite:** LANG 1900 Elementary German I or 1 year of high school German or equivalent.

## **LANG 1908 Elementary Spanish I**

**5 Credit Hours**

An introductory course in Spanish in which four language skills are emphasized; initially listening and speaking, followed by reading and writing. Correct grammar, vocabulary, and pronunciation are stressed and mastered through exposure and practice in the language lab. Introduction to Hispanic culture and civilization through history, arts, literature, and cultural settings is included.

**Fulfills:** Humanities Requirement

## **LANG 1909 Conversational Spanish**

**3 Credit Hours**

The student will be exposed to some 1,000 high frequency words used in the Hispanic world including Mexico, all of South America, Cuba, and Spain. The student will be required to understand the Spanish thought processes and verbalize these thoughts. The student will be able to ask for the necessities of life if he or she were in an environment where Spanish was a necessary tool.

**Fulfills:** Humanities Requirement

## **LANG 1910 Elementary Spanish II**

**5 Credit Hours**

A second semester in Spanish. Reading and writing skills are emphasized with listening and speaking skills included. Pronunciation is stressed. Some Hispanic culture is presented.

**Fulfills:** Humanities Requirement

**Prerequisite:** LANG 1908 Elementary Spanish I or Spanish placement score of at least 370

## **LANG 1914 Elementary French I**

**5 Credit Hours**

An introductory course in French in which the four language skills are emphasized initially listening and speaking, followed by reading and writing. Correct grammar, vocabulary, and pronunciation are stressed and mastered through exposure and practice in the language lab. Introduction to French culture and civilization through history, arts, literature, and cultural settings is included.

**Fulfills:** Humanities Requirement

## **LANG 1916 Elementary French II**

**5 Credit Hours**

This is a second semester of French and is a continuation of Elementary French I. There will be further study of grammar and pronunciation, and more emphasis on writing and speaking in everyday situation. French culture and civilization is included.

**Fulfills:** Humanities Requirement

**Prerequisite:** LANG 1914 Elementary French I

## **LANG 1933 Spanish for the Workplace**

**2 Credit Hours**

This course provides a study of workplace Spanish for non-Spanish-speaking employers and employees who need to enhance communication in the workplace, with both colleagues and customers. The curriculum utilizes phonetic encoding to address Spanish commands, questions, and phrases critical in the workplace.

## **GEOGRAPHY**

### **GEOG 1819 World & Regional Geography**

**3 Credit Hours**

This course is designed as an introductory geographic survey arranged around the eight major regions: Anglo-American, Latin American, Europe, the former Soviet Union, The Middle East, The Pacific World, and Africa. Emphasis is placed on an analysis of the natural environment, cultural environment, population status, economic development, and potentials.

**Fulfills:** Social Science Requirement

## **GRAPHIC DESIGN**

### **GRPH 1030 Web Page Design**

**3 Credit Hours**

This course is designed to build on the course material from the Information Superhighway and Web Site Construction courses. In this course the student will focus on design criteria used for the Internet. Student's will plan and develop well-designed web sites that combine effective navigation with balanced use of graphics, text, and color. The student will review design techniques by studying example pages and web sites and then apply the principles to their own work.

### **GRPH 1048 Multimedia Presentations**

**3 Credit Hours**

This course is designed to let the student experience multimedia technology. The student's ability to communicate information is directly related to their success as a professional. Multimedia can help them increase the effectiveness of presentations by incorporating text, graphics, sound, animation and video.

# Course Descriptions

## **GRPH 1049 Web Site Construction 3 Credit Hours**

This course offers students the chance to explore current software and hardware used to construct web pages on the Internet. There will be a pronounced emphasis on information layout, forms, and JavaScripting. Students will be exposed to one or more popular web page layout applications, the use of which will save time and countless keystrokes in the coding process. The scripting component of this course will focus heavily on programming concepts rather than techniques, preparing the student for much heavier programming. Other Web related topics covered include: animation, frames, forms, CGIs, external media, plug-ins, and current technological trends in web page mastery.

## **GRPH 1054 Digital Image Editing 3 Credit Hours**

This course is for the individuals interested in exploration into the use of computer graphics as applied to the advertising and business communications industries. Concentration will be on the creation of digital images for use in printed publications, corporate identity and web pages for the Internet.

## **GRPH 1056 Vector Image Development 3 Credit Hours**

This course is for individuals interested in learning the basics of vector image development. The course is computer based and focuses on how to communicate through design. Issues fundamental to layout, typography, and vector-based illustration will be covered, perfectly suited to any student who will be responsible for illustrations or graphics of any type. A leading drawing application software package will be utilized in this course. It includes transformations, trapping, continuous-tone images, perspective grids, three-dimensional drawings, and graphic tool.

## **GRPH 1062 Digital Image Editing II 3 Credit Hours**

This course is designed for students already proficient with basic applications in digital image editing who now want to significantly extend their skills and knowledge for color correction and image editing through a savvy use of alpha channels. The course provides a critical overview of advanced techniques, production strategies and creative workflow for reliable and efficient production. Students will learn to create bitmap images for use in publications, on the World Wide Web and for high quality reproduction in glossy publications.

**Prerequisite:** GRPH 1054 Digital Image Editing with a grade of D or better or BSTC 1054 with a grade of D or better Barton County Campus classes use Photoshop CS4

## **GRPH 1065 Digital Video Editing 3 Credit Hours**

This course is for individuals interested in exploring the use of digital video as applied to business and industry communications, in addition to concept development and personal expression. Concentration will be on the capture of video, and the creation and enhancement of digital video for use in forms of multimedia, particularly those relating to educational material, product or service marketing, and various web-based presentations.

## **GRPH 1070 Portable Document Formatting 3 Credit Hours**

This course covers topics related to portable document formatting. Students will learn how to use software to convert documents from nearly any program to the Portable Document Format (PDF). Portable document formatting software is used to preserve the fonts, layout, colors, and graphics of any document, regardless of the program or platform used to create the document.

## **HAZARDOUS MATERIALS**

## **HZMT 1903 Intro to Environmental Mgmt 3 Credit Hours**

Introduction to Environmental Management provides an overview of the impact of industrial operations on the environment, government regulations controlling industrial activities, and cost-effective business strategies that meet environmental guidelines. In addition, the following topics will be discussed: "green" chemistry and engineering; sustainability; indoor air quality; energy conservation; communicating environmental management risks to the public; environmental implications of nanotechnology, environmental ethnics and environmental justice.

## **HZMT 1905 Environmental Sampling & Monit 3 Credit Hours**

This course introduces students to the basic concepts and technologies employed to properly sample and monitor various environmental media in a variety of settings. Course emphasis is given to both regulatory compliance and response operations. Topics include air, water, and soil sampling plans, equipment selection, sampling techniques, sample integrity, monitoring techniques, chain of custody, quality, and data interpretation.

## **HZMT 1907 Resource Conserv & Recovery Act 3 Credit Hours**

This course provides an introduction to the Resource Conservation and Recovery Act (RCRA) with an emphasis on federal rulemaking, regulatory framework, and hazardous waste management. Topics include the Federal Register, Code of Federal Regulations, hazardous waste characterization, generator classifications, transporter responsibilities, treatment and disposal facilities, universal waste, standard and innovative remediation technologies, and contingency planning. Students will also explore and discuss related laws impacting hazardous waste management such as the Comprehensive Environmental Response and Liability Act (CERCLA) and the Emergency Planning and Community Right to know Act (EPCRA).

## **HZMT 1909 Clean Air & Water Quality Regs 3 Credit Hours**

This course provides a study of the laws and regulations associated with the protection of air and water. Topics and activities include the Clean Air Act Amendments (CAAA), Clean Water Act (CWA), air pollution control technologies, National Pollutant Discharge Elimination System (NPDES), and interpreting standards promulgated in the Code of Federal Regulations.

# Course Descriptions

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## **HZMT 1911 Emergency Resp to Chem Spills 3 Credit Hours**

This course provides students with an overview of the requirements of 29 CFR 1910.120 (g) for Emergency Responders (Spill Response Teams, Hazmat Teams, Fire Fighters, EMS, FEMA personnel or Policeman) who respond to chemical spills. Topics include levels of releases, emergency response plan, environmental spill response, incident command system, toxicology, chemical awareness, monitoring, personal protective equipment, safety, site control, types of decontamination, emergency spill containment procedures.

## **HZMT 1912 Industrial Hygiene/Toxicology 3 Credit Hours**

A review of the research done in determining the systematic health effects of exposures to chemicals. Determination of risk factors, routes of entry, control measures, and acute and chronic effects are discussed.

## **HZMT 1917 Dept. of Transportation Regs 3 Credit Hours**

This course provides a detailed study of the U.S. Department of Transportation (DOT) regulations. Topics include identifying regulated materials, prepare shipping papers, inspection of packaging and label determination. Emphasis will be placed on interpretation of regulations used in the transportation and storage of hazardous materials.

## **HZMT 1919 HAZWOPER 3 Credit Hours**

This course provides students with an overview of the requirements of 29 CRF 1910.120 for occupational health and safety workers who respond to hazardous waste and chemical spills. Topics include toxicology, chemical awareness, monitoring, personal protective equipment, safety, confined space entry, incident command, site control, medical surveillance, decontamination, safe work practices and emergency procedures.

## **HZMT 1940 Introduction to Ergonomics 3 Credit Hours**

This course provides the student the fundamental knowledge about human structure, behavior, and common work practices. Knowledge gained in class will enable the student to evaluate work systems and recommend changes that will reduce work related musculoskeletal disorders (MSD) and other workplace ergonomics related injuries.

## **HZMT 1950 Characteristics of Haz Mat 3 Credit Hours**

This course focuses on the basic concepts needed by first responders, emergency operations personnel, industry, and law enforcement to evaluate the potential hazards and behaviors of materials considered hazardous. It examines the reasons for the chemical behavior of hazardous materials and is designed to improve decision-making in safety operations, handling, entrance protection, mitigation, and decontamination procedures. Units of the course include the Periodic Table, chemical and physical aspects of chemical compounds and how these properties affect emergency incidents, salts, non-salts, the hydrocarbon family, hydrocarbon derivatives, and physical process of combustion.

## **HZMT 1978 GIS for Emergency Operations 3 Credit Hours**

This course serves as an introduction to Geographic Information Systems and their application in Emergency Operations. The basic concepts of geography, cartography and Global Positioning Systems will be covered, along with the basic components and capabilities of a geographic information system. Students will learn about the fundamental types of GIS analysis and applications, focusing on those used in Emergency Operations.

## **HZMT 1979 Continuity Operations Planning 3 Credit Hours**

This course provides a brief overview of continuity of operations planning, including its definition, the legal basis for continuity planning, the Continuity Program Management Cycle, and the essential elements of a viable continuity program. The course covers program requirements, elements and support requirements and describes the roles and responsibilities of the Continuity Program Manager and other key players in developing a viable continuity program.

## **HZMT 1980 Occupational Internship I 1 to 3 Credit Hours**

This course provides students with the opportunity to explore career interests while applying the knowledge and skills learned in the classroom in a workplace setting. The experience also helps students gain a clearer sense of what they still need to learn and provides an opportunity to build professional networks.

## **HEALTH**

## **HLTH 1247 Lifetime Fitness and Wellness 1 to 3 Credit Hours**

This course will develop those basic fitness and wellness skills and behaviors necessary for lifelong health, fitness, and well-being. Lecture sessions will cover how to develop a personal lifetime program that promotes fitness, preventive health care, and personal wellness. Through supervised circuit training and other exercise activities, students will evaluate and develop their muscle tone, cardiovascular endurance, flexibility, and body composition.

**Fulfills:** PE/Health Course, Physical Education Requirement

## **HLTH 1248 Personal & Community Health 3 Credit Hours**

The purpose of this course is to provide a personal appreciation, understanding, and awareness for good health and well being by analyzing the causes and effects of major health problems in our society today.

**Fulfills:** PE/Health Course, Physical Education Requirement

## **HISTORY**

## **HIST 1400 American History to 1877 3 Credit Hours**

The history of America will be examined from the early arrival of the colonists through the American Civil War and its reconstruction period. Political, social, economic, cultural, and religious forces that have shaped American History will be studied. The course provides a foundation for understanding the basics of American History.

**Fulfills:** Humanities Requirement

# Course Descriptions

## **HIST 1401 American History 1865 to Pres 3 Credit Hours**

This course will examine the major developments of U.S. history since the end of the Civil War to the present. Important individual events will be examined in order to get an overall picture of our American history during this period. Special attention will be given to reconstruction after the Civil War, the Great Depression of the 1930's and the impact of World War II and other events that took place and played a highly significant role in our history. Students will be asked to describe at least one important thing they learned from each chapter and to critically analyze the impact this had on the U.S.

**Fulfills:** Humanities Requirement

## **HIST 1402 American History 1877-Present 3 Credit Hours**

American History 1877-Present is a study of social, economic, and political developments in American society from the end of the Civil War reconstruction (1877) to the present.

**Fulfills:** Humanities Requirement

## **HIST 1403 American History to 1865 3 Credit Hours**

The topics of particular focus of this course include the Age of Discovery and European expansion, the temper of European-Indigenous American "first contact", early Colonial wars and culture, the growth of the Anglo-American rift, and the American Revolution. The course examines the failures of the early Confederation, America's struggle to establish a constitutional republic, the challenges of our first four Executive administrations, Jacksonian Democracy and the transformation of America's 19th century socio-political landscape, and an analysis of America's bloody Civil War.

**Fulfills:** Humanities Requirement

## **HIST 1404 American West 3 Credit Hours**

This course provides students with an excellent study of the significance of the West in American History. Students will gain a broad understanding of the events that occurred which shaped the development of the West.

**Fulfills:** Humanities Requirement

## **HIST 1406 History of Kansas 3 Credit Hours**

A survey of the exploration, settlement, and development of Kansas with special emphasis upon early history.

**Fulfills:** Humanities Requirement

## **HIST 1408 Western Civilization to 1500 3 Credit Hours**

It is the intent of the course to introduce students to the broad sweep of Western civilization. The course is focuses on examining Western heritage from the historical perspective. The class will examine social history as a core element, but extensive attention is given to economic, political, cultural, and intellectual developments.

**Fulfills:** Humanities Requirement

## **HIST 1409 Hist & Phil Western cul to1500 3 Credit Hours**

This course focuses upon reading and discussing a select group of important writings and ideas that left an imprint on the intellectual and cultural development of the Western world. History and Philosophy of Western Culture to 1500 includes readings from the ancient, medieval, and early modern periods.

## **HIST 1410 Western Civilization 1500-Pres 3 Credit Hours**

This course is a continuation of HIST 1408 Western Civilization to 1500. HIST 1410 will cover Western Civilization from 1500 to the present. It is the intent of the course to introduce students to the broad sweep of Western civilization. The course is focused on examining Western heritage from the historical perspective. The class will examine social history as a core element, but extensive attention is given to economic, political, cultural, and intellectual developments.

**Fulfills:** Humanities Requirement

## **HIST 1411 Hist&Phil West Cul 1500 - Pres 3 Credit Hours**

This course focuses upon reading and discussing a select group of important writings and ideas that left an imprint on the intellectual and cultural development of the Western world. History and Philosophy of Western Culture 1500- Present includes readings from the modern periods.

## **HIST 1416 American Military History 3 Credit Hours**

This course is designed to present a balanced history of the Army from its beginnings through the post Vietnam era, with appropriate attention to peacetime as well as wartime achievements.

**Fulfills:** Humanities Requirement

## **HIST 1425 Women & The AmericanExperience 3 Credit Hours**

This course is an introduction to the history of women in America. The primary focus is that of the experience of American women in the areas of family life, economic life, and public life. Special attention will be given to the diversity of class, race, and region. Topics are covered which give women's history its distinctive character.

**Fulfills:** Humanities Requirement

## **HIST 1440 Seminar in History 1 Credit Hours**

Seminar in History is a structured learning experience offered as an extension to the regular history curriculum. The seminar will allow students to study specific time periods and major events in history.

## **HIST 1450 History of World Civ to 1500 3 Credit Hours**

It is the intent of this course to introduce students to the broad sweep of world civilizations. The course is focused on examining heritage of world civilizations from the historical perspective. The class will examine the history of world civilizations from social, economic, political, cultural, and intellectual perspectives.

**Fulfills:** Humanities Requirement

# Course Descriptions

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## **HIST 1452 History of World Civ 1500-Pres 3 Credit Hours**

This course will cover world civilizations from 1500 to the present. It is the intent of the course to introduce students to the broad sweep of western civilizations. The course is focused on examining heritage of world civilizations from the historical perspective. The class will examine the history of world civilizations from social, economic, political, cultural, and intellectual perspectives.

**Fulfills:** Humanities Requirement

## **HIST 1460 Military Hist/Amer Revolution 3 Credit Hours**

This course presents the military history of the American Revolution through the detailed examination of the strategy, operations, battles, and leadership of the war.

**Fulfills:** Humanities Requirement

## **HIST 1461 Military Hist/Amer Civil War 3 Credit Hours**

This course presents the military history of the American Civil War. While such topics as the cause of the war and the relative strengths and weaknesses of the North and South will be addressed, the focus of the course will be the major campaigns and battles of the Civil War. Campaign/battle studies will not consist merely of an examination of the events of the campaign/battle. They will include that of the course, but also a great deal more. In addition they will include discussions of the events that precipitated each campaign/battle; examinations of the strategy, tactics, and leadership of the belligerents; and evaluations of the result of the battle on the belligerents.

**Fulfills:** Humanities Requirement

## **HIST 1462 Military Hist/First World War 3 Credit Hours**

This course presents the military history of World War I. As background for the war, this course will first examine the political, diplomatic, economic, and military events from 1914 to 1919 that led to the war. The course will then cover the major campaigns and battles in all the major theaters of the war. The campaign/battle studies will not consist merely of an examination of the events of each campaign/battle, but will also examine the political, diplomatic, economic, and strategic context in which they occurred. Thus, the campaign/battle studies will address the events that precipitated each campaign/ battle; the strategy, tactics, and leadership of the belligerents; and the result of the battle of the outcome of the war.

**Fulfills:** Humanities Requirement

## **HIST 1463 Military Hist/Second World War 3 Credit Hours**

This course presents the military history of World War II. As background for the war, this course will first examine the political, diplomatic, economic, and military events from 1919 to 1941 that led to war in both the Pacific and European Theaters. The course will then concentrate on the military, naval, and air campaigns and battles from 1941 to 1945. This portion of the course will cover the major campaigns and battles in all the major theaters of the war. The campaign/battle studies will not consist merely of an examination of the events of each campaign/battle. The studies will also examine the political, diplomatic, economic, and strategic context in which they occurred. Thus, the campaign/battle studies will address the events that precipitated each campaign/battle; the strategy, tactics, and leadership of the belligerents; and the result of the battle on the outcome of the war.

**Fulfills:** Humanities Requirement

## **HIST 1465 Military Hist/Vietnam War 3 Credit Hours**

This course presents the history of the Vietnam War. As background for the war, this course will first examine the political, diplomatic, economic and military events from 1914 that led to the development of Vietnamese Nationalism and the American commitment to the war. The course will then cover the escalation of the war through the various American administrations. Military strategy will be discussed along with the political, diplomatic and economic context in which it occurred. The anti-war movement, public opinion, literature and the media and the war will be discussed. Finally the peace accords, which may or may not have worked from this conflict, will be studied along with a look at the consequences of the conflict and the lessons learned.

**Fulfills:** Humanities Requirement

## **JOURNALISM**

### **JOUR 1700 Intro to Mass Media 3 Credit Hours**

This course is designed to look at the media from a structural and descriptive point of view. It will examine the eight major media including newspaper, television, and radio, books, magazines, movies, recorded music and the Internet and will show their role in our society.

**Fulfills:** Humanities Requirement

### **JOUR 1701 Journalism I 3 Credit Hours**

This course is designed to acquaint the student with the basic elements of design (photos, headlines and text). Students will learn how to create charts, maps and diagrams; design attractive photo spreads; add effective sidebars to complex stories; create page designs; develop leads for stories; and meet deadlines.

### **JOUR 1704 Beginning Reporting 3 Credit Hours**

The basic journalistic writing course will cover news writing for all branches of the news media with emphasis on newspapers. It will emphasize gathering and writing actual news stories from campus and community resources.

**Fulfills:** Humanities Requirement



# Course Descriptions

## **JOUR 1705 Advanced Reporting 3 Credit Hours**

The advanced journalistic writing course will cover various aspects of writing including news, news features, features, investigative reporting, editorials, and columns with an emphasis on newspapers. It will emphasize gathering and writing actual news stories from campus and community resources.

**Prerequisite:** JOUR 1704 Beginning Reporting with a grade of C or better or COMM 1704 Beginning Reporting with a grade of C or better

## **JOUR 1711 Journalism II 3 Credit Hours**

This course is designed to acquaint the student with the basic elements of design (photos, headlines and text). Students will learn how to create charts, maps and diagrams; design attractive photo spreads; add effective sidebars to complex stories; create page designs; develop leads for stories; and meet deadlines. Students are expected to demonstrate advanced skills and assume leadership responsibility in the production of news for the student news website.

