

# Vincennes University Dual Credit Course Listing with Course Descriptions 2020-2021 Academic Year

Revised 08.31.2020

#### ACCT 100 - Basic College Accounting - 3 credit hours

A course in the fundamentals of accounting practices. Emphasis is on journalizing, posting, preparing financial statements, reconciling bank statements, and understanding elements of payroll. The course is specifically designed for students with little or no previous accounting or bookkeeping experience and who are enrolled in an occupational program requiring only one accounting course. This course may not be substituted for ACCT 201. 3 lecture hours.

#### AGBS 101 - Introduction to Agribusiness Management – 3 credit hours

A study of the agriculture industries that are of service to agribusiness. Basic processing of major agricultural products, storage, shipping, grading and merchandising from production to the consumer is examined. 3 lecture hours.

#### **ARCH 102 - Architectural Drafting and Print Reading – 3 credit hours**

An introductory course covering creation and interpretation of construction documents. Methods of geometric construction, three-dimensional drawing techniques, and sketching will be presented as well as elementary aspects of residential design and site work. Areas of emphasis will include print reading and drawing. 2 lecture hours, 4 laboratory hours.

#### ARCH 141 - Introduction to Architectural CAD - 3 credit hours

This course is an introduction to computer aided drafting using AutoCAD software. This course is primarily designed for Architecture, Surveying and Interior Design majors but open to all students interested in learning the basics of AutoCAD. This course will focus on Basic Architectural AutoCAD practices. 2 lecture hours, 3 laboratory hours.

# ARCH 221 - Advanced Architectural Software – 3 credit hours

This course introduces students to Autodesk Revit software. This course is primarily designed for Architectural Studies majors, but open to all students interested in learning the basics of Revit. 2 lecture hours, 4 laboratory hours.

## ARTT 110 - Art Appreciation - 3 credit hours

An introductory lecture course in art which explores the creative history and processes for making art that have been utilized by humankind across cultures, from the pre-historic through the modern era. Students are introduced to specific traditional and contemporary media for communication and expression. The course utilizes a variety of pedagogical techniques for the study of art that includes viewing projected images and observing actual artworks in the gallery or museum setting. *This course is a transferIN course*. 3 class hours. *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079, or higher.* 

#### **AUTO 105 - Transportation Fundamentals – 2 credit hours**

Course coverage includes instruction in personal and environmental safety practices as related to OSHA and other agencies that effect individuals working in the ground transportation technology areas. Additional instruction is given in the course on measurement principles and automotive fasteners. 2 lecture hours.

#### **AUTO 110 - Transportation Electrical – 3 credit hours**

This course addresses the fundamental theories of electricity and electronics as applied to ground transportation technology area. Diagnosis and repair of basic battery, starting, charging, lighting, accessories, and wiring systems will be covered. Utilization of analog and digital meters, wiring diagrams, and other diagnostic tools will be stressed. 3 lecture hours. **Corequisite(s): AUTO 110L.** 

#### AUTO 110L - Transportation Electrical Laboratory – 1 credit hour

This course is a hands-on course that introduces the student to automotive electrical theory, batteries, charging systems, starting systems, wiring repairs, lighting systems and accessories. 3 laboratory hours. **Corequisite(s): AUTO 110.** 

#### AUTO 120 - Automotive Chassis Systems - 5 credit hours

This course addresses the diagnosis, repair and various services related to wheel, brake, steering and suspension systems. Coverage will include wheel related services, disc and drum brakes, master cylinders, booster systems, antilock brake systems, four-wheel alignments and related repairs. 5 lecture hours. **Corequisite(s): AUTO 120L.** 

#### AUTO 120L - Automotive Chassis Systems Laboratory – 1 credit hour

This course involves hands-on activities by introducing the student to the repair of wheel, brake, steering, and suspension systems, as well as wheel alignments. 9 laboratory hours. **Corequisite(s): AUTO 120.** 

#### **AUTO 130 - Automotive Engine Systems – 4 credit hours**

Instruction presents engine-operating principles and theories as well as hands-on training related to modern gasoline engines. Students will learn inspection, troubleshooting, overhaul and engine replacement procedures. 4 lecture hours. **Corequisite(s): AUTO 130L**.

#### AUTO 130L - Automotive Engine Systems Laboratory – 1 credit hour

This course involves hands-on activities that introduce the student to the repair of automotive engine systems. The course will include inspections, troubleshooting, overhaul procedures, as well as engine replacement. 9 laboratory hours. **Corequisite(s): AUTO 130.** 

## AUTO 160 - Automotive Electronics - 3 credit hours

A continuation of AUTO 110 which addresses the diagnosis and repair of various electrical and electronic systems commonly found on the automobile today. Electrical/electronic troubleshooting will be stressed. 3 lecture hours. **Corequisite(s):** A grade of C or better in AUTO 110.

#### AUTO 160L - Automotive Electronics Laboratory - 1 credit hour

This course involves hands-on activities that introduce the student to the repair of various electrical and electronic systems frequently found on modern automobiles. Electrical/electronic troubleshooting will be stressed. 3 laboratory hours. **Corequisite(s): AUTO 160.** 

#### BCST 102 - Introduction to Audio-Video Production – 3 credit hours

This course provides an introduction to the fundamentals of digital production techniques for audio, video, studio, and field production. 3 class hours.

#### BCST 120 - Audio Production - 3 credit hours

This course provides an in-depth study on audio production techniques for radio, television, and digital technologies. Students will learn skills necessary for audio production and on-air work used in radio and other digital formats. 3 class hours. *Prerequisite(s): A grade of C or better in BCST 102*.

## BCST 140 - Video Production I (Studio Production) – 3 credit hours

A study of basic video production principles. Experience will be gained in the development of the process message, directing, camera, audio, video switcher and character generator operations, as well as talent. 3 class hours. *Prerequisite(s): A grade of C or better in BCST 102*.

## BCST 206 - Video Production II (Field Production) – 3 credit hours

A study of single camera video production with emphasis on concept and script development, camera technology, shot composition, lighting, non-linear editing, and special effects. 3 class hours. *Prerequisite(s): A grade of C or better in BCST 102*.

# BINT 205 - Business Internship I - 3 credit hours

A minimum of 135 internship project hours relating to the student's major area of study, periodic reports based on the work experience, and the employer/supervisor's evaluation are the basic requirements for this course. At the end of the semester, the student will write a report and conduct a presentation based on the internship. *Prerequisite(s): Students must qualify for ENGL 101*.

## BIOL 100 - Biology: Connections and Impacts – 3 credit hours

Hands-on, inquiry methods will be used to investigate characteristics, processes, and phenomena common to humans and their environment; writing and testing hypotheses, analyzing results, drawing conclusions, and communicating results clearly to others will be emphasized. The importance and role of ethics in science will also be discussed. *This course is a transferIN course.* 3 lecture hours. Corequisite(s): BIOL 100L. *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079 or higher; and must qualify for MATT 107 or higher.* 

#### BIOL 100L - Biology: Connections and Impacts Laboratory – 1 credit hour

Explores the principles of BIOL 100. Laboratories emphasize critical thinking and the scientific process. *This course is a transferIN course.* 2 laboratory hours. *Prerequisite(s): A 'C' or better in any BIOL lecture course, or concurrent enrollment in BIOL 100.* 

#### BIOL 101 - Plant and Animal Biology – 3 credit hours

Plant and animal interrelationships involving identification and classification. Significance of plants and animals to environment and ultimately to man. *This course is a transferIN course.* 3 lecture hours. **Corequisite(s): BIOL 101L.** *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079, or higher; and must qualify for MATT 107 or higher.* 

## BIOL 101L - Plant and Animal Biology Laboratory - 1 credit hour

Explores the principles of BIOL 101. Laboratories emphasize critical thinking and the scientific process. *This course is a transferIN course.* 2 laboratory hours. **Corequisite(s): BIOL 101.** 

# BIOL 105 - Principles of Biology I – 3 credit hours

This course is part one of an integrated approach to studying living organisms. Topics will include genetics, cytology, respiration, photosynthesis, and ecology. This course is required of agricultural, biology, and medical science majors. *This course is a transferIN course.* 3 lecture hours. **Corequisite(s): BIOL 105L.** *Prerequisite(s): Students must qualify for ENGL 101 and MATH 102; and a grade of C or better or concurrent enrollment in CHEM 103/103L or CHEM 105/105L.* 

# BIOL 105L - Principles of Biology Laboratory I – 1 credit hour

Explores principles of BIOL 105. This course is a transferIN course. 3 laboratory hours. Corequisite(s): BIOL 105.

#### BIOL 107 - Essentials of Human Anatomy and Physiology – 3 credit hours

The study of basic human body structure and function. Emphasis on interdependence of systems and contributions of each system to the maintenance of a healthy body. Intended primarily for students in the Practical Nursing and Emergency Medical Services programs, the Biomedical Technician Concentration of Electronics Technology program, and

the Funeral Service program. 3 lecture hours. **Corequisite(s): BIOL 107L.** *Prerequisite(s): Students must qualify for ENGL 101; and must qualify for MATH 013 or MATT 107, or higher.* 

#### BIOL 107L - Essentials of Human Anatomy and Physiology Laboratory - 1 credit hour

Examines the principles of BIOL 107 through lab exercises, models, slides, and animal dissections. 2 laboratory hours. **Corequisite(s): BIOL 107.** 

## BIOL 111 - Anatomy and Physiology I - 3 credit hours

Introduction to human body structure and function. Cells, tissues, integument, skeletal system, muscular system, nervous system, general and special senses. 3 lecture hours. **Corequisite(s): BIOL 111L.** *Prerequisite(s): Students must qualify for ENGL 101; and must qualify for MATH 013 or MATT 107, or higher. Successful completion of high school biology and chemistry are strongly recommended.* 

#### BIOL 111L - Anatomy and Physiology Laboratory I – 1 credit hour

Examines principles of BIOL 111 through lab exercises, models, slides, animal dissection, and computer simulations. 3 laboratory hours. **Corequisite(s): BIOL 111.** 

#### BIOL 112 - Anatomy and Physiology II - 3 credit hours

This course covers the following aspects of human anatomy and physiology: blood; cardiovascular system; respiratory system; digestive system; urinary system: endocrine system; male and female reproductive systems; and basic embryology. 3 lecture hours. **Corequisite(s): BIOL 112L.** *Prerequisite(s): A grade of C or better in BIOL 111 and BIOL 111L.* 

## BIOL 112L - Anatomy and Physiology Laboratory II - 1 credit hour

Examines principles of BIOL 112 through lab exercises, models, slides, animal dissection, and computer simulations. 3 laboratory hours. **Corequisite(s): BIOL 112.** 

#### BIOL 200 - Heredity and Society - 3 credit hours

Introduction to principles of human heredity and genetic expression. Genetic diseases, history and use of prenatal diagnostic technologies and ethical dilemmas posed by these advances. 3 lecture hours. *Prerequisite(s): A grade of C or better in ENGL 101. One semester of any college level biology course is recommended.* 

#### BODY 100 - Non-Structural Analysis and Damage Repair - 3 credit hours

Instruction presents an overview of safety and personal protective equipment, materials, measuring, welding, and information resources applicable to collision repair. Students will investigate steel and aluminum dent repair along with various types of plastic body fillers. SMC, fiberglass, and plastic body panel repair will also be explored. Substrate preparation including sanding, two-part epoxy, shrinking, and primers/sealers will be discussed. 3 lecture hours. Corequisite(s): BODY 100L.

