DEPARTMENT COURSE DESCRIPTIONS

Accounting

ACCT 2003  Principles of Accounting I  3 Credit Hours
The accounting cycle for merchandising and service-oriented business organizations. Primary emphasis is on financial accounting principles applicable to measuring assets, liabilities, and owners' equity. ACTS Course Number: ACCT 2003. This course is offered on the Beebe and Searcy campuses and online during the fall and spring semesters, and on the Beebe campus during Summer I.

ACCT 2013  Principles of Accounting II  3 Credit Hours
The first part of this course is an extension of basic financial accounting concepts from Principles of Accounting I, applied to corporate equity structures, long-term debt issues, and cash flows. The second part of the course focuses on managerial and cost accounting concepts, reporting, and decision making. Prerequisite: ACCT 2003 with a grade of “C” or better. ACTS Course Number: ACCT 2013. This course is offered on the Beebe campus and online during the fall, spring, and Summer II semesters.

Agriculture

AGRI 1213  Seminars in Agriculture: Making Connections  3 Credit Hours
This course is designed to enhance academic, study and research skills, develop connections between fellow students, instructors, and the university community. Students in this course will develop an understanding of ASU-Beebe academic requirements, policies, procedures, expectations, and support services. This course will explore the world of agriculture, including the majors, career opportunities through experiential and service learning. This course is offered on the Beebe campus during the fall and spring semesters.

Agriculture Equipment Technology (John Deere)

JDAT 1102  John Deere Air Quality Systems  2 Credit Hours
The basics of air conditioning will be studied and repair and diagnostic procedures practiced. Cooling, heating, and filtering systems, both R-12 and R134A, will be studied and repair procedures practiced. Prerequisite: John Deere dealer sponsor and JDAT 1004. This course is offered on the Beebe campus during the spring semester.

JDAT 1002  John Deere Agricultural Electric Systems  2 Credit Hours
The basic electrical system principles-flow, pressures, and resistance-will be studied. These concepts will then be applied to the starting, charging, and accessory systems of typical John Deere electrical systems. Starters, alternators, and various circuit failures will be studied. Electronic components as found on the monitoring and control systems of JD electrical systems will be introduced. Prerequisite: John Deere dealer sponsor. This course is offered on the Beebe campus during the fall semester.
JDAT 1104 Precision Farming Technologies 4 Credit Hours
This course is an introduction to the theory and application of precision farming technologies, as well as their diagnosis and repair. Topics include global positioning, equipment automated systems, implement monitoring and electrohydraulic control. Prerequisite: John Deere dealer sponsor, JDAT 1004 and 1023. This course is offered on the Beebe campus during the fall semester.

JDAT 1014 Tractor Power Trains 4 Credit Hours
The theory, operation and repair procedures for tractor power train systems will be covered. Emphasis will be placed on assembly and adjustment procedures. Basic power train system diagnostics will be introduced. Prerequisite: John Deere dealer sponsor, JDAT 1004 and 1023. This course is offered on the Beebe campus during the spring semester.

JDAT 1113 John Deere Controls and Instrumentation 3 Credit Hours
This is a course in the operation of John Deere agricultural and shop equipment, including safety, usage of monitors and programming of functions. Diagnostic information and procedures will be introduced. Prerequisite: John Deere dealer sponsor. This course is offered on the Beebe campus during the fall semester.

JDAT 1023 Agricultural Hydraulics 3 Credit Hours
Basic hydraulic principles—flow, pressure, and restriction (load)—will be covered. These principles will then be applied to John Deere hydraulic systems. Basic hydraulic components—radial piston pumps, external gear pumps, selective control valves, and valve housings on current John Deere equipment—will be assembled and adjusted. Basic hydraulic system diagnostics will be introduced. Prerequisite: John Deere dealer sponsor. This course is offered on the Beebe campus during the fall semester.

JDAT 1033 John Deere Consumer Products and Systems 3 Credit Hours
This course covers the function, adjustment, and repair of various grounds care products marketed by John Deere Company. Walk-behind mowers, riders, lawn and garden tractors, and compact utility tractors will be studied. Included will be adjustment of power trains, hydraulic and electrical systems, and cutting components. Hydrostatic drive systems will be introduced. Prerequisite: John Deere dealer sponsor, JDAT 1004 and 1023. This course is offered on the Beebe campus during the spring semester.

JDAT 1046 Dealer Internship I 6 Credit Hours
Offers a supervised work experience needed to make courses taught on campus meaningful and useful. Students will practice the skills and use the knowledge acquired in class and in the lab. Prerequisites: John Deere dealer sponsor, JDAT 1003, 1004, 1014, 1023, and 1033. This course is offered on the Beebe campus during the summer term.

JDAT 2003 Harvesting Equipment 3 Credit Hours
Combines, cotton pickers and hay balers, along with various attachments, will be covered during this class. Their function and adjustments as well as repair will be studied. Electrical and hydraulic systems and diagnostic procedures will be emphasized. Prerequisite: John Deere dealer sponsor, JDAT 1004 and 1023. This course is offered on the Beebe campus during the spring semester.
JDAT 2014  Advanced Tractor Diagnostics  4 Credit Hours
On-board and off-board diagnostic systems and procedures will be introduced and applied. Controller networking theory and signals will be analyzed. Troubleshooting of transmission and hydraulic control systems using traditional and advanced diagnostic methods will be practiced. Prerequisites: John Deere dealer sponsor, JDAT 1004 and 1023. This course is offered on the Beebe campus during the fall semester.

JDAT 2023  Dealer Internship II  3 Credit Hours
See Dealer Internship I. Prerequisites: John Deere dealer sponsor, JDAT 1003, 1004, 1014, 1023, 1046, and 2014. This course is offered on the Beebe campus during the spring semester.

JDAT 2033  John Deere Engine Systems  3 Credit Hours
The basic diesel engine cycle, components of a typical John Deere engine and their theory of operation will be studied. Failure analysis and repair procedures will be emphasized. Prerequisite: John Deere dealer sponsor, JDAT 1004, 1023, 1033, and 1046. This course is offered on the Beebe campus during the spring semester.

JDAT 2053  John Deere Technician Certifications  3 Credit Hours
This course will present the features, applications, and operation of service Advisor software used by service technicians to access information and interface with John Deere equipment. Principles and applications of electrical and hydraulic systems will be reinforced. John Deere certifications in basic hydraulics, basic electrical, and Service Advisor will be administered giving students the opportunity to gain certification in these areas. Prerequisite: John Deere dealer sponsor, JDAT 1004, 1023, and 1046. This course is offered on the Beebe campus during the spring semester.

Agricultural Economics

AGEC 1003  Introduction to Agricultural Economics  3 Credit Hours
Basic economic principles and their application to agriculture. This course deals briefly with production, distribution, value, price, credit, land value, marketing, and related problems. This course is offered on the Beebe campus during the fall and spring semesters, and it is offered online during Summer 2.

Agricultural Education

AGED 1411  Introduction to Agricultural and Extension Education  1 Credit Hour
Philosophy, aims, and objectives of agricultural and extension education. Explanation of programs, career opportunities, and qualifications in agricultural and extension education.

Air Conditioning

ACR 1103  Electrical Motors and Components  3 Credit Hours
This course covers electric motor applications, motor structure, and types of electric motors, motor components and servicing electric motors. Practical application is provided in the laboratory as needed. This class will be 1/3 theory and 2/3 lab. Safety is emphasized. This course is offered on the Searcy campus during the fall semester.
ACR 1203  Gas Heating Systems  
3 Credit Hours  
This course covers the types of fuels, combustion process, furnace components, efficiency, venting and maintenance of gas heating systems. Practical application is provided in the laboratory as needed. This class will be 1/3 theory and 2/3 lab. Safety is emphasized. This course is offered on the Searcy campus during the fall semester.

ACR 1204  Electric Circuits and Controls  
4 Credit Hours  
This course covers the complete wiring diagram, electrical circuits in depth, control systems consisting of relays, contactors, circuit boards, pressure switches and troubleshooting. Practical application is provided in the laboratory as needed. This course will be 1/3 theory and 2/3 lab. Safety is emphasized. This course is offered on the Searcy campus during the fall semester.

ACR 2102  Air Distribution  
2 Credit Hours  
This course covers the properties of air, air circulation, indoor air quality, ventilation requirements and air measurement. Practical application is provided in the laboratory as needed. This class will be 1/3 theory and 2/3 lab. Safety is emphasized. This course is offered on the Searcy campus during the fall semester.

ACR 2204  Materials  
4 Credit Hours  
This course covers the process of identifying tubing and pipe and fittings. Soft soldering, silver soldering, identification of tools, and the history of air conditioning are taught. Practical application is provided in the laboratory as needed. This class will be 1/3 theory and 2/3 lab. Safety is emphasized. This course is offered on the Searcy campus during the spring semester.

ACR 2304  Air Conditioning and Refrigeration Systems  
4 Credit Hours  
This course is a comprehensive study of mechanical refrigeration cycles emphasizing proper service techniques. Testing procedures, parts removal, and installation are covered. The use of vacuum pumps and recovery equipment is taught. Practical application is provided in the laboratory as needed. This class will be 1/3 theory and 2/3 lab. Safety is emphasized. This course is offered on the Searcy campus during the spring semester.

ACR 2404  Air Conditioning and Refrigeration Components  
4 Credit Hours  
This course is a study of the major components and control devices for the cooling systems. Identification and use of refrigerants is taught. Practical application is provided in the laboratory as needed. This class will be 1/3 theory and 2/3 lab. Safety is emphasized. This course is offered on the Searcy campus during the spring semester.

Animal Science

ANSC 1204  Introduction to Animal Science  
4 Credit Hours  
A course dealing with fundamental principles of successful livestock farming in Arkansas and the United States. It includes a study of the types, breeds, and economic importance of beef cattle, swine, dairy cattle, sheep, and horses. Lecture three hours, laboratory two hours per week. This course is offered on the Beebe campus during the fall and spring semesters.
ANSC 2213  Feeds and Feeding  3 Credit Hours
Principles of animal nutrition, composition, and digestibility of feeds, balanced rations and feed of farm animals. Prerequisite: ANSC 1204. This course is offered on the Beebe campus during the spring semester.

ANSC 2623  Equine Health and Management  3 Credit Hours
Course covers aspects of equine health, diseases, soundness, first aid, preventive maintenance, and management of horses in domestic situations. This course is offered on the Beebe campus during the fall semester.

Art

ART 1013  Design I  3 Credit Hours
The study of the elements and principles of two-dimensional design. This course is offered on the Beebe campus during the fall and spring semesters.

ART 1033  Drawing I  3 Credit Hours
A studio course in which the concepts of linear perspective, value studies, contrast, contour, and technique are taught by using a variety of subjects from still life to live models. A variety of media will also be explored. Six hours per week. This course is offered on the Beebe campus during the fall and spring semesters.

ART 1043  Drawing II - Life Drawing  3 Credit Hours
Foundation course for majors or minors in art. Studies of the figure with emphasis on anatomy, composition, and orientation to media. Six hours per week. Prerequisite: ART 1033. This course is offered on the Beebe campus during the spring semester.

ART 1053  History of Graphic Design  3 Credit Hours
Surveys the field of graphic design from its origins to contemporary practice. Develops visual vocabulary, provides insight into the continuity of design thinking, provides cultural and historical context for design practice. This course is offered on the Beebe campus during the spring semester.

ART 1063  Digital Photography  3 Credit Hours
This course offers an introduction to photography as it can be used in digital media. Basic camera operation and computer based digital imaging and design applications will be covered. Prerequisite: ART 1013 Design I for art majors. This course is offered on the Beebe campus during the fall and spring semesters.

ART 1073  Color Theory  3 Credit Hours
A concentrated study of the theory and application of color, both fundamental and advanced. This course is offered on the Beebe campus during the fall and spring semesters.

ART 1083  Graphic Design I  3 Credit Hours
Basic principles of typography, printing processes, design and visual communication as they relate to graphic design. This course is offered on the Beebe campus during the fall semester.
ART 1093  Digital Photography II  3 Credit Hours
This course offers a continuation of Digital Photography I. The students will become more independent in their use of advanced photography skills including but not limited to composition, camera control, and the use of editing programs. This class will push students toward greater challenges both technically and aesthetically. Students will continue to use creative solutions to solve a series of design problems. Prerequisite: Digital Photography I.

ART 2063  Painting I  3 Credit Hours
A studio course which utilizes the elements and principles of art. In addition to the language of art, value studies, contrast, and technique will be taught. Six hours per week. Prerequisite: ART 1033. This course is offered on the Beebe campus during the fall and spring semesters.

ART 2073  Painting II  3 Credit Hours
A continuation of ART 2063. Six hours per week. Prerequisite: ART 2063. This course is offered on the Beebe campus during the fall and spring semesters.

ART 2093  Ceramics I  3 Credit Hours
An introductory course in creative clay processes. Emphasis is placed upon the hand building techniques of coil, slab, pinch, and wheel thrown pot methods along with glazing and firing procedures. Surface and glaze treatments are explored for visual as well as tactile purposes. Six hours per week. This course is offered on the Beebe campus during the fall and spring semesters.

ART 2103  Ceramics II  3 Credit Hours
Continuation of Introduction to Ceramics work. Emphasis is placed upon sculpture, slab, and wheel thrown pot methods along with glazing and firing procedures. Six hours per week. Prerequisite: ART 2093. This course is offered on the Beebe campus during the fall and spring semesters.

ART 2413  Graphic Design II  3 Credit Hours
Graphic Design II is a continuation of Graphic Design I and more fully explores the interaction of text and image. Students will become more independent in the use of fundamental components of graphic communication. Students will create independent and creative solutions to a series of design problems. Knowledge of and exposure to contemporary design issues and graphic design history will be an important component to this course. This course is offered on the Beebe campus during the spring semester.

ART 2423  Advanced Graphic Design  3 Credit Hours
Graphic Design demands the visual representation of concepts of ideas. In this advanced, hands-on course, you'll build creative skills for tackling challenging professional projects. The main focus of this class will be on creating 2D digital design projects and developing portfolio pieces.

ART 2433  Graphic Illustration  3 Credit Hours
Application of principles of typography, page layout, color, texture, organization, photography, and illustration imagery and concept using the editorial magazine as the vehicle; further mastery of Adobe Creative Suite; further understanding of both historic and contemporary graphic design and designer's styles; preparation for final portfolio; job hunting skills; venues; resume and cover letters; identity package and self-promotion; improve presentation and critique skills.
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<tr>
<td>ART 2503</td>
<td>Fine Arts-Visual</td>
<td>3</td>
<td>An introduction to visual arts for all students regardless of background or experience. The purpose is to help the student to develop criteria for appreciation of painting, sculpture, and architecture. Three lecture hours per week. ACTS Course Number: ARTA 1003. This course is offered on the Beebe campus and online during the fall, spring, and Summer semesters.</td>
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<tr>
<td>ART 2603</td>
<td>Modern Art History</td>
<td>3</td>
<td>This course will examine the origins and development of modern art, including painting, sculpture, and architecture, from the time of Manet in the late nineteenth century through the twentieth century. Its purpose is to help the student gain an understanding of some of the major ideas behind the development of modernism and of the characteristic forms of various art movements and to acquaint the student with some of the important artistic figures who played a significant role in these developments. This is a history course which is concerned with the evolution and interrelation of ideas about art, history, artists, and visual facts and their application to emerging art forms examined within their cultural-historical context. This course is intended to develop critical thinking and communication skills as well as knowledge of the subject matter.</td>
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**Auto Body Repair**

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<tr>
<td>ABR 1103</td>
<td>Basic Automotive Body and Frame Alignment</td>
<td>3</td>
<td>The students will receive instruction in the use of frame equipment and frame construction, sectioning, and straightening. Experience working with unitized construction using frame alignment equipment will be provided. The fundamentals of welding, heating, cutting, and shaping are included. This course will be approximately 1/3 theory and 2/3 lab. Safety is taught and emphasized. This course is offered on the Searcy campus during the fall semester.</td>
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<tr>
<td>ABR 1113</td>
<td>Introduction to Auto Body</td>
<td>3</td>
<td>This course will cover the introduction to vehicle body panels and tools used in panel straightening. It will also include the procedures necessary for mixing application of body fillers, proper sanding techniques, and welding. This class will be approximately 1/4 theory in the classroom and 3/4 lab. Safety is an integral part of this course. This course is offered on the Searcy campus during the fall semester.</td>
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<tr>
<td>ABR 1203</td>
<td>Collision Diagnostics and Estimating</td>
<td>3</td>
<td>Determining repairs needed to damaged vehicles will be taught in this course as well as estimating cost related to the repair of these damages. Repairs to paint, frames, accessories, and safety equipment will be covered. Students will actually work on damaged parts to become familiar with the time needed for repairs. This course will be 1/3 theory and 2/3 lab. Safety will be taught and emphasized. This course is offered on the Searcy campus during the fall semester.</td>
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<tr>
<td>ABR 1303</td>
<td>Basic Automotive Metal Repair</td>
<td>3</td>
<td>The straightening, alignment, and fitting of major panels are taught in this course. Procedures necessary to rough, shrink, bump, and finish will also be taught. Safety is an integral part of this course. This course is offered on the Searcy campus during the fall semester.</td>
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<tr>
<td>ABR 2103</td>
<td>Automotive Mechanical Components</td>
<td>3</td>
<td>Students will be taught needed skills related to minor repair of automotive mechanical parts. Included in these will be climate control, steering, cooling systems, lighting, and others. This course will be 1/3 theory and 2/3 lab. Safety will be taught and emphasized. This course is offered on the Searcy campus during the spring semester.</td>
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<tr>
<td>ABR 2113</td>
<td>Automotive Refinishing Techniques</td>
<td>3</td>
<td>Priming, painting, buffing, and polishing automotive body surfaces will be taught in this course. This course will be 1/4 theory and 3/4 lab. Related safety will be taught and emphasized. This course is offered on the Searcy campus during the spring semester.</td>
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<tr>
<td>ABR 2203</td>
<td>Automotive Refinishing Preparation</td>
<td>3</td>
<td>The skills needed to prepare automotive bodies for refinishing will be taught in this course. Straightening, sanding, and other steps in preparing for refinishing will be taught and practiced. This course will be 1/4 theory and ¾ lab. Related safety will be taught and emphasized. This course is offered on the Searcy campus during the spring semester.</td>
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<tr>
<td>ABR 2303</td>
<td>Special Automotive Body Material</td>
<td>3</td>
<td>The identification, preparation, use, and repair of special automotive body materials such as plastics, fiberglass, and automotive glass will be covered in this course. This course will be 1/2 theory and 1/2 lab. Related safety will be taught and emphasized. This course is offered on the Searcy campus during the spring semester.</td>
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**Automotive Technology**

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<tr>
<td>AST 1103</td>
<td>Introduction to Automotive Technology</td>
<td>3</td>
<td>Basic shop safety will be extensively covered in this course. Students will become familiar with tools used in automotive repair and diagnostic equipment for automobiles. The basic principles and history of the internal combustion engine will be studied extensively. This course will be 1/2 theory and 1/2 lab. This course is offered on the Searcy campus during the fall and spring semesters.</td>
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<td>AST 1203</td>
<td>Automatic Transmissions</td>
<td>3</td>
<td>In this course the student will learn how the clutches, bands, servos, solenoids, pump, valve body and modulator work. Also, the laws governing planetary gears are studied. The operating characteristics of this type of gear set will allow the student to understand how torque is routed through an automatic transmission. Learning about the relationship of hydraulic components and planetary control devices will help the student to properly diagnose problems in the transmission. Practical application is provided in the laboratory. This course will be 1/2 theory and 1/2 lab. Safety is emphasized. This course is offered on the Searcy campus during the fall and spring semesters.</td>
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<tr>
<td>AST 2103</td>
<td>Brakes</td>
<td>3</td>
<td>During this course of study the student will learn the proper selection, use, and care of hand tools, and of tools specially designed for automotive repair. The student will learn, in depth, the use and care of precision tools, with a focus on micrometers. Proper safety is also taught. Instruction in basic electricity and meter reading is taught. The student will learn the designs and functions of the various types of wheel bearings and how to diagnose problems associated with wheel bearings. Hydraulic and mechanical components and how they operate in the brake systems are taught.</td>
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Hands-on-training in turning drum and disc brakes is learned. The student will gain a working knowledge of both power assist and anti-lock brake systems. Practical application is provided in the laboratory. This course will be 1/2 theory and 1/2 lab. Safety is emphasized. This course is offered on the Searcy campus during the spring semester.

**AST 2122 Brakes/Suspension Steering Lab**  
2 Credit Hours

During this course of study the student will learn the proper selection, use, and care of hand tools, and of tools specially designed for automotive repair and about wheels, hubs, tires, their design and construction. The student will learn, in depth, the use and care of precision tools, with a focus on micrometers. Proper safety is also taught. Instruction in basic electricity and meter reading is taught. The student will learn the designs and functions of the various types of wheel bearings and how to diagnose problems associated with wheel bearings. Hydraulic and mechanical components and how they operate in the brake systems are taught. Hands-on-training in turning drum and disc brakes is learned. The student will gain a working knowledge of both power assist and anti-lock brake systems. Practical application is provided in the laboratory. The design and construction of automotive frames and front and rear suspensions plus the unique characteristics of each type of suspension system will be highlighted. The various types of manual and power steering systems used in the modern automobile plus the difference between the parallelogram steering systems and the rack and pinion steering system are taught. The student will learn the theory of wheel alignment angles that allow the automobile's suspension, tires, wheels and steering systems to work together in harmony. In addition, the correct procedures required to set wheel alignment in an automobile will be taught. Practical application is provided in the laboratory. This course will be 100% lab. Safety is emphasized. This course is offered on the Searcy campus.

**AST 2203 Suspension and Steering**  
3 Credit Hours

During this course, the student will learn about wheels, hubs, tires, their design and construction. The design and construction of automotive frames and front and rear suspensions plus the unique characteristics of each type of suspension system will be highlighted. The various types of manual and power steering systems used in the modern automobile plus the difference between the parallelogram steering systems and the rack and pinion steering system are taught. The student will learn the theory of wheel alignment angles that allow the automobile's suspension, tires, wheels and steering systems to work together in harmony. In addition, the correct procedures required to set wheel alignment in an automobile will be taught. Practical application is provided in the laboratory. This course will be 1/2 theory and 1/2 lab. Safety is emphasized. This course is offered on the Searcy campus during the spring semester.

**AST 2303 Automotive Electrical Applications**  
3 Credit Hours

In this course of study, the student will be introduced to the fundamentals of transportation electrical systems. The student will learn what electricity is, how it functions, and its relation to atomic structure. The student is taught the practical application of Ohm's Law, Watt's Law, wiring schematics and the use of simple electrical and electronic diagnostic tools. Practical application is provided in the laboratory. This course will be 1/2 theory and 1/2 lab. Safety is emphasized. This course is offered on the Searcy campus during the spring semester.
AST 2373  Automotive Electrical Applications/Climate Control Lab  3 Credit Hours

In this course of study, the student will be introduced to the fundamentals of transportation electrical systems and learn the theory governing refrigeration, the law of Thermodynamics, the refrigeration cycle and the components that make up the basic air conditioning system, plus the proper, safe method of handling refrigerants is taught. The student will learn what electricity is, how it functions, and its relation to atomic structure. The student is taught the practical application of Ohm's Law, Watt's Law, wiring schematics and the use of simple electrical and electronic diagnostic tools. Practical application is provided in the laboratory. The student will learn the functions of the compressor, condenser, receiver-drier, accumulator, evaporator, various metering devices and the lines connecting these components. The student will gain the ability to properly diagnose, repair and service the entire system. Knowledge of vacuum and electrical control devices and how to diagnose problems in these areas is also gained. This course will be 100% lab. Safety is emphasized. This course is offered on the Searcy campus.

AST 2403  Manual Transmissions/Transaxles  3 Credit Hours

During this course of study the student will learn the components and power flow of both the manual transmission and transaxle. The student will gain the ability to inspect, diagnose problems, service, disassemble, repair and test the transmission and transaxles. Also, the student will be able to identify the components of the clutch and understand how they function in relation to each other. Drive lines and U-joints of both front engines, rear wheel drive and transaxles drive trains are taught. The different types of U-joints, CV-joints and differentials are covered. The student will gain the ability to check, service, diagnose problems and repair all this equipment. Practical application is provided in the laboratory. This course will be 1/3 theory and 2/3 lab. Safety is emphasized. This course is offered on the Searcy campus during the spring semester.