**Prerequisite:** JOUR 1701 Journalism I

## **LEADERSHIP**

### **LEAD 1000 Intro to Leadership Concepts 3 Credit Hours**

This course studies leadership styles, skills, roles, and functions of leaders of organizations. Students will gain a broad understanding of the history and origins of leadership, theoretical approaches to leadership, and ethical issues facing contemporary leaders. Students will also develop a personal philosophy of leadership, an awareness of the moral and ethical responsibilities of leadership, and an awareness of one's own style of leadership. This program integrates readings from the humanities, classic works of literature, contemporary multicultural writings, and experiential learning exercises with readings and discussions of traditional leadership theories.

**Fulfills:** Humanities Requirement

### **LEAD 1002 Leadership & Mgmt Seminar I 3 Credit Hours**

This course is a leadership and management Seminar/Workshop. It is designed to enhance the productivity and effectiveness of the civilian management team on Fort Riley Kansas. The workshop seminars content was designed under the guidance of the Fort Riley Garrison Staff and is tailored to specific needs of the installation. The Leadership & Management Seminars are designed to target three specific skill sets as articulated by the current needs of the Fort Riley Garrison. This course is taught by a team of instructors and incorporates subject matter guest speakers from the Fort Riley Garrison. The seminars are offered in levels I, II, and III.

### **LEAD 1003 Leadership & Mgmt Seminar II 3 Credit Hours**

This course is a leadership and management Seminar/Workshop. It is designed to enhance the productivity and effectiveness of the civilian management team on Fort Riley Kansas. The workshop seminars content was designed under the guidance of the Fort Riley Garrison Staff and is tailored to the specific needs of the installation. The Leadership & Management Seminars are designed to target three specific skill sets as articulated by the current needs of the Fort Riley Garrison. This course is taught by a team of instructors and incorporates subject matter guest speakers from the Fort Riley Garrison. The seminars are offered in levels I, II, and III.

### **LEAD 1004 Leadership & Mgmt Seminar III 3 Credit Hours**

This course is a leadership and management seminar/workshop. It is designed to enhance the productivity and effectiveness of the civilian management team on Fort Riley Kansas. The workshop seminars content was designed under the guidance of the Fort Riley Garrison Staff and is tailored to specific needs of the installation. The Leadership & Management Seminars are designed to target three specific skill sets as articulated by the current needs of the Fort Riley Garrison. This course is taught by a team of instructors and incorporates subject matter guest speakers from the Fort Riley Garrison. The seminars are offered in levels I, II, and III.

### **LEAD 1005 Noncomm Officer Eval Report 1 Credit Hours**

Provide students with the knowledge and understanding of the Noncommissioned Officer (NCO) Evaluation Report process. The course will discuss the preparation and completion of the evaluation report, and its importance for Department of the Army centralized selection boards.

### **LEAD 1006 Army Eval Rep Sys Couns Proc 1 Credit Hours**

Provide students with the knowledge and understanding of the Army Evaluation Reporting System counseling process. The course will discuss the Noncommissioned Officer (NCO) counseling support form and the counseling process to facilitate student's performance and professional development. The course also discusses counseling session preparation and the basic components of a counseling session.

### **LEAD 1007 Eff Military Writ & Corres Sem 1 Credit Hours**

This course is designed to enhance the productivity and effectiveness of the service members and civilian workforce at Fort Riley, Kansas. The workshop seminars content was designed to provide students with the knowledge and understanding of military writing and communication form and style. The course will discuss the Army's communication standards and defines writing style. The course is tailored to specific needs of the installation.

# Course Descriptions

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## LIFE SCIENCES

### **LIFE 1402 Principles of Biology** 0 or 5 Credit Hours

The course introduces the student to the unifying principles common to all levels of biological organization. Emphasis is at the cellular, organism and population levels with inquiry into the nature of scientific investigation. This course is designed to provide students with a biological frame of reference in a liberal education as well as for students selecting additional courses in the department of biology.

**Fulfills:** Laboratory Course, Natural Science Requirement

### **LIFE 1406 Principles of Botany** 0 or 5 Credit Hours

This course focuses on the evolution, anatomy, and physiology of plants, and the vital roles they play in both the environment and in our lives. Students will gain an understanding of the unique cellular make up, morphology and function of plant tissues, as well as the metabolism, genetics, evolution, life cycles, classification, ecology, and economic importance of the plant kingdom and plant-related species. This course is intended primarily for students majoring in botany-related areas, such as Biology, Zoology, Wildlife Science, Forestry, Horticulture, Natural Resource Management, and similar fields of study.

**Fulfills:** Laboratory Course, Natural Science Requirement

**Prerequisite:** LIFE 1402 Principles of Biology with a grade of C or better

### **LIFE 1407 Anatomy & Physiology I** 0 or 4 Credit Hours

The aim of this course is to provide the student with a working knowledge of the structure and function of the human body. Emphasis is on the study of function in the body and a basic knowledge of gross anatomy. Laboratory work will include a study of the major body systems. This course is the first in a series of two.

**Fulfills:** Laboratory Course, Natural Science Requirement

### **LIFE 1408 Anatomy & Physiology** 0 or 5 Credit Hours

The aim of this course is to provide the student with a knowledge of the structure and function of the human body. Emphasis is on the study of function in the body and a basic knowledge of gross anatomy. Laboratory work will include a study of the major body systems.

**Fulfills:** Lab Science Requirement, Laboratory Course, Natural Science Requirement

### **LIFE 1409 Anatomy & Physiology II** 0 or 4 Credit Hours

The aim of this course is to provide the student with a working knowledge of the structure and function of the human body. Emphasis is on the study of function in the body and basic knowledge of gross anatomy. Laboratory work will include a study of the major body systems. This course is the first in a series of two.

**Fulfills:** Laboratory Course, Natural Science Requirement

**Prerequisite:** LIFE 1407 Anatomy & Physiology I with a grade of C or better

### **LIFE 1410 Principles of Zoology** 0 or 5 Credit Hours

This course is designed to introduce the student to the fundamental concepts and principles of animal biology and to be aware of the relationship of these principles to man. Laboratory study of animals, representing the gross and microscopic anatomy, physiology, classification, and ecology will be included. The approach will be from the single cell to the complex organism.

**Fulfills:** Laboratory Course, Natural Science Requirement

**Prerequisite:** LIFE 1402 Principles of Biology with a grade of C or better

### **LIFE 1411 Anat/Physiol-PreHospit Provide** 4 Credit Hours

This course will provide the student with a working knowledge of the structure and function of the human body. Emphasis is on the study of function in the body and a basic knowledge of gross anatomy. All concepts in this course will then also be related to the sick and injured patients commonly seen in the pre-hospital emergency environment.

**Fulfills:** Natural Science Requirement, Non-Laboratory Course, Natural Science checkw /advisor

**Prerequisite:** Enrollment by consent of instructor.

### **LIFE 1412 Principles of Microbiology** 0 or 5 Credit Hours

Microbiology is the study of microorganisms and their role in the world around us. This course includes a study of bacteria in relation to their physiology, morphology, taxonomy, life cycles, and economic influences. The students will acquire skills in performing lab techniques involved in the culturing and studying of microorganisms. The course is designed to meet the requirements of those interested in biology and allied health programs.

**Fulfills:** Laboratory Course, Natural Science Requirement

### **LIFE 1413 Environmental Science** 3 Credit Hours

This course is a study of current environmental conditions, issues, and problems. Students will study the different types of ecosystems, the use and availability of natural resources, population dynamics, and environmental risks. Students will also explore possible solutions to such environmental issues as climate change, loss of biodiversity, renewable energy sources, and energy conservation by examining current scientific, social, and political thought.

**Fulfills:** Laboratory Course, Natural Science Requirement, Non-Laboratory Course

### **LIFE 1414 Environmental Science Lab** 2 Credit Hours

This course covers lab procedures that are commonly used to determine the quality of our environment. Students will perform quantitative and qualitative experiments on air, water, food, and soil to determine environmental quality.

**Fulfills:** Lab Science Requirement, Laboratory Course, Natural Science Requirement

**Prerequisite:** LIFE 1413 Environmental Science with a grade of C or better or concurrent enrollment in LIFE 1413 Environmental Science

# Course Descriptions

## **LIFE 1422 Pathophysiology**

**4 Credit Hours**

This course is an introduction to the basic concepts of pathophysiology. Students will examine the phenomena that produce alterations in human physiologic function and the resulting human response. Upon completion of the course, students will understand pathophysiological changes, including how pathological processes are manifested, progress in the body, and the primary and secondary effects of these changes.

**Prerequisite:** (LIFE 1407 Anatomy & Physiology I with a grade of C or better AND LIFE 1409 Anatomy & Physiology II with a grade of C or better) or LIFE 1408 Anatomy & Physiology with a grade of C or better or MDAS 1672 Medical Terminology with a grade of C or better

## **LITERATURE**

### **LITR 1210 Intro to Literature**

**3 Credit Hours**

This course is designed to develop greater appreciation of literature through the study of selected short stories, novels, poetry and drama, allowing for the exploration of abstract ideas not readily accessible through other means. As such, literary selections will be used as a vehicle to examine universal themes basic to the human condition and to investigate these themes as they relate to life experiences. Students will gain an understanding of literary concepts so that they will be able to interpret, analyze, and critically evaluate selections from each genre.

**Fulfills:** Humanities Requirement

### **LITR 1212 The Short Story**

**3 Credit Hours**

A careful examination of numerous short stories, for interest and artistic excellence. The purposes of this course are to increase the student's pleasure and sensitivity in short literature, to waken interest in materials and forms of fictions, and to increase understanding of the problems of life.

**Fulfills:** Humanities Requirement

### **LITR 1214 The Novel**

**3 Credit Hours**

Designed to carefully examine world novels, to uncover each work's unsuspected delights. To instill understanding of why the student likes what he likes, how to appreciate style and technique and how to read with more enjoyment.

### **LITR 1215 World Literature**

**3 Credit Hours**

This course is a study of literature from several countries and regions, by diverse authors, and of a variety of literary types. The literature will be used as a vehicle to examine universal themes basic to the human condition, to investigate the breadth of human diversity, and to increase awareness of human values, attitudes, and behavior throughout the world.

**Fulfills:** Humanities Requirement

### **LITR 1216 American Literature I**

**3 Credit Hours**

American Literature I is a survey of American writing from pre-colonial to 1865 with emphasis on the major writers and movements.

### **LITR 1228 Introduction to Drama**

**3 Credit Hours**

A study of the development of drama as literature.

## **LITR 1231 Popular Topics in Literature**

**1 Credit Hours**

This course is designed for the enjoyment and edification of the members of the Silver Cougar's Club. It's subject matter may cover any of the following: the elements of prose, poetry, and drama; the study of individual classics; characteristics of literary forms; or literary periods.

## **LITR 1234 Shakespeare**

**3 Credit Hours**

A study of the works of William Shakespeare, including selected comedies, tragedies, romances, histories, and poetry. Attention is given to Shakespeare's historical and literary significance.

## **LITR 1235 Great Books Program**

**1 Credit Hours**

Emphasis will foster self-education of adults through reading and group discussion of books, dealing with issues basic to mankind.

## **MATHEMATICS**

### **MATH 1798 Jump Math**

**2 Credit Hours**

To provide the opportunity for students to master math skills that they need to have to be successful in their chosen academic/career goals.

**Fulfills:** Developmental Course

**Prerequisite:** ACT Math score of at least 20 or SAT Mathematics score of at least 450 or Accuplacer Arithmetic Skills score of at least 120

### **MATH 1805 Basic Math Skills**

**1 Credit Hours**

Topics cover basic math skills.

**Fulfills:** Developmental Course

### **MATH 1806 Technical Mathematics**

**3 Credit Hours**

This course covers the mathematics needed by students enrolled in technical or trade programs. The emphasis will be on application in solving problems encountered in vocational fields; the student will be exposed to a broad coverage of arithmetic, algebra, geometry and basic statistics. The metric system and measurement techniques will also be covered.

**Fulfills:** Foundation Course AAS,AGS, Mathematics Requirement

**Prerequisite:** MATH 1809 Basic Applied Mathematics with a grade of C or better OR having passed Module 4 in College Preparatory Mathematics OR an appropriate placement score.

### **MATH 1807 Math Learning Strategies**

**2 Credit Hours**

This course addresses feelings and attitudes, which may block mathematics learning and offers strategies and techniques designed to overcome these feelings. The course also teaches thinking and study skills specifically geared toward the learning of mathematics, which includes problem solving, test taking, and cognitive skills.

**Fulfills:** Developmental Course

# Course Descriptions

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## **MATH 1809 Basic Applied Mathematics**                      **3 Credit Hours**

This course is for the college student whose grasp of basic arithmetic skills is currently weak or marginal. Competency at the college level in addition, subtraction, multiplication and division of integers, decimals and fractions as well as ratio and percent will be emphasized. Many of the problems in the course notes will be applied to real world topics.

**Fulfills:** Developmental Course

## **MATH 1811 Preparatory Mathematics**                      **2 Credit Hours**

This course is designed as a review for arithmetic fundamentals. Topics to be covered include addition, subtraction, multiplication, division, fractions, decimals, and percents.

**Fulfills:** Developmental Course

**Prerequisite:** MATH 1805 Basic Math Skills with a grade of C or better or ASSET Numerical Skills score of at least 33 or ACT Math score of at least 14 or SAT Mathematics score of at least 370 or Accuplacer Arithmetic Skills score of at least 35

## **MATH 1813 College Preparatory Math I**                      **3 Credit Hours**

To provide the opportunity for students to master math skills that they need to have to be successful in their chosen academic/career goals.

**Fulfills:** Developmental Course

**Prerequisite:** When initially enrolling in College Prep Math, a student will be charged a fee of \$100.00 to cover the cost of materials for the course(s).

## **MATH 1815 College Preparatory Math II**                      **3 Credit Hours**

To provide the opportunity for students to master math skills that they need to have to be successful in their chosen academic/career goals.

**Fulfills:** Developmental Course

**Prerequisite:** MATH 1813 College Preparatory Math I with a grade of C or better

## **MATH 1817 College Preparatory Math III**                      **3 Credit Hours**

To provide the opportunity for students to master math skills that they need to have to be successful in their chosen academic/career goals.

**Fulfills:** Developmental Course

**Prerequisite:** MATH 1815 College Preparatory Math II with a grade of C or better

## **MATH 1819 Business Mathematics**                      **3 Credit Hours**

This course deals with fundamental mathematical concepts useful for business decision making. Students will learn the mathematics involved in discounts, markups and markdowns, banking, simple and compound interest, annuities, payroll, inventory and depreciation.

**Fulfills:** Foundation Course AAS,AGS, Mathematics Requirement

**Prerequisite:** MATH 1809 Basic Applied Mathematics with a grade of C or better OR having passed Module 4 in College Preparatory Mathematics OR an appropriate placement score.

## **MATH 1821 Basic Algebra**                      **3 Credit Hours**

Topics cover fundamental algebraic operations, factoring, algebraic fractions, linear and quadratic equations, exponents and radicals.

**Fulfills:** Developmental Course

**Prerequisite:** MATH 1809 Basic Applied Mathematics with a grade of C or better or MATH 1811 Preparatory Mathematics with a grade of C or better or ASSET Numerical Skills score of at least 40 or ACT Math score of at least 17 or SAT Mathematics score of at least 470 or Accuplacer Arithmetic Skills score of at least 70 or Compass Numerical/Pre-Algebra score of at least 39 or Accuplacer NG QAS score of at least 237

## **MATH 1823 Mathematics for Liberal Arts**                      **3 Credit Hours**

This is a general education course designed to meet the needs of students majoring in non-technical degree programs that do not require courses for which college algebra is a prerequisite and students who are majoring in non-STEM fields. Emphasis will be placed on developing critical thinking and quantitative reasoning skills needed to understand major issues in society.

**Fulfills:** Mathematics Requirement

**Prerequisite:** MATH 1824 Intermediate Algebra with a grade of C or better or QuadraticEquations/Functions score of at least 0 or ACT Math score of at least 21 or Accuplacer NG QAS score of at least 250 or ASSET Elementary Algebra score of at least 39 or Compass Algebra score of at least 41

## **MATH 1824 Intermediate Algebra**                      **3 Credit Hours**

Topics include properties of real numbers, linear and quadratic equations, equations of lines, operations on polynomials and factoring, operations on rational expressions, functions, graphs of linear and quadratic functions, complex numbers, integer and rational exponents, radicals, systems of linear equations, and linear and quadratic inequalities.

**Fulfills:** Foundation Course AAS,AGS, Mathematics Requirement

**Prerequisite:** MATH 1821 Basic Algebra with a grade of C or better or ASSET Elementary Algebra score of at least 39 or ACT Math score of at least 21 or SAT Mathematics score of at least 530 or Compass Algebra score of at least 41 or Accuplacer Elementary Algebra score of at least 60 or Accuplacer NG QAS score of at least 250

## **MATH 1825 College Preparatory Math IV**                      **1 or 2 Credit Hours**

To provide the opportunity for students to master math skills that they need to have to be successful in their chosen academic/career goals.

**Fulfills:** Developmental Course

**Prerequisite:** MATH 1813 College Preparatory Math I with a grade of C or better or MATH 1815 College Preparatory Math II with a grade of C or better

# Course Descriptions

## **MATH 1826 College Algebra**

**5 Credit Hours**

A study of polynomial, rational, exponential, and logarithmic functions and their graphs; complex numbers, systems of equations and inequalities, and an introduction to matrices and determinants with "just-in-time" instruction on Intermediate Algebra topics. Additional topics may include conic sections, partial fractions, sequence and series, discrete mathematics, probability, and the binomial theorem.

**Fulfills:** Foundation Course AA, AS, AGS, AAS, Mathematics Requirement

**Prerequisite:** MATH 1821 Basic Algebra with a grade of C or better or ASSET Elementary Algebra score of at least 39 or ACT Math score of at least 21 or SAT Mathematics score of at least 530 or Compass Algebra score of at least 41 or Accuplacer Elementary Algebra score of at least 60 or Accuplacer NG QAS score of at least 250 This 5 credit hour class is equivalent to MATH 1828 which meets the needs of students requiring additional class time to succeed. Particularly recommended for students who have not used algebra for some time or whose placement scores indicate that he/she would benefit from this format. \*\*\*\*\*Note: Credit is only given for this course, MATH 1826.

## **MATH 1828 College Algebra**

**3 Credit Hours**

A study of polynomial, rational, exponential, and logarithmic functions and their graphs; complex numbers, systems of equations and inequalities, and an introduction to matrices and determinants. Additional topics may include conic sections, partial fractions, sequence and series, discrete mathematics, probability, and the binomial theorem.

**Fulfills:** Foundation Course AA, AS, AGS, AAS, Mathematics Requirement

**Prerequisite:** MATH 1824 Intermediate Algebra with a grade of C or better OR having passed Module 12 in College Preparatory Mathematics OR appropriate placement score.

## **MATH 1830 Trigonometry**

**3 Credit Hours**

A study of the trigonometric functions, identities, complex numbers, and solutions of triangles.

**Fulfills:** Foundation Course AA, AS, AGS, AAS, Mathematics Requirement, Natural Science Requirement, Non-Laboratory Course

**Prerequisite:** MATH 1828 College Algebra with a grade of C or better OR MATH 1826 College Algebra with a grade of C or better OR appropriate placement score.

## **MATH 1831 Business Calculus**

**3 Credit Hours**

A condensed study of differential and integral calculus with an emphasis on applications in the areas of business and economics.

**Fulfills:** Foundation Course AA, AS, AGS, AAS, Mathematics Requirement, Natural Science Requirement, Non-Laboratory Course

**Prerequisite:** MATH 1828 College Algebra with a grade of C or better OR MATH 1826 College Algebra with a grade of C or better OR appropriate placement score.

## **MATH 1832 Analytic Geometry-Calculus I**

**5 Credit Hours**

A study of limits, differentiation, definite and indefinite integration of polynomial, trigonometric, exponential, logarithmic and inverse trigonometric functions.

**Fulfills:** Foundation Course AA, AS, AGS, AAS, Mathematics Requirement, Natural Science Requirement, Non-Laboratory Course

**Prerequisite:** MATH 1830 Trigonometry with grade of C or better, or appropriate placement score.

## **MATH 1833 Linear Algebra**

**3 Credit Hours**

Basic concepts of linear algebra with applications.

**Prerequisite:** MATH 1832 Analytic Geometry-Calculus I with a grade of C or better

## **MATH 1834 Analytic Geometry-Calculus II**

**5 Credit Hours**

A continuation of Analytic Geometry and Calculus I covering volume, work, advanced methods of integration, indeterminate forms, improper integrals, and series.

**Prerequisite:** MATH 1832 Analytic Geometry-Calculus I with a grade of C or better

## **MATH 1836 Analytic Geometry-Calculus III**

**3 Credit Hours**

A study of vector functions, partial differentiation, multiple integrals, and moments of inertia.

**Prerequisite:** MATH 1834 Analytic Geometry-Calculus II with a grade of C or better

## **MATH 1840 Intro to Contemporary Math**

**3 Credit Hours**

This course explores uses of mathematics in the contemporary world. Topics include: management science, statistics, coding of information, social choice and decision making, geometry of growth and symmetry.

**Fulfills:** Foundation Course AA, AS, AGS, AAS, Mathematics Requirement

**Prerequisite:** MATH 1828 College Algebra with a grade of C or better OR MATH 1826 College Algebra with a grade of C or better OR appropriate placement score.

