



MID-SOUTH COMMUNITY COLLEGE

Course Descriptions

Chapter 10

How to Read this Section

Courses are identified by four letters and a four-digit number. The letters are an abbreviation of the discipline (ENGL=English); the numbers are a unique identifier for courses within the discipline. Under course number and title are a number and the word “credit(s).” This indicates the number of semester hours of credit for the course. The letter(s) “F,” “S,” and “Su” indicates the semester(s) in which the course is traditionally offered. Summer courses vary each year but generally include core English, math, and social science.

The numbers and words “lecture hours” or “laboratory hours” on the second line indicate the number of hours spent in instructional activities per week. Additional information is available by viewing semester class schedules. All credit schedules are posted on the College’s website prior to Early Registration for the next semester.

For ACTS Equivalent Course Numbers, please visit <http://acts.adhe.edu/studenttransfer.aspx>.

An example and explanation of a typical course description follows:

ENGL 1123 English Composition II 3 cr.
Sem: F/S 3 lecture hours per week
Prerequisite: ENGL 1113 English Composition I with a grade of C or better. English Composition II continues to develop the student’s writing skills through practice in different kinds of rhetorical development while emphasizing quality and forms of writing. Students learn both APA and MLA documentation and produce a research paper using either MLA or APA documentation.

“**ENGL 1123**” is the unique course prefix. “**English Composition II**” is the course title/name.

The number of “**credits**” awarded for successful completion of a course is generally determined as follows:

- 3 lecture/direct instructional hours per week during the semester with associated out-of-class assignments = 1 credit
- 2 direct instructional lab hours per week during the semester with associated out-of-class assignments – 1 credit. A higher lab hour to credit ratio occurs in some programs where equipment is shared by several students.
- 30 directed/supervised laboratory hours with associated out-of-class assignments = 1 credit
- 48 off-site clinical/externship learning hours with little to no out-of-class assignments = 1 credit

Sem is the semester/semesters the course is offered.

A “**prerequisite**” is a course which must be completed prior to registering for the described course. In this example, ENGL 1113 English Composition I must be successfully completed before the student may enroll in ENGL 1123 English Composition II.

A “**corequisite**” is a course which must be taken during the same semester as the described course.

Courses are listed in alphabetical order by the area designation.

Addiction Studies

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

ADST 2313 Addiction Counseling: Theory and Practice 3 cr.
Sem: F/S 3 Lec. Hrs./week

Prerequisite: ENGL 1113 English Composition I

This course examines the techniques of counseling, common counseling theories, and their appropriateness to addictions and co-occurring disorders.

ADST 2323	Assessment, Intervention, & Treatment Planning	3 cr.
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Sem: F/S 3 Lec. Hrs./week

Prerequisite: ENGL 1113 English Composition I.

This course addresses the assessment of Addiction disorders as found in the latest Diagnostic and Statistical Manual (DSM-IV-TR) of mental disorders. Intervention techniques, client treatment planning, and issues related to co-occurring disorders are also reviewed.

ADST 2333 Etiology & Epidemiology of Addiction 3 cr.
Sem: F/S 3 Lec. Hrs./week

Prerequisite: ENGL 1113 English Composition I.

This course addresses the psychological, physiological, and socio-cultural influences upon addictions. The distribution, as well as the disease concept of addictions, and the effects of co-occurring disorders on the development of addictions are addressed.

Allied Health Sciences

(See Nursing Assistant, Emergency Medical Technician, Medical Assistant, Medical Professions, Phlebotomy, Respiratory Care)

Anthropology

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

ANTH 2013	Cultural Anthropology	3 cr.
Sem: S		3 Lec. Hrs./week

This course covers the study of culture and cultural diversity, social institutions, ethnocentrism, cultural relativity, and methods of ethnographic fieldwork. Specific topics include communication, gender, marriage and family, economic and political systems, religion, inequalities of class and race/ethnicity, and globalization. Students will gain critical thinking skills that will allow them to analytically and holistically relate cultural anthropological concepts to their everyday lives.

Art

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental

English II is a prerequisite for all courses unless otherwise noted.

ARTS 1013	Introduction to Film	3 cr.
Sem: F/S		3 Lec. Hrs./ week

An introduction to the study of film, this course is designed to enhance the understanding and appreciation of cinema as one of the major art forms of the twentieth and twenty-first centuries. Students will study various film techniques and terminology, as well as a variety of film, learn to observe films more closely and critically, and become active participants in the film experience.

ARTS 1103	Art Appreciation	3 cr.
Sem: F/S		3 Lec. Hrs./ week

This course refines students' visual enjoyment. Students study major artists and art forms and develop awareness of the visual arts while examining and analyzing sculpture, painting, and architecture forms. ARTS 1103 appeals to all students who are interested in acquiring an understanding of visual arts.

ARTS 1123	Introduction to Theatre	3 cr.
Sem: F/S		3 Lec. Hrs./week

This course introduces students to the history and literature of the theatre as an art form from the early Greeks to the modern day. Assignments include reading, viewing videos and live performances, research, discussions, oral presentations, and writing.

ARTS 1213	Acting	3 cr
Sem: F/S		3 Lec.Hrs/week

This course introduces students to basic acting skills through exercises and assignments that develop characters using the voice and body. Memorization, regular class attendance, and class performance are required.

ARTS 1313	Drawing	3 cr.
Sem: S		3 Lec. Hrs./week

In this introductory course, students draw from figures or objects, and course content includes sketching and organizing two-dimensional space as well as learning shading and line fundamentals. A lab fee is required.

ARTS 1323 Painting 3 cr.
Sem: S 3 Lec. Hrs./week

This course allows students to visually express themselves. Students create a series of paintings in various styles using various techniques in an attempt to find each student's own style or technique of painting. A lab fee is required.

Aviation Maintenance Technology

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

Aviation Airframe Maintenance

AMTA 1076 Aircraft Metallic Structures 6 cr.
Sem: S/Su 2 Lec./8 Lab Hrs./week

Prerequisite: Successful completion of the Certificate of Proficiency in General Aviation Maintenance Technology.

This course focuses on the formation and repair of sheet metal, including the calculation of bend allowances, special techniques used to construct sheet metal structures from plans, and acceptable methods of repair. Lectures are reinforced with laboratory projects. A lab fee is required.

AMTA 1094 Aircraft Composite Structures 4 cr.
Sem: F/S 2 Lec./4 Lab Hrs./week

Prerequisite: Successful completion of the Certificate of Proficiency in General Aviation Maintenance Technology.
This course covers fabrication, repair, finishing, and safety practices relating to plastic, composite wood, and fabric materials found in current structural applications on aircraft. Lectures are reinforced with laboratory projects. A lab fee and testing fee are required..

AMTA 1104 Aircraft Systems I 4 cr.
Sem: F 2 Lec./4 Lab Hrs./week

Prerequisite: Successful completion of the Certificate of Proficiency in General Aviation Maintenance Technology.
This course presents the theory and practical application involved in the operation, service, and line maintenance of aircraft. Topics include troubleshooting techniques on fire protection systems, ice and rain control systems, and cabin atmosphere control systems. Lectures are reinforced with laboratory projects. A lab fee and testing fee are required..

AMTA 2006 Aircraft Electricity 6 cr.
Sem: F/Su 2 Lec./8 Lab Hrs./week

Prerequisite: Successful completion of the Certificate of Proficiency in General Aviation Maintenance Technology.
This course engages students in electrical equipment installations with attention given to circuitry, motors, actuators and lighting with component inspection, maintenance, and testing. Lectures are reinforced with laboratory projects. A lab fee and testing fee are required..

AMTA 2024 Aircraft Inspection and Rigging 4 cr.
Sem: F/S 2 Lec./4 Lab Hrs./week

Prerequisite: Successful completion of the Certificate of Proficiency in General Aviation Maintenance Technology.
This course introduces students to the use of FAA certificate data sheets, aircraft records, maintenance publications, and federal regulations pertinent to airframe inspections required for both general and commercial aviation aircraft. Attention will be given to rigging and assembly techniques found in current general aviation and jet-type aircraft. Lectures are reinforced with laboratory projects. A lab fee and testing fee are required..

AMTA 2044 Aircraft Systems II 4 cr.
Sem: F/S 2 Lec./4 Lab Hrs./week

Prerequisite: Successful completion of the Certificate of Proficiency in General Aviation Maintenance Technology.
This course covers operating principles and basic troubleshooting techniques for hydraulic and pneumatic components and systems. Topics include component maintenance, repair, and overhaul for landing gear, anti-skid, aircraft fuel systems, and braking systems. Lectures are reinforced with laboratory projects. A lab fee and testing fee are required..

AMTA 2064 Aircraft Instruments and Avionics 4 cr.

Sem: F 2 Lec./4 Lab Hrs./week

Prerequisite: Successful completion of the Certificate of Proficiency in General Aviation Maintenance Technology.
This course covers the operation, removal, installation, and troubleshooting techniques on aviation electronics (avionics) and electromechanical instrumentation systems, including antenna installation practices, aircraft positioning and warning systems, aircraft instruments, communication, and navigation systems. Lectures are reinforced with laboratory projects. A lab fee and testing fee are required..

General Aviation Maintenance

AMTG 1003 Aviation Math & Basic Physics 3 cr.
Sem: F/S 1 Lec./4 Lab Hrs./week

Prerequisite: None.
Corequisite: AMTG 1024 Basic Aviation Electricity.
This course presents mathematical and physics concepts and processes commonly encountered by an aviation maintenance technician. The mathematical concepts include fractions, decimals, ratio, roots, geometry, formula, and proportions. The physical science processes include an understanding of simple machines, sound, fluid power, and heat dynamics and will be covered within the context of basic aerodynamics, aircraft structures, and theory of flight. Lectures are reinforced with laboratory projects. A lab fee and testing fee are required..

AMTG 1024 Basic Aviation Electricity 4 cr.
Sem: F/S 1 Lec./6 Lab Hrs./week

Prerequisite: None
Corequisite: AMTG 1003 Aviation Math and Basic Physics.
The course introduces students to calculating and measuring capacitance, inductance, electrical power, voltage, current, resistance, and continuity. Students will determine the relationship of voltage, current, and resistances in electrical circuits. Students will read and interpret aircraft electrical circuit diagrams, including solid state devices and logic functions as well as inspect and service batteries. Lectures are reinforced with laboratory projects. A lab fee and testing fee are required..

AMTG 1033 Aviation Tools, Materials and Processes 3 cr.

Sem: F/S 1 Lec./4 Lab Hrs./week

Prerequisite: None
This course is an introduction of safety methods, tools, hardware, and materials used in aircraft maintenance and repair. Students will learn how to fabricate and install rigid and flexible fluid lines and fittings. Students will also study various methods of nondestructive testing and apply concepts to various practical situations. Lectures are reinforced with laboratory projects. A lab fee and testing fee are required..

AMTG 1054 Aircraft Familiarization 4 cr.
Sem: F/S 2 Lec./4 Lab Hrs./week

Prerequisite: None.
This course provides an overview and instruction on

chemicals, materials, and procedures used to clean aircraft and to prevent and control corrosion. Students will identify and select cleaning materials, inspect, identify, remove, and treat aircraft corrosion and perform aircraft cleaning. Students will be taught ground operations and servicing such as moving or taxiing aircraft and routine service procedures. Lectures are reinforced with laboratory projects. A lab fee and testing fee are required.

AMTG 1074 Aviation Regulations, Documentation, & Drawing 4 cr.
Sem: F/S 1 Lec./6 Lab Hrs./week

Prerequisite: None

Corequisite: AMTG 1003 Aviation Math and Basic Physics.

This course covers the FAA's Federal Aviation Regulations pertinent to aircraft maintenance and the associated documents, publications, and records applicable to the maintenance technician. Students will study the weight and balance for aircraft, as well as be introduced to basic mechanical drawing and blueprint reading. Lectures are reinforced with laboratory projects. A lab fee and testing fee are required..

Aviation Power Plant Maintenance

AMTP 1006 Reciprocating Engines 6 cr.
Sem: S/Su 2 Lec./8 Lab Hrs./week

Prerequisite: Successful completion of the Certificate of Proficiency in General Aviation Maintenance Technology

This course covers the design, theory and operation of a reciprocating engine. Hands-on training emphasizes the knowledge and skills needed to disassemble, inspect, overhaul, and reassemble a reciprocating engine and return the aircraft to airworthiness status. Lectures are reinforced with laboratory projects. A lab fee and testing fee are required..

AMTP 1036 Reciprocating Engines II 6 cr.
Sem: F/Su 2 Lec./8 Lab Hrs./week

Prerequisite: Successful completion of the Certificate of Proficiency in General Aviation Maintenance Technology.

This course continues the study of reciprocating engines and their subsystems. Topics include the operation, removal, installation, and troubleshooting techniques on the following systems: lubrication, fuel metering and distribution, induction, ignition, exhaust, cooling, and starting. Lectures are reinforced with laboratory projects. A lab fee and testing fee are required..

AMTP 1054 Power Plant Electrical Systems 4 cr.
Sem: F/S 2 Lec./4 Lab Hrs./week

Prerequisite: Successful completion of the Certificate of Proficiency in General Aviation Maintenance Technology.

This course covers the operating principles of the power plant ignition system and components found on reciprocating and turbine engine powered aircraft. Included are various power plant electrical systems: fire detection and extinguishing, DC twin generator, and AC generator. Auxiliary power units, their operation, removal and installation, and

troubleshooting techniques will be discussed in depth. Lectures are reinforced with laboratory projects. A lab fee and testing fee are required..

AMTP 2016 Turbine Engines I 6 cr.
Sem: F 2 Lec./8 Lab Hrs./week

Prerequisite: Successful completion of the Certificate of Proficiency in General Aviation Maintenance Technology.

This course provides a study of the construction, design, and theory, and operation of modern gas turbine engines and auxiliary power units (APU) used in the current generation of airplanes and helicopters. Primary topics include the lubrication, fuel scheduling, starting, and ignition of turbine engine systems. Hands-on training emphasizes the knowledge and skills needed to disassemble, inspect, overhaul, and reassemble a turbine engine and return the aircraft to airworthiness status. Lectures are reinforced with laboratory projects. A lab fee and testing fee are required..

AMTP 2036 Turbine Engines II 6 cr.
Sem: F/S 2 Lec./8 Lab Hrs./week

Prerequisite: Successful completion of the Certificate of Proficiency in General Aviation Maintenance Technology.

This course continues the study of turbine engines and their subsystems. Topics include the operation, removal, installation, and troubleshooting techniques on the following systems: lubrication, cooling, fuel metering, ignition and starting, and exhaust. Lectures are reinforced with laboratory projects. A lab fee and testing fee are required..

AMTP 2053 Propeller Systems 3 cr.
Sem: F 2 Lec./2 Lab Hrs./week

Prerequisite: Successful completion of the Certificate of Proficiency in General Aviation Maintenance Technology.

This course covers the maintenance, repair, as well as troubleshooting theory and practices for propellers and their systems components, which are found in today's reciprocating and turboprop aircraft. Lectures are reinforced with laboratory projects. A lab fee and testing fee are required..