## BODY 100L - Non-Structural Analysis and Damage Repair Laboratory - 4 credit hours

Students will perform dent repair using hammer/dolly, stud gun, and heat shrinking techniques. Surface preparation using various plastic body fillers along with a variety of sanding techniques/tools will be stressed. Students will demonstrate bolt on panel removal, replacement, and alignment. Plastic panel identification and repair will also be explored. Spray gun usage/setup will be discussed as it applies to primer application. 12 laboratory hours. **Corequisite(s): BODY 100.** 

#### **BODY 150 - Painting and Refinishing – 3 credit hours**

Instruction presents spraying/mixing techniques in various painting processes including: primers, sealers, acrylic enamels, urethane enamels, epoxy, base coat/clear coat, and water-borne products. Students will explore spray gun operation (conventional and HVLP), paint matching, blending, paint defects, and personal protective equipment related to paint application processes. 3 lecture hours. **Corequisite(s): BODY 150L.** 

## **BODY 150L - Painting and Refinishing Laboratory – 4 credit hours**

Students will perform hands-on activities that include: surface preparation, masking techniques, spray gun techniques (conventional and HVLP), paint mixing, color matching/blending, color identification, buffing, de-nibbing and final detailing. Instruction will also include paint defect prevention/repair in single stage, base/clear, tri-coat, and water-borne paint systems. 12 laboratory hours. **Corequisite(s): BODY 150.** 

#### BODY 280 - Automotive Customization and Restoration – 2 credit hours

A course designed to introduce students to automotive customization and restoration processes. Instruction will include activities as they apply to automotive research, organization, documentation, sublet repairs, financial planning, custom metal fabrication, polishing techniques, upholstery, and trends such as chopping, channeling, and the creation of resto-mods. 4 laboratory hours.

#### BODY 290 - Custom Painting and Pin-Striping - 2 credit hours

A course designed to introduce students to custom painting and pin striping. Course coverage will include: color selection, candy colors, metallics, pearls, marbleizing, stenciling, pounce pad usage, design layout using tape/masking material and electronic means, design and application of vinyl graphics. Custom airbrushing and pin striping techniques will be also be explored. 4 laboratory hours.

# CHEM 100 - Elementary Chemistry - 3 credit hours

An introduction to the basics of inorganic chemistry with a study of the chemical and physical properties, and changes of matter including measurement, nomenclature, reactions, and stoichiometry, including a discussion of nuclear chemistry. **This course is a transferIN course.** 3 lecture hours. **Corequisite(s): CHEM 100L.** Prerequisite(s): Students must qualify for MATH 016 or MATH 022 or higher; and students must qualify for ENGL 010 or ENGL 079.

## CHEM 100L - Elementary Chemistry Laboratory - 1 credit hour

Experiments to illustrate concepts of CHEM 100. *This course is a transferIN course*. 3 laboratory hours.

Corequisite(s): CHEM 100.

#### CIMT 100 - Electronics for Automation - 3 credit hours

An introductory course in the theory, characteristics, and application of basic electronic components used in AC, DC, and digital electronic circuits. Topics will include circuit analysis, measurement, and troubleshooting. 3 lecture hours. **Corequisite(s): CIMT 100L.** 

#### CIMT 100L - Electronics for Automation Laboratory - 3 credit hours

This course emphasizes the building, analyzing, and troubleshooting of AC, DC, and Digital electronic circuits. 9 laboratory hours. **Corequisite(s): CIMT 100.** 

#### CIMT 125 - Introduction to Robotics and Automation - 2 credit hours

This course covers an introduction to Computer Integrated Manufacturing in industry. Programming concepts are introduced using Visual Basic. Emphasis is placed on robotic workcell basics; including programming a six axis articulated robot. Various topics cover robotic classifications, applications, socioeconomic impact, workcell design, robot programming, sensor and actuator interfacing, plus a project centered around a CIM Workcell. 2 lecture hours.

**Corequisite(s): CIMT 125L.** *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079.* 

Writing Reading Intensive Course

#### CIMT 125L - Introduction to Robotics and Automation Laboratory - 1 credit hour

This course emphasizes robot programming, interfacing to I/O devices, and Visual BASIC programming. 6 laboratory hours.

Corequisite(s): CIMT 125.

#### CIMT 140 - Mechanical Drives – 2 credit hours

A study of the operation, application, and maintenance of the following mechanical components: gears, pulleys, sprockets, chains, bearings, belts, couplings, clutches, and brakes. Other topics include lubrication, alignment, troubleshooting, measurements, tools, hardware, materials, drawings, dimensions, and drive ratios. 2 lecture hours. Corequisite(s): CIMT 140L.

## CIMT 140L - Mechanical Drives Laboratory - 1 credit hour

This course emphasizes the setup, alignment, and measurement of single and multi-shaft drive systems using sprockets, pulleys, and gears. 3 laboratory hours. **Corequisite(s): CIMT 140**.

## CIMT 150 - Electronic and Electrical Applications for Manufacturing – 2 credit hours

One half of this course will cover the theory, characteristics, and application of electronic components used in automation control and sensing applications. Students will build, measure, and troubleshoot circuits using diodes, transistors, SCR's, triacs, ADC/DAC convertors, and other linear and discrete components. The other half of the course will cover industrial wiring topics and activities, including: safety practices; the Nation Electrical Code (NEC), tools, materials, and wiring methods. 2 lecture hours. **Corequisite(s): CIMT 150L.** *Prerequisite(s): A grade of C or better in CIMT 100 and CIMT 100L.* 

#### CIMT 150L - Electronic and Electrical Applications for Manufacturing Laboratory - 1 credit hour

This course emphasizes the building, analyzing, and troubleshooting of industrial electronic circuits using diodes, transistors, SCRs, Triacs, ADC, and DAC components; and the installation, wiring, and study of electrical hardware such as wire, conduit, boxes, and breakers based on the NEC. 9 laboratory hours. **Corequisite(s): CIMT 150.** 

# CIMT 160 - Fluid Power Systems - 1 credit hour

Introduction to the theory and operation of hydraulic and pneumatic systems. Special emphasis on hydraulic and pneumatic components and flow diagrams for particular applications in industrial control. 1 lecture hour. **Corequisite(s): CIMT 160L.** 

## CIMT 160L - Fluid Power Systems Laboratory – 1 credit hour

This course emphasizes the building, measuring, and troubleshooting of hydraulic and pneumatic circuits. 5 laboratory hours. **Corequisite(s): CIMT 160.** 

#### CIMT 175 - Mechatronics - 2 credit hours

This course covers the design, application, wiring, and troubleshooting of industrial control circuits. Electromechanical components and a PLC are used with ladder logic control circuits to control hydraulic and pneumatic circuits, timing and counting circuits, plus sequencing circuits. Components studied and used for designing circuitry includes relays, limit switches, timers, counters, photo sensors, proximity detectors, pressure switches, solenoid valves, etc. 2 lecture hours. Corequisite(s): CIMT 175L. Prerequisite(s): A grade of C or better in CIMT 100 and CIMT 100L.

## CIMT 175L - Mechatronics Laboratory – 1 credit hour

This course emphasizes the designing, building, analyzing, and troubleshooting of electrical control circuits for hydraulic and pneumatic applications. 6 laboratory hours. **Corequisite(s): CIMT 175**.

# CIMT 200 - Programmable Logic Controllers (PLCs) – 3 credit hours

This course covers the applications, programming, servicing, and troubleshooting of programmable logic controllers (PLCs) with applications in pneumatics, analog, and electrical controls for automated applications. Laboratory experiences include the design and troubleshooting of ladder logic programs. Allen-Bradley processors are used to control a pneumatic pick-and-place robot using ladder diagram programming, rung sequencing, data manipulation, file moves, subroutines, and other PLC instructions. 3 lecture hours. **Corequisite(s): CIMT 200L.** *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079; and have a grade of C or better in CIMT 175 and CIMT 175L.* 

## CIMT 200L - Programmable Logic Controllers (PLCs) Laboratory – 3 credit hours

This course emphasizes the programming and troubleshooting with an Allen-Bradley PLC using RSLogix and RSLinx. Programs are used to control discrete and analog I/O. 9 laboratory hours. **Corequisite(s): CIMT 200.** 

#### CMET 140 - Computer Maintenance I - 3 credit hours

An introduction to computer maintenance. This course will focus on safety, computer hardware devices, software, operating systems, and customer service. 2 lecture hours, 4 laboratory hours.

#### CMET 185 - Computer Maintenance II – 2 credit hours

This course will build on topics from CMET 140 adding basic networking and peripheral devices. 1 lecture hour, 4 laboratory hours. *Prerequisite(s): A grade of C or better in CMET 140.* 

#### CMET 195 - CompTIA A+ Certification - 1 credit hour

This course will help students prepare for CompTIA A+ certification. Students enrolling in this course will be required to take 2 CompTIA A+ certification exams. Lab fees will be assessed to cover the cost of the exams. 1 lecture hour. Prerequisite(s): A grade of C or better in CMET 140; and a grade of C or better or concurrent enrollment in CMET 185.

#### CMET 215 - Computer Maintenance III – 2 credit hours

This course will cover networking for Electronics Majors. The course will cover network hardware, the OSI model, network protocols, network operating systems, and cabling. Students will be required to take a network certification exam as part of the course. 1 lecture hour, 4 laboratory hours.

# CMET 220 - CompTIA Network+ Certification – 1 credit hour

This course will help students prepare for CompTIA Network+ certification. Students enrolling in this course will be required to take the CompTIA Network+ certification exam. Lab fees will be assessed to cover the cost of the exam. 1 lecture hour. *Prerequisite(s): A grade of C or better or concurrent enrollment in CMET 215.* 

## CNET 146 - Introduction to Network Operations and Security – 3 credit hours

This course introduces fundamental networking protocols and their hierarchical relationship in the context of conceptual Information Communication Technology (ICT) frameworks. Students will learn how networked hosts and applications communicate across networks. Emphasis is placed on security at the beginning of the SDLC (Systems Development Life Cycle). 3 lecture/laboratory hours.

#### CNET 151 - Information and Data Security I - 3 credit hours

Students will acquire the fundamentals of information and data security and understand the vulnerability most organizations have in their security systems with an emphasis on firewalls, security plans and Virtual Private Networks (VPNs). Discussions will include data security methods, authentication, network attacks, malicious code and viruses, wireless security, e-mail and web security and disaster recovery. 3 lecture/laboratory hours.

#### CNET 155 - Basic Cyber Crime and Computer Forensics – 3 credit hours

This course is designed to provide students with an introduction to specific crimes and investigation techniques within the discipline of digital and cyber forensics. Students will use existing federal, state, and case laws to determine best approaches to processing cybercrimes. Students will complete labs that focus on processing evidence involved in digital and cybercrimes (e.g., workstations, laptops, servers, storage media, smart-phones and smart-devices). 3 lecture/laboratory hours.

#### **CNET 236 - Operating Systems I – 3 credit hours**

Students will explore topics and issues related to operating systems and their installation, configuration, maintenance, and troubleshooting. Topics will include the characteristics and use of various types of operating systems, virtualization and Its usage, their implementations in both personal and corporate environments, and issues related to ensuring data security within each. Students will be presented with a variety of scenarios in which technical skills will be utilized in

order to meet the various demands of those associated with both the Information Technology and Security-related fields. A lab fee will be assessed to students for purchase of a voucher to be used for taking an industry-recognized certification exam upon completion of the course. 3 lecture/laboratory hours.