## **MATH 1853 Math for the PreHospital Provd**

**3 Credit Hours**

This course will provide the student with a working knowledge of all math formulas and equations relative to patient care in the pre-hospital emergency environment. Students will participate in mathematics and fractions review, learn systems of measurement, and drug dosage calculations in for the non-emergent and emergent environments.

**Fulfills:** Foundation Course AAS, Mathematics Requirement, Math check w/ advisor

**Prerequisite:** Enrollment by consent of instructor.

## **MEASUREMENT**

### **MEAS 1100 Common Technical Skills**

**3 Credit Hours**

This web based course introduces the student to the basic skills necessary to pursue further training in Natural Gas Measurement. Skills will include applied mathematics, physics and basic computer operation.



# Course Descriptions

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## **MEAS 1101 Gas Industry Concepts**

**5 Credit Hours**

This combination of instructor led and web based training introduces the student to the laws of fluid mechanics and gas measurement techniques commonly used in the industry.

## **MEAS 1102 Instrumentation & Controls**

**9 Credit Hours**

This instructor led and web based course enables the student to understand and operate instrumentation that monitors and directs processes including pressure, flow, temperature, level, and material composition. The student will learn to use a variety of different forms of instrumentation such as electrical, electronic, and computerized control devices such as programmable logic controllers.

## **MEAS 1103 Gas Quality Analysis**

**4 Credit Hours**

This instructor led and web based course prepares the student to work with standard gas quality analyzers used in all aspects of the measurement industry. The student will learn how to collect and analyze gas quality data in order to make determinations about its quality and safety.

## **MEAS 1104 Flow Measurement**

**6 Credit Hours**

This instructor led and web based course prepares the student to install, maintain, and troubleshoot all industry standard gas measurement devices. The student will also learn how to interpret data from popular brands of flow computers and modify software parameters for specified applications.

## **MEAS 1105 Pressure & Volume Control**

**3 Credit Hours**

This instructor led and web based course prepares the student to install, maintain, and troubleshoot the devices that regulate gas flow. Common types of control valves, pressure regulators, and safety relief devices are discussed. Topics include theories of operation, applications, and safety concerns.

## **MEAS 1107 Gas Measurement Core Skills**

**3 Credit Hours**

This course enables the student to apply common technical concepts used in the gas measurement industry. Computer based and instructor led training are blended with hands on exercises to build a set of basic skills necessary to implement industry applied mathematics and physical laws necessary for advanced gas measurement training.

## **MEDICAL ASSISTANT**

### **MDAS 1615 Medical Assistant Internship**

**4 Credit Hours**

The application phase of the Medical Assistant program providing detailed education, training, and work-based experience and direct patient/client care in an ambulatory health care setting.

**Prerequisite:** Program acceptance and concurrently enrolled in final semester of Medical Assistant Program

### **MDAS 1642 Advanced Medical Coding**

**2 Credit Hours**

This course provides the opportunity to apply administrative skills and coding experience in a simulated environment. Emphasis is placed on enhancing competence in administrative skills necessary for strengthening professional communication and interaction.

**Prerequisite:** Concurrently enrolled in final semester of the Medical Coding Program

### **MDAS 1644 Basic Medical Lab Techniques**

**3 Credit Hours**

A study of basic medical laboratory techniques for Physician's office and medical laboratory personnel. Primary emphasis is on physical and chemical urinalysis, macroscopic hematology and instrument maintenance.

### **MDAS 1646 Emergency Preparedness**

**1 Credit Hours**

Provides healthcare professionals with an orientation for their possible future roles in disaster response and the importance of staying within the scope of practice of their profession. Students will be prepared to meet the expectations of their employers, to volunteer effectively, and to be competent and safe responders.

### **MDAS 1648 Medication Administration**

**1 Credit Hours**

Prepares students to prepare and administer medications via several routes including oral, parenteral (excluding intravenous), transdermal, and inhalation. Emphasis is placed on safe and accurate administration.

**Prerequisite:** MDAS 1680 Basic Pharmacology with a grade of C or better

### **MDAS 1650 Medical Professional Issues**

**2 Credit Hours**

Reviews the role and function of the medical assistant. This course focuses on the basic concept of the professional practice of medicine and the scope of practice of the medical assistant. Students discuss the personal and professional characteristics and legal and ethical standards for medical assistants, explore professional and personal therapeutic communication, and address time management and goal setting.

**Prerequisite:** MDAS 1655 Medical Administrative Aspects with a grade of C or better

### **MDAS 1652 Patient Care I**

**4 Credit Hours**

Introduces students to the patient care skills required by the medical assistant including standard precautions, vital signs, and patient transfer.

**Prerequisite:** Admittance to Medical Assistant Program

### **MDAS 1653 Patient Care II**

**4 Credit Hours**

Focuses on the techniques used by the medical assistant in direct patient care. Students learn to assist with a variety of exams.

**Prerequisite:** MDAS 1652 Patient Care I with a grade of C or better

# Course Descriptions

## **MDAS 1655 Medical Administrative Aspects 4 Credit Hours**

Provides an introduction to the administrative skills needed for a medical office. Students learn how to maintain medical records (both paper and electronic), manage appointments, and perform routine office duties. Focuses on the financial aspects of the medical office including accounts payable and accounts receivable. Students examine billing and collection procedures.

**Prerequisite:** MDAS 1672 Medical Terminology with a grade of C or better

## **MDAS 1657 Legal/Ethical Issues in Health 3 Credit Hours**

This course introduces the U.S. legal system, laws and ethical issues and how they relate to health care.

## **MDAS 1672 Medical Terminology 3 Credit Hours**

Medical Terminology includes medical terms commonly encountered in the day-to-day activities of medically oriented students. Each lesson consists of prefixes, root words and/or suffixes, exercises, pronunciation of terms, practical applications, and review sheets.

## **MDAS 1673 Medical Coding I 3 Credit Hours**

Medical Coding I will explore the medical insurance system and related billing and coding. This class begins with coding rules and applications as its foundation and then moves into insurance carrier specifics. The student will understand the impact of carrier rules on claims submission. The course will teach the student about the reimbursement system.

**Prerequisite:** MDAS 1672 Medical Terminology with a grade of D or better

## **MDAS 1674 Medical Coding II 3 Credit Hours**

Medical Coding II is designed to provide students an advanced understanding of Current Procedural Coding (CPT) and HCPCS coding. This class will teach the student to apply CPT and HCPCS codes to patient documentation.

**Prerequisite:** MDAS 1673 Medical Coding I with a grade of C or better or MDAS 1672 Medical Terminology with a grade of C or better

## **MDAS 1675 Medical Coding III 4 Credit Hours**

Medical Coding III is introducing the student to the International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) and International Classification of Diseases, 10th Revision, Procedure Coding System (ICD-10-PCS) coding systems. The class will explore the uses of the codes within patient documentation. Students will practice Current Procedural Terminology (CPT) coding, ICD-10-CM, and ICD-10-PCS codes on online coding cases. This class brings all coding aspects together in patient documentation.

**Prerequisite:** MDAS 1673 Medical Coding I with a grade of D or better AND MDAS 1672 Medical Terminology with a grade of D or better

## **MDAS 1680 Basic Pharmacology 3 Credit Hours**

This course is designed to teach the physiological effects and clinical use of medications that may be administered in the prevention/management of health care conditions. This includes a general knowledge of use, action, dosage, side effects, contraindications of medications and patient education suggestions. Safe and legal practices are stressed throughout the course.

## **MDAS 1682 Medical Terminology NonHealthcare 1 Credit Hours**

Medical Terminology for the Non-Healthcare Provider includes medical terms commonly encountered in the day-to-day activities of non-healthcare employees. Each lesson consists of prefixes, root words and/or suffixes, exercises, pronunciation of terms, and practical applications of words likely seen in registration, admissions, dietary and environmental services.

## **MDAS 1683 Cardiopulmonary Resuscitation 1 to 3 Credit Hours**

This course covers the knowledge and skills required to provide temporary and immediate care to a person who has ceased breathing or has suffered a cardiac arrest. Successful completion of this course provides for certification by American Heart Association First Aid; and Adult, Child, and Infant CPR.

## **MEDICAL LAB TECHNICIAN**

## **MLTC 1500 MLT Urinalysis & Body Fluids 3 Credit Hours**

This course will provide the student with in-depth knowledge of kidney function, urine formation, and the procedures utilized in performing a routine urinalysis and body fluid analysis. Correlation of abnormal findings and disease states will be discussed. Other body fluids included in this course are feces, seminal, amniotic, cerebrospinal, pleural, pericardial, and peritoneal. Discrimination between normal and abnormal findings and correlation of this knowledge to disease states will be included in the course material. Hands-on laboratory time is required.

**Prerequisite:** LIFE 1408 Anatomy & Physiology with a grade of C or better AND LIFE 1412 Principles of Microbiology with a grade of C or better AND CHEM 1802 Fundamentals of General Chem with a grade of C or better Enrollment by consent of instructor. Phlebotomy national certification eligibility.

## **MLTC 1501 Phlebotomy Clinical Practicum 1 Credit Hours**

Practical experiences at an approved health care facility in specimen collection. Requires a quota performance to meet national certification agency guidelines. Upon successful completion of this class and MLTC1503 Principles of Phlebotomy, the student is eligible to take a national phlebotomy certification exam and will be awarded a Barton Certificate of Completion.

**Prerequisite:** MLTC 1503 Principles of Phlebotomy or consent of instructor.

# Course Descriptions

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## **MLTC 1502 MLT Hematology/Coagulation 6 Credit Hours**

This course presents the theory behind hematologic principles including the formation of blood cells, identification of normal and abnormal blood cells as they correlate to disease. Also, included is the study of coagulation, the clotting and fibrinolytic mechanisms of the blood. Students will learn the theory and skills required to perform medical laboratory testing in Hematology and Coagulation. Hands on laboratory time is required.

**Prerequisite:** Enrollment by consent of instructor.

## **MLTC 1503 Principles of Phlebotomy 3 Credit Hours**

This class is an overview of the principles and practice of phlebotomy. The course will emphasize safety, specimen collection and specimen processing. Students will learn the basic skills required to collect a blood specimen. Minimum collections required for successful completion of the class. Upon successful completion of this class and MLTC 1501 Phlebotomy Clinical Practicum, the student is eligible to take a national phlebotomy certification exam and will be awarded a Barton Certificate of Completion.

**Prerequisite:** Minimum 16 years of age

## **MLTC 1504 MLT Clinical Chemistry 6 Credit Hours**

This course will cover the physiology of the body and the biochemical reactions that are necessary for a healthy existence. The human condition is evaluated by biochemical shifts in different systems that maintain homeostasis during healthy periods. Basic interpretations of biochemistry and the concentration of enzymes, carbohydrates, lipids, proteins, electrolytes, blood gases, and therapeutic drug monitoring will be discussed. The student will perform routine clinical tests on biological fluids, maintain quality assurance records, and perform preventative maintenance on instrumentation. Hands on laboratory time is required.

**Prerequisite:** AND LIFE 1412 Principles of Microbiology with a grade of C or better AND LIFE 1408 Anatomy & Physiology with a grade of C or better or equivalent.

## **MLTC 1505 MLT Pathogenic Microbiology 6 Credit Hours**

This course will survey microbiology as it is applicable to a clinical laboratory. Procedures for routine specimen collection will be discussed and practiced. Normal flora and pathogenic bacteria will be identified by morphology, staining characteristics, growth on selective media, biochemical testing and serological methods. Basic theory in antimicrobial susceptibility testing will be covered. Principles of all tests will be studied. Study of viruses and chlamydia will be limited to the processing and handling of specimens for consultant referral and principles of serological testing. Normal and pathogenic parasites and fungal elements will be identified and procedures utilized for proper identification will be discussed. Hands on laboratory time is required.

**Prerequisite:** LIFE 1412 Principles of Microbiology with a grade of C or better AND CHEM 1802 Fundamentals of General Chem with a grade of C or better AND LIFE 1408 Anatomy & Physiology with a grade of C or better or equivalent.

## **MLTC 1506 Human Parasit & Fungus & Mycobact 3 Credit Hours**

A study of clinical microbiology that includes parasites, fungi, mycobacteria, and viruses that cause human diseases. Methods of examination and identification of these organisms are also covered. This course is designed to enable students to learn the theory and basic skills required to perform in a medical laboratory. No hands on laboratory time is required.

**Prerequisite:** High school diploma/GED and a college 5 credit hour science course passed with a C, or admission to the MLT Program or instructor approval.

## **MLTC 1508 MLT Immunohematology 6 Credit Hours**

A study of the immunology of blood, including those principles and practices that are known collectively as blood banking. An overview of blood component collection and component preparation is presented. Basic concepts of genetics, immunology and antiglobulin testing are included as a foundation for the understanding of the blood group systems and antibody detection and identification. Current transfusion practices are discussed. The student will gain experience in performance of techniques in immunohematology to include blood typing, cross-matching, direct and indirect coombs testing and antibody identification. Hands on laboratory time is required.

**Prerequisite:** CHEM 1802 Fundamentals of General Chem with a grade of C or better AND LIFE 1412 Principles of Microbiology with a grade of C or better AND LIFE 1408 Anatomy & Physiology with a grade of C or better

## **MLTC 1509 MLT Immunology 3 Credit Hours**

A basic study of the molecules, cells and organs of the immune system. You will learn about the structural features of the components of the immune system and their functions but primarily this will be the study of mechanisms involved in immune system development and responsiveness. Common serological procedures and related diseases are covered. No laboratory time required.

**Prerequisite:** High School diploma/GED and 5 hours of college science with a C or better OR Instructors permission.

## **MLTC 1511 MLT: Sem in Laboratory Medicine 1 Credit Hours**

A study of selected laboratory analysis and topics.

**Prerequisite:** Enrollment by consent of instructor.

## **MLTC 1512 Basic Med Lab Techniques 3 Credit Hours**

A study of basic medical laboratory techniques for Physician's office and medical laboratory personnel. Primary emphasis is on physical and chemical urinalysis, macroscopic hematology and instrument maintenance.

## **MLTC 1513 MLT Lab Operations/Leadership 2 Credit Hours**

A study for laboratory professional growth and leadership through personal organization and preparation.

**Prerequisite:** MLTC 1504 MLT Clinical Chemistry with a grade of C or better AND MLTC 1505 MLT Pathogenic Microbiology with a grade of C or better or consent of instructor

# Course Descriptions

## **MLTC 1514 Med Lab:Directed Studies 1 to 4 Credit Hours**

An individualized plan of study designed to supplement previous coursework. Study may include any subject area required of Medical Laboratory Technology. May be repeated.

**Prerequisite:** Enrollment by consent of instructor.

## **MLTC 1519 MLT Clinical Practicum I 2 Credit Hours**

Practical experiences at an affiliated health care facility in specimen collection, urinalysis, body fluids, hematology, coagulation and immunology.

**Prerequisite:** MLTC 1500 MLT Urinalysis & Body Fluids AND MLTC 1502 MLT Hematology/Coagulation AND MLTC 1503 Principles of Phlebotomy AND MLTC 1509 MLT Immunology

## **MLTC 1520 MLT Clinical Practicum II 4 Credit Hours**

Practical experiences at an affiliated health care facility in specimen collection, immunohematology, clinical chemistry, parasitology and pathogenic microbiology.

**Prerequisite:** MLTC 1504 MLT Clinical Chemistry AND MLTC 1505 MLT Pathogenic Microbiology AND MLTC 1506 Human Parasit&Fungus&Mycobact AND MLTC 1508 MLT Immunohematology AND MLTC 1513 MLT Lab Operations/Leadership

## **MENTAL HEALTH TECHNICIAN**

## **MENT 1000 Doc and Med Rpt Writing in MH 3 Credit Hours**

This course introduces the detail needing for completing various reports required in a Mental Health setting. Structure, terminology, detail, grammar and a variety of report styles will be studied. The course will also include basic concepts of written communications adapted to meet specific needs in the institutionalized setting.

**Prerequisite:** Admission to Mental Health Technician Program

## **MENT 1001 Pharmacology for MHT 3 Credit Hours**

This course introduces the principles of pharmacology, including drug classifications and their effects on the body. This course introduces the principles of pharmacology, drug classifications and the effects of selected medications on the human body within the scope of practice of the Mental Health Technician.

**Prerequisite:** Admission to Mental Health Technician Program

## **MENT 1002 Psych Ther Tx and Intervention 6 Credit Hours**

This course focuses on therapeutic treatments and interventions of special population patients in mental health settings. This course will address therapeutic relationships, patient's rights, cultural and spiritual concepts, various therapies and crisis intervention, individual treatments for various psychiatric conditions and clinical strategies to care for patients with these conditions.

**Prerequisite:** Admission to Mental Health Technician Program

## **MENT 1003 MHT Clinical I 5 Credit Hours**

This course is a clinical application course that will allow the student to implement effective communication, evaluate and provide a safe and comfortable environment for the patient, assist with activities of daily living, refine observational skills and provide the patient care to patients with a variety of medical and mental health conditions.

**Prerequisite:** MENT 1002 Psych Ther Tx and Intervention with a grade of C or better Admission to Mental Health Technician Program

## **MENT 1004 MHT Clinical II 5 Credit Hours**

This course is a clinical application course that will allow the student to implement effective communication, evaluate and provide a safe and comfortable environment for the patient, assist with activities of daily living, refine observational skills and provide the patient care to patients with a variety of medical and mental health conditions. It will also include application of more advanced technical skills and application of knowledge and skills in caring for patients with increased complexity of illness.

**Prerequisite:** MENT 1002 Psych Ther Tx and Intervention with a grade of C or better AND MENT 1003 MHT Clinical I with a grade of C or better Admission to Mental Health Technician Program

## **MILITARY**

## **MLTR 1020 Plant Maintenance Manager 3 to 5 Credit Hours**

This course provides the basic knowledge and skills for Motor Pool Operations and management. This course includes training in duties, responsibilities and procedures to conduct and manage a unit maintenance program, use of the automated standard Army Maintenance System-Enhanced (SAMS-E) computer program, shop operations, tool room procedures, supply and safety procedures and exchange pricing.

## **MLTR 1022 Physical Security 1 Credit Hours**

This course provides the prescribed standards and criteria for the physical security of sensitive conventional arms, ammunition, and explosives (AA&E), within the custody of the Department of the Army (DA) facilities. This course will also ensure that prescribed policies, procedures and standards are followed in accordance with Army regulations. It will also assign responsibilities for the effective implementation and application of physical security of AA&E consistent with operational and safety requirements.

## **MLTR 1024 Unit Load Team Training 1.5 Credit Hours**

This course is designed to train an individual on procedures to transport equipment by rail and aircraft. Students that complete this course will be qualified to train smaller groups at their military unit(s) on the proper procedures to load equipment on rail and aircraft.



# Course Descriptions

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## **MLTR 1026 TC-AIMS Unit Movement I 3 Credit Hours**

This course provides personnel with the knowledge and skills to perform the procedures and functionalities necessary to operate the TC-AIMS II software and hardware. After an introductory section giving an overview of the Army deployment process, training is designed to instruct the Unit Move Officer (UMO) in those particular procedures and functionalities assigned to the UMO profile in TC-AIMS II with stress on data completion, maintaining and updating the Organizational Equipment List (OEL) and creating the Unit Deployment List (UDL). This course also offers a thorough practical understanding of Automatic Identification Technology. Instruction is mainly hands-on training utilizing instructor-led and independent student practical exercises, demonstration and conference (lecture) type training.

## **MLTR 1029 Unit Movement Officer 3 to 5 Credit Hours**

This course prepares personnel to assume the duties of a unit movement officer / NCO, and includes instruction on the following: unit deployment planning; unit movement planning; COMPASS/OEL; unit movement automation; preparation of unit supplies and equipment for movement by surface mode; planning and conduct of preparation of hazardous cargo for movement by surface mode; planning and conduct of CONUS highway operations; convoy documentation; marshalling area procedures; use of containers in unit deployment; rail movement planning; rail equipment planning; rail equipment characteristics and use; blocking, bracing, packing, crating, and tie down procedures and equipment for all modes of transport; rail load-out exercise; host nation rail movement operations, inland waterways; strategic airlift; airfield operations; preparation of supplies, equipment and personnel for movement by air; building a 463L pallet; unit deployment through a sea port of embarkation; use of radio frequency / automated information technology systems; theater reception, staging, on-ward movement, and intergration; and redeployment of personnel, equipment by all modes of transportation. Instruction is mainly hands on-instructor led and independent student practical exercises.

## **MLTR 1039 Building Maintenance Milit Fac 1 to 3 Credit Hours**

This course will provide instruction to military service members and Department of Defense employees in the proper procedures and techniques necessary to perform facility maintenance and upkeep. Course includes administrative requirements and procedures on use of military forms and records, basic tools, masonry repair, painting, minor sheet rock repair, tile replacement, proper use of building materials, carpentry, minor plumbing and electrical maintenance.

## **MLTR 1040 Military Passeng-Carry Vehicle 2 Credit Hours**

This course is designed to train an individual to operate a Passenger-Carrying Vehicle Operations including inspection, maintenance, observing safety procedures and adhering to appropriate traffic rules and regulations.