Biology

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

BIOL 1114 General Biology 4 cr.
Sem: F/S/Su 3 Lec./2 Lab Hrs./week

Prerequisite: DMTH 1024 Developmental Math II with a grade of "C" or better or equivalent placement test scores.

Corequisite: BIOL 1110 General Biology Lab

This course introduces modern concepts of biological science. Topics include the nature of life, cell theory, cell chemistry, and genetics. A two-hour laboratory component is included to provide students with hands-on activities and projects to further their understanding of scientific methodology and instruments. A lab fee is required.

BIOL 1124 Plant Biology 4 cr.
Sem: S 3 Lec./2 Lab Hrs./week

Corequisite: BIOL 1120 Plant Biology Lab.

This course is a survey of botany to include the fundamental structure and function of plants and their economic importance. This course introduces the student to the basics of plant biology including plant diversity, structure, physiology, metabolism, reproduction, genetics, evolution and ecology. A lab fee is required.

BIOL 1214 Anatomy & Physiology I 4 cr.
Sem: F/S 3 Lec./2 Lab Hrs./week

Prerequisite: BIOL 1114 General Biology.

Corequisite: BIOL 1210 Anatomy & Physiology I Lab.

This course designed for nursing students provides a study of the structure, function, and integrated activity of the cells, tissues, and organ systems of the human body with special attention to the integumentary, skeletal, muscular, and nervous systems. A two-hour laboratory component is included to provide students with hands-on activities and projects to further their understanding of scientific methodology and instruments. A lab fee is required.

BIOL 1224 Anatomy & Physiology II 4 cr.
Sem: F/S 3 Lec./2 Lab Hrs./week

Prerequisite: BIOL 1214 Anatomy & Physiology I.

Corequisite: BIOL 1220 Anatomy & Physiology II Lab.

A continued study of the structure, function, and integrated activity of the cells, tissues, and organ systems of the human body. A two-hour laboratory component is included to provide students with hands-on activities and projects to further their understanding of scientific methodology and instruments. A lab fee is required.

BIOL 2413 Nutrition 3 cr.
Sem: F/S 3 Lec. Hrs./week

This is an introduction to the basic science of nutrition and deals with normal nutrition in the healthy individual. Life styles, goals, culture, growth and development, and the meaning of food and eating are explored.

BIOL 2504 Microbiology 4 cr.
Sem: F/S 3 Lec./2 Lab Hrs./week

Prerequisite: BIOL 1114 General Biology.

Corequisite: BIOL 2500 Microbiology Lab.

This course provides students who have no prior background in microbiology with an introduction to the morphology and biological activity of microorganisms. Since the course is intended primarily for students who will enter the nursing and allied health professions, emphasis will be given to the medical implications of microbial activity. After completing this course, students will have sufficient depth of knowledge to understand the nature, etiology, and control of infectious diseases. A lab fee is required.

Business

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental

English II is a prerequisite for all courses unless otherwise noted.

BUSN 1103 Introduction to Business 3 cr.
Sem: F/S 3 Lec. Hrs./week

Designed to give students a survey in the field of business, including terminology and career opportunities, this course introduces the operation of the business segments of society and includes the free enterprise system, management, marketing, finance, and government regulation.

BUSN 1143 Business Communication 3 cr.
Sem: F/S 3 Lec. Hrs./week

Prerequisite: ENGL 1113 English Composition I with a grade of "C" or better or equivalent placement test scores.

This course focuses on written and oral communication within an organization. Topics covered include the foundations of business communication, the composition and revision of letters, memos, reports, proposals, and resumes, as well as the preparation and delivery of oral presentations. Attention is given to appropriate style and diction for business environments and to techniques for composing direct, routine, rejection, and persuasive correspondence.

BUSN 1201 Career Preparation 1 cr.
Sem: F/S 1 Lec. Hr./week

This course provides information on career planning and decision-making, job search preparation, and professionalism skills for employees. Students will learn to explore and evaluate career options, write a professional resume, prepare for an interview, and communicate effectively with potential employers and co-workers.

BUSN 1203 Basic Marketing 3 cr.
Sem: F 3 Lec. Hrs./week

This course is an introduction to marketing in the global economy with special emphasis on marketing as it is practiced in the U.S. Topics include marketing strategies, functions, philosophies, planning and research; legal considerations; customer behavior; international marketing; and marketing management.

BUSN 1223 Administrative Office Procedures 3 cr.
Sem: S 3 Lec. Hrs./week

This course introduces students to current office practices and procedures. Topics include office organization and supervision issues; communication and conflict resolution; procedure analysis for billing, purchasing, and payroll; operation of common office equipment; form design and control; and storage and retrieval of information. Case studies and projects integrate theory with practical applications.

BUSN 1303 Business Mathematics 3 cr.
Sem: F 3 Lec. Hrs./week

Prerequisite: DMTH 1024 Developmental Math II with a grade of "C" or better or equivalent placement test scores.

This course covers mathematics applied to problems in a business environment in areas such as marketing,

accounting, finance, retailing, statistics, financial reporting, inventory, banking, and graphics. Problem solving exercises encourage students to make effective business and financial decisions based on mathematical computations. Other activities include reading, interpreting, and drawing conclusions from data tables in order to solve business problems and monitor issues related to business productivity. Students use authentic business documents, such as spreadsheets, databases, and financial reports to solve business problems.

BUSN 1423 Principles of Accounting I **3 cr.**
Sem: F **3 Lec. Hrs./week**

Prerequisite: DMTH 1024 Developmental Math II with a grade of "C" or better or equivalent placement test scores.
 This course presents the fundamentals of accounting theory, principles and terminology. Students are introduced to double-entry bookkeeping for proprietorships and partnerships.

BUSN 1433 Principles of Accounting II **3 cr.**
Sem: S **3 Lec. Hrs./week**

Prerequisite: BUSN 1423 Principles of Accounting I with a grade of "C" or better.
 A continuation of BUSN 1423, this course completes the basics of accounting theory, principles, and terminology. Emphasis is given to financial statements and analysis.

BUSN 1453 Human Resource Management **3 cr.**
Sem: F **3 Lec. Hrs./week**

This course addresses contemporary problems in human resource management using a systems approach that examines the many interdependencies affecting personnel decision-making, both from the organization's internal and external environments. Topics include the following human resource decision areas: planning, staffing, employee development, compensation and benefits, employee and labor relations. Emphasis is placed on measuring the effectiveness of human resource management programs.

BUSN 2033 Legal Environment of Business **3 cr.**
Sem: S **3 Lec. Hrs./week**

An introduction to the legal system and its common law origin, this course emphasizes basic concepts of the judicial system, law of torts, contracts, and the Uniform Commercial Code that applies to business transactions.

BUSN 2113 Principles of Management **3 cr.**
Sem: F/S **3 Lec. Hrs./week**

This course analyzes various elements necessary for managerial action, the importance of management, and various functions performed by managers, including planning, staffing, organizing, directing, and controlling.

BUSN 2993 Capstone Learning Experience **3 cr.**
Sem: F/S

Prerequisite: BUSN 2133 Introduction to Project Management

and 2.0 GPA or higher and submission of an approved Capstone Learning Project Application by the date listed in the Academic Calendar prior to the semester of intended enrollment.

Registered students must be in their final semester of enrollment. Students, with the assistance of a faculty facilitator, choose a project, identify project stakeholders, and develop and execute a formal project plan. Students maintain a journal which documents goals, progress, and barriers encountered. Most projects include an oral/written presentation at the conclusion of the semester.

Certified Nursing Assistant
 (see Nursing Assistant)

Chemistry

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

CHEM 1314 Chemistry I **4 cr.**
Sem: F **3 Lec./2 Lab Hrs./week**

Prerequisite: DMTH 1034 Developmental Math III with a grade of "C" or better or equivalent placement scores.
Corequisite: CHEM 1310 Chemistry I Lab.

This is an introductory course in algebra-based chemistry for science majors. The topics that will be covered in this course include scientific measurement, the periodic table modern atomic theory nomenclature of inorganic chemical compounds, atomic and molecular structure, stoichiometry, chemical bonding, nuclear chemistry, and chemical reactions. The laboratory component provides students with applications of theory and enables them to use general principles on practice. A lab fee is required.

CHEM 1324 Chemistry II **4 cr.**
Sem: S **3 Lec./2 Lab Hrs./week**

Prerequisite: A grade of "C" or better in CHEM 1314, Chemistry I.

Corequisite: CHEM 1320 Chemistry II Lab.

A continuation of CHEM 1314, this algebra-based course includes a more in-depth study of chemical reactions. Course topics include thermodynamics, acids and bases, reduction-oxidation reactions, and mechanisms of chemical reactions. A lab fee is required.

College Survival

CSUR 1101 College Survival Skills **1 cr.**
Sem: F/S **1 Lec. Hr./week**

Prerequisite: None

Designed to assist students in successfully completing their chosen academic programs, this course orients students to the resources available at the College, to goal setting, and to time management skill. Students will also be taught skills to

facilitate a smooth transition into college-level work incorporating their individual learning styles. This course also provides a foundation for General Education Outcomes in areas such as communication, critical thinking, and interpersonal skills.

Communications

(see English)

Composition

(see English)

Computers

(See also Developmental Education as well as Information Systems Technology)

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

Computer Applications

COMP 1113 Computer Fundamentals 3 cr.
Sem: F/S 3 Lec. Hrs./week

Prerequisite: Keyboarding skills of 20 words per minute or better or concurrent enrollment in DKEY 1101 Computer Keyboarding.

This course is designed to provide students with a fundamental knowledge of computers and applications software. Topics include computer organization, storage media and devices file processing techniques, computer systems and configurations, computer-based information systems, and computer terminology. Additionally, the course serves as an introduction to the use of computer hardware; to word processing, electronic spreadsheet, and data base management software; and to the Internet. Students may challenge this course through Credit by Examination.

COMP 1213 Database Applications 3 cr.
Sem: F/S 3 Lec. Hrs./week

Prerequisite: COMP 1113 Computer Fundamentals or ISTC 1013 IT Principles and Practices.

This course emphasizes features, functions and terminology of relational database management in support of project development and management. Students will learn database design and data maintenance by using queries, form design, reporting, and macro writing. Students enrolled in the Applications Specialist track of the AAS in Business Technology are required to take the Office Specialist (MOS) Certification Exam. A testing fee is required.

COMP 1313 Spreadsheet Applications 3 cr.
Sem: S 3 Lec. Hrs./week

Prerequisite: COMP 1113 Computer Fundamentals or ISTC 1013 IT Principles and Practices.

This course emphasizes features, functions, and terminology of electronic spreadsheets in support of project development and management. Students learn to create, edit and format worksheets, develop and format charts, write macros, and work with formulas and "what if?" conditions. Students enrolled in the Applications Specialist track of the AAS in Business Technology are required to take the Office Specialist (MOS) Certification Exam. A testing fee is required.

COMP 1413 Document Processing 3 cr.
Sem: F/S 3 Lec. Hrs./week

Prerequisite: COMP1113 Computer Fundamentals or ISTC 1013 IT Principles and Practices and demonstration of minimum keyboarding skills of 20 wpm.

This course emphasizes the application of word processing concepts and skills to enter, edit, and format documents. Students will create business letters, memoranda, reports, tables, columns, and merged documents.

COMP 2003 Keyboarding for Professionals 3 cr.
Sem: S 3 Lec. Hrs./week

Prerequisite: COMP1113 Computer Fundamentals and keyboarding skills of 20 wpm with 90%+ accuracy.

This course introduces students to computer keyboarding principles and techniques and provides practical application exercises through Microsoft application software. It is designed to increase both keyboarding speed and accuracy and provide students with a working knowledge of file management, including saving, retrieving, and deleting files, and networking through sending and receiving email attachments. Attention is also given to improving proof-reading skills and effectively following oral and written instructions for document preparation.

COMP 2013 Presentation Applications 3 cr.
Sem: F 3 Lec. Hrs./week

Prerequisite: COMP 1413 Document Processing or COMP 1113 Computer Fundamentals.

This course is designed to give students basic knowledge of Computer Based Training software that allows them to create a variety of productions by creating and importing graphics, by importing video, by improving or changing colors and resolutions, and by utilizing different fonts and formats effectively. Students enrolled in the Applications Specialist track of the AAS in Business Technology are required to take the Office Specialist (MOS) Certification Exam. A testing fee is required.

COMP 2503 Advanced Document Processing 3 cr.
Sem: F 3 Lec. Hrs./week

Prerequisite: COMP 1413 Document Processing.

This course covers advanced Microsoft Word skills. Individuals learn how to work with larger documents and collaborate with others working on the same document, arrange text and text objects create and modify charts and forms, and customize the Word environment. Students enrolled in the Applications Specialist track of the AAS in

Business Technology are required to take the Office Specialist (MOS) Certification Exam. A testing fee is required.

Criminal Justice

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

CJUS 1003 Introduction to Criminal Justice 3 cr.
Sem: F/S 3 Lec. Hrs./week

This course presents the history, development, and philosophy of criminal justice in a democratic society. The constitution, the sources and rationale of the law and the jurisdictions of local, state, and federal law enforcement agencies and courts are discussed. Students are provided with information about possible career orientations.

Developmental Education

Developmental education courses are designed to strengthen basic skills for students whose placement test scores indicate they need additional skills and knowledge to be successful in college level work. Credits earned do not satisfy degree requirements unless noted otherwise in the descriptions below. Grades earned are considered in computing students' academic standing and their financial aid eligibility. A grade of "C" or better is required for successful completion of all developmental education courses.

Developmental Communications

See the Admissions and Placement chapter for a listing of ACT, SAT, and COMPASS placement score requirements for placement in developmental or college level courses.

DCOM 1034 Developmental Communications I 4 cr.
Sem: F/S/Su 4 Lec. Hrs./week

Prerequisite: Appropriate placement test scores and keyboarding skills of 20 wpm or better or concurrent enrollment in DKEY 1101 Computer Keyboarding.
This course is designed for students who need to develop their reading and writing skills to prepare for the demands of college-level coursework. Particular emphasis will be placed on the relationship between reading and writing and the skills required to become more proficient at both. Students will complete various reading and writing assignments that explore this relationship and develop these skills. A lab fee is required.

DCOM 1054 Developmental Communications II 4 cr.
Sem: F/S/Su 4 Lec. Hrs./week

Prerequisite: Appropriate placement test scores and keyboarding skills of 20 wpm or better or concurrent enrollment in DKEY 1101 Computer Keyboarding.
This course is designed to help students develop Basic English skills necessary for college level writing through

continued emphasis on Standard American English grammar, sentence structure, and the development of clear, concise, well organized paragraphs and essays that are the building blocks of college essays and reports. Furthermore, this course emphasizes the relationship between reading and writing through reflective writing assignments that clearly show an understanding of the text. DENG 1054 does not satisfy the English requirement for degree and certificate programs. A grade of 'C' or better is required for successful completion of this course. This course utilizes computers. A testing fee is required

DENG 1034 Developmental English I 4 cr.
Sem: F/S/Su 4 Lec. Hrs./week

Prerequisite: Appropriate placement test scores and keyboarding skills of 20 wpm or better or concurrent enrollment in DKEY 1101 Computer Keyboarding.
This course incorporates a laboratory approach to individualized instruction to meet different students' needs. Course content may include fundamentals of grammar, sentence structure, and paragraph development. A grade of "C" or better is required for successful completion of this course. A lab fee is required.