#### CNET 251 - Information and Data Security II - 3 credit hours

This course is a continuation of CNET 151. This course builds upon the concepts and foundations presented in CNET 151. Students will continue exploring many aspects of information and data security and specifically focus on the managerial aspects of information security and assurance. Topics covered include access control models, information security governance, and information security program assessment and metrics. Coverage on the foundational and technical components of information security is included to reinforce key concepts, such as security planning and contingencies, security policies, security management models and practices and ethics. The course includes up-to-date information on changes in the field, such as national and international laws and international standards that are essential to anyone entering this particular field. A lab fee will be assessed to students for purchase of a voucher to be used for taking an industry-recognized certification exam upon completion of the course. 3 lecture/laboratory hours.

#### CNET 255 - Advanced Researches in Cyber Crime and Forensics – 3 credit hours

This course is designed to increase a student's ability to investigate advanced topics with a primary focus on computer forensics, cyber law, cybercrimes, and cyber forensics. Using Federal, State, and existing case laws, students will gain in-depth experience investigating and gathering evidence to prepare for a presentation in a court of law. This course will emphasize the need for structured investigation techniques and proper protocol for maintaining a chain of evidence. Students will learn to follow proper investigative procedures while using a variety of forensic software tools and techniques. 3 lecture/laboratory hours. *Prerequisite(s): A grade of C or better in CNET 155*.

# CNST 100 - Construction Seminar - 1 credit hour

A course designed to expose students to recent trends in the residential construction industry. Information is presented concerning materials, occupations and professional organizations within the industry. Guest speakers provide such information when available. 1 hour lecture.

#### CNST 105 - Framing - 2 credit hours

A course devoted to rough framing. It includes building codes, floor framing, wall framing, roof framing, stair framing and general use of the steel square. Information on types and methods of construction will be presented in the classroom. The laboratory section will provide opportunities to practice framing in mock-up situations. Field trips will be scheduled if houses in rough framing construction are available. 2 lecture hours. **Corequisite(s): CNST 105L.** *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079, or higher; and must qualify for MATT 107 or MATH 022, or higher.* 

#### CNST 105L - Framing Laboratory – 2 credit hours

This course involves hands-on activities that are directly related to CNST 105. The course emphasizes building layout, floor framing and layout, wall framing and layout, roof framing and layout, and shingling applications. 4 laboratory hours. **Corequisite(s): CNST 105.** 

#### CNST 120 - Construction Safety - 3 credit hours

This course focuses on safety practices to be followed during construction. Emphasis is placed on the Occupational Safety and Health Administration's Safety and Health Standards for the construction industry. 3 lecture hours. *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079, or higher.* 

#### CNST 155 - Electrical Wiring - 2 credit hours

Information is given regarding installing and connecting component parts of residential wiring in a manner which is workable and acceptable according to the national electrical code. 2 lecture hours. **Corequisite(s): CNST 155L.**Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079, or higher.

## CNST 155L - Electrical Wiring Laboratory - 1 credit hour

This course involves hands-on activities that are directly related to CNST 155. These activities include the following wiring applications: Wiring of single pole switches, 3-way switches, 4-way switches, split wired receptacles, duplex receptacles, and service panel wiring applications. 2 laboratory hours. **Corequisite(s): CNST 155.** 

#### CNST 160 - Finish Carpentry – 2 credit hours

Students are introduced to products and instructed in their applications in the residential building industry. Instruction includes wall covering, floor covering, ceilings, paint, hardware, millwork, specialty products, doors and windows. 2 lecture hours. **Corequisite(s): CNST 160L.** *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079, or higher; and qualify for MATT 107 or MATH 022, or higher.* 

## CNST 160L - Finish Carpentry Laboratory – 2 credit hours

This course involves hands-on activities that are directly related to CNST 160. These activities include: Drywall hanging and finishing, interior painting, wallpapering, installation of door and window casing, installation of base board and crown molding, ceramic wall tile installation, and the installation of exterior siding components. 4 laboratory hours. **Corequisite(s): CNST 160.** 

#### CNST 180 - Concrete and Masonry – 2 credit hours

Students plan foundation, footings, walks, and driveways. They are instructed on the types of bonds and materials used to construct walls. Composition of the materials is also covered. 2 lecture hours. **Corequisite(s): CNST 180L.** 

#### CNST 180L - Concrete and Masonry Laboratory - 1 credit hour

This course involves hands-on activities that are directly related to CNST 180. These activities include: Concrete flat work placement/finishing and forming, laying concrete block in varying pattern bonds, and laying brick in varying pattern bonds. 2 laboratory hours. **Corequisite(s): CNST 180.** 

#### CNST 261 - The Indiana Residential Code for One-and Two-Family Dwellings - 3 credit hours

A course devoted to the understanding and interpretation of the Indiana Residential Code for one- and two-family dwellings. Instruction will be given in the following areas, but not limited to, administrative requirements, definitions, building planning, foundations, floors, wall construction, wall coverings, roof and ceiling construction, and roof assemblies. 3 lecture hours. *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079, or higher.* 

## COMM 143 – Speech – 3 credit hours

Introduces fundamental concepts and skills for effective public speaking including audience analysis, outlining, research, delivery, critical listening and evaluation, and the use of visual aids/technology. *This course is a transferIN course*. 3 class hours. *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079*.

#### **COMM 148 - Interpersonal Communication – 3 credit hours**

A course providing theory, actual practice, and criticism for examining and changing human interactions in work, family, and social contexts. The course will focus on perception, message encoding and decoding, feedback, listening skills, causes for communication breakdowns, and other elements affecting interpersonal communication. *This course is a transferIN course*. 3 class hours. *Prerequisite(s): Students must qualify for ENGL 101*.

#### COMM 204 - Business and Professional Communication - 3 credit hours

This course is designed to examine the theories and principles of oral and written communication as they apply to business and professional situations. Students will participate in mock employment interviews, prepare resumes, collaborate in staff meetings and performance review discussions, deliver sales presentations, manage change and conflict resolution discussions, assess communication styles as they relate to supervision and teamwork, deliver presentations, and analyze case studies relevant to business contexts. 3 class hours. *Prerequisite(s): Students must qualify for ENGL 101*.

Writing Reading and Speaking Intensive Course

#### **COMP 107 - Web Page Design - 3 credit hours**

This course is designed for students learning the fundamentals of constructing well-designed web pages for the World Wide Web. The proper use of color, spacing, graphics, tables, and forms along with the importance of correct linking and use of copyrighted material will be presented. Course will explore the publishing features of various software available. The careful design and planning steps will lead to a thoughtful, readable, and worthwhile individual project. 3 lecture/laboratory hours.

#### **COMP 110 - Introduction to Computer Concepts – 3 credit hours**

This course is designed as a one-semester study for students from all areas of concentration. Students will be exposed to the historic, current, and future roles of information systems as well as the importance of computers in all aspects of our modern society. General hardware and software features of modern systems will be discussed. Current word processing, spreadsheet, database, and presentation software will be covered. *This course is a transferIN course*. 3 lecture/laboratory hours.

#### **COMP 146 - Computer Configuration and Management I – 3 credit hours**

An introduction into the components and internal operations of various computer systems with an emphasis on hands-on activities. Presentations will discuss and detail computer hardware components, related operating systems software, performance, and compatibility features. Emphasis will be placed on software and hardware error diagnosis and troubleshooting, installation of software, information and data security, and initial setup of equipment. Lectures will cover topics on requirements, features, selection, and management of various computer systems. A lab fee will be assessed to students for purchase of kit. Lectures in the last segment of the class will discuss prioritization and management of computers and issues in a work environment from a technical support standpoint. Discussions and lectures will center around leadership roles, prioritizing, delegating and following up on computer related issues, and the importance of information and data security and how it can be achieved on various platforms and devices. 3 lecture/laboratory hours.

## COMP 177 - Introduction to Programming Logic, Design and Development – 3 credit hours

This course is an introductory programming course that orients students to programming concepts and logic without assuming any previous programming experience. Fundamental concepts of flow charting and pseudocode will be covered. Demonstrations in business problem and solution techniques will be reviewed. 3 class hours.

#### COMP 185 - Introduction to Databases - 3 credit hours

The course will feature database design and relational design principles based on dependencies and normal forms. This course introduces students to practical and theoretical database concepts. In addition, students learn to model databases using the entity relationship diagram method. The database language concepts while general in nature are demonstrated using an SQL platform. Overall database design and implementation issues will also be presented. 3 lecture/laboratory hours.

#### **COMP 203 - Object Oriented Programming – 3 credit hours**

This course introduces the fundamental concepts of object-oriented programming, programming methodology, and advanced data structures and algorithms. Microcomputer experience will be beneficial as the various features of object-oriented languages are explored. 3 lecture/laboratory hours. *Prerequisite(s): A passing grade in COMP 177.* 

#### COMP 232 - Business Driven Communications and Networking - 3 credit hours

This course is designed to give students a technical understanding of data networking and telecommunications that are imperative in competitive business enterprises. Topics in this course include understanding home networking, enterprise networking, (LAN) local and (WAN) wide area networks. Basic network topologies and characteristic fundamentals are discussed. The fundamentals of networking will build a foundation of why we have networks and what role Networking Standards and Organizations like the IEEE play in creating and maintaining a reliable network. The OSI and TCP/IP model will be covered to provide the theory and logic of how networks incorporate protocols and standards. Cabling

fundamentals and standards explore the physical layer of networking. The concepts of (ICT) Information and Communication Technology will be applied throughout this course as students learn when and why specific technology is used. Students will realize the important role that technology can play in helping organizations achieve a competitive advantage. A lab fee will be assessed to students for purchase of a voucher to be used for taking an industry-recognized certification exam upon completion of the course. 3 lecture/laboratory hours.

Writing Reading and Speaking Intensive Course

## COMP 242 - Creating a Personal Brand and e-Portfolio - 3 credit hours

This course examines the importance of identifying and developing a personal brand. Students will engage in a series of self- and peer-assessments that will identify skills set, value proposition and competitive differentiation. The importance of conveying a consistent personal brand will be a focus. Students will develop professional presentation skills, interviewing and networking skills, proper social media etiquette, and participate in targeted professional associations appropriate for their desired career. 3 lecture/laboratory hours.

#### COMP 252 - Introduction to Java Programming - 3 credit hours

This course introduces students to object-oriented programming concepts along with the Java syntax to implement them. At the end of this course, students should be able to write small applications and to program with Java on their own. 3 lecture/laboratory hours. *Prerequisite(s): A passing grade in COMP 177*.

# **COMP 257 - Advanced Web Page Design – 3 credit hours**

This course will introduce advanced topics not covered in COMP 107. Students will be introduced to HTML5. The proper use of Cascading Style Sheets (CSS) and javascript will be emphasized. Students will be required to produce a Web site containing style sheets, javascript, and HTML5. 3 lecture/laboratory hours. *Prerequisite(s): A grade of C or better in COMP 107 and COMP 185*.

## **COMP 275 - Mobile Application Development – 3 credit hours**

This course will allow students to learn advanced development topics, including how to publish and sell applications in their respective apps stores. Students will experience using development frameworks and Web services in their applications. Upon completion of this course, students will be able to develop Web sites that are ready for mobile device deployment. 3 lecture/laboratory hours.