## **MLTR 1042 Military Petroleum Operations 3 Credit Hours**

This course serves as an introduction to the United States Army and reports, accountability, performing quality assurance procedures and tests, and observing for various forms of contaminants. Included is compliance with federal guidelines for transporting petroleum fuel in tanker vehicles.

## **MLTR 1046 Field Sanitation Military Unit 3 Credit Hours**

This course will give soldiers knowledge and hands on training in testing and purifying water in a field environment along with preventive medicine measures (PMM) against disease's associated with arthropods, rodents and personnel hygiene. Preventive measures will be instructed and demonstrated in the prevention of heat and cold injuries, and the proper construction of waste facilities in a field environment.

## **MLTR 1050 Battle Staff Non-Comm Officer 9 Credit Hours**

This is a performance-oriented course of instruction designed to prepare Sergeants through Sergeant Majors for positions of responsibility as Staff Non-Commissioned Officers. Major subject areas include risk management; small group process; supply operations; transportation/tactical movement planning; reconstitution; graphics and overlays; combat support; military decision making process (MDMP); plans, orders, and annexes; combat records and reports; intelligence preparation of the battlefield (IPB); military briefings; introduction to army battle command system (ABCS); information operations; urban operations; rehearsals; maneuver control system (MCS); and staff functions.

## **MLTR 1535 Combat Lifesaver 2.5 Credit Hours**

This course is designed to address the significant challenges faced in providing emergency care in battlefield environment when medically trained personnel are unavailable. Instruction consists of a broad mix of basic and advanced life support techniques and strategies. Major areas of emphasis include care under fire, tactical field care, and casualty evacuation specifically focusing on immediately life-threatening and potentially correctable medical problems. Students with or without prior medical knowledge will gain valuable emergency medical skills used in military operations.

## **MLTR 1626 Weapons Storage Facility Oper 4 Credit Hours**

This course is designed to train an individual to do various levels of arms storage facility operations, including inspection and maintenance of small arms, maintenance record keeping, and the appropriate physical security measures.

## **MLTR 1627 Mgmt of Weapon Stor Facilities 1.5 Credit Hours**

This course is designed to train an individual to do various levels of arms storage facility operations, including inspection and maintenance of small arms, maintenance record keeping, and the appropriate physical security measures.



# Course Descriptions

## **MLTR 1795 Supply Manager**

**5 Credit Hours**

This course provides Supply Managers with an overview of the procedures used by Army organizations to control and account for supplies and equipment by using the GCSS-Army (Global Combat Support System) supply database. Theory and application of both manual and automated tasks are presented with lecture and practical exercises. Supply Manager areas of major emphasis include procedures used that enable an organization to account for resources and provide managers with logistical data needed to ascertain spending trends and to account for Property Accountability, Equipment Inventories, and Supply Functionality.

## **MLTR 1815 Military Digital Train Mgmt Sy**

**3 Credit Hours**

This course is designed to enable Department of Defense personnel and other interested parties to acquire the skills needed to prepare training plans, coordinate training, resource training events, evaluate and assess training and produce applicable training reports.

## **MLTR 1917 DOT Regs for Military Org**

**1 Credit Hours**

This course provides a study of the U.S. Department of Transportation (DOT) hazardous materials regulation. An emphasis will be placed on the general awareness and familiarization of hazardous materials, hazard communication, emergency response and safety, and any specific modal (air, rail, highway, and water) regulatory requirements for hazardous materials that is prepared for commercial or private transport.

## **MLTR 1921 Chemical, Biological Defense**

**1 to 5 Credit Hours**

This course is designed to teach students the primary techniques and skills necessary for analysis, investigation, and defensive operations in areas suspected of Nuclear, Biological, or Chemical contamination. Though extensive study of each critical area, students will gain the skills necessary to predict and determine the extent of possible damages, losses, and personnel injury in a defined population. Students will learn the fundamental techniques of defensive planning, reporting criteria, and the role of advising senior managers of potential threats and possible courses of action. In addition to extensive lectures, hands on training will consist of the proper use, maintenance and deployment of monitoring equipment, including decontamination procedures, and personal/organizational protective measures.

## **MLTR 1922 Transport Hand&Stor-Explos Mat**

**1.5 Credit Hours**

This course is designed to instruct students about the basic safety, the technical aspects, and the proper handling and transportation for ammunition and explosives. The course presents a fundamental understanding of safe handling procedures, accountability, and transportation requirements for Army personnel working in a munitions operation.

## **MLTR 1924 Master Driver Course**

**3 Credit Hours**

The Master Drivers Course provides an overview of the procedures used by Military Commanders to control and account for training, testing, evaluating, and licensing vehicle and equipment operators. Theory and application of both manual and automated tasks are presented through the use of seminar and practical exercises. Safety requirements for motor vehicles and accountability for training, testing, recording, evaluating, and licensing for all vehicle and equipment operators who utilize military equipment will be included. Department of Defense, Army, State and Local laws, regulations and policies will be reviewed.

## **MUSIC**

### **MUSI 1000 Beginning Guitar**

**0.5 to 1 Credit Hours**

This course on acoustic guitar designed to teach the beginning student in the open classroom through the personal touch blended with audio-visual teaching.

### **MUSI 1001 Dir Ind Study/Instr Music**

**1 Credit Hours**

Directed independent study is a structured learning experience offered as an extension of the regular curriculum. It is intended to allow students to broaden their comprehension of the principles of, and their grasp of competencies associated with academic, nonvocational disciplines. Its purpose is to supplement extant courses with individualized, in-depth learning experiences. Such learning experiences may be undertaken independent of the traditional classroom setting, but will be appropriately directed and supervised by regular instructional staff.

**Fulfills:** Performance Course

### **MUSI 1002 Introduction to Music**

**3 Credit Hours**

This course is designed for the non-music major. A background in music is not necessary for enrollment. Emphasis is placed on the development of competence in listening to music through the study of the sources, mediums, elements of music, musical forms, composers, and periods of music.

**Fulfills:** Humanities Requirement

### **MUSI 1004 Intermediate Guitar**

**1 Credit Hours**

A course on acoustical guitar designed to teach the intermediate student in the open classroom through the personal touch blended with audio-visual teaching.

**Fulfills:** Performance Course

**Prerequisite:** MUSI 1000 Beginning Guitar

### **MUSI 1005 Instrumental Ensemble**

**1 Credit Hours**

This class is designed for an instrumental or keyboard music major or someone desiring to improve his or her playing ability. This class will meet for a minimum of one and a half hours per week, containing no more than six to eight students as a maximum.

# Course Descriptions

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## **MUSI 1006 Community College Orchestra** 1 Credit Hours

A humanities course with enrollment open to all students. Performance of music common in the field of concert band literature.

**Fulfills:** Performance Course

**Prerequisite:** Ability to play an orchestra instrument.

## **MUSI 1007 Pep Band** 1 Credit Hours

A performance-oriented music ensemble designed for performance at college pep events, social functions, and activities beyond the campus as scheduled.

**Fulfills:** Performance Course

**Prerequisite:** By audition and consent of instructor.

## **MUSI 1008 Band** 1 to 2 Credit Hours

A humanities course with enrollment open to all students. Performance of music common in the field of concert band literature.

**Fulfills:** Performance Course

## **MUSI 1009 Jazz Ensemble** 1 to 2 Credit Hours

A humanities course with enrollment open to all students. Rehearsal scheduled for three hours every week with extra rehearsals called. Performances are scheduled playing music in the stage band repertoire.

**Fulfills:** Performance Course

**Prerequisite:** By audition or consent of instructor.

## **MUSI 1010 Choir** 1 to 2 Credit Hours

The Barton Community College Choir is open to all students and requires no audition for membership. Music literature to be performed is carefully selected from many stylistic periods and is rehearsed utilizing those choral techniques necessary for high-level performance standards. The Choir will appear in concert several times during the academic year both on and off campus.

**Fulfills:** Performance Course

## **MUSI 1014 Vocal Ensemble** 1 to 2 Credit Hours

This ensemble is comprised of students selected from the choir by auditions held in the fall. Enrollment is for a full academic year. The primary purpose of the group is to perform music selected for audience appeal. Numerous performances are scheduled for civic clubs, conventions, and schools in the area served by the college.

**Fulfills:** Performance Course

**Prerequisite:** By audition

## **MUSI 1015 Fundamentals of Music** 3 Credit Hours

This course will provide fundamental knowledge of music theory including notation, scales, interval and triad construction, form, meter, and basic harmony. Musical skills will be developed through reading, lecture- discussions, in-class activities and exercises on your own. It is recommended for music majors but a background in music is not necessary to take the course.

**Fulfills:** Humanities Requirement

## **MUSI 1016 Aural Skills I** 2 Credit Hours

Aural Skills I is the first of four courses in Aural Skills designed primarily for students interested in developing aural perception of music and skill in sight singing. Basic activities include dictation of melodic, harmonic, and rhythmic exercises and the development of speed and accuracy in sight singing. Aural Skills I is required for all music majors, and taken concurrently with Harmony I.

**Prerequisite:** concurrent enrollment in MUSI 1018 Harmony I

## **MUSI 1018 Harmony I** 3 Credit Hours

Harmony I is the first of four music theory courses for students highly interested in music. Fundamentals of music notation, scales, intervals, triads, connection of chords, and cadences are covered. Harmony I is required for all music majors, and taken concurrently with Aural Skills I.

## **MUSI 1020 Aural Skills II** 2 Credit Hours

The second of four courses in aural skills designed primarily for students interested in developing aural perception of music and skill in sight singing. Basic activities include student dictation of melodic, harmonic, and rhythmic exercises and the development of speed and accuracy in sight singing. Aural Skills II is required for all music majors, and taken concurrently with Harmony II.

**Prerequisite:** MUSI 1016 Aural Skills I

## **MUSI 1022 Harmony II** 3 Credit Hours

Harmony II is the second in a sequence of four music theory courses for students highly interested in music. This course includes a study of all diatonic triads and their inversions, the dominant and supertonic seventh chords, introduction to modulation techniques, and secondary dominant functions. Keyboard application of course work is integrated with class piano laboratory work. Harmony II is required for all music majors and taken concurrently with Aural Skills II.

**Prerequisite:** MUSI 1018 Harmony I

## **MUSI 1026 Aural Skills III** 2 Credit Hours

The third of four courses in aural skills designed primarily for students interested in developing aural perception of music and skill in sight singing. Basic activities include student dictation of melodic, harmonic, and rhythmic exercises and the development of speed and accuracy in sight singing. Aural Skills III is required for all music majors, and taken concurrently with Harmony III.

**Prerequisite:** MUSI 1020 Aural Skills II

## **MUSI 1027 Aural Skills IV** 2 Credit Hours

The final course in aural skills designed primarily for students interested in developing aural perception of music and skill in sight singing. Basic activities include student dictation of melodic, harmonic, and rhythmic exercises and the development of speed and accuracy in sight singing. Aural Skills IV is required for all music majors and taken concurrently with Harmony IV.

**Prerequisite:** MUSI 1026 Aural Skills III

# Course Descriptions

## **MUSI 1028 Harmony III** **3 Credit Hours**

Harmony III is the third in a sequence of four music theory courses designed for students highly interested in music. This course includes a study of modulation to closely related keys, binary and ternary forms, less common chord progressions and part-writing procedures, diatonic seventh chords, borrowed chords, secondary dominants and leading tone chords, and non-dominant diminished seventh chords. Keyboard application of course work is integrated with class piano laboratory work. Harmony III is required for all music majors and taken concurrently with Aural Skills III.

**Prerequisite:** MUSI 1022 Harmony II

## **MUSI 1029 Music Elem Classroom Teacher** **3 Credit Hours**

An education course designed for the elementary education major. A background in music is not necessary for enrollment. Emphasis is placed on development of music skills and techniques to help the classroom teacher integrate music into the classroom.

## **MUSI 1034 Harmony IV** **3 Credit Hours**

Harmony IV is the last in a sequence of four music theory courses designed for music majors or teachers highly interested in music. This course includes a study of altered chords not previously covered, advanced modulations and a survey of twentieth century compositional techniques. Keyboard application of course work is integrated with class piano laboratory work.

**Prerequisite:** MUSI 1028 Harmony III

## **MUSI 1038 Private Voice** **1 to 5 Credit Hours**

A thirty minute, 1 credit hour, or sixty minute, 2 credit hour, lesson per week, in which the study of vocal techniques includes the development of breath control, tone production, good intonation, clear diction, and musical interpretation. Repertoire is selected from standard vocal classical literature. Performance on recitals is expected at the request of the instructor. Enrollment in Voice Lab is expected.

**Fulfills:** Performance Course

**Prerequisite:** concurrent enrollment in MUSI 1039 Private Voice Lab  
Enrollment by consent of instructor

## **MUSI 1039 Private Voice Lab** **0 Credit Hours**

In voice lab the students perform for each other, songs that have been prepared in private voice. Suggestions for stage- deportment are given, and vocal problems are discussed. Occasionally, recorded examples are presented, and an introduction to English and Italian diction is presented.

**Prerequisite:** concurrent enrollment in MUSI 1038 Private Voice  
Enrollment by consent of instructor

## **MUSI 1040 Class Voice** **0 or 1 Credit Hours**

This class is designed for an instrumental or keyboard music major or someone desiring to improve one's singing and has not had previous study. This class will meet three times a week for a minimum of one and a half hours.

**Fulfills:** Performance Course

## **MUSI 1042 Class Piano A** **1 to 2 Credit Hours**

The course is the first semester of a sequential study to provide the fundamental skills to meet piano proficiency requirements for the music major. It is integrated with the harmony and aural skills courses offered in the music curriculum.

**Prerequisite:** This is a sequential course for music majors

## **MUSI 1043 Adult Beginning Piano** **2 Credit Hours**

The beginning level of class piano is designed for adults who have had little or no background in piano. It can be a review of piano skills but no prior knowledge of music is required. Basic music theory is presented along with piano repertoire.

**Fulfills:** Performance Course, Physical Education Requirement

## **MUSI 1044 Class Piano B** **1 to 2 Credit Hours**

The course is the second semester of a sequential study to provide the fundamental skills to meet piano proficiency requirements for the music major. It is integrated with the harmony and aural skills courses offered in the music curriculum.

**Fulfills:** Performance Course

**Prerequisite:** MUSI 1042 Class Piano A or equivalent.

## **MUSI 1045 Adult Intermediate Piano** **2 Credit Hours**

The intermediate level of class piano is designed for adults who have had Adult Beginning Piano or its equivalent. Basic music theory is presented along with piano repertoire.

**Fulfills:** Performance Course

**Prerequisite:** MUSI 1043 Adult Beginning Piano

## **MUSI 1046 Class Piano C** **1 to 2 Credit Hours**

The course is the third semester of a sequential study to provide the fundamental skills to meet piano proficiency requirements for the music major. It is integrated with the harmony and aural skills courses offered in the music curriculum.

**Fulfills:** Performance Course

**Prerequisite:** MUSI 1044 Class Piano B or equivalent.

## **MUSI 1048 Class Piano D** **1 to 2 Credit Hours**

The course is the fourth semester of a sequential study to provide the fundamental skills to meet piano proficiency requirements for the music major. It is integrated with the harmony and aural skills courses offered in the music curriculum.

**Fulfills:** Performance Course

**Prerequisite:** MUSI 1046 Class Piano C or equivalent.

## **MUSI 1049 Applied Piano-Adults** **1 to 2 Credit Hours**

This course is designed to enable adults with previous keyboard experience to redevelop technical skills and broaden the scope of repertoire through solo and ensemble experiences, group and private lesson combinations.

**Fulfills:** Performance Course

**Prerequisite:** For non-music majors.

# Course Descriptions

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## **MUSI 1051 Applied Piano 1 to 5 Credit Hours**

This course is designed to enable adults with previous keyboard experience to redevelop technical skills and broaden the scope of repertoire through solo and ensemble experiences, group, and private lesson combinations.

**Fulfills:** Performance Course

**Prerequisite:** Piano skills equivalent to 4 or 5 years piano study

## **MUSI 1052 Organ 1 to 5 Credit Hours**

This course is designed to teach beginning fundamentals of articulation, pedaling, registration, service playing, knowledge of the instrument, and accompanying on the organ. Service as well as recital repertoire is covered. Teaching is done in private and class settings. The student will be scheduled for a one-hour lesson weekly with a minimum of five hours of outside preparation expected each week for two credit hours.

**Fulfills:** Performance Course

**Prerequisite:** Piano skills equivalent to 4 or 5 years piano study

## **MUSI 1054 Applied Music Individual-Flute 1 to 2 Credit Hours**

Provides the student a thirty-minute individual lesson per week per credit hour. Study is planned with emphasis on tone production through proper application of principles specific to the instrument. Development of basic techniques through the study of scales and arpeggios in all keys. Performance on recital at request of instructor.

**Fulfills:** Performance Course

## **MUSI 1056 Applied Music Indiv-Clarinet 1 to 2 Credit Hours**

Provides the student a thirty-minute individual lesson per week per credit hour. Study is planned with emphasis on tone production through proper application of principles specific to the instrument. Development of basic techniques through the study of scales and arpeggios in all keys. Performance on recital at request of instructor.

**Fulfills:** Performance Course

## **MUSI 1058 Applied Music Indiv-Oboe 1 to 2 Credit Hours**

Provides the student a thirty-minute individual lesson per week per credit hour. Study is planned with emphasis on tone production through proper application of principles specific to the instrument. Development of basic techniques through the study of scales and arpeggios in all keys. Performance on recital at request of instructor.

**Fulfills:** Performance Course

## **MUSI 1059 Applied Music Indiv-Bass 1 to 2 Credit Hours**

Provides the student a thirty-minute individual lesson per week per credit hour. Study is planned with emphasis on tone production through proper application of principles specific to the instrument. Development of basic techniques through the study of scales and arpeggios in all keys. Performance on recital at request of instructor.

**Fulfills:** Performance Course

## **MUSI 1060 Applied Music Indiv-Bassoon 1 to 2 Credit Hours**

Provides the student a thirty-minute individual lesson per week per credit hour. Study is planned with emphasis on tone production through proper application of principles specific to the instrument. Development of basic techniques through the study of scales and arpeggios in all keys. Performance on recital at request of instructor.

**Fulfills:** Performance Course

## **MUSI 1061 Applied Music Indiv-Violin 1 to 2 Credit Hours**

Provides the student a thirty-minute individual lesson per week per credit hour. Study is planned with emphasis on tone production through proper application of principles specific to the instrument. Development of basic techniques through the study of scales and arpeggios in all keys. Performance on recital at request of instructor.

**Fulfills:** Performance Course

## **MUSI 1062 Applied Music Indiv-Percussion 1 to 2 Credit Hours**

Provides the student a thirty-minute individual lesson per week per credit hour. Study is planned with emphasis on tone production through proper application of principles specific to the instrument. Development of basic techniques through the study of scales and arpeggios in all keys. Performance on recital at request of instructor.

**Fulfills:** Performance Course

## **MUSI 1063 Applied Music Indiv-Viola 1 to 2 Credit Hours**

Provides the student a thirty-minute individual lesson per week per credit hour. Study is planned with emphasis on tone production through proper application of principles specific to the instrument. Development of basic techniques through the study of scales and arpeggios in all keys. Performance on recital at request of instructor.

**Fulfills:** Performance Course

## **MUSI 1064 Applied Music Indiv-Trumpet 1 to 2 Credit Hours**

Provides the student a thirty-minute individual lesson per week per credit hour. Study is planned with emphasis on tone production through proper application of principles specific to the instrument. Development of basic techniques through the study of scales and arpeggios in all keys. Performance on recital at request of instructor.

**Fulfills:** Performance Course

## **MUSI 1065 Applied Music Indiv-Cello 1 to 2 Credit Hours**

Provides the student a thirty-minute individual lesson per week per credit hour. Study is planned with emphasis on tone production through proper application of principles specific to the instrument. Development of basic techniques through the study of scales and arpeggios in all keys. Performance on recital at request of instructor.

**Fulfills:** PE/Health Course

# Course Descriptions

## **MUSI 1066 Appl Music Indiv-French Horn 1 to 2 Credit Hours**

Provides the student a thirty-minute individual lesson per week per credit hour. Study is planned with emphasis on tone production through proper application of principles specific to the instrument. Development of basic techniques through the study of scales and arpeggios in all keys. Performance on recital at request of instructor.

**Fulfills:** Performance Course

## **MUSI 1068 Applied Music Indiv-Trombone 1 to 2 Credit Hours**

Provides the student a thirty-minute individual lesson per week per credit hour. Study is planned with emphasis on tone production through proper application of principles specific to the instrument. Development of basic techniques through the study of scales and arpeggios in all keys. Performance on recital at request of instructor.

**Fulfills:** Performance Course

## **MUSI 1070 Applied Music Indiv-Tuba 1 to 2 Credit Hours**

Provides the student a thirty-minute individual lesson per week per credit hour. Study is planned with emphasis on tone production through proper application of principles specific to the instrument. Development of basic techniques through the study of scales and arpeggios in all keys. Performance on recital at request of instructor.

**Fulfills:** Performance Course

## **MUSI 1072 Applied Music Indiv-Saxophone 1 to 2 Credit Hours**

Provides the student a thirty-minute individual lesson per week per credit hour. Study is planned with emphasis on tone production through proper application of principles specific to the instrument. Development of basic techniques through the study of scales and arpeggios in all keys. Performance on recital at request of instructor.