AST 2412  Manual Transmissions/Transaxles Lab  2 Credit Hours

During this course of study the student will learn the components and power flow of both the manual transmission and transaxle. The student will gain the ability to inspect, diagnose problems, service, disassemble, repair and test the transmission and transaxles. Also, the student will be able to identify the components of the clutch and understand how they function in relation to each other. Drive lines and U-joints of both front wheel and rear wheel drive trains are taught. The different types of U-joints, CV-joints and differentials are covered. The student will gain the ability to check, service, diagnose problems and repair all this equipment. Practical application is provided in the laboratory. This course will 100% lab. Safety is emphasized.

AST 2503  Engine Performance I  3 Credit Hours

This course will include the study of fuel systems, electronic engine/emission controls, proper engine performance, tune-up, and automotive safety devices. Diagnostics will be extensively covered. This course will be ½ theory and ½ lab. Safety is emphasized. This course is offered on the Searcy campus during the fall semester.

AST 2523  Engine Performance/Automatic Transmissions  3 Credit Hours

This course will include the study of fuel systems, electronic engine/emission controls, proper engine performance, tune-up, and automotive safety devices and how the clutches, bands, servos, solenoids, pump, valve body and modulator work. Diagnostics will be extensively covered. Also, the laws governing planetary gears are studied. The operating characteristics of this type of gear
set will allow the student to understand how torque is routed through an automatic transmission. Learning about the relationship of hydraulic components and planetary control devices will help the student to properly diagnose problems in the transmission. Practical application is provided in the laboratory. This course will be 100% lab. Safety is emphasized. This course is offered on the Searcy campus.

**AST 2603  Engine Performance II**  
3 Credit Hours

This course will include the study of fuel systems, electronic engine/emission controls, proper engine performance, tune-up, and automotive safety devices. Engine repair will be extensively covered. This course will be ½ theory and ½ lab. Safety is emphasized. This course is offered on the Searcy campus during the fall Semester.

**AST 2703  Automotive Climate Control**  
3 Credit Hours

During this course of study the student will learn the theory governing refrigeration, the law of Thermodynamics, the refrigeration cycle and the components that make up the basic air conditioning system, plus the proper, safe method of handling refrigerants is taught. The student will learn the functions of the compressor, condenser, receiver-drier, accumulator, evaporator, various metering devices and the lines connecting these components. The student will gain the ability to properly diagnose, repair and service the entire system. Knowledge of vacuum and electrical control devices and how to diagnose problems in these areas is also gained. This course will be ½ theory and ½ lab. Safety is emphasized. This course is offered on the Searcy campus during the fall Semester.

**AST 2802  Engine Rebuild Lab**  
2 Credit Hours

During this course of study the student will learn the theory and operation of the internal combustion gasoline engine. Instruction will be given on the different classifications and measurements involved in gasoline engines. The student will have a clear understanding of cooling and lubrication systems, and will also know how the engine block is constructed and the reasons for multiple cylinders. A thorough understanding is gained of the relationship between the friction bearing, crankshaft, connecting rods, pistons and piston rings for the lower end of the engine. In addition, knowledge of the relationship between valve lifters, cylinder heads and valves of the upper end of the engine is gained. The student will be able to properly inspect, clean, measure, service and repair all the various components of the engine upon completion of this course. In addition, the student will learn the value of a correct complete work order as well as learning the proper procedures involved with engine inspection and diagnosis. Different types of gaskets, seals and sealants used in today's engine repair are taught. Practical application is provided in the laboratory. This course will be 100% lab. Safety is emphasized. This course is offered on the Searcy campus.

**AST 2803  Engine Rebuild**  
3 Credit Hours

During this course of study the student will learn the theory and operation of the internal combustion gasoline engine. Instruction will be given on the different classifications and measurements involved in gasoline engines. The student will have a clear understanding of cooling and lubrication systems, and will also know how the engine block is constructed and the reasons for multiple cylinders. A thorough understanding is gained of the relationship between the friction bearing, crankshaft, connecting rods, pistons and piston rings for the lower end of the engine. In
addition, knowledge of the relationship between valve lifters, cylinder heads and valves of the upper end of the engine is gained. The student will be able to properly inspect, clean, measure, service and repair all the various components of the engine upon completion of this course. In addition, the student will learn the value of a correct complete work order as well as learning the proper procedures involved with engine inspection and diagnosis. Different types of gaskets, seals and sealants used in today's engine repair are taught. Practical application is provided in the laboratory. This course will be ½ theory and ½ lab. Safety is emphasized. This course is offered on the Searcy campus during the fall Semester.

Biological Science

BIOL 1004  Biology for General Education  4 Credit Hours
Provide a study of the similarity and diversity of life on earth. This course is designed for non-majors and will not count as the prerequisite for any other BIOL, BOT or ZOOL course. ACTS Course Number: BIOL 1004. Lecture three hours, laboratory two hours per week.

BIOL 1014  Principles of Biology  4 Credit Hours
Provide an in-depth study of the similarity and diversity of life on earth. This course is designed to give students the necessary background for further courses in BIOL, BOT and ZOOL. Prerequisite: ACT Reading score of 19 or better (or equivalent) or Freshman English I with a grade of C or better. ACTS Course Number: BIOL 1104. Lecture three hours, laboratory two hours per week.

BIOL 1013  Nutrition for a Healthy Lifestyle  3 Credit Hours
This course is designed for students who desire to apply nutrition knowledge to their own personal lives. Areas of particular emphasis include the role of nutrition in our health, designing a healthful diet, achieving and maintaining a healthful body weight, and physical activity. Providing hands on, in-class food preparation demonstrations, shopping tips, cooking tips, tips for eating out, etc., students are equipped with necessary tools for successfully planning a healthy diet. Demonstrating how nutrition relates to our bodies, our health, our weight, our success in sports and other activities, this course empowers students to reach their personal health and fitness goals. Designed with non-health care majors in mind. (This course is not intended to replace BIOL 2013 Nutrition that is required for certain majors.)

BIOL 2013  Nutrition  3 Credit Hours
A study of human nutritional needs over the human life span. Individual nutrients, their nature, functions, and their processing by the human body. Dietary analyses and evaluations. Food labels and their interpretation, weight control, exercise, food safety, relationships of nutrition to health and the environment. This course is offered on the Beebe campus and online during the fall and spring semesters.

BIOL 1024  Ecology  4 Credit Hours
This course will provide a broad survey of the fundamental concepts and principles that stem from the “Ecosystem Theory” within biology. This will include the basic principles of organismal, population, interspecific, and community ecology; biogeography; speciation; biomes; food webs; and biogeochemical cycles. This course is offered online during the fall semester.
BIOL 2104 Microbiology 4 Credit Hours
A study of microorganisms, in particular bacteria, involving their structure and function at the molecular level, and interaction of these organisms with humans and their environment. Prerequisite: BIOL 1014 with a grade of C or better. Knowledge of basic chemistry strongly recommended. Lecture three hours, laboratory three hours per week. ACTS Course Number: BIOL 2004. This course is offered on the Beebe campus during the fall and spring semesters.

Botany

BOT 1104 General Botany 4 Credit Hours
A study of selected aspects of the anatomy, morphology, ecology, and physiology of plants. An overview of the life cycles, evolution, and diversity of Achaear, Bacteria, Protista, Fungi, and Plantae. Lecture three hours, laboratory three hours per week. Prerequisite: BIOL 1014 with a grade of C or better. ACTS Course Number: BIOL 1034. This course is offered on the Beebe campus during the spring semester.

Business

BUS 1003 Computer Fundamentals 3 Credit Hours
An introductory course in the use of microcomputers within industries. Students will be introduced to the basics of various applications such as the Internet, email, word processing, spreadsheets, databases, and presentation software. (This course does not fulfill the CIS 1503 Microcomputer Applications I requirement for any associate degree.)

BUS 1013 Introduction to Business 3 Credit Hours
A survey course to acquaint beginning students with the major institutions and practices in the business world, and to provide the elementary concepts of business. ACTS Course Number: BUSI 1013.

BUS 2113 Business Statistics 3 Credit Hours
Statistical methods used in studying business and economic data, averages and dispersions, probability, sampling, statistical inference, estimation, tests of hypotheses, index numbers, linear regression, and correlation. Prerequisite: MATH 1023 with a grade of "C" or better. ACTS Course Number: BUSI 2103. This course is offered on the Beebe campus during the fall and spring semesters.

Business Administration

BUAD 2093 Internship 3 Credit Hours
An employment experience relating to the student's major within the AAS in Business Technology. An instructor will monitor the student's progress with the supervising employer. The student will submit a journal describing the experience and will be evaluated by the employer at the end of the internship. Prerequisite: Completion of 50 hours toward AAS degree, and a 2.00 GPA. This course is offered on the Beebe campus during the fall and spring semesters.
Business Systems

BSYS 2413  Word Processing  3 Credit Hours
Instruction in use of word processing software on microcomputers. Familiarization with word processing procedures and terminology. Three hours per week plus laboratory time. This course is offered on the Beebe and Searcy campuses during the fall semester.

BSYS 2563  Business Communication  3 Credit Hours
Survey of the principles of effective oral and written communication. Practice in writing business letters and reports, and preparing various types of oral presentations. Prerequisite: ENG 1013 and keyboarding ability. ACTS Course Number: BUSI 2013. This course is offered on the Beebe campus during the fall and spring semesters and online during the spring and Summer I semesters.

BSYS 2583  Spreadsheet Applications for Business  3 Credit Hours
The study of electronic spreadsheet concepts. The fundamentals of worksheets, graphics, database, and macro features of electronic spreadsheets will be utilized to solve problems. Prerequisite: CIS 1503. Students concerned about transferability should check with their transfer institution. This course is offered on the Searcy campus during the spring semester.

Career Communications

COM 1003  Career Communications  3 Credit Hours
This course is designed for the student who needs a review of communication skills and basic computer skills in order to be able to function in situations similar to those encountered in the workplace. The format provides for diagnosis, instruction, and practice with emphasis on competencies involved in the job search as well as job retention. Topics include how to prepare an employment plan and how to communicate effectively through reading, writing, and speaking. This course also provides instruction on using Windows operating system, database, worksheet, and presentation applications. Some sections of this course may require a research paper for certain degree program requirements. This course may be a requirement for all certificate students with less than six (6) hours of college English. This course is offered on the Searcy campus during the fall and spring semesters.

Chemistry

CHEM 1003  Introduction to Chemistry  3 Credit Hours
Fundamentals of chemistry and a survey of topics for students with no previous training in chemistry. The purpose of this course is to provide the necessary background to enter CHEM 1014. Lecture three hours per week. Prerequisite: MATH 0013 with a grade of C or better. This course is offered on the Beebe campus during the fall and spring semesters.

CHEM 1014  General Chemistry I  4 Credit Hours
Fundamental laws and theories of chemistry. Lecture three hours, laboratory three hours per week. Prerequisite: High school chemistry or CHEM 1003 and MATH 0023 both with a grade of C or better. ACTS Course Number: CHEM 1414. This course is offered on the Beebe campus during the fall and spring semesters.
CHEM 1024  General Chemistry II  4 Credit Hours
Continuation of CHEM 1014. Lecture three hours, laboratory three hours per week. Prerequisite: CHEM 1014 and MATH 1023 or MATH 1054 both with a grade of C or better. ACTS Course Number: CHEM 1424. This course is offered on the Beebe campus during the spring semester.

CHEM 1034  Introduction to Organic and Biochemistry  4 Credit Hours
A brief survey of organic compounds, their nomenclature, classification, preparation, and reactions. An introduction to reaction mechanisms, stereochemistry, and spectroscopy. Lecture three hours, laboratory three hours per week. Prerequisite: CHEM 1014 or CHEM 1024 with a grade of C or better. This course is offered on the Beebe campus during the fall and spring semesters.

CHEM 2104  Organic Chemistry I  4 Credit Hours
Structure and bonding in organic compounds, conformational analysis, stereochemistry, introduction to reaction mechanisms and spectroscopic characterization of organic molecules. Lecture three hours, laboratory three hours per week. Prerequisite: CHEM 1024 with a grade of C or better. This course is offered on the Beebe campus during the fall semester.

CHEM 2114  Organic Chemistry II  4 Credit Hours
Organic transformations, carbonyl chemistry, carbon-carbon bond formation, reaction mechanisms, stereochemistry and radiochemistry of synthetic processes. Lecture three hours, laboratory three hours per week. Prerequisite: CHEM 2104 with a grade of C or better. This course is offered on the Beebe campus during the spring semester.

Computer-Aided Drafting and Design

(Engineering Graphics Technology)

EGT 1004  Computer-Aided Engineering Graphics  4 Credit Hours
In this entry level course, participants will learn both the fundamentals of drafting and the application of computer-aided design software. Learning is realized through lecture and hands-on experience using updated industry leading computer-aided design software. Those fundamentals of drafting include geometric construction, shape theory, orthographic projection, development of auxiliary and section views, and proper dimensioning techniques. This course is offered on the Beebe campus during the fall and spring semesters.

EGT 1114  Intermediate Drafting  4 Credit Hours
This is a course in drafting using the most current version of AutoCAD. It provides hands-on training in the areas of Design Concepts, Developments and Intersections, Geometric Dimensioning and Tolerancing, Fasteners, Detail Drawings, Assembly Drawings, Pictorial Drawings, and Welding Drawings. Lecture three hours. Laboratory three hours. Prerequisite: EGT 1004. This course is offered on the Beebe campus during the spring semester.

EGT 1233  Introduction to Geographic Information Systems  3 Credit Hours
This is a course in Geographic Information Systems/Global Positioning Systems using the most current version of Arc View software and state of the art GPS receivers. It provides hands-on training in the operation of the GPS receiver to include data collection and the downloading of data into the ArcView database. It also provides an introduction to databases in general and detailed
work with the ArcView database as it relates to data manipulation in the civil drafting field and in other related areas of Geographic Information. Lecture two hours. Laboratory two hours. This course is offered on the Beebe campus during the fall and spring semesters.

**EGT 2114 Introduction to Pro/Engineer**  
4 Credit Hours  
This is a course in interactive computer-aided drafting using the most current version of Pro/Engineer. It provides hands-on training in the areas of the Pro/Engineer User Interface, Parametric Modeling Fundamentals, Extrusions, Editing, Holes and Rounds, Datums and Sections, Revolved Protrusions and Cuts, Chamfers and Threads, Groups and Patterns, Drawing Formats and Title Blocks, Detailing, Section and Auxiliary Views. Lecture three hours. Laboratory three hours. Prerequisite: EGT 1004. This course is offered on the Beebe campus during the fall semester.

**EGT 2134 Introduction to Inventor**  
4 Credit Hours  
This is a course in interactive computer-aided drafting using the most current version of AutoDesk Inventor. It provides hands-on training in the areas of the Inventor User Interface, Parametric Modeling Fundamentals, Constructive Solid Geometry Concepts, Model History Tree, Parametric Constraints, BORN Technique and Work Features, Part Drawings and Associative Functionality, Symmetrical Features in Designs, Geometric Construction Tools, Parent/Child Relationships, and Assembly Modeling. Lecture three hours. Laboratory three hours. Prerequisite: EGT 1004. This course is offered on the Beebe campus during the spring semester.

**EGT 2144 Introduction to Solid Works**  
4 Credit Hours  
This is a course in interactive computer-aided drafting using the most current version of Solid Works. It provides hands-on training in the areas of the SolidWorks User Interface, Parametric Modeling Fundamentals, Constructive Solid Geometry Concepts, Model History Tree, Parametric Constraints, BORN Technique and Work Features, Part Drawings, and Associative Functionality, Symmetrical Features in Designs, Geometric construction Tools, Parent/Child Relationships, and Assembly Modeling. Lecture three hours. Laboratory three hours. Prerequisite: EGT 1004. This course is offered on the Beebe campus during the fall semester.

**EGT 2153 Civil Drafting Technology**  
3 Credit Hours  
In this course, participants will learn the fundamental theories and procedures of civil drafting using updated industry standard civil design software. Hands-on training include the areas of mapping scales, mapping symbols, surveying basics, location and direction, legal descriptions, plot plans, contour lines, profiles, horizontal alignments, and earthwork. Prerequisite: EGT 1004. This course is offered on the Beebe campus during the fall semester.

**EGT 2163 Structural Drafting I**  
3 Credit Hours  
This is a course in structural steel drafting using the most current version of AutoCAD Architecture. It provides hands-on training in the areas of Column Framing Plans, Beam Framing Plans, Sections, Connection Details, Fabrication Details, and Bill of Materials. Lecture two hours. Laboratory two hours. Prerequisite: EGT 1004. This course is offered on the Beebe campus during the spring semester.

**EGT 2183 Architectural Drafting I**  
3 Credit Hours  
This is a course in architectural drafting using the most current version of AutoCAD Architecture. It provides hands-on training in the areas of Basic House Design, Primary Considerations, Room...
Planning, Plot Plans, Foundation Plans, Sill and Floor Construction, Wall and Ceiling Construction, Doors and Windows, Stairs, Fireplaces and Chimneys, and Floor Plans, Roof designs, Elevations, Electrical Plans, Plumbing Plans, Climate Control Plans, Perspective Plans, Specifications, and Estimating Building Cost. Lecture two hours. Laboratory two hours. Prerequisite: EGT 1004. This course is offered on the Beebe campus during the fall semester.

EGT 2214 Pro-Engineer II 4 Credit Hours
This is a course in interactive computer-aided drafting using the most current version of Pro/Engineer. It provides hands-on training in the areas of Ribs, Relations, Failures, Family Tables, Drafts, Text Protrusions, Shell, Reorder, Sweeps, Blends and Splines, Helical Sweeps and 3D Model Notes, Assembly Constraints, Exploded Assemblies, and Assembly Drawings. Lecture three hours. Laboratory three hours. Prerequisite: EGT 2114. This course is offered on the Beebe campus during the spring semester.

EGT 2234 Inventor II 4 Credit Hours
This is a course in interactive computer-aided drafting using the most current version of Autodesk Inventor. It provides hands-on training in the areas of Lofting, 3D Sketches, Sheet Metal, Parameters, iParts, iMates, Lighting, Materials and Color, Rendering, and Simulating Motion. Lecture three hours. Laboratory three hours. Prerequisite: EGT 2134. This course is offered on the Beebe campus during the fall semester.

EGT 2244 Solid Works II 4 Credit Hours
This is a course in interactive computer-aided drafting using the most current version of Solid Works. It provides hands-on training in the use of the following Solid Works features: Fillets, Revolve, Dome, Shell, Pattern, Mold Tools, Sweep, Loft, Draft, Shape, Rib, and Mirror. Lecture three hours. Laboratory three hours. Prerequisite: EGT 2144. This course is offered on the Beebe campus during the spring semester.

EGT 2284 Advanced Revit 4 Credit Hours
This is a course is a continuation of our Architectural Drafting class and covers the more advanced functionality of Autodesk Revit’s building information modeling (BIM) software. Students should master the techniques required to create custom template files, family items, schedules, legends, materials, and renderings. This course will also explore the phasing, design options, and collaboration tools of Revit. Lecture three hours. Laboratory three hours. Prerequisite: EGT 2183. This course is offered on the Beebe campus during the spring semester.

Computer Information Systems

CIS 1113 Introduction to Macintosh Computers 3 Credit Hours
This course provides an overview for the beginning Macintosh user who has little or no prior computer experience. Topics covered include identifying components, working with the menu bar, understanding the concepts of the Macintosh operating system, and file management. This course is offered on the Beebe campus during the fall and spring semesters.

CIS 1503 Microcomputer Applications I 3 Credit Hours
A course designed to introduce students to the concepts of computer information systems through the application of software packages for microcomputers. Students will gain “hands-on”
experience using popular business application software including word processing, spreadsheets, databases, and presentation graphics. ACTS Course Number: CPSI 1003. This course is offered on the Beebe campus during the fall, spring, and Summer I semesters; online during the fall, spring, and Summer semesters; and on the Searcy campus during the fall and spring semesters.

**CIS 2013 Web Page Design** 3 Credit Hours
This course provides instruction on the development of web pages using basic HTML and web page authoring software. Students should be familiar with the Internet and the World Wide Web. Students will be provided with a thorough introduction of HTML and basic web page design concepts. Prerequisite: CIS 1503. This course may not transfer for credit to some institutions. This course is offered on the Beebe campus during the fall semester.

**CIS 2023 Computer Animation** 3 Credit Hours
An introduction to computer animation concepts through application. Course concentrates on composition and manipulation, masking and layering, sound effects, animation rendering, and other animation techniques. Students will learn terminology, principles, and theories behind successful animation. A variety of sophisticated software programs will be used during the course. Prerequisite: CIS 1503. Students concerned about transferability should check with their transfer institution. This course is offered on the Beebe campus during the fall semester.

**CIS 2033 Visual Basic Programming** 3 Credit Hours
An introduction to object oriented high level programming language. Emphasis will be on designing full featured GUI applications that exploit the key features of Microsoft Windows. Prerequisite: CIS 1503. This course is offered on the Beebe campus during the fall semester.

**CIS 2403 Database Applications** 3 Credit Hours
A study of database management principles including file organization, data storage, access methods, data structures, data privacy, security, and integrity. Surveys current generalized database management systems. Prerequisites: CIS 1503. This course is offered on the Beebe campus during the spring semester.

**CIS 2453 Microcomputer Applications II** 3 Credit Hours
An intermediate course in the application of software packages for microcomputers with emphasis on common business functions. Students will gain an increased level of understanding of the integration of word processing, spreadsheet applications, databases, and presentation graphics. Prerequisite: CIS 1503. This course is offered on the Beebe and Searcy campuses and online during the fall and spring semesters.

**CIS 25-1 Special Topics in Computer Applications** 1 Credit Hour
**CIS 25-2 Special Topics in Computer Applications** 2 Credit Hours
**CIS 25-3 Special Topics in Computer Applications** 3 Credit Hours
Course content and length will vary. Subject matter will be determined by demand and recent developments in information systems. (Course may be repeated if topic changes.) Offered on demand.
### CIS 2813 Desktop Publishing Applications 3 Credit Hours
An introduction to desktop publishing concepts. Course concentrates on design, creation, formatting, and revision of business documents using microcomputers with desktop publishing software. Students will learn terminology, layout techniques, graphics creation and manipulation, text integration, and other desktop publishing principles. Prerequisites: CIS 1503. Typing skills are important. Keyboard familiarity is essential. This course is offered on the Beebe campus during the spring semester.

### CIS 2873 Structured Programming in the C Language 3 Credit Hours
Structured design in software development will be emphasized, along with usage of the many software modules available in most libraries that come with C compilers. Prerequisites: CIS 1503. This course is offered on the Beebe campus during the spring semester.

### Computer Systems and Networking Technology

#### CST 1104 Introduction to Computer Hardware/Software 4 Credit Hours
An introductory course for the beginning Computer Systems student including such topics as computer hardware, software, firmware, and terminology. It is the first course in preparation toward the A+ certification. Both theory and hands-on application will be emphasized. Lecture three hours. Laboratory three hours. This course is offered on the Beebe campus during the fall and spring semesters.

#### CST 1114 Networking Essentials - Cisco I 4 Credit Hours
This is the first of four courses preparing the student to sit for the Cisco Certified Network Associate certification exam. It is the study of networking and internetworking. Topics include the OSI model, data link and network layer devices, IP addresses, subnet masking, ARP, RARP, cabling, topologies, LAN technologies, basic electrical and electronic issues in networks, and TCP/IP network-layer protocols. Lecture three hours. Laboratory three hours. This course is offered on the Beebe campus during the fall and spring semesters.

#### CST 1124 Microcomputer Operating Systems 4 Credit Hours
Instruction of the current microcomputer operating systems. Purpose of the OS, application of essential commands, file and disk management, directory organization, creating and modifying batch files, and system configurations will be studied. Both theory and hands-on application will be emphasized. Lecture three hours. Laboratory three hours. This course is offered on the Beebe campus during the fall and spring semesters.