#### **COMP 295 - Systems Development - 3 credit hours**

The capstone course reviews and applies system development theory and methodologies, and covers the components of the traditional life cycle of a system. Students produce a design and workable project individually to gain an appreciation of the documentation and planning of an information system. Other activities include the review and analysis of existing designs and discussions on the importance of working as team members. 3 lecture/laboratory hours. *Prerequisite(s):* Students must qualify for ENGL 101; and have a grade of C or better in COMP 185; and a grade of C or better in COMP 203 or COMP 252 or COMP 257.

Writing Reading and Speaking Intensive Course

# **COSM 100 - Cosmetology I - 7 credit hours**

This course offers an introduction to cosmetology with emphasis on basic practical skills and theories including roller control, quick styling, shampooing, hair coloring, permanent waving, facials, manicuring, business and personal ethics, and bacteriology and sanitation. Successful completion of the course requires at least 375 Cosmetology studio hours. 3 lecture hours, 26 studio hours. Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079.

#### **COSM 150 - Cosmetology II - 7 credit hours**

Development of practical skills introduced in COSM 100 will receive the greatest emphasis in this course. Clinical application and theory in the science of cosmetology are introduced. Successful completion of the course requires at least 375 Cosmetology studio hours. 3 lecture hours, 26 studio hours. Prerequisite(s): A grade of C or better in COSM 100.

## **COSM 200 - Cosmetology III - 7 credit hours**

The emphasis will be toward the development of advanced skills in styling, hair coloring, permanent waving, facials and manicuring. Students will also study anatomy and physiology as it applies to cosmetology. Successful completion of the course requires at least 375 Cosmetology studio hours. 3 lecture hours, 26 studio hours. Prerequisite(s): A grade of C or better in COSM 150.

#### COSM 250 - Cosmetology IV - 7 credit hours

All previously developed skills are applied with emphasis on developing individual techniques. Professionalism, salon management, psychology in relation to cosmetology, and preparation for state board examination are stressed. Successful completion of the course requires at least 375 Cosmetology studio hours. 5 lecture hours, 26 studio hours. *Prerequisite(s): A grade of C or better in COSM 200.* 

#### CPNS 101 - LAN Basics and OSI Model - 3 credit hours

This course is designed to prepare students to apply and understand the basics of networking hardware. The course covers the OSI model and industry standards; network topologies; IP addressing, including subnet masks; and basic network design. This is the first of a four-part series to prepare students for the CISCO Certified Networking Associate examination. 1 lecture hour, 6 laboratory hours.

#### CPNS 102 - WAN Basics and Routers - 3 credit hours

This course is designed to prepare students to apply and understand the basics of networking hardware. The course covers beginning router configurations, routed and routing protocols, and introduction to LAN switching. This is the second of a four-part series to prepare students for CISCO Certified Networking Associate examination. 1 lecture hour, 6 laboratory hours. *Prerequisite(s): A grade of C or better in or concurrent enrollment in CPNS 101*.

## **CPNS 170 - Computer Networking I – 3 credit hours**

This course is designed to introduce students to Microsoft networking. Students will install and maintain a computer network. Emphasis will be placed on Microsoft certification testing. Extensive individual study time will be required to pass the Microsoft certification tests. 1 lecture hour, 6 laboratory hours.

## **CULN 110 - Quantity Food Production – 5 credit hours**

This course is an introduction to basic food preparation; use, care and handling of tools and equipment; and the perishable commodity. Preparation and presentation of soups, sauces, vegetables, entrees and salads using a variety of cooking and preparation techniques will be covered. Professionalism in chef presentation and behaviors will be stressed. 7 class hours.

#### CULN 150 - Advanced Quantity Food Production – 5 credit hours

This course will include the preparation and presentation of soups, sauces, vegetables, entrees and salads at a higher level than CULN 110. There will be a strong emphasis on advanced food production techniques. Students will also focus on portion control and plate design presentations. 7 class hours. *Prerequisite(s): A grade of C or better in CULN 110*.

## CULN 210 - Pastry and Bake Shop Production - 5 credit hours

This is an in-depth study of the production and presentation of bakery, pastry, and specialty bakeshop items. Included are yeast products, puff pastry, sweet rolls and fillings, cakes and cake decorating, European tortes, candies, and specialty items for special occasions and buffets. Students will also be exposed to tools and equipment used in the bakeshop and management of the bakery. 7 class hours.

#### CULN 215 - Supervision of the Quantity Food Facility – 3 credit hours

Often the chef or executive chef serves as the manager and supervisor of the quantity food facility. This course examines managerial techniques including motivational techniques, delegation and supervision of work assignments, public relations, and management theory application. 3 lecture hours.

Writing Reading and Speaking Intensive Course

#### CULN 260 - Haute Cuisine and Special Food Items - 5 credit hours

This is an intensive laboratory course stressing the refinement of quantity food skills, decorating skills, specialty recipes, and front of the house skills. In addition, the preparation and presentation of classical foods and cuisine, banquet, buffet, specialty appetizers, and special occasions, will be included. Students will learn front and back of the house skills by serving dinners to the public in the dining room. 7 class hours. *Prerequisite(s): A grade of C or better in CULN 110 and CULN 150*.

#### DESL 110 - Diesel Electrical - 3 credit hours

This course addresses the fundamental theories of electricity and electronics as applied to diesel and heavy equipment. Diagnosis and repair of basic battery, starting, charging, lighting, accessories, and wiring systems will be covered. Utilization of analog and digital meters, wiring diagrams, and other diagnostic tools will be stressed. 3 lecture hours.

Corequisite(s): DESL 110L

#### DESL 110L - Diesel Electrical Laboratory – 1 credit hour

This course is a hands-on course that introduces the student to diesel and heavy equipment electrical theory, batteries, charging systems, starting systems, wiring repairs, lighting systems and accessories. 3 laboratory hours.

Corequisite(s): DESL 110

#### DESL 130 - Diesel Engine Systems – 3 credit hours

Instruction presents engine operating principles and theories as well as Diesel Fuel Systems and hands-on training related to modern diesel engines. Students will learn inspection, troubleshooting, overhaul and engine replacement procedures. 3 lecture hours. **Corequisite(s): DESL 130L.** 

#### **DESL 130L - Diesel Engine Systems Laboratory – 3 credit hours**

This is a hands-on course that introduces the student to the repair of modern diesel engines. The course will include inspection, troubleshooting, overhaul and engine replacement procedures. 9 laboratory hours. **Corequisite(s): DESL 130** 

#### DESL 140 - Diesel Hydraulic Systems – 2 credit hours

The study of hydrostatic and hydrodynamic system theory of operation, including gear, piston pumps spool, poppet, and electro-hydraulic valves problem diagnosis and repair procedures. 2 lecture hours. **Corequisite(s): DESL 140L.** 

## DESL 140L - Diesel Hydraulic Systems Laboratory – 2 credit hours

This is a hands-on course that introduces the student to the repair and troubleshooting of hydrostatic and hydrodynamic systems. The course will include the repair of gear and piston type pumps, spool, poppet and electro-hydraulic valves. 6 laboratory hours. **Corequisite(s): DESL 140.** 

#### DESL 160 - Diesel Preventative Maintenance - 2 credit hours

Course coverage includes inspection of cab and body, tires and wheels, engine compartment, electrical/electronics and cab, undercarriage components. These tasks will be done to DOT specifications. Pre-trip inspections are also covered. 2 lecture hours. **Corequisite(s): DESL 160L.** 

# DESL 160L - Diesel Preventative Maintenance Laboratory – 1 credit hour

This is a hands-on course that introduces the student to the inspection of a vehicle's cab, body, tires, wheels, engine compartment, electrical/electronic systems, and undercarriage components per DOT specifications. Pre-trip inspections will also be performed. 3 laboratory hours. **Corequisite(s): DESL 160.** 

#### **DESN 120 - Computer Illustration – 3 credit hours**

This course contains in-depth instruction in the use of Adobe Illustrator to produce vector illustrations, graphics and logos. As a studio course, every aspect of the class will be totally hands-on. Each tool and function will be explained, demonstrated and used by every member of the class in order to gain understanding and develop skills and proficiency.

A strong background in this industry standard software program is essential in keeping with today's high technology requirements within the graphic design industry. Areas of concentration include: graphic creation, use of tools, text applications and modifications, and color separations and output. 6 studio hours.

#### **DESN 140 - Computer Imaging - 3 credit hours**

This course will offer advanced, in-depth instruction of all aspects of Adobe Photoshop. Assignments encourage students to explore personal creative expression while developing skills and understanding of color correction and enhancement, image manipulation, photo-composite collage, and filter effects. Students will also gain valuable skills in scanning, image resolution adjustment, and file preparation necessary to produce images for print or web applications. This course will provide a solid background of experience with one of the most essential bitmap imaging tools in the graphic design industry today. 6 studio hours.

#### **DESN 155 - Computer Page Layout - 3 credit hours**

This course is a comprehensive study of page layout techniques in the digital environment. Current page layout computer applications will be used to create multiple page color documents integrating bitmap images, vector images and type. Areas that will be explored include: master pages, style sheets, tables, copy fitting, link management, and transparency effects. 6 studio hours.

# DRAF 120 - Computers for Technology - 2 credit hours

This course is designed to meet the special computer needs of technology students. Computer software and hardware experiences, as they relate to technology students, will be covered. No prior computer experience is assumed. 2 lecture hours, 2 laboratory hours.

#### DRAF 140 - Introduction to CAD - 3 credit hours

Introduction to computer aided drafting using AutoCAD software. This course is primarily designed for drafting and surveying majors but open to all students interested in learning the basics of AutoCAD. Topics include: 2D drawing commands, coordinate systems, editing commands, paper and model space, inquiry commands, layers, plotting, text, and basic dimensioning. 2 lecture hours, 2 laboratory hours.

## DRAF 150 - Descriptive Geometry - 2 credit hours

Students will draw and calculate three-dimensional problems. Theory and methods include graphic developments and the relationships between points, lines and planes, curved lines and surfaces, intersections, and development. 2 lecture hours, 2 laboratory hours.

#### ECON 100 - Elements of Economics - 3 credit hours

An introductory course intended primarily for students who need only one semester of economics. A survey of microeconomics, macroeconomics, international economics, comparative economic systems, historical development of economic thought. *This course is a transferIN course*. 3 lecture hours.

#### ECON 201 – Microeconomics – 3 credit hours

A descriptive and analytical study of the market economy, including market structures, pricing, and distribution and determination of wealth and income. *This course is a transferIN course*. 3 lecture hours. *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079, or higher.* 

#### ECON 202 - Macroeconomics - 3 credit hours

A descriptive and analytical study of fundamental concepts of our national economy. It includes an analysis of the determination and fluctuations in national income and employment, monetary and fiscal policy, and international trade and finance. Economic analysis of monetary and fiscal policies is stressed. *This course is a transferIN course*. 3 lecture hours. *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079, or higher.* 

## ECON 208 - Personal Financial Management - 3 credit hours

A study of the financial concerns of individuals and families. Included are family budgeting, insurance decisions, estate planning, installment buying, investment planning and tax problems. *This course is a transferIN course*. 3 lecture hours. *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079, or higher.* 

#### ELEC 105 - Electronic Circuit Analysis I – 3 credit hours

This course will include basic DC/AC circuit analysis using Ohm's Law, use of test equipment, interpretation of circuit diagrams, and basic soldering. Emphasis is on basic concepts and servicing techniques. 2 lecture hours, 4 laboratory hours.