**Fulfills:** Performance Course

## **MUSI 1074 Applied Music Indiv-Baritone 1 to 2 Credit Hours**

Provides the student a thirty-minute individual lesson per week per credit hour. Study is planned with emphasis on tone production through proper application of principles specific to the instrument. Development of basic techniques through the study of scales and arpeggios in all keys. Performance on recital at request of instructor.

**Fulfills:** Performance Course

## **MUSI 1075 App Music Ind Guitar 1 to 2 Credit Hours**

Provides the student a thirty-minute individual lesson per week per credit hour. Study is planned with emphasis on tone production through proper application of principles specific to the instrument. Development of basic techniques through the study of scales and arpeggios in all keys. Performance on recital at request of instructor.

**Fulfills:** Performance Course

## **MUSI 1076 Applied Music Indiv-Jazz Piano 1 to 2 Credit Hours**

Provides the student a thirty-minute individual lesson per week per credit hour. Study is planned with emphasis on tone production through proper application of principles specific to the instrument. Development of basic techniques through the study of scales and arpeggios in all keys. Performance on recital at request of instructor.

**Fulfills:** Performance Course

## **MUSI 1086 Jazz Improvisation I 1 to 2 Credit Hours**

A humanities course open to students with the ability to play a keyboard, wind or percussion instrument and a desire to learn improvisational techniques within the jazz idiom. The class is a laboratory type that meets two times a week.

**Fulfills:** Performance Course

**Prerequisite:** MUSI 1018 Harmony I or MUSI 1022 Harmony II Enrollment by consent of instructor.

## **NATURAL GAS**

### **NATG 1100 DC Circuit Fundamentals 3 Credit Hours**

The course is designed to acquaint students with the fundamentals of direct current (DC); circuits, the relationship between voltage, current, resistance, and power, the application of Ohm's and Kirchhoff's laws.

### **NATG 1105 AC Circuit Fundamentals 4 Credit Hours**

This course teaches students the fundamentals of Alternating Current (AC), including magnetism, waveforms, oscilloscopes, function generators, capacitance, inductance, reactance, impedance, resonance, power supplies, transformers, RC circuits, RL circuits, RLC circuits, and filters.

### **NATG 1110 Foundations of Natural Gas 3 Credit Hours**

The Fundamentals Course provides the students with a basic understanding of natural gas chemistry, gas quality, spot sampling, and the gas laws. This course will enable the students to understand the properties of natural gas and their relationship to the gas measurement and accounting process.

### **NATG 1125 Electrical Devices & Controls I 3 Credit Hours**

This course teaches students to identify basic electrical/ electronic symbols in a schematic diagram, design a simple motor service in compliance with National Electrical Code mandates and recommendations, calculate voltage drop in a single or three phase AC service, and be familiar with the design, operation, and safety considerations of electrical components such as fuses, circuit breakers, overloads, conductors, conduits, contactors, and relays. Students will also learn to build and safely troubleshoot several electro-mechanical relay circuits.



# Course Descriptions

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## **NATG 1130 Electrical Devices Controls II** 3 Credit Hours

This course teaches students to identify the interconnection of electrical/electronic symbols and apply this knowledge to circuit analysis and troubleshooting and explain the different types of hazardous area classifications and divisions. Students will also learn to wire and safely troubleshoot several ramping, reversing, slave starter, and control motor circuits.

## **NATG 1135 Basic Corrosion/Field Tech** 3 Credit Hours

This course is first in a series of courses designed to teach the basics of corrosion and field technician skills to students/technicians in pipeline and other related industries.

## **NATG 1145 Gas Regulators** 2 Credit Hours

The Gas Regulators course enables students to develop a fundamental understanding of the operation of various gas regulators. In addition, students will learn how to perform maintenance on typical gas regulators used by the gas industry.

## **NATG 1150 Intro Prog Logic Controllers** 3 Credit Hours

This course enables the student to configure and apply programmable logic controllers (PLCs) to various automation scenarios. Given an operation specification, the student will be able to program the PLC to conform to typical automation requirements.

## **NATG 1155 Advanced Programmable Logic** 4 Credit Hours

An advanced programmable logic controller (PLC) course designed to train the student in computerized automation of a gas pipeline using the ControlLogix PLC, a standard of the industry. The student will become familiar with the advanced features of the programming software and be able to create and troubleshoot ladder logic using an operation specification.

## **NATG 1160 Trench & Excavation Practices** 2 Credit Hours

This course will train students to operate excavation equipment (hydraulic excavator) in the field.

## **NATG 1165 Natural Gas Tech Internship** 1 to 4 Credit Hours

This course is designed to provide the student with practical work experience and on the job training within his or her chosen career field. Students will work with professionals in the field, learn the type of dedication necessary and observe working operations of the natural gas industry.

## **NATG 1170 Gas Measurement & Controls** 4 Credit Hours

Gas Measurement and Controls will demonstrate why accurate gas flow measurement is necessary and will describe the components of a gas measurement system. Instructor led and hands on exercises will show how accurate gas flow measurements are important and can make the difference between profit and loss.

## **NATG 1175 Inter Nat Gas Dist & Trans** 1 Credit Hours

This course is intended to prepare employees in the natural gas distribution industry to perform identified job tasks in order to comply with federal regulations and industry standards.

## **NATG 1180 Basic Corrosion I** 1 Credit Hours

The National Association of Corrosion Engineers (NACE) Basic Corrosion Course is designed to impart a substantial part of the basic information available about corrosion and the means whereby it is controlled. It is intended to be comprehensive of the scope of current knowledge about corrosion of metals, deterioration of non-metals, electrochemical phenomena, elementary chemistry and practical control measures. The intent of the course is to provide theoretical background rather than in-the-field corrosion work.

## **NATG 1185 Basic Corrosion II** 1 Credit Hours

The National Association of Corrosion Engineers (NACE) Basic Corrosion Course is designed to impart a substantial part of the basic information available about corrosion and the means whereby it is controlled. It is intended to be comprehensive of the scope of current knowledge about corrosion of metals, deterioration of non-metals, electrochemical phenomena, elementary chemistry and practical control measures. The intent of the course is to provide theoretical background rather than in-the-field corrosion work.

## **NATG 1190 Natural Gas Transmission** 3 Credit Hours

This course will discuss the gathering, storage, and compression needed in pipeline Natural gas to distribution. It will relate to federal regulations for interstate pipelines. It will include the meters, reliefs, regulators required for higher pressure and flows needs for transmission.

## **NATG 1195 First Aid & Safety NatGasTech** 3 Credit Hours

This course prepares you to work in and perform routine safety precautions for natural gas in addition to acquiring the knowledge and skills required to help an injured or suddenly ill person before professional emergency care can be provided. Successful completion of this course provides for certification by American Heart Association First Aid; and Adult, Child, and Infant CPR.

**Fulfills:** Physical Education Requirement

## **NATG 1200 Natural Gas Distribution** 3 Credit Hours

The course will discuss the border (city gate) stations where transmission transfers natural gas to distribution. It will relate to state, KCC regulations for intrastate requirements. It will include meters, reliefs, regulators required for border stations to commercial and residential consumers.

## **NETWORKING**

## **NTWK 1030 Linux I** 3 Credit Hours

Linux I prepares students to administer a Linux network operating system. Students learn to install, configure, manage, monitor and troubleshoot a Linux server. Part one of a two course sequence which prepares students for Linux+ certification.

# Course Descriptions

## **NTWK 1032 Introduction to Networking 3 Credit Hours**

Introduction to Networking will introduce students to the underlying concepts of telecommunications and networking. It provides a general overview of computer networks and will focus on the terminology and technologies in current networking environments. Students in business and computer fields will learn a basic understanding of networking setup and how to access data across the network.

## **NTWK 1034 Networking I 3 Credit Hours**

This course is designed to expand the student's view of networking and prepare students to pass a vendor neutral networking certification exam. This course covers a wide range of material about networking, from local area networks to wide area networks, protocols, topologies, transmission media, and security. It discusses in-depth the most significant aspects of networking, such as the TCP/IP protocol suite. This course is the first course in a two course sequence which prepares the student for Network+ certification.

**Prerequisite:** NTWK 1032 Introduction to Networking with a grade of C or better

## **NTWK 1035 Networking II 3 Credit Hours**

This course is designed to expand the student's view of networking and prepare students to pass a vendor neutral networking certification exam. This course covers a wide range of material about networking, from local area networks to wide area networks, protocols, topologies, transmission media, and security. It discusses in-depth the most significant aspects of networking, such as the TCP/IP protocol suite. This course is the second course in a two course sequence which prepares students for Network+ certification.

**Prerequisite:** NTWK 1034 Networking I with a grade of C or better

## **NTWK 1046 Local Area Network Workstation 3 Credit Hours**

This course prepares students to operate and manage Local Area Network (LAN) workstations and prepares to pass the current industry certification. Students learn to install, configure, deploy, monitor and maintain a LAN workstation. Migration from previous versions and new features are highlighted.

## **NTWK 1052 Computer Repair & Upgrade I 3 Credit Hours**

Students learn routine maintenance and preventative care for PCs, laptops and mobile devices including hardware and software troubleshooting, upgrading and replacing system components, SOHO network connectivity, and security. Part one of a two course sequence which prepares students for A+ certification.

**Prerequisite:** Basic Computer Proficiency

## **NTWK 1053 Computer Repair & Upgrade II 3 Credit Hours**

Students learn routine maintenance and preventative care for PCs, laptops and mobile devices including hardware and software troubleshooting, upgrading and replacing system components, SOHO network connectivity, and security. This course is the second in a two course sequence which prepares students for A+ certification.

**Prerequisite:** concurrent enrollment in NTWK 1052 Computer Repair & Upgrade I

## **NTWK 1061 Linux II 3 Credit Hours**

Linux II prepares students to administer a Linux network operating system. Students learn to install, configure, manage, monitor and troubleshoot a Linux server. Part two of a two course sequence which prepares students for Linux+ certification.

**Prerequisite:** NTWK 1030 Linux I with a grade of C or better

## **NTWK 1068 Help Desk Fundamentals 3 Credit Hours**

This course introduces students to service concepts, skills sets, career paths, and operations of the help desk industry. This course presents help desk theories from an educational perspective and provides an overview of the help desk for individuals interested in pursuing a career in customer support. This course also provides an overview of the knowledge, skills, and abilities necessary for employment in the user support industry. This course emphasizes problem-solving and communication skills in addition to technical skills.

## **NTWK 1070 Network Security I 3 Credit Hours**

Network Security I prepares students to design, implement and maintain an organization's network and computer security policies. Students analyze computer networks to determine areas of weakness in an organization's security architecture, and suggest solutions for controlling those weaknesses. Students also learn how to track hackers when security breaches occur. This course is the first course in a two course sequence which prepares students for Security+ certification.

**Prerequisite:** NTWK 1072 Information Security with a grade of C or better AND NTWK 1032 Introduction to Networking with a grade of C or better

## **NTWK 1071 Network Security II 3 Credit Hours**

Network Security II prepares students to design, implement and maintain an organization's network and computer security policies. Students analyze computer networks to determine areas of weakness in an organization's security architecture and suggest solutions for controlling those weaknesses. Students also learn how to track hackers when security breaches occur. This course is the second course in a two course sequence which prepares students for Security+ certification.

**Prerequisite:** NTWK 1070 Network Security I with a grade of C or better

# Course Descriptions

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## **NTWK 1072 Information Security 3 Credit Hours**

This course examines principles of information security. Emphasis is placed on the confidentiality, integrity and availability of information in a technological setting. Security awareness, analysis, design, implementation and maintenance are explored. Students, who complete this class with a C or better, earn the NSTISSI (National Training Standard for Information Systems Security) 4011 certification in Information Systems Security. (pending certification approval)

## **NTWK 1080 Occupational Internship I 1 to 6 Credit Hours**

This course is designed to provide the student with practical work experience and on-the-job training within his or her chosen career field. Students will engage in experiences to enhance the development of their professional networking career.

## **NTWK 1085 Windows Server I 3 Credit Hours**

This class prepares students to install and configure a Windows Server. Students learn to install Windows Server through manual and automated installation routines, configure file systems and disk management functions, implement IPv4 and v6 addressing, configuring networking protocols, install and configure virtualization systems and services, configure DNS Services, and configure group policies. This course is one of a group of courses which prepares students for the Microsoft Certified Technology Specialist (MCTS) Windows Server Infrastructure Exam, a core requirement of the MCSA (Microsoft Certified Systems Administrator).

**Prerequisite:** NTWK 1032 Introduction to Networking with a grade of C or better

## **NTWK 1086 Windows Server II 3 Credit Hours**

This class prepares students to administer a Windows Server. Students learn to configure Active Directory services, configure deployment services, monitor services and servers, configure file systems management, establish audit policies, configure DNS, configure direct access, implement network protection, configure domain controller management, and configure advanced group and user policy management processes. This course is one of a group of courses which prepares students for the Microsoft Certified Technology Specialist (MCTS) Windows Server Infrastructure Exam, a core requirement of the MCSA (Microsoft Certified Systems Administrator).

**Prerequisite:** NTWK 1085 Windows Server I with a grade of C or better

## **NURSES AID**

## **NAID 1229 Nursing Home Aide 5 Credit Hours**

This course is designed to enhance basic care-giving skills, human understanding and attitude, all of which are necessary to render services to residents of an adult care facility. Emphasis is placed on the normal needs of the geriatric resident and specific individual physical, psychosocial, environmental and spiritual needs. Students completing this course with a minimum grade of "C" will be allowed to sit for the Kansas CNA State Certification Examination and receive a Barton certificate of completion.

**Prerequisite:** Meets college level reading assessment.

## **NAID 1230 Certified Nurse Aide Refresher 1 Credit Hours**

This course is designed to provide the student with a review of basic selected nursing skills in an adult care home environment. Following successful completion of the competency test, the student's Certified Nurse Aide (CNA) certificate is reinstated by the Kansas Department of Aging and Disabilities Services (KDADS).

## **NAID 1235 Medication Aide 5 Credit Hours**

This course is designed to provide the student with a basic knowledge of medications and their safe administration. It covers the systems of the body and the effects of medications on these systems. Special emphasis is given to the aging process and what it does to drug utilization by the body. Students completing this course with a minimum grade of "C" will be allowed to sit for the Kansas Certified Medication Aide (CMA) State Certification Examination and receive a Barton certificate of completion.

**Prerequisite:** NAID 1229 Nursing Home Aide Meets college level reading assessment and active Kansas Nurse Aide Certification.

## **NAID 1245 Nutrition Assistant 1 Credit Hours**

This course is designed to provide the student with basic knowledge of nutrition and hydration assistance of the resident in an adult care home. Following successful completion of the competency test, the student is approved to work as a paid nutrition assistant in the state of Kansas.

## **NURSING**

## **NURS 1206 Fundamentals of Nursing 5 Credit Hours**

This course is an orientation to the nursing profession. The student is introduced to fundamental concepts and principles including standards of nursing care, which underlie and guide nursing practice. Basic nursing skills will be presented.

**Prerequisite:** Admission to Nursing Program

## **NURS 1207 Mental Health I 2 Credit Hours**

This course focuses on the development of self-awareness on the part of the practical nurse and the beginning skills necessary for establishing meaningful and effective interpersonal communication that assists the beginning nurse to function in diverse health care organizations. Emphasis is placed on the concepts of communication, and common selected mental health issues. Additionally, the course content focuses on regulations in practical mental health nursing, legal and ethical issues.

**Prerequisite:** Admission to Nursing Program

# Course Descriptions

## **NURS 1208 Mental Health Nursing II 4 Credit Hours**

This course focuses on the care of patients across the lifespan experiencing cognitive, mental and behavioral disorders. Emphasis is placed on management of patients facing emotional and psychological stressors, as well as promoting and maintaining the mental health of individuals and families. The concepts of patient-centered care, professionalism, clinical judgment and therapeutic communication are integrated throughout the course. Clinical experiences provide the student an opportunity to apply theoretical concepts and implement safe patient care to patients in a variety of settings.

**Prerequisite:** NURS 1257 Medical Surgical Nursing III AND NURS 1259 Maternal Child Nursing II AND NURS 1264 RN Leadership and Management and Kansas LPN License and Admission to Nursing Program

## **NURS 1210 Gerontological Nursing 2 Credit Hours**

This course discusses the normal aging process in order to recognize deviations from normal. This course is an overview of the social, psychological and biological changes that accompany aging and the implications of these changes for the individual as well as for society.

**Prerequisite:** NURS 1255 Medical Surgical Nursing I AND NURS 1206 Fundamentals of Nursing AND NURS 1207 Mental Health I AND NURS 1228 Pharmacology for Nurses Admission to Nursing Program

## **NURS 1222 ADN:Making the Transition 1 Credit Hours**

This course is designed to facilitate the transition of the student role in the associate degree nursing program. An overview of the Barton Nursing Program framework is provided along with an introduction to learning resources used throughout the nursing program. Emphasis is placed on the nursing student role in the classroom and clinical situations. Common LPN psychomotor skills are reviewed, in preparation for entry into the ADN program.

**Prerequisite:** Completion of Practical Nursing Program with Current Kansas Licensure and Admission to the Associate Degree Nursing Program

## **NURS 1228 Pharmacology for Nurses 3 Credit Hours**

This course introduces the principles of pharmacology, including drug classifications and their effects on the body. Emphasis is on the use of components of the nursing process when administering medications.

**Prerequisite:** Admission to Nursing Program

## **NURS 1255 Medical Surgical Nursing I 5 Credit Hours**

This course is an introduction to the area of adult medical-surgical nursing to a diverse client population. Common, noncomplex medical surgical conditions and problems, which interfere with individual need fulfillment, are presented.

**Prerequisite:** NURS 1206 Fundamentals of Nursing with a grade of C or better Admission to Nursing Program

## **NURS 1256 Medical Surgical Nursing II 6 Credit Hours**

This course is a continuation of adult Medical-Surgical Nursing I. Medical-Surgical assessments, diagnosis, interventions, and treatments are integrated with psychosocial and cultural aspects of care.

**Prerequisite:** NURS 1255 Medical Surgical Nursing I AND NURS 1206 Fundamentals of Nursing AND NURS 1207 Mental Health I AND NURS 1228 Pharmacology for Nurses Admission to Nursing Program

## **NURS 1257 Medical Surgical Nursing III 6 Credit Hours**

This course focuses on the care of adult clients with complex health alterations that require medical and/or surgical intervention. Emphasis is placed on the care of clients with alterations in select body systems and the role of the registered nurse in intravenous therapy. Concepts of patient-centered care, professionalism, teamwork and collaboration, clinical judgment, leadership and management of care, patient education, and communication are integrated throughout the course. Clinical experiences provide the student an opportunity to apply theoretical concepts and implement safe client care to adults in a variety of settings.

**Prerequisite:** LPN License and Admission to ADN Program

## **NURS 1258 Maternal-Child Nursing I 3 Credit Hours**

This course builds upon the fundamental concepts, processes and outcomes utilizing the nursing process as the foundation for the delivery of client care addressing physiological, psychosocial, spiritual and cultural needs of the healthy maternal, neonatal, and pediatric client. Holistic nursing care of the child and family experiencing health alterations is also introduced. Emphasis is placed on the role of the practical nurse and the core concepts of caring, communication, critical thinking, professionalism, and competence are integrated throughout the course. Clinical experiences provide the student an opportunity to apply theoretical concepts and implement safe patient care to the healthy maternal, neonatal, and pediatric client in a variety of settings.

**Prerequisite:** NURS 1206 Fundamentals of Nursing AND NURS 1207 Mental Health I AND NURS 1228 Pharmacology for Nurses AND NURS 1255 Medical Surgical Nursing I Admission to Nursing Program

## **NURS 1259 Maternal Child Nursing II 3 Credit Hours**

This course provides an integrative, family-centered approach to the care of mothers, newborns, and children. Emphasis is placed on normal and high-risk pregnancies, normal growth and development, family dynamics, common pediatric disorders and the promotion of healthy behaviors in patients. The concepts of patient-centered care, professionalism, teamwork and collaboration, clinical judgment, patient education, and communication are integrated throughout the course. Clinical experiences provide the student an opportunity to apply theoretical concepts and implement safe patient care to mothers, newborns, and children in a variety of settings.

**Prerequisite:** Kansas LPN License and Admission to ADN Program



# Course Descriptions

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## **NURS 1261 Medical-Surgical Nursing IV**      **5 Credit Hours**

This course focuses on the care of adult clients with complex health alterations that require medical and/or surgical intervention. Emphasis is placed on the care of clients with alterations in select body systems and the advancement of patient education and management of care for clients with multiple, complex health needs. Concepts of patient-centered care, professionalism, teamwork and collaboration, clinical judgment, leadership and management of care, patient education, and communication are integrated throughout the course. Clinical experiences provide the student an opportunity to apply theoretical concepts and implement safe client care to adults in a variety of settings.