DENG 1054 Developmental English II 4 cr.
Sem: F/S/Su 4 Lec. Hrs./week

Prerequisite: Appropriate placement test scores and keyboarding skills of 20 wpm or better or concurrent enrollment in DKEY 1101 Computer Keyboarding.
This course is designed to help students develop basic English skills necessary for college-level writing through continued emphasis on grammar and sentence structure. It provides instruction in the development of clear, concise, well-organized paragraphs and essays that are the building blocks of college essays and reports. Some assignments may be completed outside of class through the use of web-based programs that support the textbook. DENG 1054 does not satisfy the English requirement for degree and certificate programs. A grade of "C" or better is required for successful completion of this course. A lab fee is required.

Developmental Computer Skills

DKEY 1101 Computer Keyboarding 1 cr.
Sem: F/S 2 Lab Hrs./week

Prerequisite: None.
This course introduces students to computer keyboarding principles and techniques and provides practical application exercises designed to increase both speed and accuracy. Students may exit (test out) upon completion of all weekly assignments, coupled with the ability to type 20 WPM with 90 percent accuracy. College credit is awarded for successful completion, but no certificate or degree requirements are satisfied by this course.

DKEY 1201 Introduction to Computers 1 cr.
Sem: F/S 2 Lab Hrs./week

Prerequisite: None.
This is an introductory course covering basic computer skills. Emphasis will be placed on PC basics, file management, the

Internet, email. An introduction to application software will also be presented. Enrollment is on a pass/fail basis. The course does not satisfy any degree or certificate requirements, nor is the grade computed in students' GPA calculations.

Developmental Mathematics

All students whose placement test scores indicate a need for developmental mathematics will start in Developmental Mathematics I DMTH 1014 on Module 1, with the option of pre-testing out of some modules and immediately moving to the next module in the sequence. The Developmental Mathematics sequence includes 17 modules which, collectively, cover all of the arithmetic, algebraic, and problem-solving skills needed to prepare students for college-level math courses. Emphasis is placed throughout the sequence on solving algebraic equations and word problems.

DMTH 1014 Developmental Mathematics I 4 cr.
Sem: F/S/Su 4 Lec. Hrs./week

Prerequisite: None

The course is self-paced, with one-on-one help available from an instructor. Developmental Mathematics I covers the first 5 modules out of the 17 Module Developmental Mathematics sequence. These 17 modules collectively cover all of the arithmetic, algebraic, and problem-solving skills needed to prepare students for college-level math courses. Emphasis is placed on solving algebraic equations and word problems.

DMTH 1024 Developmental Mathematics II 4 cr.
Sem: F/S/Su 4 Lec. Hrs./week

Prerequisite: Required placement test scores or a grade of C or better in DMTH 1014 Developmental Mathematics I.

The second course in the Developmental Mathematics sequence, Developmental Mathematics II covers modules 6 through 11 out of the 17-module sequence. The course format is computer based with one-on-one help available from instructor. These 17 modules collectively cover all of the arithmetic, algebraic, and problem-solving skills needed to prepare students for college-level math courses. Emphasis is placed on solving algebraic equations and word problems.

DMTH 1034 Developmental Mathematics III 4 cr.
Sem: F/S/Su 4 Lec. Hrs./week

Prerequisite: Required placement test scores or a grade of C or better in DMTH 1024, Developmental Mathematics II.

The third course in the Developmental Mathematics sequence, Developmental Mathematics III covers Modules 12 through 17 of the 17-module sequence. These 17 modules collectively cover all of the arithmetic, algebraic, and problem-solving skills needed to prepare students for college-level math courses. Emphasis is placed on solving algebraic equations and word problems.

Developmental Reading

DRDG 1004 Developmental Reading I 4 cr.
Sem: F/S/Su 4 Lec. Hrs./week

Prerequisite: Required placement test scores.

This course provides individualized instruction for students whose placement scores indicate a need to strengthen reading skills for college success. Course content focuses on improving comprehension as well as developing a college-level vocabulary. Furthermore, this course will explore the relationship between reading and writing through short, reflective writing assignments that require a clear understanding of the text. A lab fee is required.

DRDG 1024 Developmental Reading II 4 cr.
Sem: F/S/Su 4 Lec. Hrs./week

Prerequisite: Required placement test scores

This course, designed for students who need additional instruction in comprehension and vocabulary skills, provides individualized instruction for students whose placement test scores indicate a need to strengthen reading skills for college success. Course content focuses on improving comprehension and concentration, developing a college-level vocabulary, and increasing reading speed. Furthermore, this course will explore the relationship between reading and writing through short, reflective writing assignments that require a clear understanding of the text. A lab fee is required.

Diesel Maintenance Technology

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

Lecture and lab hours meet the requirements for National Automotive Technicians Education Foundation (NATEF) Certification.

Diesel Maintenance

HTDM 1014 Preventive Maintenance 4 cr.
Sem: F/S 1 Lec./6 Lab Hrs./week

This course provides a fundamental understanding of heavy truck classifications and major components. Students will develop an understanding of the benefits of well-planned preventive maintenance service and of Federal Motor Carrier inspector qualifications, and learn how to prepare the heavy duty truck for cold weather. This course requires the purchase of a tool kit. A lab fee is required.

HTDM 1024 Electrical Systems I 4 cr.
Sem: F 1 Lec./6 Lab Hrs./week

This course covers the fundamentals of general electrical systems. Emphasis will be placed on diagnosis, testing, and repair of the batteries, starting system, charging system, and chassis electrical circuits using proper service manual

procedures. Students will gain hands-on experience using digital volt/ohm meters (DVOM) and specialized test equipment used for diagnosing electrical/electronic systems problems. A lab fee is required.

HTDM 1034 Brake Systems 4 cr.
Sem: F 2 Lec./5.5 Lab Hrs./week

This course focuses on antilock and electronic brake systems. Students will learn the importance of well-functioning brake systems, the operation of the dual-brake circuit, and the requirements of the Federal Motor Vehicle Safety Standard No. 121. A lab fee is required.

HTDM 1044 Electrical Systems II 4 cr. Sem: S 1 Lec./6 Lab Hrs./week

Prerequisite: HTDM 1024 Electrical Systems I with a grade of "C" or better.

Presenting the fundamentals of electronics and computer systems, this course emphasizes the understanding of an integrated circuit and its application in on-board vehicle electronics. The laboratory portion provides students with trouble shooting skills to learn proficiency in performing tests on key electronic components including diodes and transistors. The student will learn to use PC and OEM software to read, diagnose, and reprogram vehicle electronic systems. A lab fee is required.

HTDM 1054 Diesel Engines I 4 cr.
Sem: F 1 Lec./6 Lab Hrs./week

Prerequisite: HTDM 1014 Preventive Maintenance with a grade of "C" or better.

This course covers principles and fundamentals of the diesel engine including coolant systems, intake systems, exhaust systems, fuel systems, and engine and brake electronics. The laboratory portion provides hands-on practice with diagnostic and repair skills. A lab fee is required.

HTDM 1063 HVAC Systems 3 cr.
Sem: S/Su 1 Lec./4 Lab Hrs./week

This course covers the theory and operation of vehicle heating, ventilation, and air conditioning systems. Manual and electronic control systems including blower controls and motors, air distribution and a/c operation are covered as well. Students will perform diagnosis, testing, and repair of the HVAC systems using the proper procedures and equipment and learn about Federal and State laws that pertain to refrigerants used in vehicle a/c systems. A lab fee is required.

HTDM 1073 Steering and Suspension 3 cr.
Sem: F/Su 1 Lec./4 Lab Hrs./week

This course covers the theory and operations of the various types of steering and suspensions used on highway transportation vehicles. The laboratory portion will provide the student with diagnosis, testing, and repair procedures of the various types of steering and suspension system. A lab fee is required.

HTDM 1084 Powertrain 4 cr.
Sem: S 2 Lec./4 Lab Hrs./week

Prerequisite: HTDM 1014 Preventive Maintenance, HTDM 1024 Electrical Systems I with a grade of "C" or better.

This course presents the theory and operation of manual transmissions, automatic transmissions, differentials, power dividers, clutches, and drive shafts. Attention is given to the theory and operation of mechanical, pneumatic, hydraulic, and electronic control devices for powertrain components. Students will perform maintenance, adjustments, disassembly, assembly, and installation of heavy duty clutch assemblies, manual transmissions, automatic transmission, differentials, and power dividers. A lab fee is required.

HTDM 1094 Diesel Engines II 4 cr.
Sem: S 1 Lec./6 Lab Hrs./week

Prerequisite: HTDM 1054 Diesel Engines with a grade of "C" or better.

A continuation of HTDM 1054 Diesel Engines I, this course covers the disassembly procedures, analysis, and rebuild procedures of the diesel engine. Attention will be given to electronic fuel injection as well as the mechanical fuel injection diagnosis and repair procedures. A lab fee is required.

HTDM 2004 Intro to Diesel Fuel Systems 4 cr.
Sem: (TBD) 1 Lec./6 Lab Hrs./week

This course covers introductory diesel fuel injection systems. Topics include the identification, disassembly, assembly, troubleshooting, repair, and adjustment of the following fuel systems components: inline pumps, distributor pumps, various manufacturer's fuel systems, unit injectors, and injectors. A lab fee is required.

HTDM 2014 Automatic Transmissions 4 cr.
Sem: (TBD) 1 Lec./6 Lab Hrs./week

Prerequisite: HTDM-1084 Powertrain.

This course covers automatic transmissions including disassembling and reassembling of selected transmissions for the purpose of understanding function, construction, operation, servicing, and troubleshooting procedures. A lab fee is required.

HTDM 2102 Diesel Engine Diagnosis & Repair I 2 cr.

Sem: (TBD) 1 Lec./2 Lab Hrs./week

Prerequisite: HTDM 1094 Diesel Engines II.

This course provides advanced study in engine assembly and start-up after assembly with a continuation in the study of engine components, controls and operating systems. Students receive an in-depth study of component replacement, tune-up adjustments, and preparation to run an engine under load in a dynamometer test cell with emphasis on basic engine operating factors and troubleshooting. A lab fee is required.

HTDM 2113 Diesel Shop Practices 3 cr.
Sem: (TBD) 1 Lec./4 Lab Hrs./week

Prerequisite: HTDM 2124 Diesel Engine Diagnosis & Repair II.

This course emphasizes actual shop operation including long and short term jobs covering all aspects of a vehicle. Emphasis includes vehicle maintenance, shop flat-rate procedures, work order and warranty claim procedures. A lab fee is required.

HTDM 2124 Diesel Engine Diagnosis & Repair II 4 cr.
Sem: (TBD) 1 Lec./6 Lab Hrs./week

Prerequisite: HTDM 2102 Diesel Engine Diagnosis & Repair I.

This course is intended to give students a thorough understanding of advanced diesel engine performance, emissions systems and advanced diagnostic and troubleshooting skills. Students will receive engine performance theory, exhaust emissions treatment, diagnosis and correction of engine performance, emission complaints. Students perform hands-on component replacement and tune-up adjustments. Students will receive advanced instruction in the operation of engines under load in a dynamometer test cell. A lab fee is required.

Digital Media

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

DIGM 1033 Film and Video Production 3 cr.
Sem: F 2 Lec. Hrs./2Lab Hrs./week

This course provides an introduction to cinematic techniques, lighting, and editing for narrative filmmaking that combines the presentation of theory, aesthetics, and methods with a hands-on practical filmmaking experience. A lab fee is required.

DIGM 1043 Audio Production 3 cr
Sem: S 3 Lec. Hrs./week

This course is an introduction to the theory and practice of audio production, providing both hands-on experiences with equipment and techniques as well as discussions of the principles and ethics underlying the writing, recording and editing of creative audio presentations. A lab fee is required.

DIGM 1053 Screenwriting 3 cr.
Sem: S 3 Lec. Hrs./ week

The course will examine the theory and techniques of writing for the screen with a fixed focus on the unique storytelling demands of the short narrative film. Students will be introduced to fundamentals of dramatic structure, visualization, and characterization, as well as pragmatic matters of format and marketplace. Each student will write a screenplay and become a more critical viewer of movies. A lab fee is required.

DIGM 2003 Cinematography 3cr.
Sem: F 3 Lec. Hrs./week

Prerequisites: DIGM 1033 Film and Video Production and DIGM 1043 Audio Production.

This class focuses on visual storytelling, and explores advanced digital cinematography techniques. Students will operate HD video cameras, use light meters, determine set and lighting needs, block scenes and become familiar with topics including film space, continuity, lenses, color, filters, and camera control. Over the course of the semester, students will work together to produce a number of short films to demonstrate mastery of these concepts. A lab fee is required.

DIGM 2033 Producing and Directing 3cr.
Sem: S 3 Lec. Hrs./week

Prerequisites: DIGM 1033 Film and Video Production and DIGM 1043 Audio Production.

This course focuses on the production process and performances from the perspectives of a producer and director. The roles of all other members of a film crew are also explored. Students will learn the economics of film production through the creation of detailed, line-item budgets for proposed projects. The stages of pre-production, production, post-production and distribution are examined as well as the relationship between the producer and director. A lab fee is required.

DIGM 2042 Digital Radio 2cr.
Sem: S 2 Lec. Hrs./week

Prerequisite: DIGM 1043 Audio Production. This course provides exposure to digital audio editing techniques through the application of advanced radio productions. Students will produce various types of radio productions by using advanced digital audio editing tools to craft messages geared towards specific target audiences. Participants will gain invaluable experience by creating content for MSCC's KWEM radio station. A lab fee is required.

DIGM 2073 Advanced Digital Graphics 3cr.
Sem: S 3 Lec. Hrs./week

Prerequisites: ISTC 2123 Digital Graphics for the Web. In this course, students will explore and create graphic designs from a multitude of design software and concepts. Students will build on the elements of basic design learned in Digital Graphics for Web, and learn the advanced techniques necessary to become proficient in the field of graphic design. A lab fee is required.

Economics

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless noted.

ECON 2213 Macroeconomics 3 cr.
Sem: F 3 Lec. Hrs./week

A general introduction to basic concepts in economics, this course includes national income, money and banking, fiscal policy, and economic growth. Emphasis is placed on macroeconomics as applied to the world of today.

3 cr.

Sem: S

3 Lec. Hrs./week

This course is a continuation of ECON 2213 Macroeconomics and emphasizes theories of cost, price, and consumer behavior. Attention is given to production, distribution, and consumption of goods and markets of pure and imperfect competition.

Emergency Management

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

EMGT 1003 Environmental Hazards

3 cr.

Sem: F

3 Lec. Hrs./week

This course provides an overview of emergency management systems with an analysis of the causes, characteristics, nature and effects of such disasters as avalanches, drought, earthquakes, epidemics, fires, flooding, hazardous materials, hurricanes, industrial accidents, nuclear power plants accidents, power failures, volcanoes, and other catastrophic hazards.

EMGT 1013 **Aim/Scope of Emergency Management**

3 cr.