# ELEC 110 - Basic Component and Circuit Analysis - 6 credit hours

Develops an understanding of basic DC and AC theory with mathematical analysis. Emphasis is on the function and characteristics of electronic components, basic circuit configurations, RCL circuits, vector analysis and resonance. 3 lecture hours, 9 laboratory hours. *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079; and must qualify for MATH 013 or MATT 017, or higher.* 

## ELEC 115 - Electronic Circuit Analysis II - 3 credit hours

This course is a continuation of ELEC 105 with further emphasis on DC and AC theory with mathematical analysis. Emphasis is on the function and characteristics of electronic components, circuit configurations, RCL circuits, vector analysis, and resonance. 2 lecture hours, 4 laboratory hours.

#### ELEC 130 - Digital Logic I - 3 credit hours

An introduction of fundamental digital electronic devices and circuits, including TTL logic, binary numbers, codes, and combinational logic circuits. 3 lecture hours, 3 laboratory hours.

## ENGL 007 - Introduction to College Reading and Writing I - 3 credit hours

This course is designed for distance education students who need additional support with foundational skills in English. Students will build proficiency in integrated reading and writing skills. Course content will include reading and writing processes, critical thinking, and the composition of clear and logical texts. This course is specifically designed for delivery online and for students unable to attend classes on Vincennes University's Vincennes and Jasper campuses. 3 class hours. *Prerequisite(s): SAT Writing and Reading score of 370 or below, or equivalent placement test scores.* 

## **ENGL 010 - Introduction to College Reading and Writing II – 3 credit hours**

This course is designed for distance education students who need additional support building college-level reading and writing skills before enrolling in ENGL 101. This course integrates critical reading and academic writing skills to prepare students for college-level writing. Students will be introduced to critical reading strategies to improve comprehension, analysis, and retention of texts written at the college-level. Students will also learn to apply the writing process to create well-developed, coherent, and unified texts appropriate for college-level writing. This course is specifically designed for online delivery and for students unable to attend classes on Vincennes University's Vincennes and Jasper campuses. 3 class hours. Prerequisite(s): A grade of C or better in ENGL 007 or ENGL 008 or SAT Reading and Writing scores of 380 or greater, or appropriate placement test scores.

# **ENGL 101 - English Composition I – 3 credit hours**

English Composition I is a college level course in critical reading and writing designed to help students develop their ability to think critically, to organize their thoughts, and to express ideas clearly and effectively. The course will focus on the various modes of expository writing, such as process, description, narration, comparison, cause/effect, and analysis, and give significant focus to argumentation. Students will be introduced to documentation. Numerous in-class assignments are required in addition to extended essays written outside of class. Required of all students. *This course is a transferIN course.* 3 class hours. *Prerequisite(s): A grade of C or better in ENGL 010, or a grade of C or better or concurrent enrollment in ENGL 079, or SAT Writing score of 440 or greater and SAT Reading score of 420 or greater, or appropriate placement test scores.* 

#### **ENGL 102 - English Composition II - 3 credit hours**

A continued development of writing skills introduced in ENGL 101. Students learn how to conduct research and how to base their writing on research. In addition to shorter documented papers, all students are required to write a longer investigative paper that must be fully documented according to MLA standards. *This course is a transferIN course*. 3 class hours. *Prerequisite(s): A grade of C or better in ENGL 101*.

# ENGL 107 - Business English - 3 credit hours

A course designed to meet the needs of students who plan to enter any phase of business—management, secretarial, etc. A study of business correspondence and research techniques is emphasized. 3 class hours. *Prerequisite(s): A grade of C or better in ENGL 101.* 

# ENGL 108 - Technical Writing - 3 credit hours

A course designed to provide students of technology with the communication skills that enable them to compose effective, precise, concise, technical reports. *This course is a transferIN course*. 3 class hours. *Prerequisite(s): A grade of C or better in ENGL 101*.

#### **ENGL 202 - Creative Writing - 3 credit hours**

A course designed to give students the opportunity for creative expression through one or more of the literary genres short fiction, novella, poetry, one-act drama, and essay. *This course is a transferIN course*. 3 class hours. *Prerequisite(s):* A grade of C or better in ENGL 101.

#### **ENGL 205 - Business Communications – 3 credit hours**

A study of the principles and techniques of effective business communication. Emphasis is placed on the preparation of clear, concise, reader-oriented memoranda, letters, resumes, proposals, and reports. Instruction is provided in research techniques and a formal research report with complete documentation is required. 3 class hours. *Prerequisite(s): A grade of C or better in ENGL 101*.

#### **ENTR 221 - Creating a Small Business – 3 credit hours**

Topics will include analyzing your own potential, business feasibility, franchising location, insurance and owner liability, obtaining necessary capital, getting financial assistance, business plan development and computer simulation. 3 lecture hours.

Writing Reading and Speaking Intensive Course

#### FACS 206 - Fundamentals of Nutrition - 3 credit hours

A study of the principles of nutrition, the requirements and interrelationship of nutrients, with application to personal and social needs. *This course is a transferIN course*. 3 class hours. *Prerequisite(s): A grade of C or better in ENGL 101; and students must qualify for MATT 107 or MATH 022, or higher.* 

#### FIRE 100 - Introduction to the Fire Service – 9 credit hours

Students will complete the academic portion of the Fire Fighter I & II curriculum. Topics such as personal protective equipment, fire fighter safety, water supply, alarm systems, hose lays, applied rescue, and other topics will be covered. Stress will be on the importance of physical fitness in the fire service. The goal is to successfully complete both the written portion of the Fire Engineering program and the practical skills related to Fire Fighter I & II. The course will also include the academic portion of Hazardous Materials Operations. 6 lecture hours, 3 laboratory hours.

# FREN 101 - French Level I – 4 credit hours

An introduction to the French language and culture with emphasis on oral skills. Guided communication tasks, vocabulary building, listening comprehension, phonetics. Use of videos, audio-visual aids, and "less-stress" techniques. Introduction to reading and writing. *This course is a transferIN course*. 4 class hours.

#### FREN 103 - French Level II - 4 credit hours

A continuation of FREN 101 with structured oral communication, vocabulary building. Reading of graded and glossed materials, basic grammatical structures, writing. *This course is a transferIN course*. 4 class hours. *Prerequisite(s): A grade of C or better in FREN 101 or appropriate placement test score*.

#### FREN 201 - French Level III - 4 credit hours

Emphasis on reading. Conversation coordinated with reading of cultural text. *This course is a transferIN course*. 4 class hours. *Prerequisite(s): A grade of C or better in FREN 103 or appropriate placement test score*.

#### FREN 203 - French Level IV - 4 credit hours

A continuation of FREN 201 with emphasis on writing. Readings on cultural and contemporary topics. *This course is a transferIN course*. 4 class hours. *Prerequisite(s): A grade of C or better in FREN 201*.

#### GEOS 100 - Earth Science – 3 credit hours

Introduction to fields of geology, meteorology, oceanography, and astronomy. Designed especially for non-science majors. *This course is a transferIN course*. 3 lecture hours. *Prerequisite(s): A grade of C or better or concurrent enrollment in GEOS 100L; must qualify for MATH 013 or MATH 022, or higher; and must qualify for ENGL 101.* 

## GEOS 100L - Earth Science Laboratory - 1 credit hour

Laboratory activities to accompany GEOS 100. *This course is a transferIN course*. 2 laboratory hours. *Prerequisite(s): A grade of C or better or concurrent enrollment in GEOS 100*.

#### GEOS 101 - Environmental Science - 3 credit hours

This course examines issues and events of current importance such as pollution, natural disasters, state and federal land use (including state and national parks), and population growth concerns. Career opportunities and transfer options for fields of studies covered will be included. Presentations by professional guest speakers, and utilization of World Wide Web will provide course enrichment. 3 lecture hours. *Prerequisite(s): Students must qualify for ENGL 101; and must qualify for MATH 013 or MATH 022, or higher.*Speaking Intensive Course

#### GEOS 101L - Environmental Science Laboratory – 1 credit hour

Examines principles of GEOS 101. Course may involve field sampling or environmental parameters, field trips to local sites or environmental significance, and analysis of case studies and/or data. 3 laboratory hours. **Corequisite(s): GEOS 101.**Prerequisite(s): A grade of C or better or concurrent enrollment in GEOS 101. Examines principles of GEOS 101.

# **GRMN 101 - German Level I – 4 credit hours**

An introduction to the German language and culture with emphasis on listening comprehension. Guided communication tasks, vocabulary building. Use of audio-visual aids, video, language lab, and "less-stress" techniques. *This course is a transferIN course*. 4 class hours.

#### GRMN 103 - German Level II - 4 credit hours

A continuation of GRMN 101 with structured oral communication, vocabulary building. Introduction to reading of graded and glossed materials, basic grammatical structures, writing. *This course is a transferIN course*. 4 class hours. *Prerequisite(s): A grade of C or better in GRMN 101 or appropriate placement test scores*.

#### GRMN 201 - German Level III - 4 credit hours

Emphasis on reading. Conversation coordinated with reading of cultural text, written and oral reports. Continued study of grammar structures, vocabulary building. *This course is a transferIN course*. 4 class hours. *Prerequisite(s): A grade of C or better in GRMN 103 or appropriate placement test score.* 

#### GRMN 203 - German Level IV – 4 credit hours

A continuation of GRMN 201 with emphasis on writing. Cultural and contemporary topics. *This course is a transferIN course*. 4 class hours. *Prerequisite(s): A grade of C or better in GRMN 201*.

#### HIMT 110 - Medical Terminology for Allied Health - 3 credit hours

This course is designed to acquaint students with the specialized language of medicine by focusing on the precise communication required by practitioners in medicine (i.e., health information managers, physical therapists, nurses, surgical technologists, occupational therapists, respiratory care practitioners, dental hygienists, doctors, etc.) and related fields. After learning the word elements (prefixes, suffices, and combining forms), and being taught the correlation between word elements, abbreviations and symbols with the basic anatomy, physiology and disease processes of the human body, students will be able to quickly recognize medical word meanings and understand medical reports. *This course is a transferIN course*. 3 lecture hours. *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079*.

#### HIST 139 - American History I - 3 credit hours

The colonial period; causes and results of the American Revolution; the development of the federal system of government; the growth of democracy; early popular American culture; territorial expansion; slavery and its effects; sectionalism; causes and effects of the Civil War; Reconstruction, political and economic. *This course is a transferIN course*. 3 lecture hours. *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079, or higher.* 

## HIST 140 - American History II - 3 credit hours

Industrial growth of the nation and its effects, agrarian and urban discontent and attempts at reform, World War I, the Roaring Twenties, social and governmental changes of the thirties, World War II and its consequences, the growth of the federal government, social and political upheaval in the sixties and seventies, and the conservatism of the eighties. *This course is a transferIN course*. 3 lecture hours. *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079, or higher.* 

#### HIST 235 - World Civilization I - 3 credit hours

The development of early civilizations of the Eastern Hemisphere, the civilizations of Greece and Rome, the rise and growth of Christianity and Islam, early Oriental history, medieval Europe, the Renaissance and Reformation, power politics and diplomacy, the expansion of Europe and its effect on various civilizations, scientific and intellectual developments to 1650. 3 lecture hours. *Prerequisite(s): Students must qualify for ENGL 101*.