#### CST 1134 Router Technologies - Cisco II 4 Credit Hours
The second of four courses preparing the student to sit for the Cisco Certified Network Associate certification exam. It is the study of router hardware and software. Topics include TCP/IP transport-layer protocols, flow control, IOS, router configuration, RIP and IGRP routing protocols, access-lists, and router troubleshooting. Lecture three hours. Laboratory three hours. Prerequisite: CST 1114. This course is offered on the Beebe campus during the fall and spring semesters.

#### CST 1154 Computer Coding 4 Credit Hours
Introduction to Computer Coding is a required course for the Associate of Applied Science in Computer Coding degree. This course is a study of a structured programming language with
applications. Topics covered: structured design, flow charting and coding. Emphasis will be on planning, writing and debugging programs.

**CST 1234 Database Operator**  
4 Credit Hours  
The focus is on the database as opposed to specific operating system tasks. Students gain practical experience installing and operating an SQL database to support departmental database applications that have from one to twenty users. Using a variety of tools, students learn to anticipate and solve common problems associated with operating a database, perform common administration tasks, and learn basic SQL language. The class consists of demonstrations and hands-on exercises for performing daily operator tasks.

**CST 1354 Computer Forensics Essentials**  
4 Credit Hours  
This is a beginning course, which is designed to introduce students to the ever-changing world of cyber-crime prevention. In this class, students will learn the basics of computer forensics and will be able to make forensically sound computer examinations. This course will teach students how data is stored, where the data is located, and how to recover all of the data. Students will learn how to conduct thorough examinations and how to explain, interpret, and draw the appropriate conclusions on what has been found and what it may mean. Lecture three hours. Laboratory three hours. This course is offered on the Beebe campus during the fall and spring semesters.

**CST 2114 Advanced Router Technologies - Cisco III**  
4 Credit Hours  
The third of four courses preparing the student to sit for the Cisco Certified Network Associate certification exam. It is a continuation of the study of router hardware and software. Topics include LAN switching, VLANs, LAN design, EIGRP, OSPF, classless routing, and trunking. Lecture three hours. Laboratory three hours. Prerequisites: CST 1114 and CST 1134. This course is offered on the Beebe campus during the fall and spring semesters.

**CST 2124 Wan Technologies - Cisco IV**  
4 Credit Hours  
The final of four courses preparing the student to sit for the Cisco Certified Network Associate certification exam. It is a continuation of the study of router hardware and software. Topics include WAN theory and design, WAN technology, NAT, PAT, DHCP, basics of optical networks, PPP, frame relay, ISDN and network troubleshooting. Lecture three hours. Laboratory three hours. Prerequisite: CST 1134 and CST 2114. This course is offered on the Beebe campus during the fall and spring semesters.

**CST 2134 Local Area Network I**  
4 Credit Hours  
It is the study of the most current version of Microsoft Server/Workstation Operation System. Topics include current LAN topology, hardware requirements, installing and maintaining the network Operating System, and file server setup and maintenance. It prepares the student to sit for the appropriate Microsoft Certified Professional exam. Both theory and hands-on application will be emphasized. Lecture three hours. Laboratory three hours. Prerequisite: CST 1104. This course is offered on the Beebe campus during the fall and spring semesters.

**CST 2174 Local Area Network II**  
4 Credit Hours  
This is a required course for the Associate of Applied Science in Computer Systems & Networking Technology degree. This course provides everything students need to build the knowledge and skills necessary to configure, manage, and troubleshoot a Microsoft Windows Server network...
infrastructure and to prepare for the Microsoft Certified Professional examination. Lecture three hours. Laboratory three hours. Prerequisite: CST 2134. This course is offered on the Beebe campus during the fall and spring semesters.

**CST 2194 Microcomputer Systems Installation and Troubleshooting**  
4 Credit Hours

It is the final course in preparing the student to sit for the A+ certification exam. It is the study of installation and troubleshooting of a microcomputer system. Techniques of installing, maintaining and troubleshooting a microcomputer system will be studied. Laboratory sessions will include hardware, operating system, and software installation, testing and troubleshooting (isolation down to the card level) techniques and preventive maintenance. Lecture three hours. Laboratory three hours. Prerequisite: CST 1104, CST 1124, CST 1134, CST 2114, CST 2174, and CST 2134. This course is offered on the Beebe campus during the fall and spring semesters.

**CST 2234 Introduction to Security**  
4 Credit Hours

This course is the study of the current security concerns facing network administrators. Topics include security threats, enforcing an organized security policy, managing PKI, and monitoring security infrastructure. This course will help prepare the student for the Security+ certification exam. Lecture three hours. Laboratory three hours. Prerequisite: CST 2134. This course is offered on the Beebe campus during the fall and spring semesters.

**CST 2314 Building Scalable Cisco Networks - Cisco V**  
4 Credit Hours

Building Scalable Cisco Networks is an elective course for the Associate of Applied Science in Computer Systems Technology degree. Topics include: overview of scalable internetworks, managing traffic and access, managing IP traffic, extending IP addressing using VLSMs, configuring OSPF in a single area, interconnecting multiple OSPF areas, configuring enhanced IGRP, optimizing routing update operation, and configuring BGP. Prerequisite: Successful completion of CCNA and successfully passing skills test or CCNA Networking Academy.

**CST 2324 Remote-Access Networks - Cisco VI**  
4 Credit Hours

Remote-Access Networks is an elective course for the Associate of Applied Science in Computer Systems Technology degree. Topics include: assembling and cabling the WAN components, configuring asynchronous connections with modems, configuring PPP, using ISDN and DDR, establishing dedicated frame relay connection, optimizing traffic on dedicated WAN connections, scaling IP address with PAT and NAT, and troubleshooting the remote access network. Prerequisite: Successful completion of CCNA and successfully passing skills test or CCNA Networking Academy.

**CST 2424 Networking Troubleshooting - Cisco VIII**  
4 Credit Hours

Networking Troubleshooting is an elective course for the Associate of Applied Science in Computer Systems Technology degree. Topics include: support resources for troubleshooting, using troubleshooting methods, identifying troubleshooting targets, applying Cisco troubleshooting tools, documenting symptoms, actions and results, tracking log-ins and connections, diagnosing and correcting campus TCP/IP, catalyst, frame relay, and ISDN BRI problems and troubleshooting VLANs on routers and switches. Prerequisite: CST 2314 and CST 2414.

**CST 2434 Advanced Computer Security**  
4 Credit Hours

This course is the design and study of the most current security practices for Microsoft Server products. Topics include: analyzing, designing, monitoring, and implementing security for Microsoft
server products. It prepares the student to sit for the appropriate Microsoft Certified Professional exam. Both theory and hands-on application will be emphasized. Lecture three hours. Laboratory three hours. Prerequisites: CST 2124 and CST 2234. This course is offered on the Beebe campus during the fall semester of odd numbered years.

**CST 2444 Advanced Operating Systems**  
4 Credit Hours  
This course has been designed to help students gain the knowledge and skills needed to become a Linux administrator. This in-depth, hands-on course covers a variety of topics: installing and configuring Linux Enterprise Server, managing users and groups, securing the system, performance tuning, and backup and recovery services. By completing multiple lab exercises, the students will be able to apply course concepts and strengthen proficiency in Linux administration. Prerequisites: CST 1124. This course is offered on the Beebe campus during the fall semester of odd numbered years.

**CST 2454 E-mail Server Systems**  
4 Credit Hours  
This course is the study of the most current version of Microsoft Exchange Server. Topics include: installation, configuration, management, monitoring, and troubleshooting an e-mail system. It prepares the student to sit for the appropriate Microsoft Certified Professional exam. Both theory and hands-on application will be emphasized. Lecture three hours, laboratory three hours. Prerequisites: CST 2174. This course is offered on the Beebe campus during the spring semester of even numbered years.

**CST 2464 Advanced Computer Forensics**  
4 Credit Hours  
Advanced Computer Forensics is designed to provide students with tools to detect, contain, and eliminate intrusions using security-monitoring principles. This course will teach students theory and hands-on practice of network forensics. Students will learn how to conduct thorough examinations and how to explain, interpret, and draw the appropriate conclusions on what has been found and what it may mean. Prerequisite: CST 1354. This course is offered on the Beebe campus during the spring semester of even numbered years.

**CST 2474 Microcomputer Systems Installation & Troubleshooting w/Internship**  
4 Credit Hours  
This course is a study of the installation and troubleshooting of microcomputer systems and servers/networks. Techniques for installing and maintaining a microcomputer system will be studied. Laboratory sessions will include hardware installation and operation, preventative maintenance, testing and troubleshooting techniques. This course has a required internship component. Prerequisite: CST 1104, CST 1124, CST 1134, CST 2114, CST 2174, and CST 2134. Student must be a CSNT major with second semester sophomore standing and a 3.0 cumulative GPA to take this course. This course is offered on the Beebe campus during the spring semester.

**CST 2484 System Virtualization**  
4 Credit Hours  
System Virtualization is a required course for the Associate of Applied Science in Computer Systems Technology degree. This course concerns a cloud computing operating system that is able to manage large pools of virtualized computing infrastructures, including software and hardware. Emphasis will be placed on the dramatic reduction of capital and operating costs associated with virtualization, which lends itself toward a more "green" environment. Multiple virtualization software packages will be presented in the class. Proper installation and configuration techniques...
will be emphasized. Prerequisite: CST 2174. This course is offered on the Beebe campus during the fall and spring semesters.

**Computerized Machining Technology**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMT 1003</td>
<td>Master Cam I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>This course utilizes Master Cam software to design, test and manufacture parts. The student will learn how to draw and manipulate a design on the screen and how to create a tool path, and finally how to send information to a machine tool for manufacturing a part. This course is offered on the Searcy campus during the fall semester.</td>
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<tr>
<td>CMT 1103</td>
<td>Prototyping I</td>
<td>3</td>
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<tr>
<td></td>
<td>This course will teach the design and modification of a prototype model. Model projects will be produced by the use of a three-dimensional printer. This course is offered on the Searcy campus during the fall semester.</td>
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<tr>
<td>CMT 1203</td>
<td>Basic Machining</td>
<td>3</td>
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<td>This course will provide instruction in the basic skills needed in the machining trade. Some of these skills are blueprint reading, precision measurements, use of basic metal working tools and material layout. The basic skills needed for the operation of a metal lathe and milling machine will be covered, also. This course will be 1/3 theory and 2/3 lab. Related safety will be taught and emphasized. This course is offered on the Searcy campus during the fall semester.</td>
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<tr>
<td>CMT 1402</td>
<td>Manufacturing Materials</td>
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<td>In this course of study, students will learn about various types of manufacturing materials such as metal, plastic, and wood. Students will learn how different heat treatment and annealing procedures can change the properties of the metals. Students will also learn about laser engraving, including which materials such as wood and plastic behave when laser engraved, and which plastics are unsafe. Safety will be emphasized throughout the course. This course will be 1/3 theory and 2/3 lab. This course is offered on the Searcy campus during the fall semester.</td>
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<tr>
<td>CMT 1602</td>
<td>Manufacturing Processes</td>
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<td>In this course of study, students will receive the fundamentals of plastic injection, die construction &amp; operation, laser engraving, and plasma operations. Experience will be gained in the machining of plastic by using manual and computerized machinery, as well as the electronic discharge machine to study the many ways a cavity for a mold can be produced. Students will learn the raster and vector techniques of laser engraving and plasma operating. Students will utilize the knowledge gained in the manufacturing materials class. Safety will be emphasized through the course. This course will be 1/3 theory and 2/3 lab. This course is offered on the Searcy campus during the spring semester.</td>
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<tr>
<td>CMT 2003</td>
<td>Master Cam II</td>
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<td>This course is designed to teach students the advanced level of the use of Master Cam. This course will employ the use of three-dimensional design and programming. This course is offered on the Searcy campus during the spring semester.</td>
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CMT 2103  Prototyping II  3 Credit Hours
This course teaches the advanced level of design and modification of a prototype model. This course is also designed to produce models and physical testing of the working models at the advanced level. This course is offered on the Searcy campus during the spring semester.

CMT 2113  Industrial Environment  3 Credit Hours
In this course, students will learn the fundamentals of lean manufacturing and quality assurance and control. Students will also be taught OSHA regulations and a certification test will be given. In this course, students will also have the opportunity to receive forklift certification. Safety will be emphasized throughout the course.

CMT 2123  Concepts of Production  3 Credit Hours
In this course, students will be taught from the concept stage to production. They will be given a blueprint they have to produce using SolidWorks and MasterCAM. They will then move the design into the production stage. Students will use manual and CNC machines to produce a finished product. Safety will be emphasized throughout the course.

CMT 2133  Computer Integrated Manufacturing  3 Credit Hours
Students will learn the fundamentals of Computer Integrated Manufacturing. In this course, students will utilize knowledge of CAD/CAM, lean manufacturing, quality assurance/control, and the various types of manufacturing. In addition to this, students will learn about cost calculation and automated assembly. Safety will be emphasized throughout the course.

CMT 2203  Die Making  3 Credit Hours
In this course of study, the student will receive the fundamentals of construction and operation of basic stamping dies. The area of plastic injection molds will also be studied. Safety will be emphasized throughout the course. This course is about 1/3 theory and 2/3 lab. This course is offered on the Searcy campus during the spring semester.

CMT 2213  Advanced Computer Numeric Control Machining  3 Credit Hours
In this course of study, the student will learn about advanced methods of CNC programming and metal cutting advancements such as high speed milling and the application of chip thinning and also be exposed to various methods of mass production as well as prototyping one part. Students will have individual projects as well as a class project where each student will be responsible for designing and manufacturing components that will assemble and function with the components built by their classmates. Course will include the CNC Mill, CNC Lathe and CNC Router. Student will spend time writing, entering, and editing programs as well as applying knowledge and skills learned in MasterCam and SolidWorks. This course is 1/3 theory and 2/3 lab. Safety is emphasized.

CMT 2303  Computer Numeric Control Machining  3 Credit Hours
In this course of study, the student will learn about advanced and short-cut methods of programming, such as the repeat function, the subroutine function, the rotate function, and how to scale and mirror a program. The student will spend time writing, entering, and editing programs. This course is 1/3 theory and 2/3 lab. Safety is emphasized. This course is offered on the Searcy campus during the fall semester.
CMT 2703  Advanced Machining  3 Credit Hours
The student will continue to improve their basic skills on the milling machine and lathe while learning about more advanced machining techniques. Dividing heads, rotary tables and boring heads will be used on the mill while boring, grinding, tapers and threading will be done on the lathe. Better finishes and tighter tolerances will be expected. This course is about 1/3 theory and 2/3 lab. This course is offered on the Searcy campus during the spring semester.

Creative Arts Enterprise

CAE 2003  Capstone Project  3 Credit Hours
In the Capstone Project, Creative Arts Enterprise students will complete the required body of marketable work in their chosen media, and then they will market, display, and sell their work, experiencing both wholesale and retail markets. The emphasis is on the actual experience of implementing what has been learned through the preceding classes, bringing the business and creative aspects of the program together in a culminating project. Prerequisite: Approval of Creative Arts Enterprise advisor.

Criminology

CRIM 1013  Introduction to Law Enforcement  3 Credit Hours
This course is an introduction to the law enforcement segment of the criminal justice system, with an examination of the history and development of law enforcement, especially in the United States. The various job and career opportunities will be reviewed. This course is offered on the Beebe campus during the spring semester.

CRIM 1023  Introduction to Criminal Justice  3 Credit Hours
This course is intended to expose the student to the workings of criminal justice systems, exploring the historical development, current operation, and future trends of criminal justice. Emphasis will be placed on contemporary problems in the definition of law, the enforcement of law, strategies of policing, judicial systems, sentencing strategies, and correctional practices. Content includes not only practices in the United States, but also other cultures and their systems of justice. ACTS Course Number: CRJU 1023. This course is offered on the Beebe campus during the fall semester.

CRIM 1103  Victimology  3 Credit Hours
This course addresses the issue of how the Criminal Justice System deals with the victim of a violent crime. Examining such areas as societal changes over the years towards victims; children as victims versus adult victims; victim reparation and the change of victim rights with the advent of plea bargaining. This course is offered on the Beebe campus during the spring semester.

CRIM 1113  Ethical Dilemmas  3 Credit Hours
This course is designed to introduce Criminal Justice students into the world of ethics and its application to professionals in the criminal justice system. Students will become familiar with moral laws, both good and bad; ethical issues in punishment versus rehabilitation; moral and ethical education of police officers and the other criminal justice employees; and ethical decisions when dealing with homeland security issues. This course is offered on the Beebe campus during the spring semester.
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tr>
<td>CRIM 1123</td>
<td>Criminal Profiling</td>
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<td>This course is designed to provide students with an understanding and appreciation for the darkest part of our society, attempting to understand the incomprehensibility of horrific acts committed by individuals we yet to understand. Criminal Profiling is a multi-disciplinary practice that employs knowledge of Criminalistics, death investigation and psychology. Students will develop an understanding of these disciplines and how they are applied in understanding and organizing investigative leads towards apprehension and/or at least assisting law enforcement organizations with foundation in which to launch investigations. This course is offered on the Beebe campus during the fall semester.</td>
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<tr>
<td>CRIM 1133</td>
<td>Criminal Behavior: A Psychological Approach</td>
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<td>A scientific study of criminal behavior, cognitive behavior, and a psychological perspective regarding psycho-social contributions to criminal behavior. This course is offered on the Beebe campus during the spring semester.</td>
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<tr>
<td>CRIM 2023</td>
<td>Probation, Parole, and Community Corrections</td>
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<td>This course examines the principles, problems, and trends in the probation, parole and communications of both adults and juveniles. It overviews the methods of achieving organizational change and the evaluation of correctional units and probation systems.</td>
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<tr>
<td>CRIM 2043</td>
<td>Community Relations in the Administration of Justice</td>
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<td>Provides an understanding of the complex factors in human relations. The philosophy of law enforcement is examined with the emphasis on the social forces that create social change and disturbance. This course is offered on the Beebe campus during the fall semester.</td>
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<tr>
<td>CRIM 2113</td>
<td>Critical Thinking in Criminal Justice</td>
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<td>The development of critical thinking skills in criminal justice has never been more vital. Critical thinking skills can be learned with practice and guidance by changing the actions involved in decision-making so that they become part of the permanent behavior of criminal justice professionals in enforcement activities. This course fosters critical thinking skills of different scenarios and weighing probable solutions for situations personnel are often faced with. This course will serve to develop and enhance critical thinking skills for criminal justice professionals in acquiring new ways of thinking more proficiently and becoming more proactive in combating modern crimes.</td>
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<tr>
<td>CRIM 2213</td>
<td>Criminology</td>
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<td>This basic course provides an examination of the nature and extent of crime and theories of crime causation, as well as the societal reaction of criminal behavior.</td>
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<tr>
<td>CRIM 2243</td>
<td>Criminalistics</td>
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<td>This course covers topics such as the discovery, recognition, observation, identification and collection and comparison of physical evidence, including a review of various current techniques in the testing of physical evidence. This course is offered on the Beebe campus during the fall semester.</td>
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CRIM 2253  Criminal Investigation 3 Credit Hours
Includes fundamentals and theory of an investigation, conduct at crime scenes, collection and presentation of physical evidence, and methods used in the police service industry. This course is offered on the Beebe campus during the fall semester.

CRIM 2263  Criminal Evidence and Procedure 3 Credit Hours
Rules of evidence of import at the operational level in law enforcement and criminal procedures, personal conduct of the officer as a witness, and examination of safeguarding personal constitutional liberties. This course is offered on the Beebe campus during the spring semester.

CRIM 2313  Contemporary Issues in Criminal Justice 3 Credit Hours
Criminal justice students need to begin, understand, and develop social issues that affect the criminal justice system and the administration of justice. Contemporary Issues in Criminal Justice is a course that examines a broad range of problems faced by the criminal justice system in the 21st century. By examining such complex social issues such as community relations, diversity, racial profiling, police use of deadly force, gangs, immigration, drug control policy, domestic terrorism, sentencing guidelines, etc., students have an opportunity to recognize the impact of crime on society as well as the criminal justice system's response to such issues.

Culinary Arts

CUL 1003  Introduction to Baking 3 Credit Hours
This course takes the student from the design of a bakery to the inner workings of the different venues of bakery shops. Baking history will be included. Basic equipment and terminology will be covered. Experiments of ingredient activity and their functions will be discussed. One hour lecture, four hours lab.

CUL 1013  Garde Manger 3 Credit Hours
This course provides students with skills and knowledge of the organization, equipment and responsibilities of the “cold kitchen.” Students are introduced to and prepare cold hors d’oeuvres, sandwiches, salads, as well as basic charcuterie items while focusing on the total utilization of product. Reception foods and buffet arrangements are introduced. Students must pass a written and practical exam. One hour lecture, four hours lab.

CUL 1023  Stocks, Sauces and Soups 3 Credit Hours
This course involves instruction in the preparation of stocks, soups and classical sauces, contemporary sauces, accompaniments and the pairing of sauces with a variety of foods. One hour lecture, four hours lab.

CUL 1033  World Cuisine 3 Credit Hours
This course emphasizes both the influences and ingredients that create the unique character of selected Classical European and World Cuisines. In studying Classical European Cuisines student prepare, taste, serve, and evaluate traditional, regional dishes of the British Isles, Italy, France, Germany, Austria, Switzerland, and Scandinavian countries. In studying World cuisines, students prepare, taste, serve, and evaluate traditional, regional dishes of Spain, the Middle East, Turkey, Greece, Africa and India. Importance will be placed on ingredients, flavor profiles, preparations, and techniques representative of the cuisines. One hour lecture, four hours lab.
CUL 1213  Introduction to Food and Beverage Management  3 Credit Hours
This course covers the practical skills and knowledge necessary for the effective operation of food and beverage service in a variety of settings. Students will be introduced to service management and leadership, planning skills, and hands-on techniques for consistently delivering quality service in every type of operation. One hour lecture, four hours lab.

CUL 2014  Advance Food Preparation  4 Credit Hours
Upon completion of this course the student should be able to demonstrate advanced level cooking techniques and methods, recipe conversion, and professional food preparation and handling as well as managerial competencies. Two hours lecture, four hours lab. Prerequisites: HA 1013, HA 1023, HA 2003.

Diesel Technology

DST 1104  Diesel Engine Technology  4 Credit Hours
This course consists of basic fundamentals of internal combustion engines, with emphasis on diesel powered engines. The course stresses different types of engine cylinder and valve arrangements, ignition, fuel, lubrication, air induction, and cooling systems. Laboratory work will include disassembly and reassembly of diesel engines and component parts with emphasis on diagnosis and repair. The proper use of tools and safe work habits will be emphasized. This course is offered on the Searcy campus during the fall semester.

DST 1204  Transportation Electronics  4 Credit Hours
This course is the study of the different components that make up the electronic controls on a diesel engine and their functions. This course covers computer principles and the computer control system makeup. A study of electronically activated injectors, electronic transmission controls, electronic cruise control, and a number of sensors that send signals to the computer is included. Other topics covered include basic fundamentals of electricity, Ohm's law, measuring voltage, amperage, and resistance. Students study three types of electrical circuits, drawing and reading schematics, and distinguishing between AC and DC circuits. Safety and the use of special tools are emphasized. This course is offered on the Searcy campus during the fall semester.

DST 1404  Steering and Suspension Systems  4 Credit Hours
This course deals with the steering component operation and repair as well as the suspension of the over the road truck. The student should be able to identify the steering components and suspension parts of a heavy truck. The student will be able to diagnose and repair failures of steering and suspensions of heavy trucks. The diesel mechanic should be versed in highway truck steering and suspension systems. This course is offered on the Searcy campus during the fall semester.

DST 2104  Climate Control  4 Credit Hours
This course will cover the operational principles of air conditioning systems and related components as applied to diesel equipment with emphasis on testing, maintenance, and repair. Safety and the use of special tools are emphasized. This course is offered on the Searcy campus during the spring semester.
DST 2204 Brake Systems 4 Credit Hours
This course is a study of the different types and makeup of mechanical, air, and hydraulic brake systems. This course covers hydraulic principles and the makeup of hydraulic systems. A study of pumps, motors, controls, valves, and cylinders will also be covered. Students will demonstrate the ability to check pressures, troubleshoot the systems, and make necessary repairs and/or adjustments. Emphasis will be on maintenance, repair, safety and special tools. This course is offered on the Searcy campus during the spring semester.