Sem: S

3 Lec. Hrs./week

This course engages students in analyses of disasters in historical settings and current situations. Areas covered include the role of local, state, and federal government, the unique problems of business/industry crisis management, disaster prevention and mitigation policy, technology support, and professionalism and litigation issues.

Emergency Medical Technician

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for this course (see additional requirements below). Enrollment in EMER 1007 Emergency Medical Technician requires special approval from the approval from the VP or Associate VP for Learning and Instruction, substance abuse screen, and criminal background check.

EMER 1007 Emergency Medical Technician (EMT)

7 cr.

Sem: S

4 Lec./4 Lab Hrs./week
120 additional field

hours during the semester

Prerequisite Students must be 18 or older and hold high school diploma or GED to enroll. Students without a science background are strongly encouraged to enroll in MEDP 1043 Anatomy & Physiology or BIOL 1214 prior to taking EMER 1007.

This course sequentially presents knowledge and skills required by the U.S. Department of Transportation (U.S. D.O.T.) and the Arkansas Department of Health to become a certified EMT. Course content follows the EMT- National Standard Curriculum as set forth by U.S. D.O.T and the Arkansas Department of Health. The student will develop EMT skills and competencies that will enable successful program completers to take the National Registry examination for EMT certification. Students must meet all requirements as set forth by the Arkansas Department of Health Guidelines including, but not limited to, a practicum in a hospital emergency room, a practicum as an ambulance third rider, and special auto extrication training. **Students must make a minimum course grade of 70% to be eligible to take the National Registry examination.** This course is limited to students admitted to the Emergency Medical Technician program and requires fees for a uniform, CPR certification, liability insurance, federal and state background checks, state exam, and national registry exam. Licensure may be denied to applicants who have been convicted of certain designated crimes. Fees for supplies, testing, insurance, background checks, and uniform are required.

English

(See also Developmental Education)

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

Composition

ENGL 1113 **English Composition I**

3 cr.

Sem: F/S/Su

3 Lec. Hrs./week

English Comp I gives attention to critical reading and thinking skills applicable to all college courses. The course stresses writing as a process and uses the essay as the vehicle while stressing invention, drafting, revising, and rewriting. This course utilizes computers and requires keyboarding skills of 20 wpm or better. A lab fee is required.

ENGL 1123 English Composition II

3 cr.

Sem: F/S/Su

3 Lec. Hrs./week

Prerequisite: ENGL 1113 English Composition I with a grade of "C" or better.

English Comp II continues to develop the student's writing skills through practice in different kinds of rhetorical development while emphasizing appropriate diction and audience awareness. Students learn both APA and MLA documentation and produce a research paper using MLA documentation. This course utilizes computers and requires keyboarding skills of 20 wpm or better. A lab fee is required.

ENGL 1133 Writing for the Workplace

3 cr.

Sem: F/S

3 Lec. Hrs./week

Prerequisite: ENGL English Composition I with a grade of "C" or better.

In this workshop/ discussion course, we will study professional writing with an emphasis on audience analysis. We will focus on rhetorical strategies for writing letters, memos, reports, summaries, resumes, and oral presentations. We will also focus on developing the collaborative writing abilities so often required of professionals and technical writers at every stage of the writing process: brainstorming, drafting, revising, editing, and proofreading.

ENGL 2213 Creative Writing 3 cr.
Sem: F 3 Lec. Hrs./week

Prerequisite: ENGL 1113 English Composition I with a grade of "C" or better.

This course introduces students to the basics of creative writing. Students explore the creative process and apply it to writing poetry, fiction, drama, and nonfiction. The course offers a workshop environment where students have the benefit of peer review and critique.

Oral Communication

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

ENGL 2303 Oral Communication 3 cr.
Sem: F/S/Su 3 Lec. Hrs./week

This course investigates the components of oral communication through study and practice in dyadic, small group, and speaker-audience situations.

Fine Arts **(See Art, Music)**

Foreign Language **(See Humanities)**

Geography

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

GEOG 1133 World Geography 3 cr.
Sem: F/S 3 Lec. Hrs./week

This survey course's content emphasizes the relationship of human beings to their geographic environment. Students study various climatic and geographic regions of the world in relation to their influence on human activity.

Health and Physical Education

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024

Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

HPED-1011 Beginning Zumba 1 cr.
Sem: F/S 2 Lab Hrs./week

Prerequisite: None. This Latin inspired fitness class is designed for all levels of fitness. The routines feature interval training sessions where fast and slow rhythms and core training are combined to tone and sculpt your body while burning fat.

HPED 1113 Health and Safety 3 cr.
Sem: F/S 3 Lec. Hrs./week

Prerequisite: Placement by Testing or DRDG 1024 and DENG 1054

This course is designed to examine contemporary health-related issues for all dimensions of the individual—psychological, physical, social, spiritual, intellectual, and environmental—through focus on health promotion and disease prevention. Emphasis is placed on maintaining or improving quality of life by developing personal and social skills (decision-making, communication, stress management, goal setting) across health education content areas, as well as identifying and accessing appropriate health-related resources.

HPED 1201 Beginning Basketball for Men 1 cr.
Sem: F 2 Lab Hrs./week

Prerequisite: Permission of the Coordinator for Athletics and Physical Education.

This course utilizes both theoretical and practical techniques to educate students in the sport. The various skills of basketball including ball-handling, passing, shooting, rebounding and defense, as well as sportsmanship and knowledge of the rules of the game, will be taught. Skill and knowledge will be stressed so that through participation of basketball activities there will be enjoyment and competition.

HPED 1221 Physical Conditioning for Men 1 cr.
Sem: F .5 Lec./1.5 Lab Hrs./week

Prerequisite: Permission of the Coordinator for Athletics and Physical Education

This course utilizes both lecture and experiential learning opportunities to instill a fundamental knowledge of physical conditioning skills which attempt to maximize athletic potential. The majority of the content will attempt to provide students with the knowledge and practice necessary to cultivate athletic fitness. It should be noted that this class is very strenuous in its physical requirements.

HPED 1301 Beginning Basketball 1 cr.
For Women 2 Lab Hrs./week

Sem: F
Prerequisite: Permission of the Coordinator for Athletics and Physical Education

This course utilizes both theoretical and practical techniques to educate students in the sport of basketball. The various skills of basketball including ball-handling, passing, shooting, rebounding and defense, as well as sportsmanship and knowledge of the rules of the game will be taught in this

course. Skill and knowledge will be stressed so that through participation of basketball activities there will be enjoyment and competition.

HPED 1321 Physical Conditioning for Women 1 cr.

Sem: F .5 Lec./1.5 Lab Hrs./week
Prerequisite: Permission of the Coordinator for Athletics and Physical Education

This course utilizes both lecture and experiential learning opportunities to instill a fundamental knowledge of physical conditioning skills which attempt to maximize athletic potential. The majority of the content will attempt to provide students with the knowledge and practice necessary to cultivate athletic fitness. It should be noted that this class is very strenuous in its physical requirements.

HPED 1401 Beginning Weight Training 1cr.

Sem: F/S 2 Lab Hrs./week

This course focuses on providing each student with an array of exercise options as well as providing the student with basic health benefits of those specific forms of exercise.

HPED 1702 Concepts of Physical Activity 2 cr.

Sem: F/S 2 Lec. Hrs./week

Prerequisite: None.

Course components include relationships between lifestyles and selected health problems, the knowledge and skill to participate in at least one lifetime physical activity, and the benefits of various physical activities. Students develop a personal health program that targets cardiorespiratory fitness, muscular strength and endurance, and flexibility. This course requires a laboratory fee.

HPED 1801 Fitness 1 cr.

Sem: F/S 1 Lec. Hr./week

This course focuses on providing each student with an array of exercise options as well as providing the student with basic health benefits of those specific forms of exercise. A lab fee is required.

History

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

HIST 1153 World Civilization I 3 cr.

Sem: F 3 Lec. Hrs./week

With emphasis on development of world civilizations, this course stresses cultural developments, the growth of institutions, and the expansion of world civilization to the early modern period.

HIST 1163 World Civilization II 3 cr.

Sem: S 3 Lec. Hrs./week

With emphasis on development of world civilizations, this

course stresses cultural developments, the growth of institutions, and the expansion of world civilization since the early modern period.

HIST 2123 U.S. History Before 1877 3 cr.

Sem: F 3 Lec. Hrs./week

Major topics in this course include discovery and development of America, the Colonial settlement, the Revolutionary War, the new government, the Civil War and Reconstruction. The course emphasizes ideals, attitudes, and values of Americans in development of politics, culture, society, and economics.

HIST 2133 U.S. History After 1877 3 cr.

Sem: S Lec. Hrs./week

A continuation of HIST 2123, this course begins after Reconstruction and ends with the present era. Major topics include industrial growth, the emergence of the U.S. as a world power, the Depression, World War II, and international developments.

HIST 2153 Arkansas History 3 cr.

Sem: S 3 Lec. Hrs./week

This course provides an overview of the political, economic, social, and cultural development of Arkansas beginning with the Indians and ending at present day with a special emphasis on national and regional perspectives of Arkansas.

Hospitality

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

HMG1 1003 Introduction to Hospitality and Tourism Management 3 cr.

Semester: F/S 3 Lec. Hrs./week

This introductory course acquaints the student with the field of hospitality and tourism industry with focus on basic management theories and principles as they apply to hospitality and tourism: basic structure, organization, and management of industry components and the services/products they deliver.

HMG1 1013 Applications of Food Service Management..... 3 cr.

Semester: F 3 Lec. Hrs./week

This course is restricted to high school students enrolled in the MSCC Technical Center. Prerequisite: None. This course provides an overview of the field but concentrates on the different facets of the foodservice including a brief history of the development of hospitality and professional foodservice; various types and styles of foodservice operations; the new brigade system; employment opportunities in foodservice; professional development and certifications; and the benefits of professional networking and introduction to

management issues including human resources, customer service, operations, marketing, and planning.

HMGT 1033 Hotel, Lodging and Housekeeping Management 3 cr.

Semester: S 3 Lec. Hrs./week

This course examines both the operation of a rooms department of a typical full-service or selective-service facility and the theoretical applications of all revenue center operations including yield management and other vital hotel functions, with emphasis on the control function of management.

HMGT 1043 Professionalism in Hospitality 3 cr.

Semester: S 3 Lec. Hrs./week

Prerequisites: ENGL 1113, English Composition I and ENGL 2303, Oral Communication or permission of the Lead Faculty. This course teaches the "soft skills" necessary for success in the culturally diverse hospitality management environment with an emphasis on dress, proper etiquette, body language, the art of nonverbal communication, and business conversation. Networking and job search techniques are examined, and students explore the dynamics, meaning, and value of becoming a well-rounded person.

HMGT 1123 Hospitality Information Systems 3 cr.

Semester: F 3 Lec. Hrs./week

Prerequisite: COMP1113 Computer Fundamentals or permission of the Lead Faculty. This course will introduce students to hospitality information systems, including property and restaurant management systems, meeting management, club management, and communication networks.

HMGT 1143 Food Service Management 3 cr.

Semester: F/S 3 Lec. Hrs./week

Foodservice systems will be explored through examining the component parts of a typical foodservice operation which include management and organization, procurement, production, distribution, service, maintenance, and sanitation. The course will also explore modern trends in foodservice/restaurant management. All students will be required to take and pass the National Restaurant Association ServSafe Food Protection Manager Certification exam which is a prerequisite for HMGT 2064 Principles of Food Prep. A testing fee is required.

HMGT 1213 Accounting Systems in Hospitality Industry 3 cr.

Semester: F 3 Lec. Hrs./week

Prerequisite: BUSN 1423 Principles of Accounting I. This course covers financial record keeping and reporting systems in the hospitality industry, with emphasis on payroll, purchasing, financial analysis and expense management.

HMGT 1413 Gaming and Casino Management 3 cr.

Semester: TBA 3 Lec. Hrs./week

This course provides a survey of the gaming industry, wagering and casino operation, security, social

consequences, local regulatory issues, management and marketing.

HMGT 1513 Nutrition and Menu Planning 3 cr.

Semester: F 3 Lec. Hrs./week

This course is an introduction to basic nutrition principles and guidelines for the food service industry. Students will research current issues in nutrition from both a global and cultural perspective, and apply principles through menu development and meal planning. All students will be required to take the National Restaurant Association ManageFirst: Nutrition exam. A testing fee is required.

HMGT 2003 Service Industry Structure and Leadership 3 cr.

Semester: S 3 Lec. Hrs./week

Successful leadership as channeled through an organizational structure is a very critical concept in the service industries where the customer is usually present at the point of production of the product. This course will review both the content of organizational structure and leadership as well as the process of utilizing them to successfully direct an organization to its objectives.

HMGT 2023 Food and Beverage Cost Controls 3 cr.

Semester: S 3 Lec. Hrs./week

Prerequisite: MATH 1104 Applied Technical Math, MATH 1113 College Algebra, or permission of the Lead Faculty. This course emphasizes the theories and techniques that are commonly used in the restaurant industry for controlling food and beverage costs. It emphasizes how controllers, and managers can use these approaches to successfully measure and control food and beverage output. All students will be required to take the National Restaurant Association Controlling Foodservice Costs certification exam. A testing fee is required.

HMGT 2041 Hospitality Internship 1 cr.

Semester: S

Prerequisite: HMGT 1043 Professionalism in Hospitality and permission of the Lead Faculty. Students will engage in employment in hospitality setting for a minimum of 320 clock hours in an instructor-approved learning situation and participate in a number of career preparation activities.

HMGT 2043 Hospitality Human Resource Management 3 cr.

Semester: TBA 3 Lec. Hrs./week

Students study human resource management specific to the hospitality industry: selection, placement, training, compensation, motivation, appraisal, labor relations and regulatory issues. All students will be required to take the NRAEF Hospitality Human Resources certification exam. A testing fee is required.

HMGT 2064 Principles of Food Prep 4 cr.

Semester: S 4 Lec/Lab. Hrs./week

Prerequisite: HMGT 1143 Food Service Management and NRAEF ServSafe Certification or permission of the Lead Faculty. This course presents the study of the various foods,

production principles, cooking methods, food storage and equipment utilized in food preparation and includes both lab and classroom learning opportunities. The classroom component provides the theoretical basis of food types and production processes that will then be demonstrated and experimented with in the lab environment. Requires the purchase of professional uniform and some supplies. A lab fee is required.

HMG 2123 Kitchen Operations Management 3 cr.
Semester: TBA 3 Lec. Hrs./week

Prerequisite: HMG 2064 Principles of Food Prep or permission of the Lead Faculty. Students study food preparation techniques based on menu and recipe requirements, including ingredient quality and yield factors. Emphasis is given to aesthetic plate and buffet presentations in a laboratory setting. A lab fee is required.

HMG 2133 Hospitality Sales and Marketing 3 cr.
Semester: TBA 3 Lec. Hrs./week

This course focuses on the application of marketing principles and techniques to the hospitality and travel industries. Students will examine how the marketing concepts of product, place, price and promotion can be effectively utilized in the hospitality industry.