#### HIST 236 - World Civilization II - 3 credit hours

Seventeenth Century absolutism, science and economics, the Enlightenment and the French Revolution; Romanticism, the Industrial Revolution; revolutions of the nineteenth century; colonialism and imperialism and their effects on under-developed areas; the prelude to World War I and the war itself; twentieth century world politics and the cold war; independence movements in Africa and Asia; recent social and cultural developments. 3 lecture hours. *Prerequisite(s): Students must qualify for ENGL 101*.

#### HIST 265 - History of the People of Japan - 3 credit hours

The course will focus on a survey of the History and Culture of the Japanese people from the Yamato Period approximately 500 AD to the present. Topics will include Early Japan, Chinese Rivalries, the Shogunate Period, the Meiji Restoration, the Russo-Japanese Wars, World War II, and Japan in the Modern World. 3 lecture hours. *Prerequisite(s): Students must qualify for ENGL 101*.

Writing Reading and Speaking Intensive Course

#### HLTH 201 - Personal Health Science - 3 credit hours

This course acquaints students with basic personal health information and gives them a basis for self-direction of health behavior. The course provides physiological and psychological basis for health attitudes and practices including drugs, family health, and other critical issues. 3 lecture hours. *Prerequisite(s): A grade of C or better or concurrent enrollment in PFWL 100; and students must qualify for ENGL 010 or ENGL 079.* 

Writing Reading Intensive Course

## HLTH 210 - Community Health and Wellness - 3 credit hours

This course is an introduction to community health needs, resources, services and programs at the local, state, national and international levels. Analysis of problems, consideration of solutions, and promotion of programs of prevention and wellness will be covered. 3 lecture hours. *Prerequisite(s): A grade of C or better in PFWL 100; and students must qualify for ENGL 101*.

#### HLTH 211 - First Aid - 2 credit hours

This course is designed to provide an introduction to basic first aid and emergency response procedures. National standards for First Aid and CPR will be covered and represents the minimal course guidelines. Students who qualify will receive certifications in adult, child, and infant CPR, AED, and First Aid Basics by one of the nationally accredited certifying agencies. *This course is a transferIN course*. 2 class hours.

#### **HORT 105 - Introduction to Landscape Horticulture – 3 credit hours**

An introductory course in landscape horticulture. Emphasis will be on the study of growth and development, nomenclature, propagation, soils, and fertility related to trees, shrubs, flowers and turf. 3 lecture hours.

## **HORT 205 - Landscaping I: Landscape Design – 3 credit hours**

Elementary principles of landscape drafting and elementary residential landscape planning. Emphasis on the selection of ornamental plants consistent with design and environmental requirements as well as presentation of the overall design. 2 lecture hours, 3 laboratory hours.

#### HORT 255 - Landscaping II: Landscape Management and Construction – 3 credit hours

Correct landscape management practices of ornamental and woody landscape plants through pruning to maintain size, improve plant structure, and manage tree health, as well as understanding irrigation systems. Hands-on experience in installing, mulching, and maintaining trees and shrubs. Learn construction details on installing hardscapes. 2 lecture hours, 3 laboratory hours. *Prerequisite(s): A grade of C or better in HORT 205*.

#### HSGN 102 - Introduction to Health Careers - 3 credit hours

An introduction to assist students in selecting a career in health sciences. It consists of information on various health science careers. Content includes an overview of health care development, delivery systems, along with information regarding laboratory experience, background and requirements for various health care professions, and employment opportunities in each career. Other aspects of the coursework include Universal Precautions, bioethical aspects of health care, professional responsibilities, and confidentiality issues. 3 class hours.

#### HSGN 240 - Multicultural Health - 3 credit hours

This course will explore what it means to deliver culturally competent healthcare in the U.S. Students will examine multicultural beliefs about health and illness, the impact of race, ethnicity, and socioeconomic status on healthcare outcomes, and methods to improve the delivery of culturally sensitive care to a diverse population. Students will explore their own cultural backgrounds and how these may impact healthcare delivery. In addition, the course will study health concerns of specific cultural and ethnic groups in the United States and health promotion strategies for reducing or eliminating health disparities. 3 lecture hours. *Prerequisite(s): A grade of C or better in ENGL 101*.

#### **HUMN 210 - Introduction to Humanities I – 3 credit hours**

A general education course designed to acquaint students with the broad and interrelated disciplines with the humanities. The content includes painting, sculpture, architecture, and drama. 3 class hours. *Prerequisite(s): A grade of C or better in ENGL 101*.

Writing Reading and Speaking Intensive Course

A general education course designed to acquaint students with the broad and interrelated disciplines within humanities. The content includes dance, literature, music, and film. 3 class hours. *Prerequisite(s): A grade of C or better in ENGL 101. HUMN 210 is not a prerequisite for HUMN 211.* 

Writing Reading and Speaking Intensive Course

#### **HUMN 245 - Cultural Diversity: Humanities – 3 credit hours**

Utilizing a multi-disciplinary approach, this course will provide students with an opportunity to explore their own ethnic roots. In addition, it will increase their understanding of the main ethnic groups in the United States: Appalachians, Native Americans, Afro-Americans, Asian-Americans, Pacific Islanders, and Hispanics. The social and religious impact on the cultural integration of these groups will be introduced. Discussions on how these aspects of United States culture may affect international dialogues will also be included. HUMN 245 and SOCL 245 - Cultural Diversity: Sociology are equivalent courses; therefore, students with credit in HUMN 245 will NOT receive additional credit in SOCL 245. 3 class hours. *Prerequisite(s): A grade of C or better in ENGL 101*.

Writing Reading and Speaking Intensive Course

#### LAWE 100 - Survey of Criminal Justice — 3 credit hours

This course will study the history, role, development, philosophy, and Constitutional aspects of the United States criminal justice system. The course will explore the interrelationship, functions, and responsibilities of law enforcement, the courts, and correctional system. *This course is a transferIN course*. 3 lecture hours.

#### LAWE 101 - Basic Police Operations - 3 credit hours

This course will introduce the students to the basic functions of a police officer in society. The students will be guided to understand officer initiated activity, directed patrol responsibilities, standard report writing of incidents, and standards of proof. Students will deploy their knowledge through scenarios gaining an understanding of how case law governs an officer's actions. 3 lecture hours.

#### LAWE 145 - Ethics and Professionalism in Criminal Justice – 3 credit hours

This course will guide students to understand the culture within the criminal justice system in order to prepare them for their chosen profession. This will be accomplished through critical writing exercises, communication exercises, core values training, community service, stress inoculation, and scenario based learning. Students will participate in physical exercises or other pertinent projects if medical or physical limitations prevent their participation in physical exercises. 3 lecture hours.

#### LAWE 150 - Criminal Minds and Deviant Behavior - 3 credit hours

An introduction to the phenomena of crime and delinquency, crime typology, and victimology, as well as the role of law enforcement in the prevention and control of deviant behavior. This course will examine the theoretical perspectives in criminology. Through classroom activities, students will be exposed to profiling techniques and gain experience in identifying motivating factors of criminal behavior. 3 lecture hours.

#### LAWE 155 - Substantive Criminal Law – 3 credit hours

This course will study the legislative power of government and the development of criminal law with consideration given to Constitutional limitations. Types of crime will be explored with emphasis on definitions of crimes in the United States and application through interpretation of criminal law. 3 lecture hours.

# LAWE 160 - Criminal Investigation – 3 credit hours

Fundamentals of criminal investigation, theory and history; crime scene to courtroom with emphasis on techniques appropriate to specific crimes. 3 lecture hours.

#### LAWE 201 - Current Trends, Issues, and Topics in Law Enforcement - 3 credit hours

This course will focus on current trends, issues, and topics in the field of Law Enforcement that are touched on in some courses, but are worthy of extensive examination. 3 lecture hours.

#### LAWE 205 - Procedural Criminal Law - 3 credit hours

Study will be made of the constitutional framework controlling governmental practices and procedures as they operate upon the citizen. Consideration will be given to consequences of governmental overreaching. Procedures for arrest, search and seizure, warrants, interrogation, stop and frisk, and identifications will be examined. 3 lecture hours. Prerequisite(s): A grade of C or better or concurrent enrollment in COMM 143 or COMM 148.

Speaking Intensive Course

# LAWE 210 - Police Operations and Community Relations – 3 credit hours

Administration of police line and support operations, including patrol as basic operation of police function, investigation of delinquent and criminal offenders, traffic control, intelligence and other special operational units. Manpower distribution, analysis of operations, enforcement policy, operations during civil disorders and disasters. The role of the police officer in achieving and maintaining public support, human relations, public information, relationship with violators and complainants. 3 lecture hours.

#### LAWE 225 - Introduction to Forensic Science – 3 credit hours

This course is an overview of the following aspects and theories of criminalistics as related to the crime scene and its investigation. Included will be laboratory procedures and capabilities; crime scene searching and sketching; photography; firearms and toolmark identification; fingerprints; shoe and tire impressions; headlamp examination; arson; microanalysis of trace evidence such as glass, hairs, fibers, paint, and explosives; drugs and toxicological analysis; serology; instrumentation; document examination; preservation of evidence; and the importance of forensic science in the courtroom. The course will emphasize the newest techniques and equipment available. This course is offered online only. 3 lecture hours. *Prerequisite(s): Open only to Distance Education students enrolled in the Law Enforcement Studies Concentration.* 

#### LAWE 250 - Juvenile Delinquency - 3 credit hours

This course provides an introduction to the structure and operation of the juvenile justice system in the United States. Responsibilities of the juvenile police officer, juvenile court, child protective service worker, and juvenile probation officer will be examined. Emphasis is placed on the types and causes of juvenile delinquency, while using practical application to understand the goal of the juvenile system in the United States. 3 lecture hours. *Prerequisite(s): A grade of C or better or concurrent enrollment in ENGL 101 or higher.* 

#### LAWE 260 - Crime Scene and Criminal Investigation - 3 credit hours

This course is designed to introduce students to the basic aspects of crime scene processing and the subsequent investigation. By utilizing lecture and practical exercises, students will learn evidence identification, processing and preservation skills. Additionally, they will understand the procedures of conducting interviews, interrogations and courtroom etiquette. 3 lecture/laboratory hours. *Prerequisite(s): Students must qualify for ENGL 101*.

Writing Reading Intensive Course

## LAWE 270 - Internship in Law Enforcement – 3 credit hours

Internship for interested and qualified law enforcement majors with a state or local law enforcement agency. Students will have an opportunity to work on interpersonal communication skills. This internship will also allow the students to make valuable contacts and network in specific areas of interest. This internship may be served on weekends during the semester or during the summer. Students will be required to serve a minimum of 150 practicum hours.

#### LITR 100 - Introduction to Literature - 3 credit hours

An introduction to literature and to three major genres: fiction, poetry, and drama. Emphasis is placed on the ability to read critically and gain an appreciation for literature. *This course is a transferIN course*. 3 lecture hours. *Prerequisite(s): Students must qualify for ENGL 101*.

Writing Reading Intensive Course

#### LITR 220 - Introduction to World Literature I – 3 credit hours

A general education survey course designed to acquaint the student with the literary masterpieces and various literary types produced from Homer's time to Shakespeare's. The course includes a study of drama, poetry (with some attention to epic form as well as shorter narrative verse), and the philosophic essay. Combines practice in advanced expository writing with literary study. *This course is a transferIN course*. 3 class hours. *Prerequisite(s): A grade of C or better in ENGL 101 or ENGL 112*.