DST 2304 Truck Preventive Maintenance 4 Credit Hours
This course deals with the knowledge required of a diesel mechanic with the over-the-road class eight tractor as well as smaller trucks. The student should be able to properly disconnect the trailer and maneuver the tractor safely into the shop. Also, the student should be able to perform a complete maintenance and pre-trip inspection. Safety is emphasized. This course is offered on the Searcy campus during the spring semester.

Early Childhood
ECH 1003 Child Guidance 3 Credit Hours
This course relates principles of child development to appropriate methods of guiding children's behavior for children birth through pre-kindergarten, including children with special needs. Techniques for managing groups of children in the various childcare settings are practiced.

ECH 1103 Child Growth and Development 3 Credit Hours
This course is the study of environmental and hereditary effects on the cognitive, affective, psychomotor, and sociolinguistic development of typically and atypically developing children from conception to middle school (conception through age 8) with diverse cultural backgrounds within and outside of the United States. The students will be introduced to methods used to observe and evaluate children’s development and recognize possible delays in development. Practical application of theory is provided through a variety of hands-on experiences and a minimum of five (5) hours of observation. This course is offered on the Beebe campus during the fall and spring semesters.

ECH 1113 Foundations of Early Childhood Education 3 Credit Hours
This course is designed to acquaint the student with the historical roles of families in their child’s development. The student will become familiar with the theories supporting early childhood education and learn how to develop an effective program designed uniquely for children (ages birth to eight). The students will also obtain knowledge of state and federal laws pertaining to the care and education of young children. This course is offered on the Beebe campus during the fall and spring semesters.

ECH 1203 Business Administration in Early Childhood Education 3 Credit Hours
Students will learn how to develop policies and procedures pertaining to child care facilities based on Arkansas State Licensing Regulations. They will develop a parent handbook, personnel policies, job descriptions and teacher evaluations. Students will design a building blueprint and will create an operating budget and a one-time start up budget. Students will also participate in simulated job interviews and will demonstrate questioning techniques that facilitate answers that provide insight.
into personalities and attitudes within the statutes of the law. Students will also become familiar with child care software and how to run programs that will monitor student attendance, emergency information and billing. Students will also learn how to use the Arkansas State Voucher Program. This course is offered on the Beebe campus during the fall semester.

**ECH 1213 Perspectives in Early Childhood Education**  
3 Credit Hours  
This course introduces students to current research in the field of Early Childhood Education. Students will develop a knowledge base of the NAEYC Code of Ethical Conduct through analyzing case studies designed to demonstrate competencies compatible with current research and practice, development of a professional portfolio to demonstrate competencies in the skills relating to the NAEYC Associate Degree Standards.

**ECH 1301 Practicum I**  
1 Credit Hour  
This course provides students with the opportunity to gain valuable insight into the field of early childhood education. Students will observe infants, toddlers, and preschool children in a child care facility approved by the instructor. A total of 96 hours of observation is required. The in-class instruction will focus on the development of the following skills: observation, record keeping, and interpretation of data. The instructor will help with placement for those students who are not currently employed at a child care facility. This course is offered on the Beebe campus during the fall and spring semesters.

**ECH 1302 Practicum II**  
2 Credit Hours  
Students must be employed or volunteer in a licensed childcare facility to apply the knowledge acquired and skills learned in previous coursework. Observation of the student's work and evaluation of student skills are conducted by instructors following the NAEYC Associate Standards. Students must demonstrate competency in all areas observed and complete a minimum number of clock hours, determined by the institution, of observation and work experience with children birth to five. An emphasis will be on the observation of physical, cognitive, language, social, and emotional development in connection with previous courses. This course is offered on the Beebe campus during the spring semester.

**ECH 2113 Health, First Aid, and Safety**  
3 Credit Hours  
Students will become proficient and certified in CPR and first aid. Students will also become familiar with signs and symptoms of communicable illnesses that pertain to children. Students will become proficient in dealing with emergency situations. Upon completion of the CPR and first aid portion of the course, students will participate in a simulated trauma where they will be required to prioritize and treat injuries until emergency medical personnel arrive. Students will also become familiar with childhood immunizations and how to track them manually and on the computer. Students will also learn how to monitor children's normal growth patterns and how to identify and seek treatment for abnormalities. In the safety portion of the course, students will become familiar with basic classroom and playground safety issues and how to avoid problems. They will also learn how to inspect playgrounds and identify hazards on playgrounds. Students will design a developmentally appropriate playground and budget that complies with Arkansas Licensing Regulations. Students will also be able to demonstrate proper fire and emergency procedures and will develop evacuation plans that meet Arkansas State Regulations. This course is offered on the Beebe campus during the spring semester.
ECH 2123  Curriculum Development in Early Childhood Education  3 Credit Hours
This course is based on the foundation of research in child development and focuses on planning and implementing enriching environments with appropriate interactions and activities for young children (ages 0-5 years) including those with special needs, to maximize physical, cognitive, communication, creative, language/literacy, and social/emotional growth and development. Competencies are based on standards developed by the National Association for the Education of Young Children for quality early childhood settings. This course is offered on the Beebe campus during the spring semester.

ECH 2203  Exceptional Children  3 Credit Hours
Students will become familiar with the laws pertaining to disabled children in child care facilities and special accommodations that child care facilities are required to make according to the Americans with Disabilities Act. Students will also learn how to tailor classroom curriculum to meet the individual needs of each child. Students will become familiar with signs and symptoms of a variety of physical, mental and learning disabilities, their prognosis, treatment, educational implications and expected outcomes. Students will also compare and contrast the pros and cons of integrating special needs children into the regular classroom. This course is offered on the Beebe campus during the fall and spring semesters.

ECH 2303  Math & Science for Early Childhood  3 Credit Hours
Students will become familiar with a variety of ways to introduce children, birth through pre-kindergarten, including children with special needs to ideas and concepts related to math and science. Students will create activities; plan and practice developmentally appropriate experiences that would meet recognized standards (NAEYC, NCTM, etc.) for these areas. This course is offered on the Beebe campus during the spring semester.

ECH 2313  Literacy & Language for Early Childhood  3 Credit Hours
This course is designed to make the early childhood educator aware of the acquisition of language and how to provide children, birth through pre-kindergarten, including children with special needs, with language rich environments by incorporating the four areas of language: speaking, listening, reading, and writing. This course is offered on the Beebe campus during the spring semester.

ECH 2323  Infant and Toddler Curriculum  3 Credit Hours
This course is based on the foundation of research in child development and focuses on planning and implementing enriching environments with appropriate interactions and activities for young children (birth through 2) including those with special needs, to maximize physical, cognitive, communication, creative language/literacy, and social/emotional growth and development. Competencies are based on Standards developed by the National Associate for the Education of Yong Children for quality early childhood settings. Also covered:

- Information on the Quality Approval process and Accreditation for Early Childhood settings in Arkansas, no called Better Beginnings
- Arkansas Frameworks Handbook for Infants and Toddlers
Economics

ECON 1303  Introduction to Economics  3 Credit Hours
Introduction to fundamental economic concepts including scarcity, choice, opportunity cost, basic demand and supply and their application involving critical reasoning skills in a market-orientated economic system of organization. Essential Macroeconomic and Microeconomic problems, possible solutions and market implications will be examined. Additional topics include: economic goals and tradeoffs, marginal benefit marginal cost, production possibilities and comparative advantage, unemployment, and inflation. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall semester.

ECON 2313  Principles of Macroeconomics  3 Credit Hours
Analysis of whole economic systems, particularly the U.S. economy. Emphasis is placed on analysis of economic problems and their possible solutions. Topics include inflation, unemployment, national income, and the monetary system. ECON 2313 and ECON 2323 may not be taken concurrently. ACTS Course Number: ECON 2103. This course is offered on the Beebe campus and online during the fall and spring semesters.

ECON 2323  Principles of Microeconomics  3 Credit Hours
Analysis of the decision making of individual units of economics: households, business firms, and the government. Topics include price determination, production, income distribution, market structures, and international economics. ECON 2313 and ECON 2323 may not be taken concurrently. ACTS Course Number: ECON 2203. This course is offered on the Beebe campus and online during the fall and spring semesters.

Education

EDU 1103  Child Growth  3 Credit Hours
This course is the study of environmental and hereditary effects on the cognitive, affective, psychomotor and sociolinguistic development of typically and atypically developing elementary grade children of diverse cultural backgrounds within and outside of the United States. The students will be introduced to ways to observe and evaluate children's development and recognize possible delays in development. The students will study major theories of development and learning. Practical application of theory is provided through a variety of hands-on experiences and observations.

EDU 2001  Introduction to Teaching Lab  1 Credit Hour
A career in education involves a great deal more than knowledge in a subject matter and provides opportunities other than classroom teaching. Direct experiences with students and a certified teacher in a public school will assist you in deciding whether a career in education is a good choice for you. This course is offered on the Beebe campus during the fall and spring semesters.

EDU 2013  Educational Technology  3 Credit Hours
An introduction to the use of technology for the classroom teacher. Emphasis will be on the computer as an instructional, administrative, and information-gathering tool. This course is offered on the Beebe campus during the fall and spring semesters.
EDU 2023  Introduction to Teaching  3 Credit Hours
An introduction to the teaching profession. Provides a basic understanding of the foundations of the education system in the United States and the role of teachers. Course requires 30 hours of observation and directed experiences in a public school. This course is offered on the Beebe campus during the fall and spring semesters.

EDU 2203  Exceptional Children  3 Credit Hours
This course will provide future educators with an introduction to educating children with exceptionalities. This course outlines challenges for people with exceptional abilities. Special education law, special education terminology, the evaluation process, and related services for exceptional children will be targeted.

Emergency Medical Technician

EMS 1003  Clinical  3 Credit Hours
Hands on applications of skills acquired in EMS 1005 and EMS 2205. This is achieved by working in the hospital emergency room and with an ambulance service. This course is offered on the Searcy campus during the fall and spring semesters.

EMS 1005  EMT I  5 Credit Hours
This course is an introduction to pre-hospital care and the basic legal and ethical aspects involved. Patient Assessment of patients with medical illness, learning signs and symptoms of the different medical problems and their standard of care. This course is offered on the Searcy campus during the fall and spring semesters.

EMS 1102  Preparatory  2 Credit Hours
Medical terminology and the metric system are discussed. An overview of general patient assessment, airway and ventilation, and shock are covered. Understanding and management of the body's system's reaction to decreased cellular oxygenation are discussed. Body fluids, osmosis and pathophysiology of inadequate tissue perfusion combined with the evaluation and resuscitation of these patients is emphasized. The use of MAST and intravenous techniques are taught. This course is offered on the Searcy campus during the fall semester.

EMS 1103  Anatomy & Physiology  3 Credit Hours
This course is an overview of the structure and function of the human body. Emphasis is placed on directing, defining, and describing normal and pathological body conditions. Includes a patient assessment by body region and how to communicate effectively with medical control and other members of the health care team. This course is offered on the Searcy campus during the fall semester.

EMS 1104  Pre-Hospital Environment  4 Credit Hours
EMS systems are overviewed. Emphasis is placed on professionalism, responsibility, development, improvement, and community involvement. The ethical and legal aspects of Emergency Medical Systems including malpractice, consent, and contracts will also be discussed. EMS communications, stress management, and emergency rescue techniques are taught. This course is offered on the Searcy campus during the fall semester.
EMS 1204  Pharmacology  4 Credit Hours
Clinical pharmacology, classification, and uses of medications with emphasis on the proper indications, precautions, dosages, and methods of administration will be covered. The course will include dosage calculations and metric conversions. This course is offered on the Searcy campus during the fall semester.

EMS 1301  Field Internship I  1 Credit Hour
Supervised experience in the pre-hospital care setting in a paramedic ambulance service is covered in this course. This will aid all the paramedic students in an understanding of the Advanced Life Support system. This will provide the student with the opportunity to utilize skills as a team member and progress to function as a team leader under the direct supervision of a paramedic in a field setting. Includes directing activities at the scene, delegating patient care responsibilities, and providing coordination of events from dispatch to the transfer of patient care to the emergency care physician. This course is offered on the Searcy campus during the fall semester.

EMS 1303  Clinical Rotation I  3 Credit Hours
Supervised rotations through hospital clinical areas. Emphasis will focus on areas that reinforce and allow the paramedic student to apply airway management, IV therapy, and patient assessment skills. This course is offered on the Searcy campus during the fall semester.

EMS 2103  Trauma  3 Credit Hours
Management and treatment of traumatic injuries including soft tissue, central nervous system, and musculoskeletal structures, anatomy and pathophysiology, and assessment and management of traumatic injuries involving these human systems. Includes management of all types of burns. This course is offered on the Searcy campus during the spring semester.

EMS 2104  Medical Emergencies I  4 Credit Hours
Recognition, management, and pathophysiology of patients with medical emergencies are included in this course. Includes respiratory disorders, diabetic emergencies, nervous systems disorders, acute abdominal pain and renal failure and anaphylaxis. This course is offered on the Searcy campus during the spring semester.

EMS 2203  Medical Emergencies II  3 Credit Hours
Recognition, management and pathophysiology of patients with medical emergencies. Includes toxicology, drug abuse, alcoholism, infectious diseases, environmental emergencies, geriatrics, pediatrics, behavioral emergencies and crisis intervention. This course is offered on the Searcy campus during the spring semester.

EMS 2204  Cardiac Emergencies  4 Credit Hours
Etiology, pathophysiology, clinical features, cardiac disease process and assessment of patient with cardiac disorders. ACLS skills and techniques are taught. Emphasis will be placed on the interpretation of cardiac dysrhythmia, clinical signs and symptoms of cardiac conditions, indications and administration of cardiac therapy along with defibrillation and synchronized cardioversion skills. This course is offered on the Searcy campus during the spring semester.
EMS 2205 EMT II
5 Credit Hours
This course will introduce the student to the kinetics of trauma as it relates to the injured patient, also, the signs and symptoms of injury to the body with the standard of treatment for those injuries. The art of extrication and patient triage are a part of this course as it relates to the Pre-hospital setting. This course is offered on the Searcy campus during the fall and spring semesters.

EMS 2303 Clinical Rotation II
3 Credit Hours
A continuation of EMS 1303 - Clinical Rotation I. This course is offered on the Searcy campus during the spring semester.

EMS 2304 EMT III
4 Credit Hours
This course is designed to further the EMT student's skills in assisting a paramedic on board and ambulance in the care of the cardiac patient. Also, art of documentation of the patient care forms required by the state of Arkansas from the Pre-hospital provider. Learn the proper communication skills for dealing with hospital staff and other Pre-hospital caregivers. This course is offered on the Searcy campus during the fall and spring semesters.

EMS 2402 OB/GYN/Neonatal
2 Credit Hours
This course includes etiology and treatment of obstetrical emergencies, the normal and abnormal events associated with pregnancy and childbirth, initial care and resuscitation of the neonate and gynecological emergencies. Emphasis will be on recognizing and managing these events and assisting in abnormal births. This course is offered on the Searcy campus during the Summer semester.

EMS 2404 Field Internship II
4 Credit Hours
A continuation of EMS 1301 - Field Internship I. This course is offered on the Searcy campus during the Summer semester.

Engineering Technology

EGR 2203 Cooperative Work Experience
3 Credit Hours
An employment internship in an industry appropriate to the curriculum. The experience should be developmental and relate to course work included in the program. An instructor monitors the student's progress with the supervising employer. The company turns in an evaluation form at the end of the employment period and the student submits a journal and report for grading. (On demand)

English

ENG 0003 Developmental English
3 Credit Hours
This course is for conditional prep cohort students only. A course designed to improve writing skills through exercises in basic grammar, in mechanics, in sentence structure, and in paragraph structure. Students with ACT scores below 19 in English must take this course. (Credit earned not applicable toward a degree.)
ENG 0013  Precollege Literacy  3 Credit Hours
A course designed to improve reading comprehension skills and habits through basic reading strategies. The design also includes improving writing skills through basic grammar, in mechanics, in sentence structure, and in paragraph structure. Students with ACT reading and/or English scores below 15 must take this course. Lecture 3 hours, laboratory 1 hour per week. (Credit earned not applicable toward a degree.) This course is offered on the Beebe campus during the fall, spring, and Summer semesters.

ENG 0023  College Literacy  3 Credit Hours
College Literacy is a three hour literacy course designed to be taken concurrently with Freshman English I (ENG 1003) and is for students with ACT English & Reading scores between 15-18 (or ACT equivalent). This course is offered on the Beebe campus during the Fall, Spring, and Summer semesters.

ENG 1003  Freshman English I  3 Credit Hours
Instruction in expository essay form, structure, and style. Prerequisite: ACT scores of 19 or better on reading and English or successful completion of Developmental English and Reading Improvement. Students with ACT scores of 15 – 18 in English and/or reading must take Freshman English I concurrently with College Literacy (ENG 0023) if the above prerequisites are not otherwise met. ACTS Course Number: ENGL 1013. This course is offered on all ASU Beebe campuses and online during the fall, spring, and Summer semesters.

ENG 1013  Freshman English II  3 Credit Hours
A continuation of ENG 1003 with the addition of research papers and literary genres. Prerequisite: ENG 1003. ACTS Course Number: ENGL 1023. This course is offered on the Beebe campus and online during the fall, spring, and Summer semesters.

ENG 2033  Technical Writing & Communication  3 Credit Hours
A course designed to prepare students to demonstrate a high level of effectiveness in handling the demands of workplace writing and communication. Prerequisite: ENG 1003. ACTS Course Number: ENGL 2023. This course is offered on the Beebe campus and online during the fall and spring semesters.

ENG 2003  World Literature I  3 Credit Hours
A study of literature from antiquity through the Renaissance, reflecting the major philosophical, religious, and literary trends of these time periods. Prerequisite: ENG 1013. ACTS Course Number: ENGL 2113. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

ENG 2013  World Literature II  3 Credit Hours
A continuation of ENG 2003, from the Renaissance to the present. Prerequisite: ENG 1013. ACTS Course Number: ENGL 2123. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

ENG 2023  Creative Writing  3 Credit Hours
Instruction and practice in writing in creative literary forms including creative nonfiction, fiction, and poetry. Students develop skills in the use of literary devices and techniques as well as methods
for inspiring creative thinking and expression. Prerequisite: ENG 1013. ACTS Course Number: ENGL 2013. This course is offered on the Beebe campus during the fall semester.

**ENG 2303 American Literature I**  
3 Credit Hours  
A study of American literature from its beginnings in colonial America through the end of the Civil War, reflecting the major authors, issues, and literary trends of these time periods. Prerequisite: ENG 1013. ACTS Course Number: ENGL 2653. This course is offered online during the fall semester.

**ENG 2313 American Literature II**  
3 Credit Hours  
A continuation of ENG 2303, from the end of the Civil War to the present. Prerequisite: ENG 1013. ACTS Course Number: ENGL 2663. This course is offered on the Beebe campus during the spring semester.

**ENG 2613 Folklore**  
3 Credit Hours  
Survey of form in American folk culture. Includes collection, classification, and analysis of folklore within the context of form. Prerequisite: ENG 1013.

**ENG 2623 Mythology**  
3 Credit Hours  
A survey of world mythologies, including archetype, symbolism, creation, flood, apocalyptic, and afterlife characteristics that cultivate literary interpretive skills. Students will achieve a deeper understanding of mythology as a universal foundation for culture and literature. Prerequisite: ENG 1013. This course is offered on the Beebe campus during the spring semester.

### Entrepreneurship

**ENTR 1003 Introduction to Entrepreneurship**  
3 Credit Hours  
An introduction to the role of entrepreneurial businesses in the U.S., the impact of the entrepreneurial businesses on the U.S. and global economy, how ideas become businesses, how entrepreneurs operate within a company, and the general precepts of entrepreneurial businesses.

**ENTR 2003 Professional Selling and Advertising**  
3 Credit Hours  
A course specifically designed to teach the tools of professional selling and advertising methods to students. Students will learn successful sales techniques for retail and non-retail customers. Students will also learn to develop an advertising program for products and services and the appropriate medium to use.

**ENTR 2033 Feasibility and Funding**  
3 Credit Hours  
This course will develop the student's knowledge of exploiting, determining, evaluating, funding, and implementing strategies for potential entrepreneurial opportunities in the market place and analyzing the feasibility of those opportunities.

### Environmental Science

**ESCI 1004 Introduction to Environmental Science**  
4 Credit Hours  
This is an interdisciplinary study of how things in nature are interconnected. This course is an integrated and science-based study of environmental issues, connections, and solutions. The
following concepts are interwoven throughout this course: sustainability, natural capital, natural capital degradation, and solutions to environmental problems. Lecture 3 hours, laboratory 2 hours per week. This course is offered online during the fall and spring semesters.

ESCI 2233 Environmental Science Internship 3 Credit Hours
An employment experience relating to the student's major within the AS in Environmental Science. An instructor will monitor the student's progress with the supervising employer. The student will submit a journal describing the experience and will be evaluated by the employer at the end of the internship.

Finance

FIN 1013 Personal Finance 3 Credit Hours
Practical applications of personal financial planning, budgeting, and control. Emphasis in this course is placed on the use of credit, insurance, savings, retirement planning, and housing finance. This course is offered on the Beebe campus during the spring semester.

French

FREN 1013 French I 3 Credit Hours
French I is designed to teach French language and culture as complementary facets of a single reality. Students will learn authentic, not simplified French and use it in the context of actual communication. French I is designed as a foundation course for students who intend to focus on careers based on either a primary or secondary use of the language. There is no prerequisite for French I. ACTS Course Number: FREN 1013. This course is offered on the Beebe campus during the fall semester.

FREN 1023 French II 3 Credit Hours
French II is a continuation of FREN 1013. Prerequisite: FREN 1013 or at least one year of high school French. ACTS Course Number: FREN 1023. This course is offered on the Beebe campus during the spring semester.

FREN 2013 French III 3 Credit Hours
French III is a continuation of FREN 1023. Prerequisite: FREN 1023 or two years of high school French. ACTS Course Number: FREN 2013. This course is offered on the Beebe campus during the fall semester.

FREN 2023 French IV 3 Credit Hours
French IV is a continuation of FREN 2013 with an introduction to reading French literature. Prerequisite: FREN 2013 or consent of instructor. ACTS Course Number: FREN 2023. This course is offered on the Beebe campus during the spring semester.

Geography

GEOG 1233 Introduction to Geographic Information Systems 3 Credit Hours
This is a course in Geographic Information Systems/Global Positioning Systems using the most current version of Arc View software and state of the art GPS receivers. It provides hands-on
training in the operation of the GPS receiver to include data collection and the downloading of data into the ArcView database. It also provides an introduction to databases in general and detailed work with the ArcView database as it relates to data manipulation in the civil drafting field and in other related areas of Geographic Information. Lecture two hours. Laboratory two hours. This course is offered on the Beebe campus during the fall and spring semesters.

**GEOG 2603  World Regional Geography  3 Credit Hours**
A general survey of geographic regions of the world emphasizing culture, demography, and economic and social patterns. ACTS Course Number: GEOG 2103. This course is offered on the Beebe campus during the spring semester and online during the spring and Summer semesters.

**GEOG 2613  Introduction to Geography  3 Credit Hours**
Emphasizes the physical and cultural patterns of the world. ACTS Course Number: GEOG 1103. This course is offered on the Beebe campus during the fall semester and online during the fall, spring, and Summer semesters.

**Health**

**HLTH 2513  Principles of Personal Health  3 Credit Hours**
A study of principles, problems, and practices involved in the improvement of individual and community health. The course is designed to stimulate a greater appreciation and understanding of health for more intelligent self-direction of health behavior and safety awareness. ACTS Course Number: HEAL 1003. This course is offered on the Beebe campus during the fall and spring semesters.

**HLTH 2523  First Aid and Safety (Responding to Emergencies)  3 Credit Hours**
Fundamentals, techniques, and practice of first aid as prescribed by the responding to emergencies course of the American Red Cross. Emphasis is given to programs of accident prevention in school, home, recreation and traffic. Certification may be earned in standard first aid and community CPR (adult, infant, and child) through the American Red Cross. This course is offered on the Beebe campus during the fall and spring semesters.

**Health Information Assistant**

**HIA 1103  Medical Terminology I  3 Credit Hours**
This course is a study of basic medical terminology including diseases, abbreviations, spellings, and diagnostic procedures. This course is offered on the Searcy campus during the fall semester.