**Prerequisite:** NURS 1257 Medical Surgical Nursing III AND NURS 1259 Maternal Child Nursing II AND NURS 1264 RN Leadership and Management and Kansas LPN License and Admission to ADN Program

## **NURS 1264 RN Leadership and Management**      **2 Credit Hours**

This course facilitates the transition of the student to the role of a professional nurse in diverse health care organizations. Course content includes the leadership and management concepts of communication, team building, delegation, prioritization, and decision making. Legal and ethical concepts of safe nursing practice, patient advocacy, and patient rights are analyzed. The concepts of quality and safety within organizational systems are examined. Emphasis is placed on the role of the nurse in coordinating care and protecting the client and healthcare personnel through evidence-based practice.

**Prerequisite:** Kansas LPN License and Admission to ADN Program

## **NURS 1265 PN Transition into Nursing**      **2 Credit Hours**

This course facilitates the transition from the role of nursing student to Licensed Practical Nurse (LPN). Emphasis is placed on factors that contribute to the LPN scope of practice, initial employment as a nurse, including leadership and management skills; as well as the obligation to obtain and maintain licensure.

**Prerequisite:** NURS 1255 Medical Surgical Nursing I Admission to Nursing Program

## **OCCUPATIONAL SAFETY & HEALTH ADMIN**

### **OSHA 1006 Permit Required Confined Space**      **1.5 Credit Hours**

This course is designed to enable students to recognize, evaluate, prevent & abate safety & health hazards associated with confined space entry. Technical topics include the recognition of confined space hazards, basic information about instrumentation used to evaluate atmospheric hazards, and ventilation techniques. This course features hands-on exercises on permit entry classification and program evaluation.

### **OSHA 1007 Guide to Industrial Hygiene**      **2 Credit Hours**

This course covers industrial hygiene practices and related OSHA regulations and procedures. Course topics include recognition, evaluation, and control of chemical, physical, biological and ergonomic hazards, Permissible Exposure Limits (PEL), OSHA health standards, respiratory protection, engineering controls, OSHA sampling protocols and strategies, and workplace health program elements. The student must successfully pass a written exam at the end of the course.

### **OSHA 1008 Principles of Ergonomics**      **1.5 Credit Hours**

This course will familiarize participants with the application of ergonomic principles for the reduction of musculoskeletal stress and strain in the workplace with the goal of controlling or preventing workplace musculoskeletal and nerve disorders. Participants will conduct a task analysis of jobs to identify risk factors and present plans for worker protection.

### **OSHA 1009 Fall Protection**      **1.5 Credit Hours**

This course provides an overview of state-of-the-art technology for fall protection and current Occupational Safety and Health Administration (OSHA) requirements. Topics covered include principles of fall protection, components of fall arrest systems, limitations of fall arrest equipment, and OSHA policies regarding fall protection. Course features exercises and activities using fall protection equipment.

### **OSHA 1010 Electrical Standards**      **2 Credit Hours**

This course is designed to provide the student with a survey of Occupational Safety and Health Administration's (OSHA) electrical standards and the hazards associated with electrical installations and equipment. Topics include single and three-phase systems, cord and plug connected and fixed equipment, grounding, ground fault circuit interrupters, and safety-related work practices. Emphasis is placed on electrical hazard recognition and OSHA policies and procedures. Students will also receive instruction on the safe and correct use of electrical testing equipment.

### **OSHA 1011 Excav, Trench & Soil Mechanics**      **1.5 Credit Hours**

This course focuses on Occupational Safety and Health Administration (OSHA) standards and the safety aspects of excavation and trenching. Students are introduced to practical soil mechanics and its relationship to the stability of shored and unshored slopes and walls of excavations. Various types of shoring (wood timbers and hydraulic) are covered. Testing methods are demonstrated and activities conducted to allow students to use instruments such as penetrometers, torvane shears, and engineering rods.

### **OSHA 1012 Hazardous Materials**      **2 Credit Hours**

This course provides a detailed overview of the Occupational Safety and Health Administration's (OSHA) general industry standards related to hazardous materials. Topics covered include flammable and combustible liquids, compressed gasses, cryogenic liquids, and liquid petroleum. Hazardous processes such as spraying and dipping operations are covered as well.



# Course Descriptions

## **OSHA 1013 Machinery & Machine Guard Stand 2 Credit Hours**

This course provides instruction provided on the hazards associated with various kinds of machinery and the control of hazardous energy sources. The course presents an approach to machinery inspection that enables participants to recognize hazards and to provide options to achieve abatement. These hazards include mechanical motions and actions created by points of operation and other machinery processes.

## **OSHA 1913 Intro OSHA Gen Ind Standards 2.5 Credit Hours**

This course will train students on Occupational Safety and Health Act, (OSHA) regulations pertaining to General Industry standards that are set forth in the Code of Federal Regulations 29, Part 1910.

## **OSHA 1914 OSHA General Industry Regs 2.5 Credit Hours**

This course covers OSHA Standards, policies, and procedures for General Industry. Topics include the scope and application of the OSHA General Industry Standards, general industry safety and health principles, and special emphasis on those areas in general industry which are most hazardous. The student must successfully pass a written exam at the end of the course.

## **OSHA 1924 Intro OSHA Construct Ind Stand 2.5 Credit Hours**

This course will train students on Occupational Safety and Health Act, (OSHA) regulations pertaining to construction standards that are set forth by OSHA's construction industry standards.

## **OSHA 1926 OSHA Construct Industry Regs 2.5 Credit Hours**

This course covers OSHA Standards, policies, and procedures for the construction industry. Topics include the scope and application of the OSHA construction industry standards, construction safety and health principles, and special emphasis on those areas in construction which are most hazardous. The student must successfully pass a written exam at the end of the course.

## **OSHA 1927 Fundamentals of OSHA Const Ind 3 Credit Hours**

This course will instruct students on the Occupational Safety and Health Act (OSHA) and regulations pertaining to construction standards set forth in the Code of Federal Regulations 29 part 1926.

## **OSHA 1928 Fundamentals of OSHA Gen Ind 3 Credit Hours**

This course will instruct students on the importance of the Occupational Safety and Health Act (OSHA) and regulations pertaining to General Industry standards set forth in the Code of Federal Regulations 29, Parts 1910. 1903 and 1904.

## **OSHA 1929 Intro to Fire Prevention 3 Credit Hours**

This course will provide fundamental information regarding the history and philosophy of fire prevention to students through the study of fire codes, identification and correction of fire hazards, and addressing the relationships of fire prevention with built-in fire protection systems, fire investigation and fire and life-safety education.

## **OSHA 1930 Practicum in OSHA 3 Credit Hours**

This practicum focuses Occupational Safety and Health practical experience in work practice controls and hazard recognition. Students will develop for a selected business standard procedures required to identify and correct hazards in the workplace.

## **OSHA 1931 Safety Trng Methods for Adults 3 Credit Hours**

Instruction consists of a review and study of the training methods and practices used to develop and incorporate safety job skills in the workplace.

## **OSHA 1932 Work Practices Controls Safety 3 Credit Hours**

This course discusses the logical flow of hazard hazard recognition to Job Hazard Analysis (JHA) and development of successful safety cultures and programs that support the management process. Work practice controls and hazard recognition will provide the basic foundation necessary to identify and correct hazards in the workplace.

## **OSHA 1933 Workplace Accident Investigati 3 Credit Hours**

This course provides an introduction to basic accident investigation procedures and describes accident analysis techniques. The focus of the course is to assist students in gaining the basic skills necessary to conduct an effective accident investigation in a workplace. Topics include the primary reasons for conducting an accident investigation, employer responsibilities related to workplace accident investigations, and the six step accident investigation procedure.

## **OSHA 1934 Instruct Methods Adult Learner 1 Credit Hours**

Instruction consists of a review and study of the instruction methods and practices used in Adult Education.

## **OSHA 1970 OSHA Trainer Stand Constr Ind 2.5 Credit Hours**

This is an advanced course offered through OSHA's outreach program that prepares and upon successful completion authorizes the student to instruct OSHA's 10 or 30 hour construction courses.

**Prerequisite:** OSHA 1926 OSHA Construct Industry Regs or OSHA #510 Standards for Construction and program director approval

## **OSHA 1971 OSHA Trainer Standards Gen Ind 2.5 Credit Hours**

This is an advanced course offered through OSHA's outreach program that prepares and upon successful completion authorizes the student to instruct OSHA's 10 or 30 hour general industry courses.

**Prerequisite:** OSHA 1914 OSHA General Industry Regs or OSHA #511 Standards for General Industry and program director approval

## **OSHA 1972 OSHA 2225 Respiratory Protect 2 Credit Hours**

This course will cover a variety of respirators, fit testing, and respiratory protection written programs for employers. This course meets the requirements of OSHA 2225 respiratory protection.

# Course Descriptions

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## **OSHA 5020 Construction Industry Trainer 1.5 Credit Hours**

This course is designed for Outreach Training Program trainers who have completed OSHA #500 Trainer Course in Occupational Safety and Health Standards for the Construction Industry and are authorized trainers in the OSHA Outreach Training Program. The course provides an update on OSHA Construction Standards, policies, and regulations. Upon course completion students will have the ability to demonstrate continued professional development in their field by applying effective adult learning principles and interactive training techniques to clearly identify, define, and explain construction industry hazards and acceptable corrective measures as they continue to teach the 10- and 30-hour Construction Outreach Training Program classes.

## **OSHA 5030 General Industry Trainer 1.5 Credit Hours**

This course is designed for Outreach Training Program trainers who have completed course #501 Trainer Course in Occupational Safety and Health Standards for General Industry and who are authorized trainers in the OSHA Outreach Training Program. The course provides an update on OSHA General Industry Standards, policies, and regulations. Upon course completion students will have the ability to demonstrate continued professional development in their field by applying effective adult learning principles and interactive training techniques to clearly identify, define, and explain general industry hazards and acceptable corrective measures as they continue to teach the 10- and 30-hour General Industry Outreach Training Program classes.

## **OFFICE TECHNOLOGY**

### **OFTC 1600 Beginning Keyboarding 1 to 3 Credit Hours**

Designed primarily for students desiring a personal use, keyboarding skill, or as the first course in a sequence leading to a vocational program. Emphasis is on touch techniques utilizing a variety of exercises, drills, and scheduled use of a keyboard lab to develop a firm foundation and reasonable speed on keyboarding.

### **OFTC 1601 Keyboarding I 2 to 3 Credit Hours**

Designed primarily for students desiring a personal use, keyboarding skill, or as the first course in a sequence leading to a vocational program. Emphasis is on touch keyboarding techniques utilizing a variety of exercises, drills, and scheduled use of the keyboarding lab to develop a firm foundation and reasonable speed on keyboarding.

### **OFTC 1603 Keyboarding II 2 to 3 Credit Hours**

Keyboarding II is designed and offered to those who have previous knowledge of keyboarding but who need to improve keyboarding skills, increase keyboarding speed, and practice on straight copy skill.

**Prerequisite:** OFTC 1601 Keyboarding I or basic keyboarding knowledge.

### **OFTC 1621 Business Admin Procedures 3 Credit Hours**

Business Administrative Procedures in a capstone course for Business Administrative Technology students. Upon successful completion of this course, students will be able to understand and apply professional techniques in an administrative setting. Through the use of technology, this course explores a variety of topics including, but not limited to the following: business ethics, telephone techniques, personal development, career building skills, business etiquette, and presentation skills.

**Prerequisite:** Near completion of Business Administrative Technology Degree

### **OFTC 1650 Ten Key Mastery 1 Credit Hours**

A competency based skill development course in which the student learns to operate the microcomputer ten-key numeric keyboard using the touch-entry method for data entry.

### **OFTC 1666 Records Management 3 Credit Hours**

A study of alphabetic, numeric, subject, and geographic filing systems. Filing equipment, procedures for charge out and follow up, and methods of transfer will be introduced.

### **OFTC 1696 Word Processing Applications 1 to 3 Credit Hours**

A course emphasizing the preparation of documents utilizing automated electronic text-editing word processing equipment and all the language arts skills necessary for accurate copy. Included will be creation, revision, printing, formatting, pagination, rulers, repetitive documents, hyphenation, spelling, error detection, list/merge processing, and related functions.

### **OFTC 1697 Adv Word Processing Appl 3 Credit Hours**

This course will provide students with an enhanced ability to efficiently use a word processing application and utilize advanced word processing features. Some of these features will include advanced formatting, editing and proofreading skills; customization in pictures, tables, charts, WordArt, SmartArt and templates; and creating multiple page reports and mail merged documents.

**Prerequisite:** BSTC 1036 Computer Concepts & Appl with a grade of C or better

## **PHARMACY**

### **PHRM 1000 Orientation to Pharmacy Tech 3 Credit Hours**

This course highlights the practice and role delineation of pharmacists and pharmacy technicians. The course of study also includes educational requirements, issues related to credentialing, and an overview of pharmacy law, pharmacy ethics, pharmacy math, pharmaceutical operations, and pharmacology.

# Course Descriptions

## **PHRM 1001 Pharmacology**

**3 Credit Hours**

This course provides practical students with information applicable to pharmacology including pharmaceutical nomenclature and classification, mechanisms of drug actions, interactions, indications and contra-indications, side effects, and methods of administering therapeutic agents primarily in the nervous, endocrine, skeletal, muscular, cardiovascular, respiratory and gastrointestinal systems. The course of study also includes methods of administering therapeutic agents with an emphasis on the renal, reproductive, vascular, sensory, dermatological, immunological and hematological systems. The benefits and disadvantages of over-the-counter vs. non-prescriptive medication will be addressed.

## **PHRM 1002 Pharmacy Calculations**

**3 Credit Hours**

This course teaches students the basic terminology, abbreviations, and units needed to perform pharmaceutical calculations. Apothecary, avoirdupois, and metric systems are an essential component of the course. Students will review calculations dealing with ratio and proportion, percentages, ratio strength, reducing and enlarging formulas, and dilution and concentration problems.

**Prerequisite:** MATH 1821 Basic Algebra with a grade of C or better  
Students must assess above the Basic Algebra level (five CPM modules)

## **PHRM 1003 Pharmacy Operations**

**3 Credit Hours**

This course stimulates daily activities in pharmaceutical practice settings. Topics include: order entry processes, medication distribution systems, inventory, prescription processing, billing, repackaging, floor stock and controlled substance distribution, pharmaceutical computer systems, utilization of drug information resources, and proper communication techniques.

## **PHRM 1004 Pharmacy Technician Topics**

**1 Credit Hours**

This course is designed to assist the Pharmacy Technician student in preparing himself/herself for the pharmacy technician certification examination. The course content will include standardized test-taking tips, Pharmacy Technician Certification FAQ's, development of pharmacy law, as well as an overview of federal laws affecting pharmacy technicians and ethics in the pharmacy. This review emphasizes major course content areas.

**Prerequisite:** PHRM 1000 Orientation to Pharmacy Tech AND PHRM 1001 Pharmacology AND PHRM 1002 Pharmacy Calculations AND PHRM 1003 Pharmacy Operations

## **PHRM 1005 Pharmacy Technician Internship**

**4 Credit Hours**

This internship provides students with the opportunity to apply basic pharmacy technician concepts in a community pharmacy setting with rotation options in the community or at a hospital, medical center, home health care facility and/or drug information center.

**Prerequisite:** concurrent enrollment in PHRM 1004 Pharmacy Technician Topics Receipt of Kansas State Board of Pharmacy technician license and background check.

## **PHRM 1006 Advanced Pharmacy Operations**

**3 Credit Hours**

This course demonstrates and simulates daily activities in pharmaceutical practice settings. Topics include: intravenous therapy and non-sterile compounding, sterile technique, drug delivery systems, TPN, weights and measurements. Students discuss compounding facilities and essential compounding equipment, standard packaging forms, interpreting compounding orders and formulations records. Students gain exposure to non-sterile and aseptic compounding techniques in action.

**Prerequisite:** PHRM 1003 Pharmacy Operations with a grade of D or better

## **PHILOSOPHY**

### **PHIL 1602 Introduction to Philosophy**

**3 Credit Hours**

The course is designed to introduce the student to various intellectual problems and questions that have confronted humankind since its beginning. Philosophical problems as well as methods of solving these problems will be discussed. This course is designed to help the student understand the integral place philosophy has in institutions of higher learning.

**Fulfills:** Humanities Requirement

### **PHIL 1604 Systematic Ethics**

**3 Credit Hours**

This course will examine the historical systems of ethical thought, considering the strengths and weakness of each in order to assist the student to understand the basis of ethical behavior and theories.

**Fulfills:** Humanities Requirement

### **PHIL 1605 Reason and Argument**

**3 Credit Hours**

This course is a study of how we can (and do) reason about all aspects of our lives. Students learn how to both create logically consistent arguments and also to break down arguments presented by others so as to judge their logical validity. Special subjects in the course include inductive fallacies, generalization, induction, analogies, and cause/ effect, as well as a study of formal (or propositionally deductive) logic.

**Fulfills:** Humanities Requirement

### **PHIL 1612 Academic Integrity**

**2 Credit Hours**

This course is designed to introduce students to the fundamentals of ethical decision-making, and academic integrity in education and for "professional life." Students will be introduced to major theories of ethics found in the discipline of philosophy and become knowledgeable concerning the development of morality. The course will emphasize the importance of the values of honesty, trust, fairness, respect, and responsibility. Students will develop an ethical framework for making and evaluating ethical choices in everyday life.

## **PHYSICAL EDUCATION**

### **PHED 1202 Bowling**

**1 Credit Hours**

This course is designed to give a person the skill, techniques, and the knowledge necessary to enjoy bowling.

**Fulfills:** Physical Education Requirement

# Course Descriptions

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## **PHED 1204 Advanced Bowling 1 Credit Hours**

This course is designed to give those who know how to bowl the advance techniques of spare pick-up and strike bowling.

**Fulfills:** Physical Education Requirement

**Prerequisite:** PHED 1202 Bowling or consent of instructor.

## **PHED 1209 Intro to Sports Administration 3 Credit Hours**

There is definitely a need for managers who possess sound administrative skills in physical education, health, recreation, and athletics. Specifically, the sports administration curriculum is designed to focus on such concepts as business theory, business and finance, marketing and advertising, organizational behavior and corporate fitness programs.

## **PHED 1210 Beginning Tennis 1 Credit Hours**

This course is designed to give students an opportunity to develop the basic skills and knowledge related to tennis. Instruction will include proper tennis stroke techniques: serve, volley, forehand, backhand, overhead, and footwork. Additionally, scoring, tennis etiquette and rules will be covered. The overall goal of the class is to properly introduce tennis in a manner that the student can successfully play and enjoy this lifelong sport.

**Fulfills:** Physical Education Requirement

## **PHED 1213 Self Defense 1 Credit Hours**

This course teaches self-defense for men and women. Since self defense involves direct contact between two or more individuals, psychological factors play a major role in the teaching of self defense. The basic art of knowing when a danger exists and how to avoid putting oneself in a position of potential danger will be stressed in this course along with the knowledge of escape to safety.

**Fulfills:** Physical Education Requirement

## **PHED 1214 Tae Kwon Do I 1 Credit Hours**

A system of defense and control techniques is based upon well-established principles of hand-to-hand combat. The course involves defensive and aggressive physical maneuvers, armed and unarmed opponents, club maneuvers, development of muscular skill, and prevention of injury to the person.

**Fulfills:** Physical Education Requirement

## **PHED 1215 Tae Kwon Do II 1 Credit Hours**

Continued development of skills and techniques as learned in Tae Kwon-Do I. Beginning development of sparring and application of techniques.

**Fulfills:** Physical Education Requirement

**Prerequisite:** PHED 1214 Tae Kwon Do I

## **PHED 1217 Fitness Thru Activities 1 Credit Hours**

The purpose of this course is to acquaint students with the development of the fitness needs of the body, through total isokinetic-aerobic exercise. The class will give the student a carry-over value of physical education.

**Fulfills:** Physical Education Requirement

**Prerequisite:** Must be a member of Danceline

## **PHED 1219 Target Shooting (Rifle-Pistol) 1 Credit Hours**

This course provides the fundamentals of firearm safety, along with rifle and pistol marksmanship. Twenty-two caliber rifles and pistols will be used on the six point indoor range.

**Fulfills:** Physical Education Requirement

**Prerequisite:** Student must pass a criminal background check dated at least one week prior to the start of class. The background check will be at the expense of the student. Costs vary. Background check may be completed at [www.kansas.gov/kbi](http://www.kansas.gov/kbi)

## **PHED 1222 Beginning Swimming 1 Credit Hours**

For non-swimmers or novices. The beginning class stresses breath control, prone float, back float, human stroke, American crawl, treading water, backstroke.

**Fulfills:** Physical Education Requirement

## **PHED 1224 Intermediate Swimming 1 Credit Hours**

Incorporated in intermediate swimming are the following strokes: elementary backstroke, sidestroke, bac crawl, and breaststroke.

**Fulfills:** Physical Education Requirement

**Prerequisite:** PHED 1222 Beginning Swimming or proficiency in basic swimming skills.

## **PHED 1226 Lifeguard Training 3 Credit Hours**

This course provides the necessary minimum knowledge and skills training for a person to qualify as pool lifeguard. This course includes First Aid and CPR for the Professional Rescuer. American Red Cross Certificates will be issued.

**Fulfills:** PE/Health Course, Physical Education Requirement

**Prerequisite:** Proficiency in basic skills and pre-test.

## **PHED 1229 Scuba Diving 3 Credit Hours**

PADI Open Water Scuba Diving Course is designed to bring the student through a progressive series of knowledge and skill levels the student will need to safely visit and explore the underwater world.