HMG 2153 Restaurant Layout & Design 3 cr.
Semester: TBA 3 Lec. Hrs./week

Prerequisite: HMG 2064 Principles of Food Prep or permission of the Lead Faculty. Location and arrangement of equipment for efficient utilization of space and development of work flow patterns to meet operational requirements. Work optimization, human interactions and styles of service and room configurations for front of the house. All students will be required to take the NRAEF Hospitality and Restaurant Management certification exam. A testing fee is required.

HMG 2173 Entertainment & Venue Management 3 cr.
Semester: TBA 3 Lec. Hrs./week

Students study major management functions: planning, organizing, implementing and controlling activities associated with sports and entertainment events including college and professional sports, concerts, local entertainment events and world events, such as the Olympics.

HMG 2203 Beverage Management 3 cr.
Semester: F/S 3 Lec. Hrs./week

This course presents the manager's role and responsibility in developing and operating a facility serving alcoholic beverages. All students will be required to take the NRAEF ServSafe Alcohol certification exam. A testing fee is required.

HMG 2233 Principles of Tourism 3 cr.
Semester: TBA 3 Lec. Hrs./week

This course provides an overview of the history and implications of travel and tourism as an economic, political

and cultural force, and the effect of tourism development on the quality of life of the host society.

HMG 2253 Issues and Trends in Hospitality and Tourism 3 cr.

Semester: TBA 3 Lec. Hrs./week

Prerequisite: ENGL 1123 English Composition II and ENGL 2303 Oral Communications or permission of the Lead Faculty. Students explore current trends and issues in the hospitality and tourism environment. Topics covered include hospitality and tourism in a global recession; travel trends including adventure travel, e-commerce and virtual tourism; and eco-friendly trends including "green hotels" and the "slow food movement." Strategic management and preparedness for issues like terrorism and natural disasters will also be discussed with an emphasis on practical business applications.

HMG 2273 Legal Issues in Hospitality and Tourism 3 cr.
Semester: TBA 3 Lec. Hrs./week

Prerequisite: ENGL 1123 English Composition II and ENGL 2303 Oral Communications or permission of the Lead Faculty. This course examines the common and statutory law of the hospitality and tourism industry in the United States. Included are discussions of the duties and responsibilities of hospitality and tourism businesses to guests, including duties to maintain property, receive travelers and assume various liabilities for guests' property. The legal environment and issues of the hotel, restaurant and travel industry will be discussed and analyzed.

Humanities

Literature, Philosophy, & Spanish

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

ENGL 2153 World Literature I 3 cr.
Sem: F/S 3 Lec. Hrs./week

Prerequisite: ENGL 1123 English Composition II with a grade of "C" or better.

In this course, the student reads and analyzes masterpieces of the Ancient World (including works from Mesopotamia and Egypt, India, China, and Greece and Rome) and of the Early Middle Period (including works from the Middle East, India, Asia, and Europe). Students respond to reading selections in writing, through class discussions, and through individual projects.

ENGL 2163 World Literature II 3 cr.
Sem: S 3 Lec. Hrs./week

Prerequisite: ENGL 1123 English Composition II with a grade of "C" or better.

In this course, students read and analyze masterpieces of the Late Middle Period (including works from the Middle East, India, Asia, and Europe) and of the Modern Era (including

works from Africa, Southeast Asia, Europe, and the Americas). Students analyze and respond to reading selections in writing, through class discussions, and through individual projects.

ENGL 2173 African American Literature 3 cr.
Sem. F Lec. 3 Hrs./week

Prerequisite: English Composition II with a grade of "C" or better. This course offers students an entry point into the advanced study of African-American Literature. While studying texts authored by African-American authors, students will be introduced to advanced literary terms, concepts, and techniques for reading, writing, and critically evaluating literature. Students will read, discuss, and write about a variety of traditional and non-traditional texts that represent the diversity of the African-American literary endeavor, including the Oral Tradition, non-fiction prose, and dramatic literature, ranging from the early days of the Diaspora to the present. Students planning to transfer this course should check with the receiving institution since the course is not included in the Arkansas Department of Higher Education's list of courses automatically accepted for transfer to Arkansas public universities.

ENGL 2183 American Literature Before 1865 3 cr.
Sem: S 3 Lec. Hrs./week

Prerequisite: ENGL 1123 English Composition II with a grade of "C" or better.

This course provides an introduction to significant works in American literature spanning the genres of fiction, drama, poetry, and prose before 1865. Students analyze and respond to reading selections in writing, through class discussions, and through individual projects.

ENGL 2193 American Literature Since 1865 3 cr.
Sem: S 3 Lec. Hrs./week

Prerequisite: ENGL 1123 English Composition II with a grade of "C" or better.

This course provides an introduction to significant works in American literature spanning the genres of fiction, drama, poetry, and prose since 1865. Students analyze and respond to reading selections in writing, through class discussions, and through individual projects.

PHIL 2013 Introduction to Philosophy 3 cr.
Sem: F/S 3 Lec. Hrs./week

This course serves as a general introduction to the concepts, terms, and principles of philosophy. The course will emphasize the concepts that humans have wondered about since ancient times and how they have sought to explain them. The philosophical method will be introduced.

SPAN 1113 Spanish I 3 cr.
Sem: F/S 3 Lec. Hrs./week

This is a beginning course designed to help students develop a basic proficiency in the four skills of listening, speaking, reading, and writing. The instruction is communicatively oriented and emphasizes the everyday life and culture of Spanish-speaking people.

SPAN 1123 Spanish II 3 cr.
Sem: S 3 Lec. Hrs./week

Prerequisite: SPAN 1113 Spanish I

This course is a continuation of SPAN 1113. It seeks to further develop a basic proficiency in the four skills of listening, speaking, reading, and writing. The instruction is communicatively oriented and emphasizes the everyday life and culture of Spanish-speaking people. It is strongly recommended that the student should have completed SPAN 1113 with a "C" or better.

Information Systems Technology

(See also Computers and Developmental Education)

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

ISTC 1013 IT Principles and Practices 3 cr.
Sem: F/S 3 Lec. Hrs./week

Prerequisite: Keyboarding skills of 20 wpm or better or concurrent enrollment in DKEY 1101 Computer Keyboarding.

Coresquisite: ISTC 1023 IT Essentials I: PC Hardware/Software.

The topics covered in this course include computer hardware and software, file management and backup, Internet and LAN technology, digital media, the computer industry, databases, and information systems analysis and design.

ISTC 1023 IT Essentials I: PC Hardware/Software 3 cr.
Sem: S 2 Lec./2 Lab Hrs./week

Coresquisite: ISTC 1013 IT Principles and Practices.

This course presents an in-depth exposure to computer hardware and operating systems. Students learn the functionality of hardware and software components as well as suggested best practices in maintenance, and safety issues. Through hands on activities and labs, students learn how to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems. In addition, an introduction to networking is included. This course helps students prepare for CompTIA's A+ certification. A lab fee is required.

ISTC 1033 IT Essentials II: Network Operating Systems Software 3 cr.
Sem: F 2 Lec./2 Lab Hrs./week

Prerequisite: ISTC 1023 IT Essentials I.

This course is an intensive introduction to multi-user, multi-tasking network operating systems. Characteristics of the Linux, Windows 2000, NT, and XP network operating systems will be discussed. Students will explore a variety of topics including installation procedures, security issues, back up procedures and remote access. A lab fee is required.

ISTC 1043 A+ Certification Prep Course 3 cr.
Sem: S 2 Lec./2 Lab Hrs./week

Prerequisite: ISTC 1023 IT Essentials I.

This course provides a review of the core elements found on the A+ Certification Exam through discussion, computer-based testing, hands-on review, and textbook references.

ISTC 1053 Introduction to Web Page Design 3 cr.

Sem: F/S 3 Lec. Hrs./week

Prerequisite: COMP 1113 Computer Fundamentals.

This course is designed to teach the fundamentals of Extensible Hypertext (XHTML) and Hypertext Markup Language (HTML) and other aspects of Web authoring to prepare students for Internet Web Professional certification. Students will learn HTML/XHTML and will create Web pages using XHTML/HTML tags to format text, hyperlinks, tables, graphics, and forms. Students will also work with cascading Style sheets and study the basics of Dynamic HTML (DHTML) and how XHTML relates to the Extensible Markup Language (XML). Students will take the Site Development foundations Module Certification Exam, which is 1/3 of the CIW Associate Certification Exam, at the conclusion of this course. A lab fee and testing fees are required.

ISTC 1513 Network Fundamentals 3 cr.

Sem: F/S 2 Lec./2 Lab Hrs./week

Pre- or Corequisite: ISTC 1013 IT Principles and Practices.

The course focuses on network terminology and protocols, local-area networks (LANs), wide-area networks (WANs), Open System Interconnection (OSI) models, cabling, cabling tools, routers, router programming, Ethernet, Internet Protocol (IP) addressing, and network standards. In addition, instruction and training are provided in the proper care, maintenance, and use of networking software, tools, and equipment. A lab fee is required.

ISTC 1523 Routing Protocols and Concepts 3 cr.

Sem: F/S 2 Lec./2 Lab Hrs./week

Prerequisite: ISTC 1513 Network Fundamentals.

This focuses on initial router configuration, IOS Software management, routing protocol configuration, TCP/IP, and access control lists (ACLs). Students will develop skills for configuring a router, for managing IOS Software, for configuring routing protocols, and setting access lists to control access to routers. A lab fee is required.

ISTC 2563 LAN Switching and Wireless 3 cr.

Sem: F/S 2 Lec./2 Lab Hrs./week

Prerequisite: ISTC 1523 Routing Protocols and Concepts.

LAN Switching and Wireless focuses on command-line interface configuration of switches, Ethernet switching, Virtual LANs (VLANs), Spanning Tree Protocol (STP), and VLAN Trunking Protocol (VTP). Particular emphasis is given to students being able to demonstrate the ability to apply learning from prerequisite courses to a network and to be able to explain how/ why a particular strategy is employed. A lab fee is required.

ISTC 2573 Accessing the WAN 3 cr.

Sem: F/S 2 Lec./2 Lab Hrs./week

Prerequisite: ISTC 2563 LAN Switching and Wireless.

Accessing the WAN focuses on advanced IP addressing techniques (Network Address Translation [NAT], Port Address Translation [PAT], Access Control Lists [ACLs], and DHCP), WAN technology and terminology, PPP, ISDN, DDR, Frame Relay, network management, and introduction to optical networking. Emphasis is given to students being able to demonstrate the ability to apply knowledge from CCNA 1-CCNA 3 to a network and to be able to explain how and why a particular strategy is employed. A lab fee is required.

ISTC 2613 Fundamentals of UNIX 3 cr.

Sem: S 3 Lec. Hrs./week

Prerequisite: ISTC 1013 IT Principles and Practices.

This course introduces the basic concepts of UNIX fundamentals administration and certification and provides an in-depth discussion of powerful UNIX command-line utilities and the graphical Common Desktop Environment. A testing fee is required.

ISTC 2623 UNIX System Administration I 3 cr.

Sem: F/S 3 Lec. Hrs./week

Prerequisite: ISTC 2613 Fundamentals of UNIX.

UNIX System Administration I training provide students with the knowledge and skills to perform essential system administration task in the Solaris Operating System, including standalone installation, file system management, backup procedures, process control, user administration, and device management. There are six main topics covered: System Access & Security, Process & Print Management, Device & Disk Management, file System Management, Boot Management, and Software Installation & Management. A testing fee is required.

ISTC 2633 UNIX System Administration II 3 cr.

Sem: F/S 3 Lec. Hrs./week

Prerequisite: ISTC 2623 UNIX System Administration I.

This course provides students with the skills necessary to administer Sun systems running Solaris in a network environment. Students will learn how to maintain Sun systems, configure and troubleshoot the Network Files System (NFS) and configure the Network Information Service (NISTC) environment. Students will also learn how to install software for a server, how to add devices, how to configure the client server environment, and how to add terminals. A testing fee is required.

ISTC 2983 Internship 3 cr.

Sem: F/S
Prerequisite: 2.0 GPA or higher and submission of an approved Internship Project Application by the date listed in the Academic Calendar prior to the semester of intended enrollment. Registered students must be in their final semester of enrollment.

A faculty member serves as facilitator to help students develop a formal internship plan which documents learning objectives and course expectations. Internship objectives vary by degree program option, but all require students to apply general education and technical knowledge and skills in an actual work environment. Students must adhere to the

policies and procedures of the industry or business in which they are placed, as well as to those of the College. Students are expected to provide a written and oral presentation at the conclusion of the course. The MSCC faculty facilitator assigns the final course grade based upon the student's timeliness in meeting internship objectives, his/her application of technical skills, the demonstration of general education outcomes defined for program graduates, and on feedback from the business/industry site supervisor. Internship assignments will be made within the first two weeks of the semester, with actual work time requiring a minimum of 60 hours spanning 9 to 10 weeks. Students should not begin an internship experience prior to receiving the necessary prior approvals from the project facilitator and appropriate dean. Successful completion of this course requires a grade of C or better.

ISTC 2993 Capstone Learning Experience 3 cr.
Sem: F/S

Prerequisite: 2.0 GPA or higher and submission of an approved Capstone Learning Project Application by the date listed in the Academic Calendar prior to the semester of intended enrollment. Registered students must be in their final semester of enrollment.

Students, with the assistance of a faculty facilitator, choose a project, identify project stakeholders, and develop and execute a formal project plan. Students maintain a journal which documents goals, progress, and barriers encountered. Capstone project assignments will be made within the first two weeks of the semester, with actual work time requiring a minimum of 60 hours spanning 9 to 10 weeks. Most projects include an oral and/or written presentation at the conclusion of the semester. The MSCC faculty facilitator assigns the final course grade based upon the student's timeliness in meeting internship objectives, his/her application of technical skills, the demonstration of general education outcomes defined for program graduates, and on feedback from the project stakeholders.

Literature
(See Humanities)

Machine Technology

(See also Technical Core for basic courses shared by more than one technical program)

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

Certificate of Proficiency students without COMPASS scores may substitute the following: KeyTrain Level 4 or WorkKeys Level 3 in Reading for Information (RI), Applied Mathematics (AM) and Locating Information (LI).

Most machining classes are offered in a hybrid format, with the lecture component provided online so that students use class time to engage in intensive hands-on learning activities applying theory to practical hands-on applications involving skills development and critical thinking.

MACH 1003 Intro to Blueprint Reading 3 cr.

This course has been replaced by TECH 1003 for students entering as of Fall 2012. It remains available only to high school students enrolled in the MSCC Technical Center. Blueprint Reading introduces the careful interpretation, use, and analysis of numbers and drawings used to create and maintain efficient manufacturing processes. Students will solve fraction and decimal problems, perform metric and inch conversions, apply blueprint information to machining tasks, and perform measuring techniques for machining tasks using the scale, calipers and micrometer. Students must demonstrate competency in core course objectives through practical applications. A lab fee is required.

MACH 1023 Introduction to Metallurgy 3 cr.
Sem: F 2 Lec./2 Lab Hrs./week

Prerequisite: MACH 1003 Introduction to Blueprint Reading or 75% or better on Blueprint Reading assessment.