**HIA 1203  Body Structure and Function  3 Credit Hours**
This course is a study of the basic concepts of the anatomy and physiology of the human body. The organs and tissues in each body system are studied in detail as well as the interrelationship between the systems. This course is offered on the Searcy campus during the fall semester.

**HIA 1303  Medical Office Procedures  3 Credit Hours**
This course is a study of the management of health records and medical office regulations. Prerequisites: HIA 1103 Medical Terminology I and HIA 1203 Body Structure and Function. This course is offered on the Searcy campus during the fall semester.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>HIA 1603</td>
<td>CPT Coding</td>
<td>3</td>
<td>This course provides instruction of basic skills and guidelines for assigning CPT codes. Prerequisites: HIA 1103 Medical Terminology I, and HIA 1203 Body Structure and Function. This course is offered on the Searcy campus during the fall semester.</td>
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<tr>
<td>HIA 2103</td>
<td>Advanced Medical Terminology</td>
<td>3</td>
<td>This course is a detailed study of medical terminology that integrates the entire spectrum of information needed by health information managers. This will include anatomical terms, word parts, medical terms, diagnostic terms, surgical terms, and diagnostic procedural terms of each body system. Prerequisite: HIA 1103 Medical Terminology I. This course is offered on the Searcy campus during the spring semester.</td>
</tr>
<tr>
<td>HIA 2203</td>
<td>Medical Office Applications</td>
<td>3</td>
<td>This course teaches medical office software. The software is a database that includes applications of appointment scheduling, posting procedures, insurance billing, and accounts receivable. Prerequisite: HIA 1103 Medical Terminology I. This course is offered on the Searcy campus during the spring semester.</td>
</tr>
<tr>
<td>HIA 2303</td>
<td>ICD 10 Coding</td>
<td>3</td>
<td>This course is the study of ICD 10. It includes the assignment of code numbers to diagnoses and procedures. Prerequisites: HIA 1103, Medical Terminology I, HIA 1203, Body Structure and Function. This course is offered on the Searcy campus during the spring semester.</td>
</tr>
<tr>
<td>HIA 2313</td>
<td>Disease Processes of the Human Body</td>
<td>3</td>
<td>This course will give the student a broad overview of common human diseases and the medications used for treatment. The course emphasizes the etiologic factors involved in disease processes and usual approaches to diagnosis and treatment including symptoms, tests, medications, and current therapies. This course is offered on the Searcy campus during the spring semester.</td>
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<tr>
<td>HIA 2503</td>
<td>Internship/OJT</td>
<td>3</td>
<td>A student's Internship/OJT assignment will be in an industry/business appropriate to the curriculum. The experience should relate to course work included in the program. An instructor and the coordinator of internship will monitor the student's progress with the supervising employer. The company will periodically turn in evaluation forms. Prerequisite: Successful completion of all required courses and a cumulative 2.0 grade point average. This course is offered on the Searcy campus during the spring semester.</td>
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Healthcare Quality

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HQ 2001</td>
<td>Introduction to Healthcare Quality</td>
<td>1</td>
<td>This seminar is an introduction to the study of the discipline of quality improvement/quality assurance in the current healthcare setting.</td>
</tr>
<tr>
<td>HQ 2011</td>
<td>Current Issues in Healthcare Quality</td>
<td>1</td>
<td>This seminar introduces the student to the economic and political issues driving the current national interest in healthcare quality and safety. It will provide a high level view of the field of</td>
</tr>
</tbody>
</table>
quality improvement/quality assurance in the current healthcare setting. This seminar is one of a series of seminars intended to benefit those engaged in or interested in pursuing a career in Healthcare Quality.

History

HIST 1013 World Civilization to 1660
3 Credit Hours
A survey of world civilizations from pre-history to 1660. ACTS Course Number: HIST 1113. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

HIST 1023 World Civilization since 1660
3 Credit Hours
A survey of world civilizations from 1660 to present. ACTS Course Number: HIST 1123. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

HIST 2083 History of Arkansas
3 Credit Hours
A survey of Arkansas history from the pre-Columbian period to the present. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

HIST 2093 Russian History
3 Credit Hours
A survey course on the origins and development of the Russian state and society from ancient times to the present.

HIST 2263 A Survey of Asian History
3 Credit Hours
A survey of Asian societies from ancient times to the present.

HIST 2273 A Survey of African History
3 Credit Hours
This survey level course will examine the political, economic, religious, and cultural developments of African societies from ancient times to the present. There is no prerequisite for this course; however, students will be expected to have some knowledge of global geography.

HIST 2283 American Military History
3 Credit Hours
This course is an in-depth study of American Military History from the colonial times up to the present.

HIST 2763 The United States to 1876
3 Credit Hours
A survey of the development of social, political and economic institutions in the United States from the age of exploration and discovery to reconstruction. ACTS Course Number: HIST 2113. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

HIST 2773 The United States Since 1876
3 Credit Hours
A survey of changing social, political and economic policies in the United States from reconstruction to the present. ACTS Course Number: HIST 2123. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.
HIST 2893 American Minorities 3 Credit Hours
A survey course involving the study of several minority groups in American society from colonial times to the present. The major emphasis will be on African Americans and Native Americans. The course will also examine the contributions of Oriental and Hispanic minorities to the development of American culture.

Hospitality Administration

HA 1003 Introduction to Hospitality Administration 3 Credit Hours
The history and development of the hospitality industry that comprises food, lodging, and tourism management, an introduction to management principles and concepts used in the service industry, and career opportunities in the field. The content is geared towards students who have little to no experience in the hospitality industry but who have an interest in exploring and/or pursuing a career in some aspect of hospitality, food service, travel and tourism or related field.

HA 1013 Sanitation and Safety 3 Credit Hours
A survey of food service industry to include its history, various food service systems, organization and operations, and franchising. Emphasizes the aspects of sanitation. Passing Servsafe exam will result in certification from the Educational Foundation of the National Restaurant Association.

HA 1023 Principles of Food Preparation 3 Credit Hours
Focus on the principles, techniques and theories of food production including the introduction, use and selection of equipment for recipes, while applying sanitation for quality, controls and guest accommodations that focus on principles of production. Two hours lecture, two hours lab. Prerequisite: HA 1013.

HA 2003 Dining Service Management 3 Credit Hours
Analysis and development of dining service management skills including leadership behavior, motivation, communication, training, staffing, etiquette, and professional service. Two hours lecture, two hours lab.

HA 2013 Lodging Operations 3 Credit Hours
This course explores the basics about how the lodging industry and the hotels in the industry operate. It includes the history and structure of the lodging industry as well as individual operating departments such as front office, sales and marketing, housekeeping, and maintenance that are so vital to the success of a hotel. Also, it discusses alternative "careers" in the lodging industry.

HA 2022 Hospitality Administration Internship 2 Credit Hours
An employment experience relating to the student's major within the Technical Certificate or AAS in Hospitality Administration. An instructor will monitor the student's progress with the supervising employer. The student will submit a journal describing the experience and will be evaluated by the employer at the end of the internship. Prerequisite: a minimum of 6 hours of hospitality or culinary courses.

HA 2033 Purchasing and Cost Controls 3 Credit Hours
This course investigates the principles of cost controls and their application to food and beverage and lodging operations. Emphasis is placed on each step in the flow of costs: purchasing, receiving,
storage, issuing, preparation, portioning, service and accounting for sales. Labor costs as they relate to the operations are also discussed. Active problem solving and practical application ensure that students are able to relate the principles learned to the food service and lodging industries. Basic computer applications of cost control systems as well as applied problems in the hospitality industry will also be included. Three hours lecture.

Horticulture

HORT 2204 General Horticulture 4 Credit Hours
An introduction to the principles of plant growth, fruiting habits, propagation, and culture of horticultural plants. Lecture two hours, laboratory two hours per week. This course is offered on the Beebe campus during the spring semester.

Humanities

HUM 2003 Introduction to Humanities I: Greece and Rome 3 Credit Hours
This course is a study of the history, literature, arts, and philosophy of ancient cultures, reflecting the major historical, artistic, and philosophical trends of different time periods. This course is offered on the Beebe campus during the fall semester and online during the spring semester.

HUM 2013 Introduction to Humanities II: Europe 3 Credit Hours
This course is a study of the history, literature, arts, and philosophy of the peoples living in Europe and England from the medieval period to the present. This course is offered on the Beebe campus during the spring semester and online during the fall semester.

Industrial Electronics

IET 1002 Introduction to General Electronics I 2 Credit Hours
This course is an introduction to the basics of electronics/electricity. Fundamentals of calculating loads and circuit sizes will be covered. Identification of components and their uses will be covered. Emphasis will be placed on troubleshooting and diagnostics. The course will consist of 40% theory and 60% related lab. This is the first part of a two-part curriculum. This course is offered on the Searcy campus during the fall and spring semesters.

IET 2002 Introduction to General Electronics II 2 Credit Hours
This course will continue an introduction to the basics of electronics/electricity. Fundamentals of calculating loads and circuit sizes will be covered. Identification of components and their uses will be covered. Emphasis will be on troubleshooting and diagnostics. The course will consist of 40% theory and 60% related lab. This is the second part of a two-part curriculum. This course is offered on the Searcy campus during the fall and spring semesters.

Law

LAW 2023 The Legal Environment of Business 3 Credit Hours
Introduction to the fundamental concepts of the American legal system, especially as it relates to business. Areas of concentration include contracts, torts, sales, agency, negotiable instruments.
and government regulation. ACTS Course Number: BLAW 2003. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

Management

MGMT 2003 Introduction to Management 3 Credit Hours
Introduction to management techniques and organizational structure. Fundamentals of various approaches to managing: planning; decision making; strategic management; organizing and coordinating work; authority, delegation, and decentralization; organizational design; interpersonal skills; leadership; organizational effectiveness; control methods; and organizational change and development. This course is offered on the Beebe campus and online during the fall semester.

MGMT 2013 Business Organization and Management 3 Credit Hours
This course focuses on discussions of the managerial process, examining the managerial functions of planning, organizing, staffing, directing, controlling and their relation to the daily job of the supervisor.

MGMT 2043 Supervisory Management 3 Credit Hours
A course covering the responsibilities of a first line supervisor; development of techniques and skills in employee communications, decision making, motivation, leadership, and training. This course is offered on the Beebe campus during the spring semester and online during the fall semester.

MGMT 2153 Small Business Management 3 Credit Hours
A course covering the organization and operation of the small business, with emphasis on personal qualifications, small business techniques, capital requirements, forms of organization, location, and sources for assistance. Prerequisites: ACCT 2003 recommended.

Mathematics

MATH 0012 Review of College Algebra 2 Credit Hours
Review for College Algebra is a two hour mathematics course designed to be taken concurrently with College Algebra (MATH 1023) and is for students with ACT Math scores of 19 or 20 (or Accuplacer equivalent). This course is offered on the Beebe campus during the fall, spring, and Summer semesters.

MATH 0013 Foundations of Algebra I 3 Credit Hours
This course is computer-based and uses online learning software to prepare students for College Algebra. It is required for any student scoring less than 19 on the ACT (or an equivalent exam). Students must show mastery of each module, as listed below:
Module 1: Whole number and Decimal Number Arithmetic
Module 2: Arithmetic of Integers and Fractions, Exponents, and Order of Operations
Module 3: Solve Linear Equations, Formulas, and Applications
Module 4: Graph Points and Lines on Cartesian Plane, Find Slope, and Write Equations of Lines
Module 5: Exponent Rules and Operations on Polynomials
Module 6: Factor Polynomials, Solve Polynomial Equations by Factoring
Module 7: Rational Expressions and Equations
Module 8: Functions and Graphs
Module 9: Systems of Linear Equations
Module 10: Linear and Absolute Value Inequalities
Module 11: Exponents and Radicals
Module 12: Quadratic Functions and Equations

Students who show mastery of fewer than 6 modules will receive a grade of NC (no credit) and must repeat the course. Students who show mastery of 6 or more modules but do not finish all 12 modules, receive a CR (credit) grade and must enroll in Foundations of Algebra II to complete the sequence of modules. Students who show mastery of all 12 modules and pass the exit exam will receive a letter grade of A, B, or C based on their performance in the class. (Credit earned is not applicable toward a degree or certificate. Grade does not count toward GPA.)

All students entering a Foundations of Algebra course for the first time (or after 1 year of not being enrolled in a Foundations of Algebra course) must begin at Module 1; otherwise, students may resume where they left off in their previous Foundations of Algebra course. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

MATH 0023 Foundations of Algebra II 3 Credit Hours

This course is a continuation of Foundations of Algebra I. It is a computer-based course that uses online learning software to prepare students for College Algebra. Students must show mastery of the remaining modules not yet completed in Foundations of Algebra I in order to receive a letter grade of A, B, or C. Students who enroll in Foundations of Algebra II, but do not complete the sequence of modules will receive a grade of NC and must repeat the course. (Credit earned is not applicable toward a degree or certificate. Grade does not count toward GPA.)

All students entering a Foundations of Algebra course for the first time (or after 1 year of not being enrolled in a Foundations of Algebra course) must begin at Module 1; otherwise, students may resume where they left off in their previous Foundations of Algebra course. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

MATH 0113 Pre-Technical Mathematics 3 Credit Hours

This course is a computer-based course that uses online learning software to prepare students for Technical Mathematics A. It is required for any student scoring less than 16 on the ACT (or an equivalent exam). Students must show mastery of each module.

MATH 1013 Technical Mathematics A, B, C, D, E, M and V 3 Credit Hours

Computer-based course that uses online learning software to prepare students for the math skills that are of importance in their specific field of study.

- Technical Mathematics A, B, M 
- Technical Mathematics C, D, E
- Technical Mathematics V

Prerequisite for Tech Math sections A, B, and M: ACT score of 16 or above or Compass score of 22 or above.

Prerequisite for Tech Math sections C, D, and E: MATH 0013.
Students must show mastery for each module, designated by their specific program, from the list below.

Module 1: Whole Number and Decimal Number Arithmetic
Module 2: Arithmetic of Integers, Exponents, and Order of Operations
Module 3: Solve Linear Equations, Formulas, and Applications
Module 4: Graph Points and Lines on Cartesian Plane, Find Slope, and Write Equations of Lines
Module 5: Exponent Rules and Operations on Polynomials
Module 6: Factor Polynomials, Solve Polynomial Equations by Factoring
Module 7: Rational Expressions and Equations
Module 8: Functions and Graphs
Module 9: Systems of Linear Equations
Module 10: Linear and Absolute Value Inequalities
Module 11: Exponents and Radicals
Module 12: Quadratic Functions and Equations
Module 13: Ratio, Proportion, Measurement, and Reading Graphs

Section A: Modules 1-3 and 13
Section B: Modules 1-6 and 13
Section C: Modules 1-8 and 13
Section D: Modules 1-10 and 13
Section E: Modules 1-13
Section M: Modules 1-3, 13 and Module M, Business Applications
Section V: Modules 1-3, 13 and Module for Vet Tech students

All students entering into Technical Mathematics for the first time (or after 1 year of not being enrolled in a Foundations of Algebra or Technical Mathematics course) must begin at Module 1; otherwise, students may pick up where they left off in their previous Foundations of Algebra or Technical Mathematics course.

**MATH 1023  College Algebra**  3 Credit Hours

A detailed study of functions and their applications including linear, quadratic, polynomial, rational, radical, absolute value, exponential, and logarithmic functions. Topics also include systems of equations and matrices. Prerequisite: Acceptable ACT score or equivalent test score. ACTS Course Number: MATH 1103. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

**MATH 1033  Plane Trigonometry**  3 Credit Hours

A study of trigonometric functions, identities, basic logarithmic and exponential functions, conic sections, and complex numbers. Prerequisite: MATH 1023 with a grade of “C” or better. ACTS Course Number: MATH 1203. This course is offered on the Beebe campus during the fall and spring semesters.

**MATH 1043  Quantitative Literacy**  3 Credit Hours

This course is designed to meet the general education mathematics requirements for students who are non-STEM majors. The goal of this course is to provide students with mathematical understanding and reasoning skills that will help them apply quantitative information to their lives. Prerequisite: ACT score of 19 or better (or equivalent Accuplacer score). This course satisfies the
math requirement for the state minimum core for baccalaureate degrees. ACTS Course number: MATH 1003.

**MATH 1054  Pre-calculus Mathematics**  
4 Credit Hours  
Selected topics from algebra, trigonometry, and analytical geometry needed to succeed in calculus. Includes all topics from college algebra and trigonometry. (Credit will not be given for both MATH 1033 Plane Trigonometry and MATH 1054.) Prerequisite: MATH 1023 with a grade of C or better or high school Algebra II and 23 ACT math sub-score. ACTS Course Number: MATH 1305.

**MATH 2113  Mathematics for Teachers I**  
3 Credit Hours  
An introduction to theory-based mathematical concepts underlying the traditional computational techniques for elementary school mathematics with the NCTM (National Council of Teachers of Mathematics) Curriculum and Evaluation Standards for school mathematics as a foundation and a guideline. Topics of study will include sets, whole numbers, elementary number theory, integers, rational numbers, decimals and percentages. Problem solving techniques will be emphasized. This course may not be used to satisfy general education mathematics requirements. Prerequisite: MATH 1023 with a grade of “C” or better or higher level of mathematics. This course is offered on the Beebe campus during the fall and Summer semesters.

**MATH 2123  Mathematics for Teachers II**  
3 Credit Hours  
Using the NCTM Curriculum and Evaluation Standards for elementary school mathematics as a foundation and a guideline, topics of study will include mathematical reasoning, measurement, a brief introduction to geometry, plane transformations, descriptive statistics, and probability. Applications and problem solving techniques will be emphasized. This course may not be used to satisfy general education mathematics requirements. Prerequisite: MATH 2113 with a grade of “C” or better. This course is offered on the Beebe campus during the spring and Summer semesters.

**MATH 2143  Calculus with Business Applications**  
3 Credit Hours  
Topics in elementary differential and integral calculus, stressing applications in business and economics. Prerequisite: MATH 1023 with a grade of “C” or better. This course is offered on the Beebe campus during the fall and spring semesters.

**MATH 2205  Calculus I**  
5 Credit Hours  
First course, including analytic geometry, functions and limits, differentials and integrals, and transcendental functions. (Credit will not be given for both MATH 2194 Survey of Calculus and MATH 2205.) Prerequisites: MATH 1033 or MATH 1054 with a grade of “C” or better. ACTS Course Number: MATH 2405. This course is offered on the Beebe campus during the fall and spring semesters.

**MATH 2215  Calculus II**  
5 Credit Hours  
Second course, including techniques of integration, sequences and series, conic sections, polar coordinates, and vectors. Prerequisite: MATH 2205 with a grade of “C” or better. ACTS Course Number: MATH 2505. This course is offered on the Beebe campus during the spring semester.
### MATH 2233  Applied Statistics  
<table>
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<tr>
<th>3 Credit Hours</th>
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<tbody>
<tr>
<td>A study of elementary statistics for students in the biological, physical, or social sciences. Prerequisite: MATH 1023 with a grade of “C” or better. ACTS Course Number: MATH 2103. This course is offered on the Beebe campus during the fall and spring semesters.</td>
</tr>
</tbody>
</table>

### MATH 2253  Calculus III  
<table>
<thead>
<tr>
<th>3 Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Third course. Topics concerning multivariate functions include the following: limits, continuity, partial derivatives, differentials, the chain rule, extreme. Multiple Integration, vector fields, line integrals, green's theorem, surface integrals, the divergence theorem, and Stokes' theorem are also covered. Prerequisite: MATH 2215 with a grade of “C” or better. ACTS Course Number: MATH 2603.</td>
</tr>
</tbody>
</table>

### Medical Laboratory Technology

(Admittance into the second year of the program is limited to the number of affiliate hospitals and is based upon completion of first year courses and selective admission criteria.)

#### MLT 1203  Orientation to the Clinical Lab  
<table>
<thead>
<tr>
<th>3 Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>This course provides an overview of Medical Technology/Clinical Laboratory Science, including historical foundations, healthcare infrastructure, and laboratory safety. An emphasis on medical ethics, medical terminology, basic anatomy and physiology, employment forecasts, laboratory mathematics, as well as the basics of laboratory specimen collection techniques (Phlebotomy) and lab equipment will be introduced. Prerequisite: CHEM 1014 and ZOOL 1014. This course is offered on the Beebe campus during the spring and Summer I semesters.</td>
</tr>
</tbody>
</table>

#### MLT 2213  Clinical Microscopy  
<table>
<thead>
<tr>
<th>3 Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>The care and use of the microscope are presented. Clinical theory as well as chemical, macroscopic and microscopic analysis of urine and body fluids in normal and disease states are covered. Lecture two hours. Laboratory two hours. Prerequisite: MLT 1203 plus additional first year requirements. This course is offered on the Beebe campus during the Summer semester.</td>
</tr>
</tbody>
</table>

#### MLT 2223  Clinical Practicum I  
<table>
<thead>
<tr>
<th>3 Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>The students will become proficient in all phases of proper blood collection. Urinalysis and body fluid analysis for normal and abnormal constituents will be clinically applied. Students can expect to spend 40 hours per week of clinical time at the affiliate hospital. Prerequisite: MLT 2213. This course is offered on the Beebe campus during the Summer semester.</td>
</tr>
</tbody>
</table>

#### MLT 2234  Clinical Hematology  
<table>
<thead>
<tr>
<th>4 Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cellular elements of blood and blood formation are presented. Emphasis will be on blood cell morphology, cell counting, differentiation, hematocrit and hemoglobin determinations and red cell indices in both normal and disease states. This course also includes the study of coagulation. Lecture two hours. Laboratory four hours. Prerequisite: MLT 2223. This course is offered on the Beebe campus during the fall semester.</td>
</tr>
</tbody>
</table>

#### MLT 2244  Clinical Practicum II  
<table>
<thead>
<tr>
<th>4 Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical application of material covered in MLT 2234 with hands-on emphasis on blood counts, white cell differentials, coagulation testing, hematocrit and hemoglobin determinations and red cell</td>
</tr>
</tbody>
</table>
indices. Students can expect to spend 40 hours per week of clinical time at the affiliate hospital. Prerequisite: MLT 2234. This course is offered on the Beebe campus during the fall semester.

**MLT 2254 Clinical Chemistry**  
4 Credit Hours  
The study of chemical substances found in body fluids and their correlation in health and disease is presented. Both theory of chemical procedures and clinical applications as well as instrumentation are included. Routine laboratory mathematics is included in this course. Lecture two hours. Laboratory four hours. Prerequisite: MLT 2244. This course is offered on the Beebe campus during the fall semester.

**MLT 2264 Clinical Practicum III**  
4 Credit Hours  
Clinical application of the study of chemical substances with emphasis on instrumentation, methodology and interpretation of test results. Students can expect to spend 40 hours per week of clinical time at the affiliate hospital. Prerequisite: MLT 2254. This course is offered on the Beebe campus during the fall semester.

**MLT 2274 Clinical Microbiology**  
4 Credit Hours  
The study of morphology and physiology of bacteria, parasites, mycobacteria and fungi is covered. Relation to disease, mode of transmission, medical importance and identification are emphasized. Lecture two hours. Laboratory four hours. Prerequisite: MLT 2264. This course is offered on the Beebe campus during the spring semester.

**MLT 2284 Clinical Practicum IV**  
4 Credit Hours  
Clinical application of material covered in MLT 2294 with special emphasis on routine blood typing, cross-matching, serological procedures and antibody detection. Students can expect to spend 40 hours per week of clinical time at the affiliate hospital. Prerequisite: MLT 2294. This course is offered on the Beebe campus during the spring semester.

**MLT 2294 Clinical Serology/Immunohematology**  
4 Credit Hours  
The theory of antibody and antigen production, function and detection is presented. Included will be the study of the lymphoid system, immunity, autoimmune diseases and complement. Also included are the study and applied techniques of blood typing, cross-matching, antibody and antigen detection and identification. Lecture two hours. Laboratory four hours. Prerequisite: MLT 2264. This course is offered on the Beebe campus during the spring semester.