**Fulfills:** Physical Education Requirement

**Prerequisite:** Ability to swim There is a \$220.38 fee required for this course, due within the first 8 weeks of the class.

## **PHED 1232 Gymnastics & Tumbling 1 Credit Hours**

This course is an activity course designed to acquaint students with the necessary flexibility, control and strength to learn and perform gymnastics and tumbling.

**Fulfills:** Physical Education Requirement

**Prerequisite:** For cheerleading members only

## **PHED 1234 Weight Training 1 Credit Hours**

Weight Training is designed to acquaint the student with the basic knowledge, understanding and values of resistance exercises in developing general muscular and organic efficiency, as well as conditioning.

**Fulfills:** Physical Education Requirement

# Course Descriptions

## **PHED 1236 Advanced Weight Training 1 Credit Hours**

Advanced Weight Training is designed to allow the student who has taken Weight Training to continue the program to a more advanced degree.

**Fulfills:** Physical Education Requirement

**Prerequisite:** PHED 1234 Weight Training

## **PHED 1238 Fundamental-Physical Fitness 1 Credit Hours**

The primary purpose of this course is to acquaint students with basic knowledge, understanding, and values of physical activity as it relates to optimal healthful living. Opportunity will be given for each student to develop an exercise program.

## **PHED 1239 Modern Dance 1 Credit Hours**

This course includes development of individual skill in dance movements and the study of the form and composition in dance.

**Fulfills:** PE/Health Course, Physical Education Requirement

## **PHED 1240 Ballroom Dancing I 1 Credit Hours**

This course will introduce students to the principles of social partner dancing. Students will first learn the basics of timing, frame, dance position, connection, and lead and follow. These fundamental skills will be applied to Merengue, American Rumba, American Waltz, Jitterbug, and East Coast Swing.

**Fulfills:** Physical Education Requirement

## **PHED 1242 Intro to Health-PE-Recreation 3 Credit Hours**

This course is a description and interpretation of the fields of Health, Physical Education, and Recreation. It will provide a general concept for the professional student. It will provide specific information about the three areas, its professional opportunities, personal rewards and satisfactions, and requirements of a sound program of professional preparation.

## **PHED 1244 Elementary Health & Phys Educa 3 Credit Hours**

This course is designed for physical educators to enhance their understanding and use of contemporary elementary health and physical education concepts to foster active and healthy lifestyles for all students.

## **PHED 1246 First Aid Emergency Care 3 Credit Hours**

This course covers the knowledge and skills required to provide temporary and immediate care to a person who has been injured or who suddenly becomes ill. Successful completion of this course provides for certification by American Heart Association First Aid; and Adult, Child, and Infant CPR.

**Fulfills:** PE/Health Course, Physical Education Requirement

## **PHED 1253 Care & Prev of Athletic Injury 3 Credit Hours**

This course is designed to familiarize the student with the most prevalent sports injuries and their effective prevention and management. The practical aspects of the care, prevention, and reconditioning of athletic injuries will be stressed. The role of the athletic training profession in the sports medicine system will also be discussed.

## **PHED 1254 Theory of Basketball 2 Credit Hours**

The history and development of the game of basketball and systems used in various sections are stressed through lectures, reports, and discussions. The principles of conditioning and strategy are emphasized.

## **PHED 1256 Psychology of Sport 2 Credit Hours**

The course provides an opportunity to become acquainted with the many psychological aspects that coaches, athletes, and spectators face in their involvement with sports. Emphasis will be given on the psychological and social dimensions of coaching, practice and competitive preparation, and psychological traits common to specific sports and athlete personality.

## **PHED 1258 Rules & Officiating 3 Credit Hours**

This course is designed to acquaint students with a thorough knowledge of the rules, mechanics, and responsibilities of officiating volleyball, football, and basketball.

## **PHED 1270 Intro to Exercise Science 3 Credit Hours**

This course is designed to provide a student with information on the basic physiological functions specific to exercise science and the effects of physical exercise on the human body.

## **PHED 1271 Figure Improvement I 1 Credit Hours**

This course is designed for people who want to make exercise a significant factor in maintaining a physically fit body. Exercising is emphasized as a regular everyday routine. Diets, eating habits and behavioral techniques are discussed by the class as a group. Individual goals are set, and progress in achieving those goals is monitored during the semester.

**Fulfills:** PE/Health Course, Physical Education Requirement

## **PHED 1276 Aqua Aerobics 1 Credit Hours**

This course is designed to offer a total body conditioning program for a firm, trim figure and a healthier cardiovascular system. It incorporates the natural resistance of water to effectively trim and tone the entire body, especially thighs, hips, mid-section, upper body and arms.

**Fulfills:** Physical Education Requirement

## **PHED 1278 Varsity Athletics 1 Credit Hours**

The course will introduce the student athlete to the basic techniques, strategies, conditioning, nutrition, individual and team situations.

**Fulfills:** Physical Education Requirement

## **PHED 1280 Varsity Ath-Basketball (Men) 1 Credit Hours**

The purpose of this course is to provide student athletes the opportunity to participate in intercollegiate athletics.

**Fulfills:** Physical Education Requirement

## **PHED 1281 Varsity Ath-Basketball (Women) 1 Credit Hours**

The purpose of this course is to provide student athletes the opportunity to participate in intercollegiate athletics.

**Fulfills:** Physical Education Requirement



# Course Descriptions

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**PHED 1282 Varsity Athletics-Baseball 1 Credit Hours**

This course is designed to give a person the skill, techniques, and the knowledge necessary to enjoy the game of baseball.

**Fulfills:** Physical Education Requirement

**PHED 1283 Varsity Athletics-Softball 1 Credit Hours**

This course is designed to give a person the skill, techniques, and the knowledge necessary to enjoy the game of Softball.

**Fulfills:** Physical Education Requirement

**PHED 1285 Varsity Athletic-Golf (Women) 1 Credit Hours**

Credit is received for participation in intercollegiate athletics.

**Fulfills:** Physical Education Requirement

**PHED 1286 Varsity Athletic-Golf (Men) 1 Credit Hours**

Credit is received for participation in intercollegiate athletics. Golf is a lifetime sport which can be used as recreation or a profession.

**Fulfills:** Physical Education Requirement

**PHED 1287 Varsity Tennis (Men) 1 Credit Hours**

Credit is received for participation in intercollegiate athletics.

**Fulfills:** Physical Education Requirement

**PHED 1288 Varsity Tennis (Women) 1 Credit Hours**

Credit is received for participation in intercollegiate athletics.

**Fulfills:** Physical Education Requirement

**PHED 1289 Varsity Swimming (Men) 1 Credit Hours**

The purpose of this course is to provide student athletes the opportunity to participate in intercollegiate athletics.

**Fulfills:** Physical Education Requirement

**PHED 1290 Varsity Athletics-Track (Men) 1 Credit Hours**

Credit is received for participation in intercollegiate athletics.

**Fulfills:** Physical Education Requirement

**PHED 1291 Varsity Swimming (Women) 1 Credit Hours**

The purpose of this course is to provide student athletes the opportunity to participate in intercollegiate athletics.

**Fulfills:** Physical Education Requirement

**PHED 1292 Varsity Athletic Track (Women) 1 Credit Hours**

Credit is received for participation in intercollegiate athletics.

**Fulfills:** Physical Education Requirement

**PHED 1293 Varsity Athletics-Volleyball 1 Credit Hours**

Credit is received for participation in intercollegiate athletics.

**Fulfills:** Physical Education Requirement

**PHED 1294 Varsity Athletics-Cheerleading 1 Credit Hours**

Credit is received for participation in Cheerleading.

**Fulfills:** Physical Education Requirement

**PHED 1295 Advanced Aqua Aerobics 1 Credit Hours**

This course is designed to offer a complete and effective conditioning program of physical fitness. It conditions your heart, lungs, and blood vessels by demanding that this internal life supporting system be strengthened through healthy use. It incorporates the natural resistance of water to effectively trim and tone the entire body, especially thighs, hips, mid-section, upper body, and arms.

**Fulfills:** Physical Education Requirement

**Prerequisite:** PHED 1276 Aqua Aerobics

**PHED 1296 Varsity Athletics Soccer (Men) 1 Credit Hours**

Credit is received for participation in intercollegiate athletics.

**Fulfills:** Physical Education Requirement

**PHED 1297 Varsity Athletic Soccer(Women) 1 Credit Hours**

Credit is received for participation in intercollegiate athletics.

**Fulfills:** Physical Education Requirement

**PHED 1298 Varsity Athletic Wrestling 1 Credit Hours**

The purpose of this course is to provide student athletes the opportunity to participate in intercollegiate athletics.

**Fulfills:** Physical Education Requirement

**PHED 1301 Beginning Modern Dance 1 Credit Hours**

A dance class offering the basic concept of beginning modern dance. Very basic movement, steps, combinations, and routines will be covered. Through practical study the student should be able to learn basic rhythm and modern dance routines for enjoyment and exercise.

**Fulfills:** Physical Education Requirement

**Prerequisite:** Must be a member of Danceline

**PHED 1308 Intro to Athletic Training 3 Credit Hours**

Introduction to the profession of athletic training via lectures, class discussions and small group activities. Study of the principles, practices, and techniques used by a certified athletic trainer in the prevention, management, and rehabilitation of athletic injuries.

**Prerequisite:** Must be a student athletic trainer or consent of instructor.

**PHED 1313 Rhythm I 1 Credit Hours**

The class is open to students selected by audition at the beginning of the year, or recruited. Emphasis on fundamentals of precision dance and drill are basic to the course. The group will perform at basketball games, community and professional functions. Credit is received for participation in dance line.

**Fulfills:** Physical Education Requirement

**Prerequisite:** Must be a member of Danceline.

# Course Descriptions

## **PHED 1314 Rhythm II** **1 Credit Hours**

The class is open to students that are selected by audition at the beginning of the year, or recruited. Each class is a continuation of the previous class. Emphasis on fundamentals of precision dance and drill are basic to the course. The group will perform at basketball games, community, and professional functions. Credit is received for participation in dance line.

**Fulfills:** PE/Health Course, Physical Education Requirement

**Prerequisite:** PHED 1313 Rhythm I

## **PHED 1315 Rhythm III** **1 Credit Hours**

Credit is received for participation in dance line.

**Fulfills:** Physical Education Requirement

**Prerequisite:** PHED 1314 Rhythm II

## **PHED 1316 Rhythm IV** **1 Credit Hours**

Credit is received for participation in dance line.

**Fulfills:** PE/Health Course, Physical Education Requirement

**Prerequisite:** PHED 1315 Rhythm III

## **PHED 1319 Yoga** **1 Credit Hours**

Yoga is designed to improve the health, performance, and mental acuity of athletes or individuals interested in improving their level of fitness. Based on the ancient fitness science of yoga, the class blends balance, strength, flexibility and power in a fitness format. Yoga delivers a practical, user-friendly style, which is accessible, understandable, and doable by individuals at any level of fitness. The Yoga class reduces the risk of injury and augments recovery for ailments including stress, lower back pain and tension.

**Fulfills:** Physical Education Requirement

## **PHED 1321 Physical Fitness I** **1 Credit Hours**

In this course students will develop their muscle tone, cardiovascular endurance, flexibility, and body composition through weight training and other exercise activities. Students will learn the value and benefits of a lifetime physical fitness program.

**Fulfills:** Physical Education Requirement

## **PHED 1322 Physical Fitness II** **1 Credit Hours**

In this course students will develop their muscle tone, cardiovascular endurance, flexibility, and body composition through weight training and other exercise activities. Students will learn the value and benefits of a lifetime physical fitness program.

**Fulfills:** Physical Education Requirement

## **PHED 1325 Coaching Advanced Soccer** **3 Credit Hours**

The primary objective of this course is to provide all coaches, from the beginner to the most advanced, with up-to-date theoretical and practical knowledge. This course will prepare coaches working with youth soccer players U10-U13 and above by expanding their knowledge and understanding of the technical and tactical demands of the game and the developmental process necessary for players of these ages. This course will provide an understanding of practical coaching methodology and the framework necessary to prepare players and a team for competition. This course will prepare coaches for whom this represents their final coaching education as well as those who plan to pursue an advanced U.S. Soccer Federation National Coaching License.

## **PHED 1326 Concepts of Personal Training** **3 Credit Hours**

This course is designed to prepare and qualify students to work as personal trainers. This professional development course not only prepares students for successful attainment of the NCSF-CPT credential, but also provides them with the skill set for capable job performance in the expanding personal training market.

**Fulfills:** PE/Health Course, Physical Education Requirement

## **PHED 1327 Zumba** **1 Credit Hours**

Zumba Fitness is a Latin-inspired dance fitness class which incorporates Latin, International and popular music and dance movements to create a dynamic, effective fitness system. Traditional dances such as Salsa, Cumbia, Merengue and African are mixed with contemporary Hip-Hop, Jazz, Pop as well as fitness moves to achieve increased physical fitness. The Zumba Fitness is a copyrighted program with a current licensed ZIN member by Zumba Fitness, LLC and have written rights to use the ZUMBA Trademarks. Zumba Fitness has a corporate office in Hallandale, FL 33009.

**Fulfills:** Physical Education Requirement

## **PHYSICAL SCIENCE**

### **PHSC 1400 Physical Science** **0 or 5 Credit Hours**

Physical Science is designed primarily for students other than those planning on mathematics or science majors. It is a lab course concerned with the concepts of matter and energy involved in the fields of physics, chemistry, astronomy, and earth science as well as introduction into the applied mathematics pertaining to each of these fields.

**Fulfills:** Laboratory Course, Natural Science Requirement

**Prerequisite:** MATH 1821 Basic Algebra with a grade of C or better (or higher level math course) OR having passed Module 6 in College Preparatory Mathematics OR appropriate math placement score.

### **PHSC 1402 Introduction to Geology** **3 or 5 Credit Hours**

The class provides an introduction to the principles of earth science and will include a study of the formation, occurrence, and structures of minerals and rocks, the action of streams, oceans, glaciers, and other agents in the formation and modification of the landscape.

**Fulfills:** Laboratory Course, Natural Science Requirement, Non-Laboratory Course

# Course Descriptions

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## **PHSC 1404 Physical Geography** **3 Credit Hours**

A study of the geographic factors of our physical environments, including climate, terrain, soils, landforms, the seas, economic sources, cartographic elements and an introduction to regional studies.

**Fulfills:** Natural Science Requirement, Non-Laboratory Course

## **PHSC 1405 Physical Geography Lab** **1 Credit Hours**

This course covers lab procedures that are commonly used to determine the geographic factors of our physical environment including climate, terrain, soils, land-forms, the seas, economic sources, and cartographic elements.

**Fulfills:** Lab Science Requirement

**Prerequisite:** concurrent enrollment in PHSC 1404 Physical Geography

## **PHSC 1406 Introduction to Meteorology** **4 Credit Hours**

A study of the principles and lab procedures of weather, including the roles of temperature, moisture, sun-earth interactions, air pressure and winds, general circulation of the atmosphere, air masses, midlatitude cyclones, thunderstorms and tornadoes, hurricanes, weather analysis and forecasting, air pollution, climate change, world climates, atmospheric optical phenomena.

**Fulfills:** Natural Science Requirement, Non-Laboratory Course

## **PHSC 1408 Astronomy** **3 Credit Hours**

This is a general Astronomy course designed to acquaint the student with the motions of astronomical objects across the sky, with the methods and tools used in exploring and understanding the universe, and with basic theories of cosmology.

**Fulfills:** Natural Science Requirement, Non-Laboratory Course

## **PHYSICS**

### **PHYS 1600 Physics I** **0 or 5 Credit Hours**

Physics I is the study of translational and rotational motion, force, work, mechanical and thermal energy, linear and angular momentum, and fluid mechanics using the tools of algebra and trigonometry. Students enrolled in Physics I are required to enroll in Physics I Lab.

**Fulfills:** Laboratory Course, Natural Science Requirement

**Prerequisite:** MATH 1830 Trigonometry or high school Trigonometry.

### **PHYS 1602 Physics II** **0 or 5 Credit Hours**

Physics II is the continuation of Physics I using the tools of algebra and trigonometry. Topics covered in this course will include electricity and magnetism waves, optics, and an introduction to modern physics.

**Fulfills:** Lab Science Requirement, Laboratory Course, Natural Science Requirement

**Prerequisite:** PHYS 1600 Physics I with a grade of C or better

### **PHYS 1604 Engineering Physics I** **0 or 5 Credit Hours**

Engineering Physics I (and associated laboratory experience) is the study of translational and rotational motion, force, work, mechanical and thermal energy, linear and angular momentum, mechanical waves, and fluid mechanics using the tools of algebra, trigonometry, and calculus. Students enrolled in Engineering Physics I are required to enroll in Engineering Physics I Lab.

**Fulfills:** Laboratory Course, Natural Science Requirement

**Prerequisite:** MATH 1832 Analytic Geometry-Calculus I or concurrent enrollment in MATH 1832 Analytic Geometry-Calculus I

### **PHYS 1606 Engineering Physics II** **0 or 5 Credit Hours**

The class will cover the basic principles of electricity, magnetism, light, and modern physics. This course is a continuation of Engineering Physics I and is designed for the majors listed in Engineering Physics I. It includes the study of electricity, magnetism, and wave motion optics, with calculus applications. Students must also enroll in Engineering Physics II Lab.

**Fulfills:** Laboratory Course, Natural Science Requirement

**Prerequisite:** PHYS 1604 Engineering Physics I with a grade of C or better

## **PLUMBING**

### **PLMB 1001 Plumbing Safety** **2 Credit Hours**

This course reviews the common causes of plumbing-related accidents and injuries. Students will learn to identify hazardous situations, unsafe conditions and how to handle and respond to these situations and conditions.

**Prerequisite:** CRFT 1001 Introductory Craft Skills with a grade of C or better

### **PLMB 1010 Plumbing Systems** **1 Credit Hours**

This course explains the factors that influence Drain, Waste, Vent, and distribution system design and how different types of drains, fittings, vents, and pipe are used to distribute water and move waste in a building.

**Prerequisite:** PLMB 1030 Plumbing Fixtures and Fittings

### **PLMB 1020 Introduction to Plumbing** **3 Credit Hours**

This course introduces with the tasks and responsibilities of professionals in the construction industry. Course topics include: proper use, care, and maintenance of basic plumbing tools used to measure, lay out, cut, drill, bore, and ream. Basic math, construction drawings, and applicable code requirements are also included.

**Prerequisite:** PLMB 1001 Plumbing Safety with a grade of C or better

### **PLMB 1030 Plumbing Fixtures and Fittings** **4 Credit Hours**

This course covers basic types of materials used in the manufacturing of plumbing fixtures and the mechanics of fixtures and faucets. The course also introduces the types of materials, schedules, and applications of plastic, copper, cast-iron, and steel piping. Properly measuring, cutting, and joining techniques for all piping materials are included.

**Prerequisite:** PLMB 1020 Introduction to Plumbing with a grade of C or better

# Course Descriptions

## **PLMB 1040 Commercial Drawing** 2 Credit Hours

The course covers identification and interpretation of civil, architectural, structural, HVAC/mechanical, plumbing, and electrical drawings. Students will learn how to use the drawings to ensure accurate dimensions, generate RFIs, locate plumbing entry points, and establish piping routes and fixture locations.

**Prerequisite:** PLMB 1010 Plumbing Systems with a grade of C or better

## **POLITICAL SCIENCE**

### **POLS 1800 Government of United States** 3 Credit Hours

A study of the Constitution of the United States and the organizations, powers, and functions of the national government. In addition, current problems and policy and the role of the individual will be studied.

**Fulfills:** Social Science Requirement

### **POLS 1801 Intro to Political Science** 3 Credit Hours

This course is designed to elevate the political awareness of the student, as well as teach the inner and outer workings of all political systems at all levels.

**Fulfills:** Social Science Requirement

### **POLS 1802 New Politics** 3 Credit Hours

An investigation into the newly forming national political coalitions, their pattern of development and causes. Also, the content, effect, and technique of the new political communication channels will be studied.

**Fulfills:** Social Science Requirement

### **POLS 1804 International Relations** 3 Credit Hours

A study of the fundamentals of the nation-state system; sovereignty, nationalism, diplomacy, collective security, the balance of power, and international organizations.

**Fulfills:** Social Science Requirement

### **POLS 1810 The Middle East in Modern Time** 3 Credit Hours

This course will explore the politics of the Near East region, including the historic, religious, ideological, and cultural forces that share the government policies, international relations, social movements, and military conflicts of the region. Special emphasis will be placed on the Israel-Palestinian conflict, impact of the Gulf War, and current day Iraq.

### **POLS 1815 Intro to UN & InternationalOrg** 3 Credit Hours

This course will explore various theoretical perspectives on international relations, and on the role of international organizations more specifically. The course focus will center on examining the historical evolution of the United Nations and its precursors. We will discuss the UN's structure and governance role in international peace and security, terrorism, human rights, development, and the environment. We will also explore the weaknesses and strengths of the UN and its agencies along with other international organizations and the tension faced by globalization, supranational governance, and national sovereignty.