This course introduces the appropriate use of metals and composite materials used in manufacturing, including how to evaluate their properties and how manufacturing changes those properties. Students must demonstrate competency in core course objectives through practical applications. A lab fee is required.

MACH 1063 Inspection & Testing 3 cr.
Sem: S 2 Lec./2 Lab Hrs./week

Prerequisite: MACH 1023 Introduction to Metallurgy or 75% or better on Machine Attendant Module 1 assessment.

This course introduces the fundamental methods and instruments used to effectively inspect parts in the shop. Students will use the caliper, micrometer, and CMM to perform calibration and more advanced inspection methods. Students must demonstrate competency in core course objectives through practical applications. A lab fee is required.

MACH 1083 Introduction to Manual Machining 3 cr.

Sem: S 2 Lec./2 Lab Hrs./week

Prerequisite: MACH 1063 Inspection & Testing or 75% or better on Inspection & Testing assessment.

This course introduces students to the care and operation of basic machine tools measuring instruments, and shop safety procedures. Students learn the use of hand tools, drills and lathe cutting tools; use tapers; and study the methods of machining them. Shop projects are designed to provide practice in turning, knurling, threading, and other operations on the lathe, in setting up and using a vertical milling machine and milling cutters, and in drilling procedures. Students must demonstrate competency in core course objectives through practical applications. A lab fee is required.

MACH 1103 Intro to CNC Machining 3 cr.
Sem: S 2 Lec./2 Lab Hrs./week
Prerequisite: MACH1083 Machining Fundamentals or 75% or better on equivalent assessment.
 This course introduces two and three axis programming applications in Computer Numerical Control machining. Students learn the terminology of coordinates, cutter paths, angle cutting, and linear and circular interpolation. Students learn how to design a part, write a CNC program to produce the part, how complete a machine setup to run a part, and how to manufacture a part using both a CNC Mill and Lathe. The safe operation of industrial machines, tools and equipment is emphasized. Students must demonstrate competency in core course objectives through practical applications. A lab fee is required.

MACH 1123 Statistics for Machining I 3 cr.
Sem: F 2 Lec./2 Lab Hrs./week
Prerequisite: MACH-1103 Introduction to CNC Machining or 75% or better on Machine Attendant assessment.
 This course introduces the concepts of statistics and algebra as they apply to shop drawings with special attention to the properties of lines and angles, various types of triangles, as well as basic circle and polygon geometry. Students must demonstrate competency in core course objectives through practical applications. A lab fee is required.

MACH 1143 Intermediate Blueprint Reading 3 cr.
Sem: F 2 Lec./2 Lab Hrs./week
Prerequisite: MACH 1123 Statistics for Machining I or 75% or better on Statistics for Machining I assessment.
 This course provides an overview of common features found in prints and describes how to properly inspect them. Students will identify shop terminology that commonly appears in prints, learn the relationship between prints and inspection, and identify information in a print relating to section views, including angled features, common types of whole features, radiuses, surface finishes, and common methods for threads. Students must demonstrate competency in core course objectives through practical applications. A lab fee is required.

MACH 1163 CNC Safety and Proper Functions 3 cr.
Sem: F 2 Lec./2 Lab Hrs./week
Prerequisite: MACH 1143 Advanced Blueprint Reading or 75% or better on CNC Safety & Proper Functions assessment.
 This course introduces the principles of basic machine guarding, to the components and roles of typical jigs and fixtures, and to hazardous machine components, pinch points, motions, and actions. Students will learn how to identify the safety hazards associated with cutting operations, handling cutting tools, changing tools and the precautions to avoid injury. Students must demonstrate competency in core course objectives through practical applications. A lab fee is required.

MACH 1183 Metalworking Theory I 3 cr.
Sem: S 2 Lec./2 Lab Hrs./week
Prerequisite: MACH 1163 CNC Safety & Proper Functions or 75% or better on Metalworking Theory I assessment.
 This course introduces traditional machining processes such as metal cutting and grinding, as well as various nontraditional methods of machining. Topics include the fundamentals of chip creation; the main types of sawing, saw blade types and materials; the common components and operations of the screw machine; and common screw machine designs. Students must demonstrate competency in core course objectives through practical applications. A lab fee is required.

MACH 1203 Basic Manual Machine Setup and Operation 3 cr.
Sem: F/S 2 Lec./2 Lab Hrs./week
Prerequisite: MACH 1183 Metalworking Theory I or 75% or better on equivalent assessment.
 This course introduces students to traditional manual machining processes. Students will demonstrate the use of dial indicators, drills, lathe cutting tools, tapers, and other devices for setup operations. Shop projects are designed to provide practice in turning, knurling, threading, and other operations on the lathe, in setting up and using a vertical milling machine and milling cutters, and in drilling procedures. Students must demonstrate competency in core course objectives through practical applications. A lab fee is required.

MACH 1223 Basic CNC Machine Setup and Operation 3 cr.
Sem: F/S 2 Lec./2 Lab Hrs./week
Prerequisite: MANF1203 Basic Manual Machine Setup & Operations or 75% or better on equivalent assessment.
 This course introduces students to traditional machining processes such as metal cutting using CNC logic, as well as various traditional and nontraditional setup methods of CNC machining. Topics include the fundamentals of CNC; the history of CNC's, common controls, various tool holders and methods of setup; the common components and operations of the CNC; and common machine designs. Students must demonstrate competency in core course objectives through practical applications. A lab fee is required.

MACH 2003 Statistics for Machining II 3 cr.
Sem: F/S 2 Lec./2 Lab Hrs./week
Prerequisite: MACH 1123 Statistics for Machining I or 75% or better on equivalent assessment.
 This course teaches students how to interpret blueprints and process layouts for the fabrication of machine parts. Students must apply the concepts of statistics, algebra, and trigonometry to shop drawings and shop situations by solving equations and using the properties of lines, angles, triangles, circle and polygons. Students must demonstrate competency in core course objectives through practical applications. A lab fee is required.

MACH 2023 Engineering Drawings/GD&T 3 cr.
Sem: F/S 2 Lec./2 Lab Hrs./week
Prerequisite: MACH 1143: Intermediate Blueprint Reading or 75% or better on equivalent assessment.
 This class presents important rules of GD&T and describes how common features are specified in GD&T prints. Students will identify the application of GD&T as it relates to parts drawings for form, fit and function of designed parts and identify datum's features and relationships with inspection and work holding concepts. Students must demonstrate competency in core course objectives through practical applications. A lab fee is required.

MACH 2033 Metalworking Theory II 3 cr.
Sem: F/S 2 Lec./2 Lab Hrs./week
Prerequisite: MACH 1183: Metalworking Theory I or 75% or better on equivalent assessment.
 This course presents advanced machining, metal cutting and grinding processes, as well as various nontraditional methods of machining and material identification. Topics include chip creation using advanced cutting tools and materials, advanced cutting geometry, and application of tools to various material conditions. Students must demonstrate competency in core course objectives through practical applications. A lab fee is required.

MACH 2043 Computer Aided Manufacturing 3 cr.
Basic Programming
Sem: F/S 2 Lec./2 Lab Hrs./week
Prerequisite: MACH 2023: Engineering Drawings/GD&T or 75% or better on equivalent assessment.
 Students will learn the basic concepts of manual programming of CNC machining applications to include lathes, mills, EDM, CNC drills, and precision lathes (Swiss turn). Topics include the fundamentals of programming; the main types of keyboarding logic and creation of programs; and an introduction to work coordinates, part processing, basics of CAD/CAM and cutting calculations and applications. Students must demonstrate competency in core course objectives through practical applications. A lab fee is required.

MACH 2053 Advanced CNC Machining 3 cr.
Setup and Operation
Sem: F/S 2 Lec./2 Lab Hrs./week
Prerequisite: MACH 1223: Basic CNC Machine Setup and or 75% or better on equivalent assessment.
 This course presents advanced tooling applications. Students will perform two and three axis programming applications using CNC machine lathes and mills to create a project, program the project, setup the project, and manufacture a finished product. Students must demonstrate competency in core course objectives through practical applications. A lab fee is required.

MACH 2063 Specialty Equipment: EDM and 3 cr.
Swiss-Style Setup/Operation
Sem: F/S 2 Lec./2 Lab Hrs./week
Prerequisite: MACH 1223: Basic CNC Machine Setup and Operation or 75% or better on equivalent assessment.

Students will perform setup and operation of Electric Discharge (EDM) and Swiss-style machines through structured process plans of these metal cutting techniques. Shop projects are designed to provide practice within these specialty machining concepts. Students must demonstrate competency in core course objectives through practical applications. A lab fee is required.

Mathematics

See also Developmental Education)

Required placement score or successful completion of designated math prerequisite and DRDG 1024 Developmental Reading are prerequisites for the following classes.

MATH 1104 Applied Technical Mathematics 4 cr.
Sem: F/S/Su 4 Lec. Hrs./week
Prerequisite: ACT Math Placement Test score of 16 or higher or 21 or higher on the COMPASS Algebra Placement test or permission of the Lead Faculty for Developmental and Technical Math. This course is a college-level mathematics course covering mathematical topics as they relate to technical skills and knowledge. However the course does not apply to transfer associate degrees or baccalaureate degrees unless specifically approved by the transfer institution. Specific emphasis is given to ratio and proportion, percentages, plan geometry, exponents, scientific notation, reading and constructing graphs, and solving quadratic equations in application problems. The course is supported by a one hour Structured Learning Assistance Lab each week for students who need skills review for operations with whole numbers, order of operations, conversions of decimals and fractions, etc.

MATH 1113 College Algebra 3 cr.
Sem: F/S 3 Lec. Hrs./week
Prerequisite: DMTH 1034 Developmental Math III with a grade of "C" or better or ACT math score of 19 or equivalent COMPASS or ASSET score.
 Course content includes operations on functions and graphing functions; linear, rational, quadratic, higher-degree polynomial, absolute value, exponential, and logarithmic equations; linear, rational, and quadratic inequalities; applications of systems of equations and matrices. Real-life problems are integrated within various topics. This course incorporates the use of technology to supplement and enhance conceptual understanding, visualization, and inquiry.

MATH 2103 Survey of Calculus 3 cr.
Sem: S 3 Class Hrs./week
Prerequisite: MATH 1113 College Algebra with a grade of "C" or better.
 This is a basic calculus course focusing on applications and is generally needed for students majoring in business, education, health sciences, or social sciences. Course content includes a review of major functions, their graphs and applications; continuity and limits, differentiation of

polynomial, exponential and logarithmic functions; using derivatives for curve sketching, determining rates of change, and optimization problems; anti-derivatives, indefinite and definite integrals, applications of definite integration. This course incorporates the use of technology to supplement and enhance conceptual understanding, visualization, and inquiry.

MATH 2113 Math for Teachers I **3 cr.**
Sem: F **3 Lecture Hrs./week**
Prerequisite: MATH 1113 College Algebra with a grade of "C" or better.
 Course content includes logic and mathematical reasoning, problem-solving, sets, functions, and number theory. Emphasis is placed on instructional methodology to support student learning.

MATH 2115 Calculus I **5 cr.**
Sem: F **5 Class Hrs./week**
Prerequisite: MATH 1113 College Algebra with a grade of "C" or better or ACT math score of 24 or better.
 This course is intended for students who wish to major in mathematics, natural science, engineering and related technology, or secondary mathematics education. Course content includes functions, limits, continuity, asymptotes, differentiation, implicit differentiation, critical points, anti-derivatives, definite and indefinite integrals, and inflection points. This course includes applications of the derivative and integral, such as slopes and rates of change; finding maximum, minimum, and relative extrema; curve sketching using Calculus techniques; exponential growth and decay; optimization; and calculating the area between curves. This course uses a graphing calculator to supplement and enhance conceptual understanding, visualization, and inquiry.

MATH 2123 Math for Teachers II **3 cr.**
Sem: S **3 Lec. Hrs./week**
Prerequisite: MATH 2113 Math for Teachers I with a grade of "C" or better.
 A continuation of MATH 2113, course content includes exponents, decimals, probability, statistics, geometry, measurement, and applications of mathematics. Emphasis is placed on instructional methodology to support student learning. This course uses a geometry software package.

MATH 2124 Calculus II **4 cr.**
Sem: S **4 Class Hrs./week**
Prerequisite: MATH 2115 Calculus I with a grade of "C" or better.
 This course is intended for students who wish to major in mathematics, a natural science, engineering and related technology, or secondary mathematics education. Course content includes integration with several techniques; applications of integration; sequences and infinite series; convergence tests; Taylor series; radius on convergence; and applying calculus concepts to polar coordinates, parametric equations, and vectors. This course uses a graphing

calculator to supplement and enhance conceptual understanding, visualization, and inquiry.

MATH 2133 Introduction to Statistics **3 cr.**
Sem: S **3 Class Hrs./week**
Prerequisite: MATH 1113 College Algebra with a grade of "C" or better.
 An algebra-based course involving the presentation and interpretation of data, probability, sampling, basic inference, correlation and regression, and analysis of variance, this course is generally needed for students majoring in business, education, health sciences, or social sciences. Course content includes probability, binomial and normal distributions, sampling, confidence intervals, hypothesis testing, and linear regression. Emphasis is placed on methods of collecting, organizing, and analyzing data in order to make data-driven decisions. Applications are integrated in all topics. This course incorporates the use of technology to supplement and enhance conceptual understanding, visualization, and inquiry.

Medical Assisting

Required placement test scores (See Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

Enrollment in the Medical Assisting Technology program requires special approval from the Director of Medical Assisting, a substance abuse screen, and criminal background check.

MDAS 1003 Medical Assisting -- Administrative Procedures I **3 cr.**
Sem: F **3 Lec. Hrs./week**
 This course is designed to acquaint the student with the administrative requirements of the medical facility. The course will provide instruction in the following: medical office software program, medical receptionist skills, HIPAA Regulations, human relations, bookkeeping methods, and management techniques. This course is limited to students admitted to the Medical Assisting Technology program. Fees for supplies, uniform and drug screening/background check are required.

MDAS 1033 Medical Law and Ethics **3 cr.**
Sem: F **3 Lec. Hrs./week**
 This course is designed to give Medical Assisting students knowledge of law and ethics as they pertain to medicine. The course will provide a thorough understanding of medical assistants' medico-legal responsibilities and relationships with physicians/employers and patients. Emphasis will be placed on the practical application of the principles of medical law and ethics. This course is limited to students admitted to the Medical Assisting Technology program.

MDAS 1053 Medical Assisting – Clinical Procedures I 3 cr.

Sem: S 3 Lec. Hrs./week

Prerequisite: MDAS 1003 Medical Assisting Administrative Procedures.

This course presents the duties and responsibilities expected in the clinical area of a medical facility. Students will be instructed in the following: assisting the doctor, assessing vital signs, sterilization procedures, minor surgery, medical specialties, physiotherapy, and diet therapy. This course is limited to students admitted to the Medical Assisting Technology program. A lab fee is required.

MDAS 1073 Medical Assisting – Clinical Procedures II 3cr.

Sem: F 3 Lec. Hrs./week

Prerequisite: MDAS 1053 Medical Assisting Clinical Procedures I.