**MLT 2314 Clinical Practicum V**  
4 Credit Hours  
Clinical application of material covered in MLT 2274 with emphasis on identification of microorganisms and correlation to disease states. Students can expect to spend 40 hours per week of clinical time at the affiliate hospital. Prerequisite: MLT 2274. This course is offered on the Beebe campus during the spring semester.
Military Science and Leadership

**MSL 1011 Foundations of Officership**  1 Credit Hour
Examines the unique duties and responsibilities of officers. Discusses organization and role of the Army. Reviews basic life skills pertaining to fitness and communication. Analyzes Army values and expected ethical behavior. This course is offered on the Beebe campus during the fall semester.

**MSL 1021 Basic Leadership**  1 Credit Hour
Presents fundamental leadership concepts and doctrine. Practices basic skills that underlie effective problem solving. Applies active listening and feedback skills. Examines factors that influence leader and group effectiveness. Examines the officer experience. This course is offered on the Beebe campus during the spring semester.

**MSL 2032 Individual Leadership Studies**  2 Credit Hours
Develops knowledge of self, self-confidence and individual leadership skills. Develops problem solving and critical thinking skills. Applies communication, feedback and conflict resolution skills. Prerequisites: MSL 1011 and MSL 1021. This course is offered on the Beebe campus during the fall semester.

**MSL 2042 Leadership and Teamwork**  2 Credit Hours
Focuses on self-development guided by knowledge of self and group processes. Challenges current beliefs, knowledge, and skills. Provides equivalent preparation for the ROTC Advanced Course and the Leaders Training Course. Prerequisites: MSL 1011 and MSL 1021. This course is offered on the Beebe campus during the spring semester.

Multi-skills Technology

**MUL 1003 Workplace Electricity A**  3 Credit Hours
This course will acquaint students with general principals and skills related to electricity in the workplace. Students will learn the basic voltages most used in electricity and their most common uses. Skills in basic electrical wiring will be practiced. Related safety will be taught.

**MUL 2003 Workplace Electricity B**  3 Credit Hours
This course will acquaint students with general principals and skills related to electronics in the workplace. Devices used in controlling electrical circuits will be studied. Wiring of electronic components will be practiced. Related safety will be taught.

**MUL 1013 Concepts of Manufacturing and Quality Control Principles A**  3 Credit Hours
This course will introduce students to processes encountered in manufacturing with emphasis on Quality Control. Measurements with various devices will be taught. G-No Go gauges will be studied. Students will learn various weight measurements and as these relate to volume. Related safety will be taught.

**MUL 2013 Concepts of Manufacturing and Quality Control Principles B**  3 Credit Hours
This course will cover written and printed tolerances for Quality Control and manufacturing. Liner, volume, weight, and fluid measurements will be used. Related safety will be taught.
MUL 1023  Concepts of Fluid and Mechanical Power A  3 Credit Hours
Principles of fluid and pneumatic power will be covered in this course. Basic technology skills needed for the workplace will be practiced. Various controls for fluid and pneumatic power will be used in developing the related workplace skills. Related safety will be taught.

MUL 2023  Concepts of Fluid and Mechanical Power B  3 Credit Hours
This course will cover the principles of mechanical power found in the workplace. Elliptical presses will be used in the training. Gears, chains, bearings, and belts used in mechanical power will be studied. Related safety will be taught.

MUL 1033  Metalworking A  3 Credit Hours
The operation of Mills, drill presses, taps and dies, and metal working hand tools will be learned in this course. The student will learn the basic skills needed in the workplace for metal working. Related safety will be taught.

MUL 2033  Metalworking B  3 Credit Hours
The operation of lathes, band saws, and an introduction to CNC will be covered in this course. Students will also learn the fundamentals of cutting and welding metal. Related safety will be taught.

Music

MUS 1001, 1011 Recital Attendance  1 Credit Hour
This course is designed to provide the music student with exposure to a wide variety of music through concert and recital attendance. This course is offered on the Beebe campus during the fall and spring semesters.

MUS 1101, 1111, 2101, 2111 Applied Piano I, II, III, IV  1 Credit Hour
MUS 1102, 1112, 2102, 2112 Applied Piano I, II, III, IV  2 Credit Hours
Applied lessons are met weekly. Students are evaluated at each lesson as to the individual technical and musical progress. The students study a variety of traditional repertoire of classical piano music, covering style periods from the Baroque era through the present day. Repertoire difficulty increases as technical and musical skills increase. This course is offered on the Beebe campus during the fall and spring semesters.

MUS 1201  Class Piano I  1 Credit Hour
This course presents basic functional keyboard skills. It is designed to prepare the music major to pass piano proficiency requirements. This course is offered on the Beebe campus during the fall and spring semesters.

MUS 1211  Class Piano II  1 Credit Hour
A continuation of MUS 1201 Class Piano I. This course is offered on the Beebe campus during the fall and spring semesters.
MUS 1301, 1311, 2301, 2311 Applied Voice I, II, III, IV 1 Credit Hour
MUS 1302, 1312, 2302, 2312 Applied Voice I, II, III, IV 2 Credit Hours

Applied lessons are met weekly. Students are evaluated at each lesson as to the individual vocal and musical progress. The students study a variety of traditional repertoire of classical vocal music, covering style periods from the Baroque era through the present day. Repertoire difficulty increases as vocal and musical skills increase. This course is offered on the Beebe campus during the fall and spring semesters.

MUS 1401 Sightsinging 1 Credit Hour

This is an introductory course that will develop the student's ability to read music vocally. Students will learn the solfège method of music reading. This course is open to both music majors (developmental elective) and non-music majors (elective). No prior music experience is necessary. Co-requisite: MUS 1403 or consent of instructor. This course is offered on the Beebe campus during the fall semester.

MUS 1403 Music Fundamentals 3 Credit Hours

The study of music elements beginning with the properties of sound and concluding with triad construction and recognition. Instruction will include beginning sight singing and ear training. No previous musical training is necessary. Open to all university students. MUS 1403 may be used as a preparatory course for Music Theory I. Co-requisite: MUS 1401 or consent of instructor. This course is offered on the Beebe campus during the spring semester.

MUS 1411 Ear Training I 1 Credit Hour

Sight reading of melodies, ear training, melodic dictation, and keyboard harmony. Music grade of "C" required for advancement in ear training sequence. Must be taken concurrently with Music Theory I or by instructor's consent. This course is offered on the Beebe campus during the spring semester.

MUS 1413 Music Theory I 3 Credit Hours

Major and minor scales, key signatures, intervals, note values, and meter signatures. Part writing using primary and secondary triads. Failure to pass music entrance examination will require students to take MUS 1403. Music grade of "C" required for advancement in theory sequence. Must be taken concurrently with Ear Training I or by instructor's consent. This course is offered on the Beebe campus during the spring semester.

MUS 1421 Ear Training II 1 Credit Hour

This course is a continuation of Ear Training I. The aural study of intervals, melodies and triads, scales, rhythms and sequences. While further developing those skills acquired in Ear Training I, the course will proceed with an aural study of functional harmony. The purpose is to increase listening skills essential for a musician. Must be taken with Music Theory II or by instructor's consent. This course is offered on the Beebe campus during the fall semester.

MUS 1423 Music Theory II 3 Credit Hours

The study of theory, harmony, and practice of Western music from the 17th century to the present, including review of music fundamentals, triad construction and inversions, voice leading, and harmonic structure. Part writing and ear training will be in conjunction with MUS 1421. This course is a continuation of Theory I. Triads and seventh chords, non-harmonic tones, and modulations to
closely related keys are studied. Secondary functions will be introduced and studied as well as formal analysis of binary and ternary forms. The student will harmonize melodies and realize figured basses. Must be taken with Ear Training II or by instructor’s consent. This course is offered on the Beebe campus during the fall semester.

**MUS 1501 Class Voice I**
1 Credit Hour
Group instruction for beginning voice students emphasizing vocal techniques, methods, and physiology. This course is offered on the Beebe campus during the fall semester.

**MUS 1511 Class Voice II**
1 Credit Hour
A continuation of MUS 1502 Class Voice I. This course is offered on the Beebe campus during the spring semester.

**MUS 1601, 1611, 2601, 2611 Applied Guitar I, II, III, IV**
1 Credit Hour
**MUS 1602, 1612, 2602, 2612 Applied Guitar I, II, III, IV**
2 Credit Hours
Applied guitar students receive private instruction in fundamental and advanced techniques and styles of guitar playing. The lessons focus on acquiring efficient practice habits and developing technical facility. Instruction also includes discussions of style, interpretation and successful performance strategies. Scales, arpeggios, etudes and representative works suited to individual ability will be assigned. Prerequisite: consent of instructor. This course is offered on the Beebe campus during the fall and spring semesters.

**MUS 1771 Chamber Singers I**
1 Credit Hour
A select performing ensemble designed to sing a wide variety of advanced vocal music. The Chamber Singers perform on campus as well as before civic and community organizations. The Chamber Singers is a select group of mixed voices. Students are selected based on vocal quality, sight-reading ability, and willingness to perform regularly. Co-requisite: The Singers. This course is offered on the Beebe campus during the fall and spring semesters.

**MUS 1791 The Singers I**
1 Credit Hour
Non-music majors as well as music majors may enroll in this course for credit. A performing ensemble designed to study a wide variety of music, The Singers perform on campus as well as before civic organizations. This course is offered on the Beebe campus during the fall and spring semesters.

**MUS 1801, 1811, 2801, 2811 Applied Lessons-Instrumental I, II, III, IV**
1 Credit Hour
**MUS 1802, 1812, 2802, 2812 Applied Lessons-Instrumental I, II, III, IV**
2 Credit Hours
Pedagogical knowledge and a basic playing proficiency on the instrument. Topics to be covered include: posture and breathing, tone production (embouchure), holding and hand position, basic fingerings or slide positions, solutions to specific technical problems, articulation, vibrato, tuning procedure, instrument and accessory selection, care and adjustment of the instrument, and general care and maintenance. This course is offered on the Beebe campus during the fall and spring semesters.

**MUS 1871 Chamber Singers II**
1 Credit Hour
Continuation of MUS 1771. Co-requisite: The Singers. This course is offered on the Beebe campus during the fall and spring semesters.
MUS 1891  The Singers II  1 Credit Hour
Continuation of MUS 1791. This course is offered on the Beebe campus during the fall and spring semesters.

MUS 1901  Symphonic Band I  1 Credit Hour
An auditioned ensemble of wind and percussion instruments performing traditional wind band repertoire as well as new 20th-century compositions. Prerequisite: Audition only. This course is offered on the Beebe campus during the fall and spring semesters.

MUS 1911  Symphonic Band II  1 Credit Hour
A continuation of MUS 1901 Symphonic Band I. This course is offered on the Beebe campus during the fall and spring semesters.

MUS 1951, 1961, 2951, 2961 Jazz Ensemble I, II, III, IV  1 Credit Hour
An ensemble of wind, percussion, string, and keyboard instruments performing traditional jazz literature for combos and big bands. The purpose of this course is to explore and perform jazz literature, including compositions by African-American and Latin-American composers.

MUS 2001, 2011, 2021, 2031 Applied Music Composition I, II, III, IV  1 Credit Hour
MUS 2002, 2012, 2022, 2032 Applied Music Composition I, II, III, IV  2 Credit Hours
Students will receive private instruction in the techniques and styles of composing music for various types and combinations of instruments and voices. They will also be instructed in the use of music composition software. Assignments in the class will require students to compose music in a wide variety of genres, and employed appropriate arranging and orchestration to the music. Prerequisite: Instructor consent. This course is offered on the Beebe campus during the fall and spring semesters.

MUS 2201  Class Piano III  1 Credit Hour
A continuation of MUS 1211 Class Piano II. This course is offered on the Beebe campus during the fall semester.

MUS 2211  Class Piano IV  1 Credit Hour
A continuation of MUS 2201 Class Piano III. This course is offered on the Beebe campus during the spring semester.

MUS 2411  Ear Training III  1 Credit Hour
This course is a continuation of Ear Training II. The aural study of intervals, melodies and triads, scales, rhythms and sequences. While further developing those skills acquired in Ear Training II, the course will proceed with an aural study of functional harmony. The purpose is to increase listening skills essential for a musician. Prerequisite: Grade of "C" or better in MUS 1421. Co-requisite: MUS 2413. This course is offered on the Beebe campus during the spring semester.

MUS 2413  Music Theory III  3 Credit Hours
The study of theory, harmony, and practice of Western music from the 17th century to the present, including review of music fundamentals, triad construction and inversions, voice leading, and harmonic structure. Part writing and ear training will be in conjunction with MUS 2411. This course is a continuation of Music Theory II. Triads and seventh chords, non-harmonic tones, and
modulations to closely related keys are studied. Secondary functions will be introduced and studied as well as formal analysis of binary and ternary forms. The student will harmonize melodies and realize figured basses. Prerequisite: Grade of “C” or better in MUS 1423. Co-requisite: MUS 2411. This course is offered on the Beebe campus during the spring semester.

**MUS 2503 Fine Arts-Musical**
3 Credit Hours

An introduction to music for the listener who has had no formal training. The purpose is to help the student develop criteria for appreciation of music. Three lecture hours per week. ACTS Course Number: MUSC 1003. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

**MUS 2511 Diction for Singers**
1 Credit Hour

Practice in proper pronunciation of Italian, German, and French language using the International Phonetic Alphabet, applicable to singing art song, oratorio, or operatic literature for music/voice majors.

**MUS 2553 Music History I**
3 Credit Hours

Course for music majors that covers music history and literature from the Antiquity to the Baroque era. Through lectures and aural examples, basic knowledge of styles and periods of music is stressed along with listening techniques and the development of a framework upon which the student may later base a more detailed study of the subject matter. This course is offered on the Beebe campus during the fall semester.

**MUS 2563 Rock Music History**
3 Credit Hours

This course explores the musicological, cultural, and historical significance of Rock Music. By analyzing the selected compositions, students will identify the techniques used, including form, lyric writing, and recording techniques. The material will be presented chronologically covering the period from 1950 to present.

**MUS 2771 Chamber Singers III**
1 Credit Hour

Continuation of MUS 1871. Co-requisite: The Singers. This course is offered on the Beebe campus during the fall and spring semesters.

**MUS 2791 The Singers III**
1 Credit Hour

Continuation of MUS 1891. This course is offered on the Beebe campus during the fall and spring semesters.

**MUS 2871 Chamber Singers IV**
1 Credit Hour

Continuation of MUS 2771. Co-requisite: The Singers. (May be repeated for credit.) This course is offered on the Beebe campus during the fall and spring semesters.

**MUS 2891 The Singers IV**
1 Credit Hour

Continuation of MUS 2791. (May be repeated for credit.) This course is offered on the Beebe campus during the fall and spring semesters.

**MUS 2901 Symphonic Band III**
1 Credit Hour

A continuation of MUS 1911 Symphonic Band II. This course is offered on the Beebe campus during the fall and spring semesters.
MUS 2911 Symphonic Band IV 1 Credit Hour
A continuation of MUS 2901 Symphonic Band III. This course is offered on the Beebe campus during the fall and spring semesters.

Pharmacy Technician Science

PHT 1002 Pharmacy Law—State and Federal Law 2 Credit Hours
This course is meant to expose the student to the state and federal law relating to the practice of pharmacy and the pharmacy technician. This course is a prerequisite for all subsequent term courses. Prerequisite: Acceptance into Pharmacy Technician Program. This course is offered on the Beebe campus during the fall semester.

PHT 1003 Pharmacy Medical and Drug Terminology 3 Credit Hours
This course provides the framework of learning the pharmacy language. The student will use audio pronunciations, abbreviations, and drug names to translate written materials within the pharmacy profession. This course is for the students enrolled in the Pharmacy Technician Program and is Internet-Assisted. This course is a prerequisite for all subsequent term courses. Prerequisite: Acceptance into Pharmacy Technician Program. This course is offered on the Beebe campus during the fall semester.

PHT 1004 Pharmacy Pharmacology I 4 Credit Hours
This course is the study of medications, drug classes and applicable body systems through the nervous system. This study will help the student to understand why certain drugs are used in particular disease states. This background will help the student make informed, intelligent decisions when assisting the pharmacist to dispense drugs thus enabling the technician to play an active role in avoiding errors. Prerequisite: Acceptance into Pharmacy Technician Program. This course is offered on the Beebe campus during the fall semester.

PHT 1013 Pharmacy Math 3 Credit Hours
Essential mathematical concepts and skills used on the job are discussed in this course. Pharmacy math calculations, conversions, measurements, application of equations, and calculations required for realistic dose and solution preparation will be covered. Business terms and calculations that are commonly found in a pharmacy setting will be discussed. This course is a prerequisite for all subsequent term courses. Prerequisite: Acceptance into Pharmacy Technician Program. This course is offered on the Beebe campus during the fall semester.

PHT 1103 Pharmacy Technician Fundamentals 3 Credit Hours
This course provides the student with the necessary techniques and procedures to prepare and dispense medications in community and institutional pharmacy settings. Use of sterile and non-sterile techniques to count, measure, and compound will be explored. The student will learn to read and fill prescriptions in the community pharmacy and medication orders in the hospital pharmacy environment. This course is a prerequisite for all subsequent term courses. Prerequisite: Acceptance into Pharmacy Technician Program. This course is offered on the Beebe campus during the fall semester.
PHT 1113  Pharmacy Clinical Rotation  3 Credit Hours
The student will intern at an approved pharmacy site and will attend class regularly to discuss issues in the clinical site. The student is expected to complete a minimum of 180 hours in the clinical rotation. Prerequisites: Successful completion of all previous term courses, successful registration with the AR State Board of Pharmacy and consent of the program director. This course is offered on the Beebe campus during the spring semester.

PHT 2004  Pharmacy Pharmacology II  4 Credit Hours
Pharmacology II is the study of medications treating the gastrointestinal system, the renal system, the cardiovascular system, muscles, joints, endocrine system, eyes, ears, and skin. Recombinant agents, chemotherapy, vitamins, OTC supplements, antidotes and other medicinal topics will be discussed. This course will incorporate body structure and function as it relates to each respective topic. This knowledge will help the student make informed, intelligent decisions when dispensing drugs and will enable the technician to play an active role in avoiding medication errors. Prerequisite(s): Acceptance into the Pharmacy Technician Program and successful completion of PHT 1002, PHT 1003, PHT 1004, PHT 1013, and PHT 1103. This course is offered on the Beebe campus during the spring semester.

PHT 2013  Aseptic Technique and Compounding  3 Credit Hours
This course covers proper aseptic technique when compounding non-sterile and sterile preparations. Students will prepare solids, semi-solids, liquids, capsules, and other medication delivery systems. Prerequisite(s): Acceptance into the Pharmacy Technician Program and successful completion of PHT 1002, PHT 1003, PHT 1004, PHT 1013, and PHT 1103. This course is offered on the Beebe campus during the spring semester.

PHT 2113  OTC Drugs and Devices/Communication  3 Credit Hours
This course discusses categories of over the counter medications (including herbals and vitamins), explains the types and uses of home monitoring equipment, and explains durable medical equipment. This course also focuses on the various modes of communication within the pharmacy setting. Prerequisite(s): Acceptance into the Pharmacy Technician Program and successful completion of PHT 1002, PHT 1003, PHT 1004, PHT 1013, and PHT 1103. This course is offered on the Beebe campus during the spring semester.

Philosophy

PHIL 1103  Introduction to Philosophy  3 Credit Hours
An examination of the basic problems of philosophy as evidenced in the major schools of philosophical thought. Includes historical and contemporary readings. ACTS Course Number: PHIL 1103. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

PHIL 2003  Applied Ethics  3 Credit Hours
A course in applied ethics, which introduces students to the most influential theories in Western moral philosophy and applies critical reasoning methods to issues arising in the healthcare professions and the biomedical sciences.
### Physical Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PE 1012</td>
<td>Fitness for Life</td>
<td>2</td>
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<tr>
<td></td>
<td>A course designed for students who wish to improve their personal physical fitness. Activities in the course will provide the student with the opportunity to develop physical strength, cardiovascular endurance, and flexibility. The student will have the opportunity to be certified in ARC/Adult CPR. Motivational materials provided by the instructor will be included in this study so that students can assess and select future fitness activities.</td>
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<tr>
<td>PE 1022</td>
<td>Physical Conditioning I</td>
<td>2</td>
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<td></td>
<td>The purpose of this course is to provide an understanding and personal appreciation of the relationship of physical activity and fitness to health so that the individual will select an appropriate personal life-style for optimal lifelong health and well-being. The course is a conditioning class consisting of physical fitness tests, weight room activities, and cardiovascular conditioning. Emphasis upon self-improvement as related to fitness, conditioning, strength development, weight loss or gain, and decreasing or increasing body measurements. This course is offered on the Beebe campus during the fall and spring semesters.</td>
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<tr>
<td>PE 1032</td>
<td>Physical Conditioning II</td>
<td>2</td>
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<tr>
<td></td>
<td>Physical Conditioning II is a continuation of Physical Conditioning I. This course is offered on the Beebe campus during the fall and spring semesters.</td>
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<tr>
<td>PE 1102</td>
<td>Fly Fishing</td>
<td>2</td>
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<td></td>
<td>Fly fishing will include the art of fly casting, fly tying, fish biology, entomology, and ecology, for the novice fly fisher.</td>
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<tr>
<td>PE 1301</td>
<td>Recreational Games I</td>
<td>1</td>
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<td></td>
<td>The course is designed for individuals who wish to be introduced to a variety of recreational games. It is designed to develop the basic skills, knowledge, and techniques of badminton, pickle ball, volleyball, table tennis, racquetball, wally-ball, and horseshoes.</td>
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<tr>
<td>PE 1311</td>
<td>Recreational Games II</td>
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<tr>
<td></td>
<td>This course is a continuation of Recreational Games I.</td>
<td></td>
</tr>
<tr>
<td>PE 1421</td>
<td>Beginning Racquetball</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Designed for individuals who wish to learn the basic fundamentals of racquetball. The course includes the fundamental skills and techniques needed to play racquetball successfully. It also includes the knowledge of rules, terminology, etiquette, and strategy.</td>
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<tr>
<td>PE 2421</td>
<td>Intermediate Racquetball</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Review of the game of racquetball: rules, etiquette, and selection of equipment. Develop racquetball skills with emphasis upon serves, backhand, and strategy. For students who have already acquired basic skills.</td>
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<tr>
<td>PE 1461</td>
<td>Fundamentals of Archery</td>
<td>1</td>
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<tr>
<td></td>
<td>Fundamentals, techniques, and practice in recreational archery.</td>
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</tr>
<tr>
<td>Course</td>
<td>Title</td>
<td>Credit Hours</td>
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<tr>
<td>PE 1481</td>
<td>Tennis I</td>
<td>1</td>
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<tr>
<td></td>
<td>Introduction to the basic skills, rules and strategy of tennis.</td>
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<tr>
<td>PE 1512</td>
<td>Judo I</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>An athletics class that will introduce the student to the Olympic sport of Judo. Judo is a safe and dynamic sport, which develops coordinated movements, fitness and flexibility. Fundamental techniques will be practiced including breakfalls (ukemi), throws (nage waza), pins (osaekomi waza), chokes (shimi waza), and arm locks (kansetsu waza). Rules of the International Judo Federation will be adhered to.</td>
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<tr>
<td>PE 1612</td>
<td>Judo II</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>An athletics class that will introduce the student to the Olympic sport of Judo. Judo is a safe and dynamic sport, which develops coordinated movements, fitness and flexibility. Fundamental techniques will be practiced including breakfalls (ukemi), throws (nage waza), pins (osaekomi waza), chokes (shimi waza), and arm locks (kansetsu waza). Rules of the International Judo Federation will be adhered to. A continuation of Judo I.</td>
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<tr>
<td>PE 2481</td>
<td>Tennis I</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Instruction in skill, strategy, and techniques of tennis.</td>
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<tr>
<td>PE 1491</td>
<td>Badminton</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Introduction to the basic skills, rules, and strategy of badminton.</td>
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<tr>
<td>PE 1501</td>
<td>Beginning Golf</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>An introduction to the basic skills, rules, and strategy of golf.</td>
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<tr>
<td>PE 2501</td>
<td>Intermediate Golf</td>
<td>1</td>
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<tr>
<td></td>
<td>Instruction in skills, strategy, and techniques of golf for students who have already acquired basic skills in golf.</td>
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<tr>
<td>PE 1601</td>
<td>Soccer</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Introduction to the basic skills, rules, and strategy of soccer.</td>
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<tr>
<td>PE 1611</td>
<td>Basketball</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Introduction to the basic skills, rules, and strategy of basketball.</td>
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</tr>
<tr>
<td>PE 1621</td>
<td>Volleyball</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Introduction to the basic skills, rules, and strategy of volleyball.</td>
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</tr>
<tr>
<td>PE 1623</td>
<td>Concepts of Fitness</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Provides knowledge and appreciation of the importance of physical activity for lifelong health, wellness, and a quality life; provides opportunities for psychomotor development. A required course for physical education majors. The course may be taken by the general population. It will satisfy the 2 hours activity physical education requirement for the core curriculum. This course is offered on the Beebe campus during the fall and spring semester and online during the fall, spring, and Summer semesters.</td>
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</tr>
</tbody>
</table>
PE 1651 Softball  1 Credit Hour
Introduction to the basic skills, rules and strategy of softball.