## **POLS 1828 State & Local Government** 3 Credit Hours

This course examines the evolution and development that has taken place in the states since the founding period. It focuses on the principles of organization and practical operations of state, county, and city governments in the United States. Special emphasis will be given to current problems facing state and local governments.

**Fulfills:** Social Science Requirement

## **PSYCHOLOGY**

### **PSYC 1000 General Psychology** 3 Credit Hours

This course provides a broad overview of the theories and research findings associated with the scientific study of behavior and mental processes. Topics covered may include research techniques, the biological influences on behavior, development, sensation and perception, motivation and emotion, intelligence, consciousness, learning, memory, the role of psychological factors in health, personality, mental disorders and their treatment, and social influences on behavior.

**Fulfills:** Social Science Requirement

### **PSYC 1006 Abnormal Psychology** 3 Credit Hours

This course will examine the criteria for normal and abnormal behavior by exploring the dynamics of their occurrence as well as their etiology, symptoms, diagnosis, and treatment. Topics covered include anxiety and stress disorders, mood disorders, sexual dysfunctions and deviations, somatoforms, and schizophrenia.

**Fulfills:** Social Science Requirement

**Prerequisite:** PSYC 1000 General Psychology with a grade of C or better

### **PSYC 1012 Introduction to Counseling** 3 Credit Hours

A study of counseling theories and strategies will be used as a basis for developing basic helping skills and effective listening techniques. This course is suggested for those interested in helping professions.

### **PSYC 1014 Developmental Psychology** 3 Credit Hours

This course examines the theories, methodologies and data pertinent to the study of the individual across the life-span. Emphasis will focus on both the continuity and changes in behavior due to hereditary and environmental influences within infancy, early childhood, adolescence, adulthood, and late adulthood. Topics will include behavioral genetics, prenatal influences, physical maturation and aging, mental abilities, gender and sexuality, moral development, family and peer interactions, developmental disorders, as well as death and dying.

**Fulfills:** Social Science Requirement

### **PSYC 1016 Social Psychology** 3 Credit Hours

This course will be concerned with the forces on individual and group behavior in social situations. Topics will include the creation of attitudes and prejudice, persuasion and conformity, obedience to authority, group decision making, theories of aggressions and altruism, social cognition and perception and interpersonal attraction.

**Prerequisite:** PSYC 1000 General Psychology with a grade of C or better

# Course Descriptions

## **PSYC 1026 Psychology Grief & Separation** 1 Credit Hours

An appropriate course for the student pursuing skills in any of the helping professions. It is also appropriate for the individual who is simply interested in learning more about the process of grief for his or her own benefit.

**Fulfills:** Social Science Requirement

## **PSYC 1027 Coping with Stress** 1 to 3 Credit Hours

Coping with Stress is designed to give the student a basic knowledge of different stress management techniques and to learn how to apply different stress management techniques to one's own life.

**Fulfills:** Social Science Requirement

## **PSYC 1033 Psychology of Serial Killers** 3 Credit Hours

This course critically examines serial killers from the psychological and sociological perspectives. Students will explore myths and facts associated with the most popular case examples. Additionally, the course will explore the psychopathology and development of serial killers as well as their portrayal in mass media and the effect on culture and society.

## **PSYC 1130 Death & Dying** 3 Credit Hours

This course will provide a broad overview of the theories and data concerning death, grief, and bereavement throughout the life-span. Topics will include demographic trends in death rates, societal views of death and dying, cultural and religious influences on dying, age differences in death experiences and coping, health care practices, and legal issues concerning death.

**Fulfills:** Social Science Requirement

## **READING**

### **READ 1108 Basic Reading** 3 Credit Hours

This course is designed to help students improve vocabulary and basic reading skills as well as to develop study skills needed for college-level work.

**Fulfills:** Developmental Course

### **READ 1109 Intermediate Reading** 3 Credit Hours

This course is designed to help students improve vocabulary, comprehension, critical thinking, and study skills needed for college-level reading.

**Fulfills:** Developmental Course

**Prerequisite:** READ 1108 Basic Reading with a grade of C or better or ASSET Reading Skills score of at least 35 or ACT Reading score of at least 14 or Compass Reading Skills score of at least 58 or Accuplacer Reading Skills score of at least 54 or Accuplacer NG Reading score of at least 237 or recommendation of Reading instructor based on class administered standardized reading test

## **RELIGION**

### **RELI 1301 New Testament Lit:Gospels** 3 Credit Hours

A course designed to introduce the student to the English translations of the four gospels of the New Testament text: Matthew, Mark, Luke, and John. The text of the gospels will be studied almost exclusively rather than emphasizing a textbook about them. Each student will complete an individual exegesis of specific, difficult passages found in the gospels. Several New Testament commentaries will be studied to complete this assignment.

**Fulfills:** Humanities Requirement

### **RELI 1303 New Test Lit:Acts & Epistles** 3 Credit Hours

A course designed to introduce the student to the English translations of the Acts and Epistles of the New Testament.

**Fulfills:** Humanities Requirement

### **RELI 1311 World Religions** 3 Credit Hours

A survey of the major religious systems of the world, including Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity and Islam. Objectivity and impartiality are important characteristics of our study. We seek to understand the world's religions, not evaluate their comparative merits.

**Fulfills:** Humanities Requirement

## **SOCIOLOGY**

### **SOCI 1100 Introduction to Sociology** 3 Credit Hours

This course is the study of human social environments. Particular emphasis is given to the origin and nature of society and its institutions, general principles of sociology, and the influence of culture on the individual. Applications of these principles will be made to current social problems.

**Fulfills:** Social Science Requirement

### **SOCI 1102 Marriage & Family** 3 Credit Hours

A survey of sociological research methods and theories used in the study of marriages/families. The affects of social change, gender theory, and contemporary global problems facing marriages/families will be considered.

**Fulfills:** Social Science Requirement

### **SOCI 1104 Contemporary Social Problems** 3 Credit Hours

This course provides a framework for identifying, exploring, and evaluating social problems today. Students are encouraged to distinguish knowledge from values in their own attitudes about what constitutes a "social problem" and in their assessment of current programs aimed at alleviation of social problems.

**Fulfills:** Social Science Requirement



# Course Descriptions

## **SOCI 1106 Intro to Social Work** 3 Credit Hours

This course is designed to serve as an introduction to the practice of social work and the field of social services. Emphasis is placed on the delivery of social services, the development and future of social work in American society. The student will be exposed to current endeavors in the field, agencies offering social welfare services, and critical issues facing social work in contemporary society.

**Prerequisite:** SOCI 1100 Introduction to Sociology

## **SOCI 1110 Juvenile Delinquency/Justice** 3 Credit Hours

Examines the historical precedents and philosophical reasons for treating juveniles differently from adults. Reviews empirical evidence about child development that can illuminate the reasons for their special status within the system. It will study the major theories that have been proposed as explanations of delinquent behavior. The course will also provide a detailed overview of the juvenile justice system, from its beginnings to the current state of the institution.

**Fulfills:** Social Science Requirement

## **SOCI 1114 Human Sexuality** 3 Credit Hours

This course is designed as a comprehensive overview of the entire field of sexuality and uses an interdisciplinary approach, which deals with the biological, psychological, and sociological aspects of sexuality. There is emphasis placed on factual dimensions as well as religious, moral, and ethical values and the social mores of the various cultural groups.

**Fulfills:** Social Science Requirement

**Prerequisite:** SOCI 1100 Introduction to Sociology or PSYC 1000 General Psychology

## **SOCI 1129 Cross Cultural Awareness** 3 Credit Hours

The purpose of the class is to assist students in developing an awareness of cultural background, attitudes, and experiences. The class is also intended to create an awareness of one's own individual respect for human dignity and individual rights both for oneself and others in our increasingly pluralistic society.

**Fulfills:** Social Science Requirement

## **SOCI 1145 Parenting** 3 Credit Hours

An examination of parenting lifestyles and values and their relationship to available alternatives for guiding children's behavior. The course will provide purposeful training in preparation for the responsibilities of parenthood.

**Fulfills:** Social Science Requirement

## STATISTICS

## **STAT 1827 Elements of Statistics Lab** 0 to 1 Credit Hours

Computer lab focusing on applying statistical software to data analysis and decision making. Using Microsoft Excel software, hands-on applications include, but are not limited to, frequency distribution charts, histograms, descriptive statistics, linear regression, binomial probability, confidence intervals, and hypotheses testing.

## **STAT 1829 Elements of Statistics** 3 Credit Hours

This course will cover descriptive statistics, probability, random variables, random sampling, sampling theory, confidence intervals, hypothesis testing, and linear regression.

**Fulfills:** Foundation Course AA, AS, AGS, AAS, Mathematics Requirement, Natural Science Requirement, Non-Laboratory Course

**Prerequisite:** MATH 1828 College Algebra with a grade of C or better OR MATH 1826 College Algebra with a grade of C or better OR appropriate placement score.

## **STAT 1840 Business & Economics Stats I** 3 Credit Hours

An introduction to the basic concepts of statistics related to business and economics; including descriptive statistics, probability, discrete and continuous distributions, confidence intervals, sampling methods, hypothesis testing, and correlation and regression.

**Fulfills:** Foundation Course AA, AS, AGS, AAS, Mathematics Requirement

**Prerequisite:** MATH 1828 College Algebra with a grade of C or better OR MATH 1826 College Algebra with a grade of C or better OR appropriate placement score.

## **STAT 1845 Business & Economics Stats II** 3 Credit Hours

Continuation of STAT 1840 with applications to business and economic studies; including sample comparisons, analysis of variance, multiple regression, correlation, quality control, time-series, forecasting, business cycles, chi-square tests, and nonparametric methods.

**Fulfills:** Foundation Course AA, AS, AGS, AAS, Mathematics Requirement

**Prerequisite:** STAT 1840 Business & Economics Stats I with a grade of C or better or STAT 1829 Elements of Statistics with a grade of C or better or MATH 1829 with a grade of C or better or BUSI 1609 Business Statistics with a grade of C or better

## THEATER

## **THEA 1300 Introduction to the Theatre** 3 Credit Hours

This course is designed to create for the student an awareness of the skills, arts and sciences involved in the presentation of a play. Special emphasis is given to the problems of the actor and the director.

**Fulfills:** Humanities Requirement

## **THEA 1301 Dir Ind Study/Theatre** 3 Credit Hours

Directed independent study is a structured learning experience offered as an extension of the regular curriculum. It is intended to allow students to broaden their comprehension of the principles of, and their grasp of competencies associated with academic, nonvocational disciplines. Its purpose is to supplement extant courses with individualized, in-depth learning experiences. Such learning experiences may be undertaken independent of the traditional classroom setting, but will be appropriately directed and supervised by regular instructional staff.

**Fulfills:** Humanities Requirement, Studio Course (AA up to 3 hrs)

**Prerequisite:** Enrollment by consent of instructor

# Course Descriptions

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## **THEA 1302 Acting I** **3 Credit Hours**

This course provides varied experiences for the students to apply the fundamental techniques of acting. Course work includes extensive practice in pantomime, character, creation, body language, and effective stage speech.

**Fulfills:** Performance Course

## **THEA 1304 Acting II** **3 Credit Hours**

This course provides a continuation of Acting I. The course provides varied experiences for the students to apply the fundamental techniques of acting, emphasizing the actor's responsibility in creating the character. Class work will involve advanced acting exercises focusing on more in-depth analysis and character development, scenes, research, and different styles of acting as demanded by dramatic literature.

**Fulfills:** Performance Course

## **THEA 1306 Play Production** **3 Credit Hours**

This course provides the student with additional theatrical experiences. Students apply various techniques necessary to the total theatrical production. Included in the course work is experience in theatre management, directing, stage managing techniques and technical theatre.

**Fulfills:** Performance Course

## **THEA 1308 Musical Theatre** **1 Credit Hours**

This course is designed for students participating in the college musical. Emphasis is placed on the musical and dramatic growth of each student, acquiring an understanding of the many facets of musical theatre and an appreciation of the discipline and effort demanded in coordinating these facets for an artistic performance.

**Fulfills:** Performance Course

## **THEA 1310 Stagecraft** **3 Credit Hours**

This course will acquaint the student with the tools, materials, and proper techniques used in scene construction and theatrical stage lighting.

**Fulfills:** Humanities Requirement, Studio Course (AA up to 3 hrs)

## **THEA 1315 Introduction to Film** **3 Credit Hours**

This course is an introduction and overview of the art of motion pictures. Students will examine how films are produced and how directors employ various techniques for effect. Students will learn of its development, of those who made major contributors to the industry, Films impact in today's culture and how he/she can view films critically.

**Fulfills:** Humanities Requirement

## **THEA 1327 Creative Dramatics: Children** **3 Credit Hours**

Designed to provide an opportunity for students working with young children to participate in creating dramatics. Course will discuss instructional and therapeutic purposes for the theater as well as interest and stimulate the imagination of the child.

**Fulfills:** Humanities Requirement

## **THEA 1328 Make-Up for the Theatre** **2 Credit Hours**

This course is designed to introduce the student to the styles of make-up that are used on stage. The course consists of most areas of make-up technique, which compliment the efforts of a particular theatrical style, resulting in a finished stage presentation. The course will concentrate on many styles and procedures for applying stage make-up.

**Fulfills:** Humanities Requirement, Studio Course (AA up to 3 hrs)

## **THEA 1330 Introduction to Film** **3 Credit Hours**

This course introduces the artistic elements of film. The course will include analyses of sound, score, editing, color visual effects, direction, acting, cinematography, genre, and writing. Students will be exposed to the history and artistic progression of each element through the viewing of applicable films.

### **TRADE AND INDUSTRY**

## **TRAD 1750 Exploratory Career Internship** **1 to 4 Credit Hours**

The purpose of Exploratory Career Internship I is to provide students the opportunity to learn through a structured internship experience. Students will acquire and refine competencies in a workplace setting through an emphasis on communication and critical thinking skills, leadership, teamwork, professional behavior and ethics, and the use of technology. At the conclusion of this course, students will reflect on their experiences to aid career/occupational preferences and choices.

## **TRAD 1764 Leadership Train Techniques I** **3 Credit Hours**

This course is designed to help the supervisor develop effective management techniques. Class work and projects cover areas of management leadership dealing with the leadership formula, management skills, improving communication, the mutual reward theory, handling power with care and the decision making process.

### **WEIGHTS/MEASURES CONT ED**

## **WGHT 1100 Scale Industry Safety** **3 Credit Hours**

This course provides students entering the weights and measures industry as scale technicians the necessary background to follow accepted safety procedures across environments where scales are used. Additionally, it provides students the necessary information to follow health and safety procedures in settings where products for human consumption and use are produced and sold. This is a required course for the Scale Technician Certificate Program.

## **WGHT 1101 Scale Rules and Regulations** **3 Credit Hours**

This course provides students entering the weights and measures industry as scale technicians the necessary background and familiarity with the appropriate reference materials for the proper installation, use, maintenance, and certification of weighing and measuring devices. Background is also provided on weights and measures laws specific to the State of Kansas. This is a required course for the Scale Technician Certificate Program.

# Course Descriptions

## **WGHT 1102 Scale Principles & Technology** 3 Credit Hours

This course is designed to provide students with the background necessary to understand the principles behind the functioning and design of both analog and digital weighing devices across all classes of scales. This is a required course for the Scale Technician Certificate.

## **WGHT 1103 Commercial Driver's Lic B** 3 Credit Hours

This course provides information and techniques necessary to successfully acquire a Class B Commercial Driver's License (CDL). The student will be taught and required to demonstrate the skills essential for proficiency while operating a commercial motor vehicle. Students will understand changing conditions, demands, traffic situations, and hazards that are essential in the professional driver's job.

## **WGHT 1104 DC Circuit Fundamentals** 3 Credit Hours

The course is designed to acquaint students with the fundamentals of direct current (DC); circuits, the relationship between voltage, current, resistance, and power, the application of Ohm's and Kirchhoff's laws.

## **WGHT 1105 AC Circuit Fundamentals** 4 Credit Hours

This course teaches students the fundamentals of Alternating Current (AC), including magnetism, waveforms, oscilloscopes, function generators, capacitance, inductance, reactance, impedance, resonance, power supplies, transformers, RC circuits, RL circuits, RLC circuits, and filters.

## **WGHT 1214 CDL Class B BTW** 2 Credit Hours

This course provides information and techniques necessary to successfully meet the Federal Motor Carrier Safety Administration Behind the Wheel (BTW) curriculum and acquirement of a Commercial Driver's Class B License. Students successfully completing this course will receive a Barton certificate of completion.

## **WGHT 1217 CDL Class B Theory** 3 Credit Hours

This course provides information necessary to meet Federal Motor Carrier Safety Regulations (FMCSA) for Theory Entry Level Driver Training. Students will understand the components needed for driver/commercial motor vehicle (CMV) interaction, practices required for safe operation of a CMV, and introduces students to high level skills necessary to recognize and handle potential hazards. This course is a pre-requisite for Commercial Driver's License – Class B - Behind The Wheel (BTW). Students successfully completing this course will receive a Barton certificate of completion.

## **WELDING**

### **WELD 1349 Gas Tungsten Arc Welding** 3 Credit Hours

Through classroom and/or lab/shop learning and assessment activities, students in this course will: explain the gas tungsten arc welding process (GTAW); demonstrate the safe and correct set up of the GTAW workstation; relate GTAW electrode and filler metal classifications with base metals and joint criteria; build proper electrode and filler metal selection and use based on metal types and thicknesses; build pads of weld beads with selected electrodes and filler material in the flat position; build pads of weld beads with selected electrodes and filler material in the horizontal position; perform basic GTAW welds on selected weld joints; and perform visual inspection of GTAW welds.

### **WELD 1350 Shielded Metal Arc Welding** 3 Credit Hours

Through classroom and/or lab/shop learning and assessment activities, students in this course will: describe the Shielded Metal Arc Welding process (SMAW); demonstrate the safe and correct set up of the SMAW workstation; associate SMAW electrode classifications with base metals and joint criteria; demonstrate proper electrode selection and use based on metal types and thicknesses; build pads of weld beads with selected electrodes in the flat position; build pads of weld beads with selected electrodes in the horizontal position; perform basic SMAW welds on selected weld joints; and perform visual inspection of welds.

### **WELD 1351 Gas Metal Arc Welding** 3 Credit Hours

Through classroom and/or shop/lab learning and assessment activities, students in this course will: explain gas metal arc welding process (GMAW); demonstrate the safe and correct set up of the GMAW workstation; correlate GMAW electrode classifications with base metals and joint criteria; demonstrate proper electrode selection and use based on metal types and thicknesses; build pads of weld beads with selected electrodes in the flat position; build pads of weld beads with selected electrodes in the horizontal position; produce basic GMAW welds on selected weld joints; and conduct visual inspection of GMAW welds.

### **WELD 1352 Cutting Processes** 3 Credit Hours

Through classroom and/or shop/lab learning and assessment activities, students in this course will: distinguish several types of mechanical and thermal cutting equipment and processes used in the welding trade; demonstrate the safe and correct set up, operation and shut down of the Oxy-fuel (OFC) workstation; demonstrate the safe and correct set up, operation and shut down of the Plasma Arc (PAC) workstation; demonstrate the safe and correct set up, operation and shut down of the Carbon Arc Cutting with Air (CAC-A) workstations; demonstrate safe and proper operation of several types of mechanical cutting equipment; and inspect quality and tolerance of cuts according to industry standards.

# Course Descriptions

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## **WELD 1353 Blueprint Reading - Welding**                      **3 Credit Hours**

Through a variety of classroom and/or shop/lab learning and assessment activities, the students in this course will: identify basic lines, views, and abbreviations used in in blueprints; interpret basic 3D sketches using orthographic projection and blueprints; solve applicable mathematical equations; use basic measuring tools; interpret scale ratios on a blueprint; identify basic welding joints and structural shapes; interpret a Bill of Materials; identify standard AWS weld symbols.

## **WELD 1354 Welding Safety/OSHA 10**                      **1 Credit Hours**

Through a variety of classroom and/or lab learning and assessment activities, students in this course will: explain job/site safety and precautions for job/site hazards; determine the uses of personal protective equipment (PPE); identify the safety equipment and procedures related to safe work practices and environment; identify fire prevention and protection techniques; explore Hazardous Communications (HazCom) including Material Safety Data Sheets (MSDS).

## **WOODWORKING**

### **WDWK 1900 Woodworking I**                      **1 to 3 Credit Hours**

An introductory course designed to teach planning of work, as well as skills in using hand tools, machines and related equipment. The student will develop an appreciation for workmanship, quality materials and safe equipment.

### **WDWK 1902 Woodworking II**                      **1 to 3 Credit Hours**

This course is a continuation of Woodworking I. Basic procedures will be developed further with an emphasis on developing complete plans for woodworking projects.

**Prerequisite:** WDWK 1900 Woodworking I

### **WDWK 1905 Individual Woodworking Project**    **1 to 3 Credit Hours**

An individualized plan of study that is a structured learning experience designed to supplement previous coursework. It is intended to allow students to broaden their comprehension of the principles of, and their grasp of competencies within their career discipline. Such learning experiences may be undertaken independent of the traditional classroom setting, but will be appropriately directed and supervised by regular instructional staff.

**Prerequisite:** WDWK 1902 Woodworking II or consent of instructor.