This course presents the further duties and responsibilities expected in the clinical area of a medical facility and the responsibilities of a medical assistant. Students will be instructed in the principles and practice of ECG/EKG, Spirometry, X-ray, and safety regulations. This course is limited to students admitted to the Medical Assisting Technology program. A lab fee is required.

MDAS 2004 Medical Billing & Encoding 4 cr.

Sem: F 4 Lec. Hrs./week

Prerequisite: MEDP 1033 Medical Terminology.

This course presents the fundamentals of medical office insurance diagnosis and procedure coding as well as skills required to produce insurance forms in a timely manner to third party payers. Students will learn to reconcile payments and rejections, process inquiry forms and understand the Diagnostic Related Groupings and how they relate to inpatient regulations. Using computer-based assignments, students apply their knowledge in medical terminology, insurance coding and billing and word processing skills by executing accurate claim submissions for reimbursement, utilizing a billing software program. This course is limited to students admitted to the Medical Assisting Technology program. A lab fee is required.

MDAS 2012 Medical Assisting Administrative Procedures II 2 cr.

Sem: S 2 Lec. Hrs./week

Prerequisite: MDAS 1003 Medical Assisting – Administrative Procedures I and DMTH 1034 Developmental Math III.

This course builds upon skills acquired in MDAS 1003 with further discussion of administrative requirements of the medical facility, including medication dosage and delivery (oral and parenteral), technical skills, aseptic technique, medical safety, and dietary supplementation related to therapy as prescribed by a physician. This course is limited to students admitted to the Medical Assisting Technology program.

MDAS 2043 Medical Assisting-Laboratory Procedures 3 cr.

Sem: F 2 Lec./2 Lab Hrs./week

Prerequisite: MDAS 1003 Medical Assisting Administrative Procedures.

This course provides medical assisting students practical experience in the collection and handling of various specimens and in the performance and interpretation of tests done in the physician's office.

Tests include Gram staining, initial culture taking, basic microbe identification, routine urinalysis, hematology, and other basic lab tests. Emphasis will be placed on patient contact orientation, contamination of specimens, patient education prior to testing, and explanation of results. This course is limited to students admitted to the Medical Assisting Technology program. A lab fee is required.

MDAS 2081 Medical Assisting Certification Review 1 cr.

Sem: S 1 Lec. Hr./week

Corequisite: MDAS 2981 Medical Assisting Seminar.

This course focuses on the certification process of medical assistants and reviews certification requirements, knowledge, and skills. Students will review and discuss certification materials for preparation for the certified medical assistant exam, including test questions and testing procedures. This course is limited to students admitted to the Medical Assisting Technology program.

MDAS 2981 Medical Assisting Seminar 1 cr.

Sem: S 1 Lec. Hr./week

Corequisite: MDAS 2996 Medical Assisting Externship I.

This course reviews the entire Medical Assisting Technology program. Emphasis is placed on general topics, administrative and clinical duties, human relations and professionalism. Recognition of the importance of employability skills after graduation is included. This course is limited to students admitted to the Medical Assisting Technology program.

MDAS 2996 Medical Assisting Externship 6 cr.

Sem: S 180 Clinical Hrs. During Semester

Prerequisite: Completion of all coursework except MDAS 2081 Medical Assisting Certification Review and MDAS 2981

Medical Assisting Seminar with a grade of B or better and permission of the Program Coordinator.

This course covers a review and rotation sequence of practical experience in offices of qualified physicians and/or accredited hospitals and clinics. Skills acquired during prior coursework will be applied during the externship under the supervision of College faculty and clinical staff. In addition to medical office practice, human relation skills will be stressed in the course work. Students will have to complete 240 clinical hours, as well as take the National Certification Exam.

This course is limited to students admitted to the Medical Assisting Technology program Fees for testing, insurance, and background check are required.

Medical Professions

Required placement test scores (See Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless courses are designated for high school students.

MEDP 1013 Introduction to Medical Professions I 3 cr.

Sem: F 4.5 Lec. Hrs./week in accordance with Arkansas Dept. of Career Education Requirements

Available only to high school students enrolled in the MSCC Technical Center, this survey course introduces students to a variety of health care careers and helps them learn the basic information about outstanding medical history and events, health care systems, human growth and development, nutrition and health, processes of disease, and medical ethics. Emphasis is given to the development of basic competencies in medical math, medical terminology, communication, and the skills and competencies associated with basic information and personal qualities needed for employment.

MEDP 1033 Medical Terminology 3 cr.
Sem: F 3 Lec. Hrs./week

This course is designed to develop the ability to recognize, understand and use medical terminology--the study and practical application of a medical vocabulary system, including: structure, recognition, analysis, definition, spelling, pronunciation, and combination of medical terms from prefixes, suffixes, roots, and combining forms.

MEDP 1043 Anatomy and Physiology 3 cr.
Sem: F 3 Lec. Hrs./week

This course, a foundation for understanding the principles of maintaining positive health and understanding deviations from the normal, includes anatomy and physiology of the human body in all its systems. MEDP 1043 does not transfer.

MEDP 1044 Anatomy and Physiology 4 cr.
Sem: F 7.5 Lec. Hrs./week in accordance with Arkansas Dept. of Career Education Requirements

Available only to high school students enrolled in the MSCC Technical Center, this course is a foundation for understanding the principles of maintaining positive health and understanding deviations from the normal includes anatomy and physiology of the human body in all its systems.

MEDP 1083 Medical Procedures 3 cr.
Sem: S 4.5 Lec. Hrs./week in accordance with Arkansas Dept. of Career Education Requirements

Available only to high school students enrolled in the Technical Center, this course allows students to develop specific skills needed in the health professions. Emphasis is given to the development of competencies related to the following areas: safety, infection control, vital signs, CPR and first aid, medical math, abbreviations, and charting.

MEDP 1113-T Introduction to Medical Professions II 3 cr.

Sem: S 4.5 Lec. Hrs./week in accordance with Arkansas Dept. of Career Education Requirements

Prerequisite: MEDP 1013 Introduction to Medical Professions I.

Available only to high school students enrolled in the Technical Center, this course is designed as an extension to the Introduction to Medical Professions core course. The course provides students with a general overview of the more crucial content areas of the Medical Professions Education program core courses. Areas covered are: medical terminology, medical math, human growth and development, processes of disease, and employability skills needed within the health care field.

Music

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

MUSC 1103 Music Appreciation 3 cr.
Sem: F/S 3 Lec. Hrs./week

Designed for the student who has little or no formal music training or experience, this course appeals to all students who are interested in acquiring an understanding and appreciation of the relationships between music and culture as well as of the development of society. Students learn to appreciate music through an introduction to the major composers and to analyze the relationships between music and culture.

Nursing Assistant

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

Enrollment in CNAS 1014 Nursing Assistant requires special approval from the Program Coordinator for Allied Health Sciences, substance abuse screen, and criminal background check.

CNAS 1014 Nursing Assistant 4 cr.
Sem: F/S/Su 2 Lec./4 Lab Hrs./week 16 Clinical Hrs.

This course presents the classroom and clinical instruction approved by the State of Arkansas for individuals to become Long Term Care Certified Nursing Assistants. The first several weeks will focus on classroom and lab training including communication skills, infection prevention and control, safety/emergency procedures/residents' rights, personal care, basic nursing skills, and basic restorative services. The final weeks will allow the students to practice their

classroom and lab skills under instructor supervision in long-term care facilities. **Students must make a minimum course grade of 70% and have a minimum of 90 hours of training to be eligible to take the state certification exam.** This course is limited to students admitted to the Nursing Assistant program. Fees for supplies, uniforms, insurance, background check and testing are required.

Phlebotomy

Required placement test scores (See Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

PHLB 1016 Principles and Practice of Phlebotomy 6 cr.

Sem: F 5 Lec./2 Lab Hrs./week
Corequisites: MEDP 1033 Medical Terminology and MEDP 1043 Anatomy & Physiology.

This course addresses the history of phlebotomy and procedural methods dealing with patients and hands on practice in the lab performing skin puncture and venipuncture, complications in blood collection procedures and specimen collections and transportation. This course is limited to students admitted to the Medical Assisting Technology program. Fees for supplies, insurance, uniforms, drug screening/background check and testing are required.

Philosophy (See Humanities)

Physical Science

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading and DENG 1054 Developmental English is a prerequisite for all courses unless otherwise noted.

PSCI 1113 Applied Physics 3 cr.
Sem: F/S 2 Lec./2 Lab Hrs./week

Prerequisite: DMTH 1033 Developmental Math III with a grade of "C" or better or ACT math score of 19 or equivalent COMPASS or ASSET score, or successful completion of, or concurrent enrollment in MATH 1104.

This course is a college level physical science course covering the major topics of physical science and physics related to technical skills and knowledge. Specific emphasis is given to mechanics, properties of matter, heat, sound, electricity and magnetism, light, atomic and nuclear physics. Laboratory activities are included. This course is not intended to meet the core curriculum science requirements for transfer associate degrees or baccalaureate degrees unless specifically approved by the transfer institution. A lab fee is required.

PSCI 1214 Physical Science 4 cr.
Sem: F/S 3 Lec./2 Lab Hrs./week

Prerequisite: DMTH 1024 Developmental Math II with a grade of "C" or better or equivalent placement test scores. Corequisite: PSCI 1210 Physical Science Lab.

This course is designed for non-science majors and serves as an overview of the main topics in physics, chemistry, astronomy, and meteorology. Emphasis is placed on the fundamental principles and concepts of physics and chemistry. The laboratory component provides students with applications of theory and enables them to use general principles on practice. A lab fee is required.

PSCI 1224 Earth Science 4 cr.
Sem: F/S 3 Lec./2 Lab Hrs./week

Prerequisite: DMTH 1024 Developmental Math II with a grade of "C" or better or equivalent placement test scores. Corequisite: PSCI 1220 Earth Science Lab.

This course is designed for non-science majors to foster understanding of basic geologic principles. Course content includes the scientific method; earth structure and processes; tectonics, earthquakes, volcanism, glacial formation; weathering, and erosion; atmosphere, climate, and weather; rocks, minerals, and fossils; and the oceans. A lab fee is required.

PSCI 1254 Physics I 4 cr.
Sem: S 3 Lec./2 Lab Hrs./week

Prerequisite: DMTH 1034 Developmental Math III with a grade of C or better in or equivalent placement test score. Corequisite: PSCI 1250 Physics Lab.

This algebra-based college level physics course introduces the basic concepts of mechanics in one- and two-dimensions; linear and rotational motion; work, energy and power; thermodynamics; mechanical waves and sound; and fluid mechanics. The laboratory component provides students with applications of theory and enables them to use general principles on practice. A lab fee is required.

Political Science

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

POLS 1143 American Government 3 cr.
Sem: F/S 3 Lec. Hrs./week

Through the study of the framework of the U.S. Constitution, this course presents a study of basic principles of American government with emphasis placed on the organization, processes, and functions of the national government.

Professional Pilot Program

Required placement test scores or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

PILT 1011 Aviation Orientation 1 cr.
Sem: F/S/Su 1 Lec Hr./week

This course orients students to Mid-South's Professional Pilot Program and career opportunities in the broader aviation industry. The course covers, among other topics, financial aid, transfer & articulation, pilot training regulations and procedures, key aviation organizations such as the FAA and Air Traffic Control, career opportunities in general, commercial, and military aviation; and the basics of aviation job search and interview processes.

PILT 1012 Aviation History 2 cr.
Sem: TBA 2 Lec. Hrs./week

This course examines prominent developments in aviation from the earliest concepts of flight through the modern space age. Topics covered include the contributions and accomplishments of specific individuals, organizations, and aircraft that have helped to advance worldwide aviation to its present state. A lab fee is required.

PILT 1013 Air Transportation 3 cr.
Sem: F/S/Su 3 Lec. Hrs./week

This course traces the evolution of the aviation industry from its earliest days through the modern age. Topics addressed include significant aviation events and individuals, aircraft development, deregulation, administrative bodies, organizations and commercial companies that have influenced and/or continue to shape the domestic and international aviation industry. A lab fee is required.

PILT 1023 Aircraft Systems 3 cr.
Sem: F/S/Su 3 Lec. Hrs./week

This course provides a study of the design, construction, and theory of operation of basic systems common to fixed-wing and rotary-wing aircraft. Topics covered include power plant, flight control, fuel, hydraulic, lubrication, airframe, landing gear, instrumentation, and electrical systems. A lab fee is required.

PILT 1203 Aviation Meteorology 3 cr.
Sem: F/S/Su 3 Lec. Hrs./week

This course provides a study of atmospheric conditions and their related effects on aeronautical operations. Topics covered include basic meteorological principles/physics, atmospheric properties, weather developmental patterns and associated aviation hazards including thunderstorms, wind shear, turbulence, icing and low visibility, weather observation, forecasting resources, and how to obtain, interpret, and apply preflight and in-flight weather information. A lab fee is required.

PILT 1223 Intro to Air Traffic Control 3 cr.
Sem: F/S/Su 3 Lec. Hrs./week

This course overviews the functions and responsibilities of the Air Traffic Control organization within the National Airspace System. Topics covered include administrative and organizational structure, National Airspace System, pilot/controller interaction, navigation systems, traffic

control procedures, rules, regulations, terminology, and employment. A lab fee is required.

PILT 1233 Aerodynamics 3 cr.
Sem: F/S/Su 3 Lec. Hrs./week

This course provides a study of the practical application of the laws of physics in the design and operation of aircraft. Specific topics covered include basic forces of flight, airplane and helicopter principles of operation, weight and balance, stability, and control, high speed flight, and aircraft design and testing. A lab fee is required.

PILT 2012 Corporate & Business Aviation 2 cr.
Sem: F/S/Su 2 Lec. Hrs./week Lec. 2 Hrs./week

This course examines the corporate & business aviation industry and common business models and practices upon which successful companies are based. Topics covered include aircraft types, flight operations management, business administration, finance and accounting, government and industry regulations, security, training, aircraft maintenance, safety, and airports. A lab fee is required.

PILT 2013 Human Factors & Safety 3 cr.
Sem: F/S/Su 3 Lec. Hrs./week

This course examines pilot performance as a function of physiological, psychological and environmental factors. Specific topics addressed include human physiology, training programs, stress, fatigue, spatial disorientation, visual illusions, cockpit resource management, decision making, and cockpit design. A lab fee is required.

PILT 2022 FARs Explained 2 cr.
Sem: F/S/Su 2 Lec. Hrs./week

This course prepares students for the conduct of flight operations within the FAA regulatory environment by assisting them in the interpretation of Federal Aviation Regulations. Specific emphasis is placed on the roles of aviation regulatory organizations, interpretation and application of regulations pertinent to the conduct of basic pilot operations, and their review for associated legal implications. A lab fee is required.

PILT 2202 Aviation Physiology 2 cr.
Sem: F/S/Su 2 Lec. Hrs./week

This course examines human physiological factors that affect pilot performance in the aviation environment and preventative measures that pilots can take to avoid or mitigate them. Specific topics addressed include basic human anatomy, altitude physiology, stress, in-flight medical emergencies, situational awareness, health maintenance programs, medical standards, regulations, and certification. A lab fee is required.