Writing Reading and Speaking Intensive Course

#### LITR 221 - Introduction to World Literature II - 3 credit hours

A general education survey course designed to acquaint the student with selected major literary works and various literary types produced from the Jacobean period to the present. The course content includes work by the Eastern, Continental, British, and American authors. Instruction in research techniques and writing research papers is combined with literary study. To meet the requirements of a second writing course, students must complete LITR 220 and LITR 221 with at least a C average. *This course is a transferIN course*. 3 class hours. *Prerequisite(s): A grade of C or better in ENGL 101, ENGL 112, or LITR 220.* 

Writing Reading and Speaking Intensive Course

#### LITR 222 - American Literature I - 3 credit hours

A study of major American poets and prose writers, noting their relationship to contemporary English writers. The course emphasizes the early colonial, national, and sectional periods of literature. Offered in even-numbered years. *This course is a transferIN course*. 3 class hours. *Prerequisite(s): Students must qualify for ENGL 101*.

Writing Reading and Speaking Intensive Course

#### LITR 223 - American Literature II - 3 credit hours

A study of the poets and prose writers of the so-called Second National Period of American Literature. The course also includes some of the present-day writers of poetry, prose, and drama. Offered in odd-numbered years. *This course is a transferIN course*. 3 class hours. *Prerequisite(s): Students must qualify for ENGL 101*.

Writing Reading and Speaking Intensive Course

#### LITR 240 - Children's Literature - 3 credit hours

This course is designed both for education majors who need to meet state requirements and for students who may wish to gain or regain appreciation for the best literature written for children. Classic and modern children's books, ranging from kindergarten to junior high level, will be read and discussed. *This course is a transferIN course*. 3 class hours.

Prerequisite(s): Students must qualify for ENGL 101.

Writing Reading and Speaking Intensive Course

#### MATH 013 - Algebra I - 4 credit hours

Basic algebra skills, number systems, linear equations, integer exponents, operations with polynomials, introduction to factoring, rational expressions and equations and graphing. 4 lecture hours. *Prerequisite(s): A grade of C or better in MATH 010 or MATH 011, or open to other students with appropriate placement score.* 

#### MATH 016 - Algebra II – 4 credit hours

Continuation of MATH 013. Systems of equations and inequalities, functions, further study of polynomials and exponents, factoring, rational expressions and equations. Roots, radicals and radical equations, complex numbers, quadratic equations, graphing, and applications. 4 lecture hours. *Prerequisite(s): A grade of C or better in MATH 013, or open to other students with appropriate placement score.* 

#### MATH 102 - College Algebra - 3 credit hours

Designed as a pre-calculus course for the study of functions (including polynomial, rational, exponential, and logarithmic) and their graphs; includes transformations of functions, operations on functions, solution methods for linear and nonlinear equations, and inequalities, and selected topics from analytic geometry. Utilizes graphing technology. *This* 

**course is a transferIN course**. 3 lecture hours. *Prerequisite(s): A grade of C or better in MATH 016 or higher, or concurrent enrollment in MATH 022, or appropriate placement test scores.* 

#### MATH 103 - Quantitative Reasoning - 3 credit hours

This course is for the non-science major with an emphasis on solving real-life problems. Topics include proportional reasoning, the mathematics of finance, linear programming, probability, mathematical modeling, and statistics. *This course is a transferIN course*. 3 lecture hours. *Prerequisite(s): A grade of C or better in MATH 016 or higher, or concurrent enrollment in MATH 023, or appropriate placement test scores.* 

## MATH 104 - Trigonometry - 3 credit hours

Discussion of the trigonometric functions of angles and numbers, use of trigonometric functions both in solutions of triangles and in the study of physical phenomena, such as electric circuits and sound waves, trigonometric identities, inverse trigonometric functions, and vectors are also studied. *This course is a transferIN course*. 3 lecture hours. *Prerequisite(s): A grade of C or better in or concurrent enrollment in MATH 102*.

#### MATH 110 - Statistics - 3 credit hours

Designed for education, social science and other non-math majors. Tabular and graphical representation of statistical data, measures of central tendency and dispersion, basic probability sampling, statistical inference, and correlation. 3 lecture hours. *Prerequisite(s): A grade of C or better in MATH 102 or higher, or appropriate placement score.* 

#### MATH 111 - Finite Mathematics - 3 credit hours

Basic set theory, counting techniques, probability (including Markov chains, random variables, binomial distribution, and expected value), linear systems, matrices, linear programming and finance. Applications to problems from business and social sciences. *This course is a transferIN course*. *Prerequisite(s): A grade of C or better in MATH 016 or MATH 022, or open to other students with appropriate placement score*.

#### MATH 115 - Survey of Calculus I – 3 credit hours

Not open to those with credit in MATH 118; does not substitute for MATH 118. For students in business, social science or pre-professional programs. Introduction to derivative, integrals and their application. *This course is a transferIN course*. 3 lecture hours. *Prerequisite(s): A grade of C or better in MATH 102 or MATH 111, or appropriate placement score.* 

## MATH 118 - Calculus with Analytic Geometry I - 5 credit hours

A knowledge of high school trigonometry is assumed. Plane analytic geometry, limits, differentiation and applications, introduction to integration, inverse functions, logarithm and exponential functions, and hyperbolic functions. *This course* is a transferIN course. 5 lecture hours. *Prerequisite(s): A grade of C or better in both MATH 102 and MATH 104, or appropriate placement score.* 

#### MATH 119 - Calculus with Analytic Geometry II - 5 credit hours

Continuation of MATH 118. Calculus of one variable. Further study of integration techniques and applications, inverse trigonometric and hyperbolic functions, parametric equations, polar coordinates and graphing, conic sections, improper integrals, sequences, series, differentiation and integration of power series, introduction to vector analysis. *This course is a transferIN course*. 5 lecture hours. *Prerequisite(s): A grade of C or better in MATH 118*.

## MATT 107 - Applied Mathematics – 3 credit hours

Unit conversion, algebraic operations and equations, graphing, systems of equations, quadratic equations, basic statistical representations, geometry, and right triangle trigonometry. Emphasis on practical application. This course is not intended for A.S. Transfer, A.A. and B.S. degree students. 3 lecture hours. *Prerequisite(s): Open to students with a grade of C or better in MATH 013 or higher, or concurrent enrollment in MATT 017, or appropriate placement scores.* 

Survey course primarily for business majors. Introduction to discounts, finance, mark-ups, investments, and statistics. Practical applications emphasized. This course is not intended for A.S. Transfer, A.A. and B.S. degree students. 3 lecture hours. *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079; and a grade of C or better in MATH 013 or higher, or concurrent enrollment in MATT 019, or appropriate placement test scores.* 

#### MGMT 100 - Introduction to Business - 3 credit hours

Exposes the student to the many kinds of business activities and how they influence society. Deals with three basic areas of business: production, marketing, and finance. Covers the role of people in business, from the managerial functions to the non-managerial skills. *This course is a transferIN course*. 3 lecture hours.

#### MGMT 250 - Introduction to Management – 3 credit hours

The purpose of this course is to prepare students to develop their personal philosophy of management. Management concepts presented in this course are based on traditionally accepted management theory and represent practical tools that managers commonly use to meet organizational challenges. Students will be introduced to many possible situations that managers must frequently handle. 3 lecture hours.

## MGMT 257 - Supervision - 3 credit hours

This course concentrates on the job responsibilities of the first-line supervisory level. As the level of management directly responsible for planning, organizing, influencing, controlling and directing the activities of non-management employees, they are the primary contacts most employees have with the total organization and its objectives. The strategy of this course is to be practical in nature and to apply theoretical concepts to possible situations that first-line supervisors must frequently handle. Special emphasis is placed on implementing change, planning, delegating, motivating for greater performance, and monitoring the changing role of the supervisor in the new "team environment." This course is offered at military sites only. 3 lecture hours.

## MGMT 260 - Organizational Leadership - 3 credit hours

This course is the cornerstone of the organizational leadership program. The course will provide analysis of leadership through study of the major leadership theories throughout history. The course will also focus on how leadership works with change, problem solving, power, technology, decision making, and other issues inherent in guiding and facilitating an organization. This course is offered at military sites only. 3 lecture hours.

## MGMT 280 - Introduction to Marketing - 3 credit hours

Designed to provide students with a basic background of marketing activities as seen from the manager's point of view. Includes marketing strategy in general, packaging and branding, distributing and channel systems, retailing, wholesaling, mass media advertising, personal selling and matters concerning pricing decisions. 3 lecture hours.

#### MUSI 218 - Music Appreciation - 3 credit hours

This course is an introduction to music stressing the art of listening with discussions of prominent composers, their works and their styles. No previous knowledge of music is required. *This course is a transfer IN course*. 3 class hours.

#### MUSI 219 - Introduction to World Music - 3 credit hours

This course is a selected survey of classical, popular, and folk music traditions from around the world. Students will learn to recognize and identify the music associated with different parts of the world, as well as to understand the relationship music has with the cultural values of each society. 3 class hours.

#### MUSI 220 - History of American Music - 3 credit hours

This course is designed to study the development of music in the United States beginning from the American Revolutionary period. Topics will include American composers of traditional concert style music and influential genres such as jazz, blues, country bluegrass, rock, and Musical Theater. No previous knowledge of music required. 3 lecture hours.

## PFWL 100 - Lifetime Fitness/Wellness - 2 credit hours

The study of the fundamental concepts, principles, and components of fitness/wellness. Related areas of study include, but are not limited to, nutrition, stress reduction, heart health, body composition and weight control, and substance abuse. Course will be delivered through a one-hour lecture and two one-hour lab sessions per week. Students will select a lab activity of their choice. 1 lecture hour, 2 laboratory hours.

#### PFWL 112 - Fitness/Wellness for Law and Safety Professions - 2 credit hours

The study of the fundamental concepts, principles, and components of fitness/wellness, specifically as it relates to the law and safety professions. Related areas of study include, but are not limited to, nutrition, stress reductions, heart health, body composition and weight control, and substance abuse. Course will be delivered through a combination of lecture and activity sessions. Activities will be designed around the physical fitness requirements of the law and safety professions. 3 class hours.

#### PHED 104 - Strength Training - 1 credit hour

Basic instruction in the use of weights and weight machines for the purpose of developing muscular strength. Instruction will also be given relative to the development of a personalized strength training program. 2 class activity hours.

# PHED 150 – Introduction to Kinesiology and Sport – 3 credit hours

This introductory course is designed to provide students with an overview of both the foundations of kinesiology and sport. Sociological, historical, philosophical foundations, and current issues and trends will be examined. 3 lecture hours. *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079*.

## PHED 252 - Sports and Recreation Areas and Facilities - 3 credit hours

A survey of primary sports and recreation areas and facilities including associated developments such as stadiums, recreation centers, play fields, parks, trails, and maintenance areas. Specific consideration will be given to design and standards concepts, operation, maintenance, scheduling, equipment, supplies, and purchasing procedures. 3 lecture hours. *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079*.

#### PHED 255 - Management of Recreation, Sport and Fitness – 3 credit hours

An overview of management functions specific to their use in recreation, sport, and fitness delivery systems. Topics include, but are not limited to personnel administration and evaluation, public relations, tournament design, budgeting systems, current trends, and risk management. 3 lecture hours. *Prerequisite(s): Students must qualify for ENGL 101.*Writing Reading and Speaking Intensive Course

#### PHIL 111 - Introduction to Philosophy – 3 credit hours

This course introduces beginning students to the recurring problems, ideas and thought systems as represented in the literature and lives of great thinkers. *This course is a transferIN course*. 3 class hours. *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079*.