PE 1701 Bowling I  1 Credit Hour
The course is designed for individuals who wish to learn the basic fundamentals of bowling. The course includes the fundamental skills and techniques of bowling. It also includes the knowledge of the rules, terminology, history, scoring, strategy, and safety practices.

PE 1711 Bowling II  1 Credit Hour
A continuation of Bowling I.

PE 1721 Concepts of Fitness  1 Credit Hour
Provides knowledge and appreciation of the importance of physical activity for lifelong health, wellness, and a quality life; provides opportunities for psychomotor development.

PE 1722 Concepts of Fitness  2 Credit Hours
Provides knowledge and appreciation of the importance of physical activity for lifelong health, wellness, and a quality life; provides opportunities for psychomotor development. A required course for physical education majors. The course may be taken by the general population.

PE 1832 Jiu-Jitsu I  2 Credit Hours
A study of Jiu-Jitsu based self-defense techniques. This course is offered on the Beebe campus during the fall and spring semesters.

PE 2832 Jiu-Jitsu II  2 Credit Hours
A continuation of the study from PE 1832 of Jiu-Jitsu based self-defense techniques. Prerequisite: PE 1832 Jiu-Jitsu I or Orange/Green belt rank. This course is offered on the Beebe campus during the fall semester.

PE 1842 Pilates I  2 Credit Hours
The purpose of this course is to instill knowledge and appreciation for the relationship between physical fitness and health. This multi-level activity course concentrates on the practice of mat Pilates. Pilates is a body conditioning method incorporating proper breathing, for the purpose of developing strength, balance, flexibility, longer, leaner musculature, postural alignment, and mind body awareness. This course is offered on the Beebe campus during the fall and spring semesters.

PE 1942 Pilates II  2 Credit Hours
This course is a continuation of Pilates I. This course is offered on the Beebe campus during the fall and spring semesters.

PE 1852 Yoga I  2 Credit Hours
The purpose of this course is to instill knowledge and appreciation for the relationship between physical fitness and health. This multi-level activity course concentrates on Hatha Yoga, which includes the physical practice of yoga postures linked to the breath, for the purpose of developing strength, balance, flexibility, postural alignment, and mind-body awareness. This course is offered on the Beebe campus during the fall and spring semesters.
PE 1952  Yoga II 2 Credit Hours
This course is a continuation of Yoga I. This course is offered on the Beebe and Heber Springs campuses during the fall and spring semesters.

PE 1862  Aerobic Exercise I 2 Credit Hours
The principles and concepts of exercise as related to the enhancement of cardiovascular development. This course is offered on the Beebe campus during the fall and spring semesters.

PE 1872  Aerobic Exercise II 2 Credit Hours
A continuation of PE 1862. This course is offered on the Beebe campus during the fall and spring semesters.

PE 1883  Foundations of Physical Education 3 Credit Hours
An introductory course designed for the prospective physical education major. Areas of special emphasis are history, principles, scope of program, relationship of physical education to general education, current professional literature, and vocational opportunities.

Physical Science

PHSC 1204  Physical Science 4 Credit Hours
An introduction to basic concepts of physical science for the student who has completed no college course in chemistry or physics. This course is designed to provide an understanding of the facts, methods, and significance of the physical sciences by concentrating on selected topics from physics, chemistry, earth science, and astronomy. Lecture three hours, laboratory two hours per week. Prerequisite: Foundations of Algebra I or Technical Mathematics A with a grade of "C" or better. ACTS Course Number: PHSC 1004. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

PHSC 1304  Earth Science 4 Credit Hours
The study of descriptive and historical geology, earth systems and processes, astronomy, and meteorology. Lecture three hours, laboratory two hours per week. ACTS Course Number: PHSC 1104. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

Physics

PHYS 1014  Applied Physics for Health Science 4 Credit Hours
A survey of the general areas of mechanics, heat, wave motion, basic electricity and magnetism, light and atomic physics for students in the health sciences. Lecture three hours, laboratory two hours per week. Prerequisite: MATH 1023 with a grade of C or better. This course is offered on the Beebe campus during the spring semester.

PHYS 2054  General Physics I 4 Credit Hours
The essentials of mechanics, heat and sound for students of the life sciences or non-science majors. Lecture three hours, laboratory two hours per week. Prerequisite: MATH 1033 with a grade of C or better. ACTS Course Number: PHYS 2014. This course is offered on the Beebe campus during the fall semester.
PHYS 2064  General Physics II  4 Credit Hours
The continuation of PHYS 2054, covering electricity, magnetism, light and modern physics. Lecture three hours, laboratory two hours per week. Prerequisite: PHYS 2054 with a grade of C or better. ACTS Course Number: PHYS 2024. This course is offered on the Beebe campus during the spring semester.

PHYS 2074  University Physics I  4 Credit Hours
A detailed study of the basic principles of mechanics, thermodynamics, and wave motion for students of physical science, mathematics, and engineering, utilizing calculus. Lecture three hours, laboratory three hours per week. Prerequisite: MATH 2205 with a grade of "C" or better. ACTS Course Number: PHYS 2034. This course is offered on the Beebe campus during the fall semester.

PHYS 2084  University Physics II  4 Credit Hours
The continuation of PHYS 2074, covering electricity, magnetism, optics and modern physics. Lecture three hours, laboratory three hours per week. Prerequisite: PHYS 2074. Co-requisite: MATH 2215. ACTS Course Number: PHYS 2044. This course is offered on the Beebe campus during the spring semester.

Political Science

POSC 2103  Introduction to United States Government  3 Credit Hours
A survey of the structure and process of American national government. ACTS Course Number: PLSC 2003. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

POSC 2203  State and Local Government  3 Credit Hours
An examination of the basic principles and problems with state and local governments and the administration of their programs. ACTS Course Number: PLSC 2103. This course is offered online during the fall and spring semesters.

POSC 2213  Legal Aspects of Environmental Management  3 Credit Hours
Policy, law and regulations relating to society's use, management and protection of natural resources. The course will present the differences and similarities between environmental regulation and previous social regulation, and examine the logic behind current regulatory programs. Prerequisite: BIOL 2024 (may be taken concurrently).

POSC 2323  Principles of International Relations  3 Credit Hours
A survey of contemporary international problems and issues as they relate to the foreign policies of the major powers.

Poultry Science

POUL 2703  Principles of Poultry Production  3 Credit Hours
Principles of breeding, housing, feeding, incubation, brooding, disease control, and marketing applied to general farm conditions.
Plant and Soil Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSSC 1303</td>
<td>Introduction to Plant Science</td>
<td>3</td>
<td>Introduction to agronomic and horticultural cropping systems including crop growth and development, crop physiology, crop ecology, environmental considerations and production/protection practices. This course is offered on the Beebe campus during the fall and spring semesters.</td>
</tr>
<tr>
<td>PSSC 2803</td>
<td>Field Crops</td>
<td>3</td>
<td>A study of field crops, types and varieties, seed of small grains, and green manure crops. Lecture two hours, laboratory two hours per week. This course is offered on the Beebe campus during the fall semester.</td>
</tr>
<tr>
<td>PSSC 2811</td>
<td>Soils Laboratory</td>
<td>1</td>
<td>Co-requisite: PSSC 2813. This course is offered on the Beebe campus during the spring semester.</td>
</tr>
<tr>
<td>PSSC 2813</td>
<td>Soils</td>
<td>3</td>
<td>A study of origin, classification and physical and chemical properties of soil. Lecture three hours per week. Prerequisite: CHEM 1003 or CHEM 1014. This course is offered on the Beebe campus during the spring semester.</td>
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Power Sports Technology

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PST 1003</td>
<td>Power Sports Drive Trains</td>
<td>3</td>
<td>During this course, the different types of transmissions will be covered. Chain driven, belt driven, and gear driven transmissions will be studied. Studies will also include the different types of clutches used in the different type of recreational vehicles. Front and rear differentials on various types of off-road vehicles will be included. Practical applications are provided in the laboratory. This course will be 40% classroom and 60% shop application. This course is offered on the Searcy campus during the spring semester.</td>
</tr>
<tr>
<td>PST 1013</td>
<td>Power Sports Four Cycle Engines</td>
<td>3</td>
<td>During this course, the basic theory and operation of a 4 cycle engine will be covered. A thorough understanding of the relationship between the various parts of a four cycle engine and their functions will be covered. Problem diagnostics and repair will be emphasized. A practical application is provided in the laboratory. This course will be 40% classroom and 60% shop application. This course is offered on the Searcy campus during the fall semester.</td>
</tr>
<tr>
<td>PST 1023</td>
<td>Power Sports Fuel Systems</td>
<td>3</td>
<td>This course will cover the difference in a carbureted and a fuel injected system. The different types of fuels, as well as the different additives associated with different types of engines will be covered. The course will also cover the different types and repair of fuel pumps, as well as oil pumps, that are used. Practical applications are provided in the laboratory. This course will be 40% classroom and 60% shop application. This course is offered on the Searcy campus during the fall semester.</td>
</tr>
</tbody>
</table>
PST 1033  Power Sports Electrical Systems  3 Credit Hours
During this course, we will cover information associated with the electrical systems, including the different types of batteries used in recreational vehicles as well as maintenance of such batteries. The different types of starting systems and diagnostics of problems related to these systems will be studied, as well as charging systems. Other related studies will be covered such as ignitions, lighting, and shift control, as well as others. Practical applications are provided in the laboratory. This course will be 40% classroom and 60% shop application. This course is offered on the Searcy campus during the fall semester.

PST 1043  Power Sports Frames, Suspensions, and Brakes  3 Credit Hours
During this course, the student will learn the proper selections of tools, use and care of hand tools, and specially designed tools for frame, suspension, and brake repair. The students will learn, in-depth, the different types of suspensions and braking systems. They will learn the different types of wheel bearings and the problems associated with wheel bearings. This course will also cover the different types of wheels and tires used in the power sports industry, as well as the different steering systems used. Practical applications are provided in the laboratory. This course will be 40% classroom and 60% lab. This course is offered on the Searcy campus during the spring semester.

PST 1053  Power Sports Maintenance  3 Credit Hours
During this course, proper maintenance of the various recreational vehicles will be covered. Procedures to change oil, check all filters, check spark plugs and plug wires, and general maintenance activities that are necessary to keep a recreational vehicle in good working condition will be studied. Practical applications are provided in the laboratory. This course will be 40% classroom and 60% shop application. This course is offered on the Searcy campus during the fall semester.

PST 1063  Power Sports Marine  3 Credit Hours
The basic operation of a gas and electric outboard motors will be studied in this course. The fuel system, the power head and lower units of an outboard motor will be covered. Proper maintenance and repair on electric and gas outboard motors up to 50 horsepower will be studied. Practical applications are provided in the laboratory. This course will be 40% classroom and 60% shop application. This course is offered on the Searcy campus during the spring semester.

PST 1073  Power Sports 2 Cycle & Electrical Engines  3 Credit Hours
During this course, the basic theory and operation of a 2 cycle engine and electrically powered recreational vehicles will be covered. The advantages and disadvantages of each type of vehicle will be discussed. Practical applications are provided in the laboratory. This course will be 40% classroom and 60% shop application. This course is offered on the Searcy campus during the spring semester.

Practical Nursing

LPN 1107  Certified Nursing Assistant  7 Credit Hours
This course teaches the basics of direct patient care. Upon successful completion of this course, a student is eligible to become a certified nursing assistant in the state of Arkansas. It is approved by the Arkansas Department of Long Term Care and consists of 74 hours of classroom training.
consisting of theory, classroom lab and clinical skills training. In addition, Clinical skills training consists of 16 hours of supervised practical training in a facility performing tasks on an individual under the direct supervision of the instructor. Prerequisite: Applicants must be 16 years of age or older. This course is in partnership with White County Medical Center. It is held a minimum of ten times per year on the South Campus of White County Medical Center.

**LPN 1110 Fundamentals of Nursing I** 10 Credit Hours

This course introduces concepts related to the basic principles of the nursing profession. Personal and professional development and responsibilities will be covered related to therapeutic communications, legal & ethical concepts, client & family care as well as interdisciplinary teamwork. The course will include the discussion of particular body system concepts and incorporate Anatomy and physiology, Nursing & Pharmacological skills, and Life Span considerations for each. The nursing process will be utilized to provide the basis concept assessment, planning, intervention and evaluation. Simulation practicum experience is incorporated into the course to assist in application of knowledge to clinical practice. Concepts from this course are integrated in all nursing courses. This course is a prerequisite to Fundamentals II and all subsequent courses.

**LPN 1209 Fundamentals of Nursing II** 9 Credit Hours

This course is a continuation of Fundamentals of Nursing I. It is a study of increasing complexity of skills base while incorporating critical thinking to give safe, skillful holistic nursing care to clients of all ages using the nursing process. It is a continuation of personal and professional development and responsibilities as well as communication; legal and ethical situations, client & family care as well as interdisciplinary teamwork. The course will continue in the discussion of particular body system concepts and incorporate Anatomy and Physiology, Nursing & Pharmacological skills, as well as Life Span considerations for each. Concepts related to performance and adaptation of nursing skills & procedures will be incorporated as they related to the skill, safety, and concern for the client in various clinical settings. Concepts related to the geriatric population are integrated into this course with an emphasis on common geriatric changes and disorders, related medications and nursing care. This course provides supervised Practicum experience related to the nursing theory content with an emphasis on planning and implementing, and evaluating the care of the geriatric client in the long-term care facility or alternate geriatric care settings. The student will develop the ability to adapt nursing procedures incorporating critical thinking to give holistic individualized client care. Principles learned in previous courses are incorporated to allow the student to do critical thinking to perform holistic care. The student will participate in community health activities related to theory content and patients throughout the lifespan.

**LPN 2109 Nursing I** 9 Credit Hours

This course incorporates fundamental knowledge learned in prior courses, and prepares the student in the nursing management of patients throughout the life span. The theory components of this course will be the medical surgical arena and the pharmacological arena and are arranged according to the body systems most closely associated with the symptoms and specific diseases with integration of pharmacological, nutritional, critical thinking and communication theories. The units in the theory components include an introduction to medical surgical nursing, the surgical patient, emergency nursing, and disorders of the immune system, hematologic system, endocrine system and respiratory system. Theory components will correlate assessment, planning, and implementation of the nursing care to include necessary skills, and the impact of nutrition and
pharmacological aspects to enhance the holistic nursing care of the patient throughout the life span. The medical surgical theory component of this course assists the student to have a basic understanding of the pathophysiology, diagnostic methods, signs and symptoms, and medical and nursing care of patients with distinct diseases of the body systems.

The pharmacological theory component assists the student to have an understanding of medications used to treat medical-surgical disorders and nursing assessments required to evaluate whether an expected or unexpected effect has occurred.

Each unit of the theory components are designed to assist the student in understanding his/her role in assessing needs, planning and implementing nursing care for patients with specific illnesses. Using critical thinking skills students will utilize the nursing process to learn the holistic nursing care of the patient throughout the life span.

The clinical component of this course has an emphasis on the medical and surgical problems for patients throughout the life span including care of the obstetrical patient and pediatric patient. Nursing care is delivered with focus on specific standards of care for the diagnosis and age of the patient.

This course is a pre-requisite for all subsequent courses. Prerequisites: LPN 2301 Mental Health and LPN 2402 Nursing of Mother and Infant. This course is offered on the Searcy campus during the spring and Summer semesters and the Heber Springs campus on a rotating 18 month schedule.

LPN 2209 Nursing II
This course is a continuation of Nursing I and will include an in-depth study of the concepts of illness and nursing care for patients throughout the lifespan with neoplastic, nervous system, cardiovascular system, gastrointestinal system and musculoskeletal disorders with integration of pharmacological, nutritional, critical thinking and communication theories. The theory components of this course will be the medical surgical arena and the pharmacological arena. The medical surgical theory component of this course assists the student to have a basic understanding of the pathophysiology, diagnostic methods, signs and symptoms, and medical and nursing care of patients with distinct diseases of the body systems.

The pharmacological theory component assists the student to have an understanding of medications used to treat medical-surgical disorders and nursing assessments required to evaluate whether an expected or unexpected effect has occurred. Using critical thinking skills students will utilize nursing process to learn the holistic nursing care of the patient throughout the life span.

To meet the clinical objectives, students must pass the Nursing of Mother and Infant and Mental Health courses. The clinical component has an emphasis on the medical/surgical patient, psychiatric patient, the obstetrical patient and the pediatric patient. This component of the course is designed to assist the student in applying principles from the theory components and laboratory setting to actual patients in healthcare settings.

This course is a pre-requisite for all subsequent courses. Prerequisite: LPN 2107 Nursing I. This course is offered on the Searcy campus during the fall and spring semesters and the Heber Springs campus on a rotating 18 month schedule.

LPN 2309 Nursing III
This course is a continuation of Nursing II and will include an in-depth study of the concepts of illness and nursing care for patients throughout the life span with integumentary system, urinary system, reproductive system, and sensory system disorders. Using critical thinking skills students
will utilize nursing process to learn the holistic nursing care of the patient throughout the life span. Nursing care in acute, sub-acute or convalescent stages of illness with integration of pharmacological, nutritional, pediatric and communication theories will be discussed. This course assists the student to have a basic understanding of the pathophysiology, diagnostic methods, signs and symptoms, and medical and nursing care including pharmacology concepts of patients of all ages with distinct diseases of the body systems. Each unit uses the nursing process to assist the student in understanding his/her role in assessing needs, planning and implementing nursing care for patients with specific illnesses.

The medical surgical and pharmacological theory portions of this course must be passed to continue into the clinical component of Nursing III.

The clinical component of Nursing III is a continuation of the clinical component of Nursing II and will include an increase in patient assignment load to develop time management skills and assist the student in the transition from student role to Licensed Practical Nurse role. The clinical component is designed to assist the student in applying medical and surgical care and pharmacological principles learned in the classroom and laboratory setting to actual clients in healthcare settings; and to assist the student in transition from student to graduate, recognizing the resultant changes in responsibility to self, clients and other health care team members.

During this clinical component, students will begin working closely with the licensed practical nurse (LPN) or registered nurse (RN) in a medical surgical area as assigned by the instructor. This course is offered on the Searcy campus during the fall, Intersession, and Summer semesters and the Heber Springs campus on a rotating 18 month schedule.

**Procurement**

**PROC 1003  Introduction to Public Procurement**

This course examines the basic concepts in public sector procurement, including the requisition and solicitation process, types of contracts, pricing policies and techniques, contract negotiations, administration and performance, as well as, contract terminations, protests, disputes, and appeals.

**PROC 1013  Public Procurement Process**

This course details public procurement activities from the realization of need to the disposal of goods. Emphasis placed on special topics such as life-cycle costing, green procurement, e-procurement, and other current topics.

**PROC 2013  Procurement Law and Ethics**

This course provides an overview of federal, state and local procurement law with special attention to ethics and Arkansas State Law. Brief overview of contract law. (Prerequisites: PROC 1003, Introduction to Public Procurement; PROC 1013, Public Procurement Process.)

**PROC 2023  Contract Planning and Analysis**

This course details all phases of contract formulation for public sector contracts. Specific instructions are given on the writing of a scope of work document, with focus on the Request for Proposal and Request for Qualification documents. (Prerequisites: PROC 1003, Introduction to Public Procurement; PROC 1013, Public Procurement Process.)
PROC 2033  Contract Management  3 Credit Hours
This course details contract management and administration processes and techniques of public sector. (Prerequisites: PROC 1003, Introduction to Public Procurement; PROC 1013, Public Procurement Process.)

PROC 2043  Materials Management  3 Credit Hours
This course provides an introduction to warehousing, inventory, central stores, merchandising and redistribution, and other topics in the field of materials management in the public sector. (Prerequisites: PROC 1003, Introduction to Public Procurement; PROC 1013, Public Procurement Process.)

Psychology

PSY 2013  Introduction to Psychology  3 Credit Hours
A scientific study of behavior and cognitive processes. Introduction to psychology covers a wide range of human behavior. ACTS Course Number: PSYC 1103. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

PSY 2113  Psychology of Mental Health and Adjustment  3 Credit Hours
This course addresses the psychological principles related to understanding mental health, adjustment and their applications related to areas such as stress coping strategies, social influence, interpersonal communication, sexuality, relationships, careers and work, and physical health. The course focuses on applying knowledge of the scientific approach and psychological principles to issues of adjustment in everyday life. Students will learn ways to apply psychological concepts and principles to enhance relationships and to increase coping with everyday life.

PSY 2533  Life-span Development (formerly Developmental Psychology)  3 Credit Hours
A study of the transformation in human development from pre-birth to death. Usually required for nursing, psychology, and social work majors. ACTS Course Number: PSYC 2103. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

PSY 2533  Human Growth and Development  3 Credit Hours
A study of the transformation in human development from pre-birth to death. Usually required for nursing, psychology, and social work majors. ACTS Course Number: PSYC 2103. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

PSY 2553  Sensation and Perception  3 Credit Hours
An explanation of the sensory processes and perceptual phenomena. Prerequisite: PSY 2013.

Quality Control Technology

QA 2123  Metrology  3 Credit Hours
A study and application of gauges, micrometers, calipers, height gauges, indicators, electronic coordinate measuring machines, and optical comparators. Other specialized quality control
instruments used in the chemical and food-processing industries will be studied. Lecture three hours.

**Social Work**

**SW 2203 Introduction to Social Work**  
3 Credit Hours  
This is the required introductory course in social work for social work majors. Students will examine the emerging profession of social work and its role in various social programs. A history of social welfare events and philosophies will be given in order to assess present services. This is a basic overview course and not an in-depth study of social work. This course is not intended to teach how to interview, how to be a counselor, or how to conduct case management. This course will, however, teach assessment of adequacy/inadequacy of resources, prevailing attitudes and influences, and trends during various periods of history. This course is offered on the Beebe campus during the spring semester.

**Sociology**

**SOC 2213 Principles of Sociology**  
3 Credit Hours  
A survey of origin, development, structure, and functioning of human relationships, and the factors influencing group life. ACTS Course Number: SOCI 1013. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

**SOC 2223 Social Problems**  
3 Credit Hours  
Application of sociological concepts and methods of the analysis of current social problems in the United States, including family and community disorganization, delinquency and crime, mental illness, and intergroup relations. ACTS Course Number: SOCI 2013

**SOC 2233 Introduction to Cultural Anthropology**  
3 Credit Hours  
Students will examine the concept of culture, cultural processes and several anthropological theories. Some topics to be studied are: introduction to anthropology, culture and communications, economic systems, kinship and descent, sex, marriage and the family, religious beliefs, behavior, and symbolism. ACTS Course Number: ANTH 2013

**SOC 2263 Comparative Religions**  
3 Credit Hours  
Students will examine the historical and philosophical tenets of the world's major religions. This course will also examine the basic beliefs and values of those religions, and the human condition, spiritually.

**Spanish**

**SPAN 1013 Spanish I**  
3 Credit Hours  
Spanish I is designed to teach Spanish language and culture as complementary facets of a single reality. Students will learn authentic, un-simplified Spanish and use it in the context of actual communication. Spanish I is designed as a foundation course for students who intend to focus on careers based on either a primary or secondary use of the language. There is no prerequisite for
this course. ACTS Course Number: SPAN 1013. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

**SPAN 1023 Spanish II**

3 Credit Hours

Spanish II is a continuation of Spanish I. Prerequisite: SPAN 1013 or at least one year of high school Spanish. ACTS Course Number: SPAN 1023. This course is offered on the Beebe campus during the fall and spring semesters.