PILT 2203 Aviation Management 3 cr.
Sem: F/S/Su 3 Lec. hrs./week

This course will prepare students to assume leadership roles in the aviation industry by providing some understanding of aviation management/administrative functions, issues and problems related to general aviation, fixed-base-operations and airports.

PILT 2223 Aviation Law 3 cr.
Sem: F/S/Su 3 Lec. hrs./week
 This course will provide aviation students with a basic understanding of law, the legal system, and of how the principles of law may be applied to air transportation. This class would help aviation managers, pilots, technicians, aircraft owners, employers, and others involved in the aviation industry build a solid foundation in relation to personal rights and obligations.

PILT 2242 Capstone Learning Experience 2 cr.
Sem: F/S/Su
 Students, with the assistance of a faculty facilitator, will choose a project, identify project stakeholders and develop and execute a formal project plan. Students will also maintain a journal which documents objectives, progress and barriers encountered. Project assignment will be made within the first two weeks of the semester with actual work time spanning 9 to 10 weeks. Projects will include an oral presentation or end-of-course paper at the conclusion of the semester.

Psychology

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

PSYC 1403 Introduction to Psychology 3 cr.
Sem: F/S 3 Lec. Hrs./week
 Designed to introduce the basic concepts of modern psychology and applications of scientific principles and theories as they relate to the complexity of human behavior, this course explores the interaction of the biological and environmental influences on behavior, and examines the effect of the human brain on normal and abnormal behavior. Major psychological disorders are also introduced as to their causes and challenges.

PSYC 2413 Human Development 3 cr.
Sem: S 3 Lec. Hrs./week
Prerequisite: PSYC 1403 Intro to Psychology.
 This course in developmental psychology focuses on human development from infancy through late adulthood. It presents the lifespan developmental perspective and emphasizes the cognitive, social, physical, and emotional processes that occur throughout the human lifespan.

Respiratory Care

Required placement test scores (See Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted. Enrollment in all courses requires admission to the Respiratory Care program.

RSPT 1004 Respiratory Care Science 4 cr.
Sem: F 3 Lec./2 Lab Hrs./week
 This course is designed to introduce the student practitioner to fundamental elements important to the delivery of healthcare in a safe, efficient, and professional manner, including fundamental concepts of the profession, professional standards, practice and physics of respiratory care. Fees are required for supplies, drug screen/background check, and testing.

RSPT 1023 Respiratory Care Assessment 3 cr.
Sem: F 2 Lec./2 Lab Hrs./week
 This course is designed to a fundamental approach to the subjective and objective evaluation, assessment, and care plan development for the individual needs of a patient. This includes: disease etiology, pathophysiology, occurrence, complications, clinical manifestations, treatment, and prevention. A lab fee is required.

RSPT 1033 Cardiopulmonary Anatomy & Physiology 3 cr.
Sem: F 3 Lec. Hrs./week
 This course is a study of cardiopulmonary physiology in relation to the practice of Respiratory Care.

RSPT 1222 Pharmacology for Respiratory Care 2 cr.
Sem: S 2 Lec. Hrs./ week
Prerequisite: RSPT 1003 Respiratory Care Science with a grade of "C" or better.
 This course is designed to introduce the student to pharmacology related to cardiopulmonary disorders.

RSPT 1244 Respiratory Care Equipment & Procedures 4 cr.
Sem: S 2 Lec./4 Lab Hrs./week
Prerequisite: RSPT 1004 Respiratory Care Science with a grade of "C" or better.
 This course is a study of respiratory treatment, equipment design, and operations related to non-critical care procedures. A lab fee is required.

RSPT 1263 Pulmonary Disease 3 cr.
Sem: S 3 Lec. Hrs./week
Prerequisite: RSPT 1003 Respiratory Care Science with a grade of "C" or better.
 This course is a study of cardiopulmonary pathophysiology, including: etiology, clinical manifestations, diagnostics, and treatment of disease states while incorporating clinical practice guidelines and therapist driven protocols.

RSPT 2123 Cardiopulmonary Diagnostics 3 cr.
Sem: Su 2 Lec./ 2 Lab Hrs./week
Prerequisite: RSPT 1222 Pharmacology for Respiratory Care with a grade of "C" or better.
 This course is a study of physical, radiological, hemodynamic, laboratory, nutritional, and cardiopulmonary diagnostic assessments, including arterial blood gas analysis, pulmonary function testing, sleep diagnostics, and equipment used in diagnostic and therapeutic practice of respiratory care.

RSPT 2133 Neonatal & Pediatric Care 3 cr.
Sem: F 3 Lec. Hrs./week

Prerequisite: RSPT 2963 Respiratory Care Clinical Practice I with a grade of "C" or better.

This course is a study of fetal development and the transition to the extrauterine environment. It includes the most common neonatal and pediatric cardiopulmonary disorders, disease processes, and modes of treatment in traditional and acute care. Other topics include: NRP (Neonatal Resuscitation Program) and PALS (Pediatric Advanced Life Support) certification. A lab fee and testing fees are required.

RSPT 2143 Mechanical Ventilation 3 cr.
Sem: F 2 Lec./ 2 Lab Hrs./week

Prerequisite: RSPT 2963 Respiratory Care Clinical Practice I with a grade of "C" or better.

This course is the study of mechanical ventilation with emphasis on ventilator classification, methods, principles, and operational characteristics, including indications, complications, and physiologic effects/principles of mechanical ventilation. Emphasizes initiation, management, and weaning of ventilator support. Other topics include: hemodynamics, special procedures, and advanced cardiac life support (ACLS). A testing fee is required.

RSPT 2963 Respiratory Care Clinical Practice I 3 cr.
Sem: Su 180 clinical/6 seminar Hrs./semester

Prerequisite: RSPT 1222 Pharmacology for Respiratory Care with a grade of "C" or better.

This course focuses on patient assessment, performance of respiratory care procedures, and care plan formation as practiced in a hospital environment. A procedural guide is used to evaluate competencies and performance of care procedures. Fees for supplies and insurance are required.

RSPT 2976 Respiratory Care Clinical Practice II 6 cr.
Sem: F 303 Clinical/15 Seminar Hrs./Sem

Prerequisite: RSPT 2963 Respiratory Care Clinical Practice I with a grade of "C" or better.

Students will rotate through various subspecialty areas for evaluation of competency and performance of care procedures. Lab fees for supplies and background check are required.

RSPT 2982 Respiratory Care Professional Seminar 2 cr.
Sem: S 1 Lec./ 2 Lab Hrs./week

Prerequisite: RSPT 2133 Neonatal & Pediatric Care with a grade of "C" or better.

This course is designed to integrate the essential elements of respiratory care practice through the use of care plans, case studies, and clinical simulations in a laboratory environment. Students develop an analytical approach to problem solving. Critical thinking is emphasized. A testing fee is required.

RSPT 2986 Respiratory Care Clinical Practice III 6 cr.
Sem: S 298 Clinical, 15 Seminar Hrs./Sem

Prerequisite: RSPT 2133 Neonatal & Pediatric Care with a grade of "C" or better.

Students will rotate through various Respiratory Care subspecialty areas: ICU, Homecare, Neonatal/Pediatric Care,

Sleep Lab, and Pulmonary Rehabilitation. A procedural guide is used to evaluate competency. A testing fee is required.

Science

(See Biology, Chemistry, and Physical Science)

Social Science

(See Anthropology, Geography, History, Political Science, Psychology, Sociology)

Sociology

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

SOCI 1303 Introduction to Sociology 3 cr.
Sem: F/S 3 Lec. Hrs./week

This introductory course provides an overview of the field of sociology and covers major sociological approaches, methods of sociological research, the organization of social life, social inequality, and social institutions such as the family, economics, politics, poverty, and the environment. Specific topics include socialization, demography, deviance, urbanization, culture, ethnicity, and racism.

Spanish

(See Humanities)

Speech

(See ENGL 2303 under English)

Technical Core

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

TECH 1003 Intro to Blueprint Reading 3 cr.
Sem: F/S/Su 2 Lec./2 Lab Hrs./week

Prerequisite: None.

This course is designed to provide students with knowledge and skills needed to read and interpret drawings, symbols and systems schematics and to develop drawings and sketches of components, parts and pieces into usable, working prints. The student will develop drawings and sketches of repairs and alterations and learn to utilize blueprints, graphs and charts to obtain or provide needed information. A lab fee is required.

TECH 1013 Shop Essentials 3 cr.
Sem: F/S/Su 2 Lec/2 Lab Hrs./week

Prerequisite: None. This course introduces the student to basic safety practices, fire safety, measurements through the

use of Micrometer and tapes, conversion of metric and English measures, shop practices, common shop paper work and basic hand tools common to various industrial trades. Students must complete lab exercises where they demonstrate competency in identifying basic safety practices, fire classes, material and proper fire control methods. Students will perform and read measurements through the use of Micrometer and tapes and demonstrate a working knowledge of conversion tables of metric and English. In addition, they will be introduced to common shop practices, common shop paper work practices and identify and appropriately use basic hand tools through practical applications. A lab fee is required.

TECH 1303 Industrial Safety 3 cr.
Sem: F/S 2 Lec./2 Lab Hrs./week

Prerequisite: None. This course covers the rationale for industry safety, safety regulations, and key safety movements. Hazardous materials handling, lock out-tag out, as well as OSHA regulations are introduced. Students must successfully complete lab exercises to demonstrate practical applications in the topics in the course. A lab fee is required.

TECH 2013 Basic Hydraulics & Pneumatics 3 cr.
Sem: TBA 2 Lec./2 Lab Hrs./week

Prerequisite: None This course introduces fluid power principles, components, fluid line manufacturing, presenting basic circuit design using symbols, schematic diagrams, and routing to build a foundation of knowledge in fluid power. Students learn and practice safe operation and handling of fluids, components, motors, pumps, tools and equipment. Students will complete lab exercises by demonstrating competency through practical application. A lab fee is required

TECH 2033 Basic Electricity & Electronics 3 cr.
Sem: F/S 2 Lec./2 Lab Hrs./week

Prerequisite: None. This course introduces the student to electrical laws and theories pertaining to DC and AC circuits building a foundation for knowledge and understanding of electrical applications in a broad range of disciplines. Emphasis is given to the use of standard electrical testing equipment, electrical components, design of electrical circuits, and troubleshooting procedures. Students must complete lab exercises demonstrating competency through practical applications. A lab fee is required.

Welding Technology

Required placement test scores (see Admissions and Placement chapter) or successful completion of DRDG 1024 Developmental Reading II and DENG 1054 Developmental English II is a prerequisite for all courses unless otherwise noted.

Certificate of Proficiency students without COMPASS scores may substitute the following: KeyTrain Level 4 or WorkKeys Level 3 in Reading for Information (RI), and Locating Information (LI) or WorkKeys. Most welding classes are

offered in a hybrid format, with the lecture component provided online so that students use class time to engage in intensive hands-on learning activities applying theory to practical hands-on applications involving skills development and critical thinking.

WELD 1103 Introduction to Welding Applications 3 cr.

As of Fall 2012, this course remains available only to high school students enrolled in the MSCC Technical Center. Designed for beginning welders in the manufacturing production and maintenance industry, this course provides basic skills and fundamental knowledge in oxyacetylene welding, cutting and brazing, Shielded Metal Arc welding, Gas Metal Arc welding and Gas Tungsten Arc welding. Safety procedures and practices are emphasized. Lab and testing fees are required.

WELD 1053 Fundamentals of Welding 3 cr.
Sem: F/S/Su 2 Lec/2 Lab Hrs./week

Prerequisites: None. This course introduces students to safety, application, technique, process essential variables, quality control, and inspection of common welding processes used in industry. The student will experience each welding process through instructor-led demonstrations and hands-on welding applications. Students who successfully complete this course will be able to make decisions regarding process selection and control common to non-essential welding personnel in an entry-level technical capacity. A lab fee is required.

WELD 1113 Flux-Core Arc Welding FCAW 3 cr.
SEM: F/S/Su 1 Lec/4 Lab Hrs./week

Corequisites: WELD 1053 Fundamentals of Welding or completion of an introductory welding skills test. This course provides entry-level technical training to SENSE Level I/NCCER Level II in the Flux-Core Arc Welding (FCAW) process. Students will receive instruction in process safety, equipment, filler metal selection, terminology, power sources, equipment and operational mechanics pertaining to gas and self-shielded processes. A lab fee and a testing fee are required.

WELD 1123 Shielded Metal Arc Welding: SMAW 3 cr.
Sem: F/S/Su 1 Lec./4 Lab Hrs./week

Corequisites: WELD 1053 Fundamentals of Welding or completion of an introductory welding skills test This course provides entry-level technical training to SENSE Level I/NCCER Level II in the shielded metal arc welding (SMAW) process. Students will receive instruction in process safety, equipment, filler metal selection, terminology, power sources, equipment and operational mechanics pertaining to self-shielded processes. A lab fee and a testing fee are required.

WELD 1133 Gas Metal Arc Welding: GMAW 3 cr.
Sem: F 2 Lec./2 Lab Hrs./week

Corequisites: WELD 1053 Fundamentals of Welding or completion of an introductory welding skills test.

This course provides entry-level technical training to SENSE Level I/NCCER Level II in the gas metal arc welding (GMAW) process, commonly referred to as MIG welding. Students will receive instruction in process safety, equipment, filler metal selection, terminology, power sources, equipment and operational mechanics pertaining to gas shielded processes. A lab fee and a testing fee are required.

WELD 1143 Gas Tungsten Arc Welding I: GTAW 3 cr.
Sem: F/S/Su 1 Lec./4 Lab Hrs./week

Corequisites: WELD 1053 Fundamentals of Welding or completion of an introductory welding skills test.

This course provides entry-level technical training to SENSE Level I/NCCER Level in Gas Tungsten Arc Welding (GTAW) process, commonly referred to as TIG welding. Students will receive instruction in process safety, equipment, filler metal selection, terminology, power sources, equipment and operational mechanics pertaining to wire feed processes. A lab fee and a testing fee are required.

WELD 2203 Introduction to Welding Fabrication 3 cr.
Sem: F/S/Su 1 Lec/4 Lab Hrs./week

Prerequisites: SENSE Level 1 Certifications in three processes.

This course allows advanced welding students a hands-on training lab. Students will be given projects requiring them to read and interpret blueprints, lay out and cut material, and use at least three of the following processes, SMAW, GMAW,

GTAW, and FCAW, to complete their projects. Students will demonstrate proper set-up, industry quality welds, inspection processes, and troubleshooting of their welding processes. A lab fee is required.

WELD 2214 Advanced Welding Fabrication 4 cr.
Sem: F/S/Su 1 Lec/6 Lab Hrs./week

Prerequisites: Completion of WELD 1203 and SENSE Level 1 Certifications in three processes.

This course allows advanced welding students a hands-on training lab. Students will develop their projects, budgets, computer-aided drawings, welding specifications, processes, work orders and procedures. Students will design projects that utilize three of the following processes: SMAW, GMAW, GTAW, and FCAW. Students will demonstrate proper set-up, industry quality welds, inspection processes, and troubleshooting, and complete welding processes which simulate master welding knowledge and project management. A lab fee is required.

Welding Technology

(See also TECHNICAL CORE for basic courses shared by more than one technical program)