**SPAN 2013 Spanish III**

3 Credit Hours

Spanish III is a continuation of Spanish II. Prerequisite: SPAN 1023. ACTS Course Number: SPAN 2013. This course is offered on the Beebe campus during the fall and spring semesters.

**SPAN 2023 Spanish IV**

3 Credit Hours

Spanish IV students will continue developing skills in reading, writing, and speaking through the selected use of authentic Spanish literature and cultural presentations. Prerequisite: SPAN 2013. ACTS Course Number: SPAN 2023. This course is offered on the Beebe campus during the spring semester.

**Special Education**

**SPED 2613 Introduction to Exceptional Children**

3 Credit Hours

An introduction to the characteristics of exceptional individuals and the field of special education. Course requires an outside observation of children in special education.

**Speech**

**SPCH 1203 Oral Communications**

3 Credit Hours

A basic speech course in which an understanding of the fundamentals of communication theory and a proficiency in the use of oral communication skills are developed. The course also serves as a prerequisite for all other speech courses unless exemption is granted by the division. ACTS Course Number: SPCH 1003. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

**SPCH 2233 Oral Interpretation**

3 Credit Hours

The theory and practice of reading aloud, with emphasis on the emotional and intellectual content of literature. Prerequisite: SPCH 1203.

**SPCH 2243 Interpersonal Communication**

3 Credit Hours

The primary aim of this course is to introduce the student to the basic concepts and theories necessary for the study of interpersonal communications and to provide the student with the opportunity to gain and practice new interpersonal skills in an open, helpful, accepting environment. Prerequisite: SPCH 1203.
Theatre

THEA 1213 Acting I 3 Credit Hours
Study of theories and styles of acting. Group and individual projects in different types and periods of roles and plays. This course is offered on the Beebe campus during the fall semester.

THEA 1223 Stage Makeup 3 Credit Hours
A practical guide to the theory and practice of theatrical make-up. Students will become familiar with the basic principles of stage makeup and application. This course is offered on the Beebe campus during the spring semester.

THEA 1233 Costume Construction 3 Credit Hours
Introduction to basic costume construction techniques including basic machine and hand sewing, commercial pattern usage, alterations, and garment production. This course is offered on the Beebe campus during the fall semester during odd numbered years.

THEA 1243 Summer Theatre Production 3 Credit Hours
This course is a laboratory course of supervised rehearsal and technical work on an ASU-Beebe summer production culminating in performance. Summer Theatre Production provides the student with summer stock experience and training.

THEA 1253 Stage Management 3 Credit Hours
This course will provide students with an overview of the functions of a stage manager. Through reading, discussion, projects and practical assignments the student will develop an understanding of the knowledge and skills utilized by a stage manager. This course will include analysis of the technical and organizational aspects of stage management with focus on the stage management process to include, but not limited to: preparing for and running the rehearsal as well as an overview of general responsibilities and basic conflict resolution concepts. Although the emphasis will be on not-for-profit organizations, attention will be given to the commercial theatre industry. This course is offered on the Beebe campus during the spring semester.

THEA 1261 Theatre Practicum I 1 Credit Hour
Open to all interested students. Two major plays will be produced; students will work both on stage and backstage. This course is offered on the Beebe campus during the fall and spring semesters.

THEA 1271 Theatre Practicum II 1 Credit Hour
Continuation of THEA 1261. This course is offered on the Beebe campus during the fall and spring semesters.

THEA 1293 Stage Combat I 3 Credit Hours
Introduction in the basic techniques of stage combat. Students will learn basic hand to hand combat and athletic movements for stage. Students will also be introduced to common stage combat weapons. Stress will be placed on safety procedures and professional development. This course is offered on the Beebe campus during the spring semester.
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>THEA 1303</td>
<td>Ballet I</td>
<td>3</td>
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<td></td>
<td>Development of technical skills in ballet, including safe and efficient alignment and clear articulation of movement vocabulary. This course is offered on the Beebe campus during the spring semester during even numbered years.</td>
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<tr>
<td>THEA 1323</td>
<td>Introduction to Scenic Rendering</td>
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<td>Introduction to the techniques used in basic scenic rendering: line width, line weight, shading, color applications, and drop-point perspective. Topics in script analysis for scenic design will be discussed as well as model construction. This course is offered on the Beebe campus during the spring semester during even numbered years.</td>
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<tr>
<td>THEA 2013</td>
<td>History of Musical Theatre</td>
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<td>This an introductory level survey course intended to provide students with a broad base of knowledge about the American Musical Theatre. At semester's end students will be able to identify, analyze, critique, and appreciate musical theatre performance of various styles, forms, and periods. This course is offered on the Beebe campus during the spring semester during odd numbered years.</td>
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<tr>
<td>THEA 2023</td>
<td>Acting for the Musical Theatre</td>
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<td>This is an intermediate acting technique class. This is not a vocal technique class, and this is not dance/movement class. Although some elements of musicianship and movement will be touched on, we will be chiefly focusing on how to effectively &quot;act a song.&quot; Acting is a craft, like carpentry, Haiku or wine making. There is a common vocabulary, a generally accepted process and (contrary to romantic sentiment) it can be taught... to almost anyone. A strong actor's toolset (sensory/emotional awareness, physical and vocal technique and analytic/critical thought) is the prerequisite for this course. If you feel ill at lease, or unprepared for an intermediate acting workshop, you may not be ready to develop this skill. We will pursue a practical knowledge of text analysis, explore improvisation, expand physical versatility and gain an understanding of the particularities of the 'song as monologue' process. This course is offered on the Beebe campus during the spring semester during odd numbered years.</td>
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<tr>
<td>THEA 2033</td>
<td>Creating Children's Theatre</td>
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<td>This course teaches the theory and practice of producing theatre for children: both performing for young audiences and working with young performers in schools, churches, and youth organizations. It includes the selection and adaptation of material, auditioning, rehearsing, directing, technical support and promotion. Teaching methods for this course combine lecture, discussion, and production.</td>
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<tr>
<td>THEA 2123</td>
<td>Movement and Dance for the Stage</td>
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<td>This is an introduction to theater movement and physical conditioning for theater performance. The students will study the basics of yoga, Pilates, modern dance and general theater movement. This class will also include the study and history of various movement styles and leaders and their influence on the theater. This course is offered on the Beebe campus during the spring semester.</td>
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THEA 2143  Stage Lighting  3 Credit Hours
A study of theatrical lighting equipment, materials, methods, and techniques. Emphasis will be placed on technical aspects of stage lighting. This course is offered on the Beebe campus during the spring semester during odd numbered years.

THEA 2153  Voice and Diction  3 Credit Hours
Students explore, expand and refine the properties of the human speaking voice, including voice and diction exercises and techniques to free the voice and improve projection, resonance, and articulation. This course is offered on the Beebe campus during the fall semester.

THEA 2213  Acting II  3 Credit Hours
Continuation of Acting I, designed to develop and exercise basic acting skills through practical application of the fundamental elements of the actor’s tools and their use on a rudimentary level. Emphasis will be placed on the special demands of scene analysis study and characterization. Prerequisite: THEA 1213. This course is offered on the Beebe campus during the spring semester during odd numbered years.

THEA 2223  Fundamentals of Stagecraft  3 Credit Hours
Basic construction, painting, and rigging of scenic units. Fundamentals of backstage organization. Classroom theory is supplemented by laboratory sessions in the scene shop and by assignment in production crews. This course is offered on the Beebe campus during the fall semester.

THEA 2233  Play Analysis  3 Credit Hours
In-depth analysis of a play’s storyline, characters, dialogue, images, motifs, and themes to enable clear, powerful, and imaginative realization on stage. Prerequisites: ENG 1003 and ENG 1013. This course is offered on the Beebe campus during the fall semester.

THEA 2261  Theatre Practicum III  1 Credit Hour
The second year in the practicum sequence. Open to all interested students by permission of the instructor or by completion of THEA 1261 and THEA 1271. This course is offered on the Beebe campus during the fall and spring semesters.

THEA 2503  Fine Arts-Theatre  3 Credit Hours
Introduction to the creative process and history of theatre. Provides students with an appreciation of how various artistic elements combine to produce theatrical presentations. Students will explore the human experience through the theatre arts. ACTS Course Number: DRAM 1003. This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and Summer semesters.

THEA 2513  Fine Arts-Film  3 Credit Hours
The study of the origin and development of film from the late 19th century to the present. Emphasis is placed on the study of film as a distinctive art form. Includes criticism of film, concentrating on the creative elements used in the development of film aesthetics and the application of scholarly and popular critical standards. (This course does not fulfill the Fine Arts requirement in the core curriculum for the Associate of Arts degree.) This course is offered on the Beebe campus during the spring semester and online during the fall, spring, and Summer semesters.
University

UNIV 1001  Principles of Academic Success I  1 Credit Hour
Designed to assist students in obtaining information and skills necessary to succeed in college. University programs, policies, and resources will be presented along with a special emphasis on study skills. Required for full-time, first-time entering students and for transfers with fewer than 30 transfer credits. This course is for institutional credit but can also be used as an elective in the Associate of Arts in Liberal Arts and the Associate of Science in Liberal Arts and Sciences.

UNIV 1003  Principles of Academic Success III  3 Credit Hours
This course serves as an introduction to concepts and information that are essential for academic success. The course is an interactive seminar that requires student participation in the exploration of improving academic skills and providing an orientation to campus services. (Required for full-time, first-time entering or transfer students who are required to take one or more developmental courses). This course is offered on the Beebe campus during the fall and spring semesters and online during the fall, spring, and summer semesters. This course is for institutional credit but can also be used as an elective in the Associate of Arts in Liberal Arts and the Associate of Science in Liberal Arts and Sciences.

Upholstery

UPH 1004  Basic Upholstery Techniques  4 Credit Hours
Students will develop and show proficiency in the use of tools, materials, shop supplies, and terminology as applied to the upholstery industry.

UPH 1014  Auto Upholstery I  4 Credit Hours
Students will develop knowledge and skills in the removal, repair, recovering and reinstallation of automotive seats.

UPH 1024  Auto Upholstery II  4 Credit Hours
Students will demonstrate proficiency in removal of old carpet and pad and construction of new carpet and pad. They will also demonstrate proficiency in removal and construction of a convertible top and convertible boot. (Students may select one of all of these units, with approval of the instructor, to meet the requirements of the course.)

UPH 1034  Auto Upholstery III  4 Credit Hours
This course is designed to give students a working knowledge of automotive interior replacement or repair including repair or replacement of arm rest door panels and wind lace headliners. It also features a continuation of UPH 1024.

UPH 1044  Furniture Upholstery I  4 Credit Hours
Students will demonstrate proficiency in disassembling and reupholstering reclining furniture.

UPH 1054  Furniture Upholstery II  4 Credit Hours
Students will demonstrate proficiency in upholstering pillow-type furniture.
UPH 1064  Furniture Upholstery III  4 Credit Hours
Students will demonstrate proficiency in upholstering sofas or loveseats.

UPH 1074  Advanced Upholstery Techniques I  4 Credit Hours
Students will continue to develop skills and knowledge in upholstering techniques. Channeling will be emphasized in this course.

UPH 1084  Advanced Upholstery Techniques II  4 Credit Hours
Students will continue to develop skills and knowledge in upholstering techniques. In this course, students will be required to refurbish one tufted back chair.

UPH 1094  Restoration of Antique Furniture  4 Credit Hours
Students will develop knowledge and skills in the repair, recovering, and refinishing of an antique chair.

Veterinary Technology

VET 1023  Laboratory Techniques I  3 Credit Hours
Presents an introduction to the principles and procedures for the veterinary practice laboratory. Emphasis is placed on laboratory safety; handling specimens; technical skills in hematology, cytology, clinical chemistry, serology, and parasitology; maintaining laboratory equipment; and quality control principles and practices. Topics include: handling of laboratory specimens and laboratory safety, principles of hematology and cytology, clinical chemistry, principles of serology, principles of urinalysis, and principles of parasitology. Any grade below a "C" is unacceptable in the Veterinary Technology Program and the course must be retaken for the completion of the degree. This course is offered on the Beebe campus during the spring semester of the students first year in the program.

VET 1044  Veterinary Technology Anatomy and Physiology I  4 Credit Hours
Covers directional terminology, developmental anatomy and histology as well as gross morphology and function of external structures in animal species. Beginning course in a two-semester sequence. Any grade below a "C" is unacceptable in the Veterinary Technology Program and the course must be retaken for the completion of the degree. This course is offered on the Beebe campus during the spring semester of the students first year in the program.

VET 1103  Veterinary Medical Terminology  3 Credit Hours
This course is a study of basic medical terminology including anatomical terms, word parts, medical terms, diagnostic terms, and surgical terms. Course also includes diseases, abbreviations, spellings, diagnostic procedures and treatments for animals, and an introduction to medical math as it relates to the terms. Any grade below a "C" is unacceptable in the Veterinary Technology Program and the course must be retaken for the completion of the degree. This course is offered on the Beebe campus during the fall semester of the students first year in the program.

VET 1113  Breeds, Restraint, and First Aid  3 Credit Hours
Provides an overview of the veterinary technology occupation. Emphasis is placed on breeds, handling, restraint, and first aid. Any grade below a "C" is unacceptable in the Veterinary Technology Program and the course must be retaken for the completion of the degree. This
course is offered on the Beebe campus during the fall semester of the students first year in the program.

**VET 1144  Veterinary Technology Anatomy and Physiology II  4 Credit Hours**

Explores the structure and function of internal organs and systems in domestic animal species. Provides an overview of the functional anatomy and physiology of domestic animals commonly encountered in veterinary medicine. Emphasis is placed on the parts and function of the systems of the animal body and associated medical terminology. Topics include: musculoskeletal system, digestive system, cardiovascular system, cutaneous system, hematopoietic system, respiratory system, urogenital system, nervous system and special senses, and endocrine system. Second course in a two-semester series. Prerequisite: VET 1044. *Any grade below a “C” is unacceptable in the Veterinary Technology Program and the course must be retaken for the completion of the degree.* This course is offered on the Beebe campus during the fall semester of the students second year in the program.

**VET 2103  Animal Reproduction, Nutrition and Production  3 Credit Hours**

Provides an advanced study of the principles of animal production, reproduction and nutrition. Any grade below a “C” is unacceptable in the Veterinary Technology Program and the course must be retaken for the completion of the degree. This course is offered on the Beebe campus during the fall semester of the students second year in the program.

**VET 2114  Clinics and Nursing  4 Credit Hours**

Provides an orientation to nursing care and surgical procedures. Emphasis is placed on care of patient and equipment, examination room procedures, anesthesia and pharmacology, and procedures in the surgery room. Topics include: general nursing care of patient; general care of equipment; aseptic technique; surgery room procedures; groups of drugs; drug distribution, administration, and routing; inventory control and drug laws; and weights and measures, and the metric system. *Any grade below a “C” is unacceptable in the Veterinary Technology Program and the course must be retaken for the completion of the degree.* This course is offered on the Beebe campus during the fall semester of the students second year in the program.

**VET 2123  Laboratory Techniques II  3 Credit Hours**

Provides an advanced study in the principles and procedures for the veterinary practice laboratory. Emphasis is placed on microscopy, interpretation of microscopic observations, and operation. Topics include: microscopy, procedures of hematology, procedures of cytology, procedures of parasitology, procedures of urinalysis, microbiology, and pro-section. Prerequisite: VET 1023. *Any grade below a “C” is unacceptable in the Veterinary Technology Program and the course must be retaken for the completion of the degree.* This course is offered on the Beebe campus during the fall semester of the students second year in the program.

**VET 2213  Wild, Zoo, and Lab Animal Care  3 Credit Hours**

Provides an overview into the study of exotic animals and animals used in research. Emphasis is placed on selecting wild animals for research, maintaining safety and health, providing proper care and handling, managing pain, and laboratory procedures. Topics include: selection and procurement of animals, safety and health considerations, husbandry, care, and importance of the environment, laboratory and exotic animal handling and restraint, pain management, animal health, laboratory procedures, and laws, regulations, and policies on care and use of laboratory
any grade below a "C" is unacceptable in the Veterinary Technology Program and the course must be retaken for the completion of the degree. This course is offered on the Beebe campus during the spring semester of the students second year in the program.

VET 223 Veterinary Technology Radiology 3 Credit Hours
This course is designed to introduce the student to the various aspects of radiology, including: safety, theory, positioning, making exposures and development of radiographs. Prerequisites: VET 1023, VET 1044, VET 1113, VET 2114, VET 2123, and VET 2233. Any grade below a "C" is unacceptable in the Veterinary Technology Program and the course must be retaken for the completion of the degree. This course is offered on the Beebe campus during the spring semester of the students second year in the program.

VET 223 Veterinary Technology Pharmacology 3 Credit Hours
Provides further study in the area of veterinary drugs and medicines Emphasis is placed on calculating dosages, administering, and dispensing drugs. Topics include: calculating dosages, classes of drugs, pharmacy dispensing, and laboratory safety and record keeping. Prerequisites: VET 1113 and VET 1023. Any grade below a "C" is unacceptable in the Veterinary Technology Program and the course must be retaken for the completion of the degree. This course is offered on the Beebe campus during the spring semester of the students second year in the program.

VET 2316 Preceptorship 6 Credit Hours
Introduces students to the application and reinforcement of veterinary technology procedures in an actual job setting under direct supervision of a veterinarian. Students are acquainted with occupational responsibilities through realistic work situations on the job. Job sites can include veterinary teaching hospitals at major universities, veterinary hospitals, research laboratories, and other facilities supervised by a veterinarian. Topics include, but are not limited to: problem solving, adaptability to the job setting, use of proper interpersonal skills, interpretation of work authorizations, participation in or observation of veterinary technology procedures, and professional development. The occupation-based instruction is implemented through the use of written individualized training plans, written performance evaluation, and required on-the-job training. Prerequisites: VET 1023, VET 1044, VET 1113, VET 2114, VET 2123, and VET 2233. Any grade below a "C" is unacceptable in the Veterinary Technology Program and the course must be retaken for the completion of the degree. This course is offered on the Beebe campus during the Summer I semester of the students second year in the program.

VET 2403 Clinic Management 3 Credit Hours
This course covers basic veterinary medical office procedures, staff and client relations, human-animal bond, ethics and professional conduct. Prerequisite: VET 2114. Any grade below a "C" is unacceptable in the Veterinary Technology Program and the course must be retaken for the completion of the degree. This course is offered on the Beebe campus during the spring semester of the students first year in the program.

VET 2414 Animal Pathology 4 Credit Hours
An introductory pathology course, that includes a comprehensive overview of general pathology, including: immunology, toxicology, common diseases of domestic animals, zoonotic implications and preventive measures. Prerequisites: VET 1044 and VET 1144. Any grade below a "C" is
unacceptable in the Veterinary Technology Program and the course must be retaken for the completion of the degree. This course is offered on the Beebe campus during the spring semester of the students second year in the program.

**VET 2443 Capstone**  
3 Credit Hours  
Emphasis is on preparation for national board examinations and assurance of clinical competency. Course content is tailored to the specific needs of the students. Lecture and lab each meet two hours per week. Any grade below a "C" is unacceptable in the Veterinary Technology Program and the course must be retaken for the completion of the degree. This course is offered on the Beebe campus during the spring semester of the students second year in the program.

**Welding Technology**

**WELD 1004 Shielded Metal Arc Welding**  
4 Credit Hours  
This course is designed to teach students the basic knowledge required to operate welding equipment, function safely in the welding shop and demonstrate all types of shop practices. Students will learn to make basic fillet welds in all welding positions. Students will also learn and study welding nomenclature, design of joints, and electrode classification. This course is offered on the Searcy campus during the fall and spring semesters.

**WELD 1104 Gas Metal Arc Welding**  
4 Credit Hours  
This course is designed to study and practice the use of metal arc welding process. The student will learn the principles of constant voltage power sources. Also, students will learn how to operate and maintain various types of wire feed welders. This course is offered on the Searcy campus during the fall and spring semesters.

**WELD 1204 Gas Tungsten Arc Welding**  
4 Credit Hours  
This course will introduce the study and practice of the gas tungsten arc welding process. The student will first gain practice of this skill through the use of oxy-acetylene welding. Then the student will continue to progress using similar applications in the TIG welding process. Joint designs will be mastered on carbon steel, aluminum and stainless steel. This course is offered on the Searcy campus during the fall and spring semesters.

**WELD 1304 Metal Fabrication**  
4 Credit Hours  
This course covers the theory and practice of layout and fabrication of basic welding fittings using sheet metal. The student will learn the process of fabricating the basic welding fittings from sheet metal using different methods. This course is offered on the Searcy campus during the fall and spring semesters.

**WELD 2004 Advanced Shielded Metal Arc Welding**  
4 Credit Hours  
This course is an advanced ARC Welding (SMAW) Course. Advanced ARC welding techniques will be performed using mild steel electrodes on groove welds in the flat, horizontal, vertical and overhead position on structural plate. Students will have the opportunity to get their AWS D1.1 Welding certifications and then move on to pipe welding. This course is offered on the Searcy campus during the fall and spring semesters.
WELD 2104  Advanced Gas Metal Arc Welding  4 Credit Hours
This course is comprised of the advanced study and practice of the Gas Tungsten Arc Welding process. Basic skills will be enhanced through mastering out of position joints, fabrication projects and pipe welding techniques. Extensive use of air-cooled torches and scratch start techniques will be utilized. American Welding Society Welder Certification will be offered. This course is offered on the Searcy campus during the fall and spring semesters.

WELD 2114  Pipeline Welding  4 Credit Hours
This course provides the student with a thorough understanding of downhill pipe welding procedures and weld quality. It provides training to develop the skills necessary to produce quality welds on open root carbon steel pipe in the 5G and 6G positions, using E6010 and E7010 electrodes. This course is offered on the Searcy campus during the fall and spring semesters.

WELD 2123  Technical Blueprint Reading  3 Credit Hours
This course is designed to provide the student with a foundational knowledge of shop drawings and blueprints as it relates to the welding field. Also, students will gain necessary skills to successfully modify and create new part models, assemblies, and drawings using the Solid works Program.

WELD 2204  Advanced Gas Tungsten Arc Welding  4 Credit Hours
In this course, advanced MIG welding practices and power source technology including programmable and pulsing constant current constant voltage machines will be utilized. Machine set up and repair will also be utilized. Ferrous and non-ferrous alloys will be practiced. Metal transfers including short circuit, spray, globular and pulsed will be studied and practiced. AWS welding Certifications Testing will be offered at no extra charge. This course is offered on the Searcy campus during the fall and spring semesters.

WELD 2304  Advanced Metal Fabrication  4 Credit Hours
This course covers theory and practice of layout and fit up of structural and piping systems. Blueprint reading skills and use of different types of measuring devices will be used in this course. Students will learn the process of fabrication of structural and piping systems through a series of competency based exercises.

Zoology

ZOOI 1014  Basic Human Anatomy and Physiology  4 Credit Hours
A course emphasizing the fundamentals of structure and function of the body's organ systems. Designed for majors in medical technology, radiology, home economics, physical education, psychology, and secondary education with teaching emphasis in biology. Lecture three hours, laboratory three hours. This course is offered on the Beebe campus during the spring semester.

ZOOI 1204  Principles of Zoology  4 Credit Hours
A study of the taxonomy, evolution, structure, function, and behavior of the major animal phyla. Lecture three hours, laboratory three hours per week. Prerequisites: BIOL 1014(with a grade of C or better) or consent of instructor. ACTS Course Number: BIOL 1054. This course is offered on the Beebe campus during the fall and spring semesters.
ZOOL 2004  Human Anatomy and Physiology I  4 Credit Hours
Structure and function of cells, tissues, integumentary system, skeletal system, muscular system, nervous system. Lecture three hours, laboratory three hours per week. Prerequisite: BIOL 1014 with a grade of C or better. This course is offered on the Beebe campus during the fall and spring semesters.

ZOOL 2014  Human Anatomy and Physiology II  4 Credit Hours
Structure and function of special senses, endocrine, circulatory, digestive, respiratory, excretory and reproductive systems, acid base balance, and fluid balance. Lecture three hours, laboratory three hours per week. Prerequisite: ZOOL 2004 with a grade of C or better. ACTS Course Number: BIOL 2414. This course is offered on the Beebe campus during the fall and spring semesters.