#### PHIL 212 - Introduction to Ethics – 3 credit hours

This course is a study of the morality of human behavior. After discussion of certain introductory questions about the nature and verification of moral propositions, this course will focus on components of the morally good life and alternative theoretical approaches to its achievement, using case studies (civil disobedience, abortion, euthanasia, etc.) to illustrate the principles and norms involved. *This course is a transferIN course*. 3 class hours. *Prerequisite(s): Students must qualify for ENGL 101*.

Writing Reading and Speaking Intensive Course

Introduction to the principles of pharmacology. Defines the common uses for specific drugs, their therapeutic effects, bioavailability and toxicology information. Emphasis will be placed on dosage forms, dispensing criteria and familiarization of generic drug nomenclature. 3 lecture hours.

#### PHRM 110 - Dispensing Lab I - 2 credit hours

An overview of pharmacy computer systems with students receiving hands-on access. The students will transcribe a doctor's written, verbal, fax, or telephone order. Emphasis will be placed on manufacturing of a product from a batch sheet, patient counseling, and assistance to pharmacists. 6 laboratory hours. *Prerequisite(s): A 'C' or better grade or concurrent enrollment in PHRM 105*.

# PHRM 115 - Pharmacy Law and Ethics for Technicians – 3 credit hours

Students will be given an overview of Federal and State laws and ethical standards governing the practice of pharmacy. Emphasis will be placed on narcotic dispensing and documentation. Patient education and counseling requirements will be stressed. 3 lecture hours.

#### PHRM 200 - Pharmacy Management – 3 credit hours

Pharmacy Management explores today's health care environment, emphasizing the issues facing pharmacy and the pharmacy technician. Skills, talents, and tools required to cope today and succeed tomorrow are developed. This course covers such workplace topics as communication issues, continuous quality improvement for the pharmacy, legal issues, teamwork concepts and patient instruction techniques. This course covers all five certificate requirements as follows: Technician Product Verification (Tech-Check-Tech), Medication History, Controlled Substance Diversion Prevention, Billing and Reimbursement, and Hazardous Drug Management and Patient Instruction Techniques. Student participation, role playing, and other interactive learning methods are emphasized. 3 lecture hours. *Prerequisite(s): A grade of C or better or concurrent enrollment in PHRM 206*.

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#### PHRM 206 - Pharmacology II – 3 credit hours

Continuation of drug concepts taught in Pharmacology I, with continued emphasis on drug utilization and management. Introduction of Latin abbreviations, measurements and conversion commonly used in pharmacy practice. 3 lecture hours. *Prerequisite(s): A grade of C or better in PHRM 105*.

## PHRM 211 - Dispensing Lab II - 2 credit hours

Primary emphasis on manufacturing of sterile products from a physician's order with a 100 percent accuracy. Aseptic technique and work in a sterile environment will be stressed. 6 laboratory hours.

#### PHRM 220 - Pharmacy Calculations – 3 credit hours

Major emphasis on drug dose calculations, metric system, and basic skills needed to survive in the pharmacy. 3 lecture hours. *Prerequisite(s): Students must qualify for MATT 107 or higher or have appropriate placement test scores.* 

#### PHRM 225 – Practicum – 4 credit hours

A one-semester course designed to allow students to work with patients and other pharmacy professional staff. Students will work in an affiliated hospital or pharmacy. Emphasis will be placed on integration of the students into the profession of pharmacy. 200 practicum hours. *Prerequisite(s): A grade of C or better in PHRM 211*.

## PHYS 215 - General Physics I – 4 credit hours

The course covers mechanics, heat, and sound. *This course is a transferIN course*. 4 lecture hours. *Prerequisite(s): A grade of C or better in MATH 102; or a grade of C or better or concurrent enrollment in MATH 104 or higher MATH. It is further expected that the students be proficient in basic trigonometry (sin, cos, tan, Pythagorean Theorem).* 

Examines principles of PHYS 215. This course is a transferIN course. 3 laboratory hours. Corequisite(s): PHYS 215.

# PHYS 216 - General Physics II - 4 credit hours

The course covers electricity, magnetism, light, and selected topics in modern physics. *This course is a transferIN course*. 4 lecture hours. *Prerequisite(s): A grade of C or better in MATH 102; or a grade of C or better or concurrent enrollment in MATH 104 or higher MATH. It is further expected that the students be proficient in basic trigonometry (sin, cos, tan, Pythagorean Theorem).* 

#### PHYS 216L - General Physics Laboratory II – 1 credit hour

Examines principles of PHYS 216. This course is a transferIN course. 3 laboratory hours. Corequisite(s): PHYS 216.

## PMTD 105 - Understanding Industrial Blueprints – 2 credit hours

This course is designed to develop students' ability to interpret needed information contained on industrial blueprints. An overview of reading the blueprint as well as its views, dimensions, tolerances and finishing marks will be stressed. Assembly and detailed drawings will be examined on an advanced level. Geometric dimensions, tolerances, and symbols will also be covered. 2 lecture hours.

#### PMTD 108 - Introduction to Machine Tools I – 2 credit hours

This course is designed to provide students with instruction on the proper use of various machine tools, including the engine lathe, milling machine, drill press, and surface grinder. Primary emphasis will be placed on shop safety. Students will begin interpreting blueprints and machining tolerances. Offered in sponsored high school programs only. 2 lecture, 2 laboratory hours.

#### PMTD 109 - Introduction to Machine Tools II - 2 credit hours

This course is a continuation of PMTD 108. Students will machine all details necessary to build and assemble a class project to correct blueprint tolerance. Offered in sponsored high school programs only. 1 lecture, 3 laboratory hours. *Prerequisite(s): A grade of C or better in PMTD 108.* 

#### PMTD 110 - Manufacturing Processes - 2 credit hours

This course is designed to provide students with a basic understanding of the processes used to produce industrial goods. Classroom discussion focuses on measurement, layout, inspection, machine tool operation, metallurgy, welding, shop math, blueprint reading, and safety. 2 lecture hours. **Corequisite(s): PMTD 110L.** 

#### PMTD 110L - Manufacturing Processes Laboratory – 1 credit hour

Using conventional machine tool equipment, assigned student projects will be built using milling machines, engine lathes, surface grinders, and band saws. Blueprint reading, layout, inspection, shop math, and safety will also be incorporated. 4 laboratory hours. **Corequisite(s): PMTD 110.** 

# PMTD 111 - Advanced Machine Tools I - 3 credit hours

This course is designed to provide students with a fundamental understanding of basic tooling design. CAD/CAM type software will be used to assist in the tool design and in the programming of CNC machines. Students will build basic manufacturing type tooling, using manual, as well as CNC machine tools. Offered in sponsored high school programs only. 1 lecture, 4 laboratory hours. *Prerequisite(s): A grade of C or better in PMTD 109*.

#### PMTD 112 - Advanced Machine Tools II - 3 credit hours

This course is a continuation of PMTD 111. Students will design, program, and machine all of the tooling and fixtures necessary to build advanced manufacturing type tooling, using manual, as well as CNC machine tools. Offered in sponsored high school programs only. 2 lecture, 3 laboratory hours. Prerequisite(s): A grade of C or better in PMTD 111.

This course is designed on building a foundation in basic CNC setup and operations. Topics and applications cover standard CNC practices, tooling, machining practices and applied mathematics. Critical thinking and problem solving is emphasized through hands-on experience and practical applications. This course aligns with NIMS (National Institute of Metalworking Skills) standards and requirements to achieve CNC Mill and Lathe Operator Level 1 National certifications. 1 lecture hour, 2 laboratory hours.

#### PMTD 116 - Introduction to CNC Programming – 2 credit hours

This course will provide students with entry-level programming knowledge of CNC mill and lathe. Students will learn various G and M codes and then use them to write manual CNC programs from industrial blueprints. Emphasis will be on absolute and incremental programming, machine parameters, machine settings, part programming, program editing, and program verification. 2 lecture hours.

#### PMTD 117 - Basic Machining I – 3 credit hours

This course is designed to provide students with a basic understanding of operations and processes found in a machine shop. Students will become familiar with the power saw, drill press, lathe, milling machine and surface grinder. Measurement, layout and inspection will also be covered. 2 lecture hours, 4 laboratory hours.

## PMTD 118 - Basic Machining II – 3 credit hours

This course is designed as a continuation of PMTD 117. Topics to be discussed include identification and uses of cutting tools, thread terminology, trigonometry, and shop math. Students will experience hands-on training on the drill press, lathe, milling machine, and surface grinder. 2 lecture hours, 4 laboratory hours. *Prerequisite(s): A grade of C or better in PMTD 117*.

#### PMTD 120 - General Machines – 6 credit hours

This course is designed to build a foundation in precision machining. Classroom discussion focuses on theory, terminology, calculations, machine tool set-up, machine operation, and safety. Using conventional as well as CNC machine tool equipment, assigned student projects will be built using milling machines, engine lathes, surface grinders, drill presses, and band saws. Blueprint reading, layout, inspection, shop math, and safety will also be incorporated. 2 lecture hours, 18 laboratory hours. *Prerequisite(s): A grade of C or better in or concurrent enrollment in PMTD 110 and PMTD 110L or PMTD 117.* 

#### PMTD 122 - Advanced Machine Tools III - 4 credit hours

This course is designed as a continuation of the Basic Machining Series. Classroom discussion and laboratory projects will focus on the theory and the application of various types of high precision machining. Manual as well as CNC machine tools will be utilized. 1 lecture hour, 9 laboratory hours. *Prerequisite(s): A grade of C or better in PMTD 117, PMTD 118, and PMTD 119; or a grade of C or better in PMTD 120.* 

#### PMTD 125 - CNC Programming and Operations I – 4 credit hours

This course is designed to provide students with extensive training in G and M code manual programming of CNC mills and lathes. Students will use online virtual training software to input information, edit, set-up tooling, and graphically verify the appropriate code for CNC mills and lathes. The end result of the various methods will be a piece part program that can be machined to blueprint specifications. 4 lecture hours. *Prerequisite(s): A grade of C or better in PMTD 120*.

#### PMTD 145 - Quality Assurance - 4 credit hours

In this course, students will learn blueprint reading and inspection as it relates to quality assurance in the metalworking and manufacturing environment. Students will gain an understanding of Statistical Process Control (SPC), Geometric Tolerancing and Dimensioning (GTD), correct use and care of basic mechanical and electronic measuring equipment, and correct inspection procedures. 4 lecture hours.

This course is designed to provide students with the basic concepts needed to machine and assemble components that make up metal stamping dies and plastic injection molds to blueprint specification. Classroom discussion focuses on theory, terminology, calculations, machine tool set up, machine tool operation, and safety. 2 lecture, 18 laboratory hours. *Prerequisite(s): A grade of C or better in PMTD 120.* 

#### PMTD 150 - Precision Tooling I – 6 credit hours

This course is designed to present basic concepts in both tool & die and injection mold construction. Classroom discussion focuses on theory, terminology, calculations, and safety. Using conventional as well as CNC machine tool equipment, each student will be required to build a progressive metal stamping die, set it up in a punch press and produce piece parts to blueprint specifications. Each student will also be required to build a plastic injection mold, set it up in an injection molding machine, and produce plastic piece parts to blueprint specifications. 2 lecture hours, 18 laboratory hours. *Prerequisite(s): A grade of C or better in PMTD 119 or PMTD 120*.

#### POLS 111 - American National Government – 3 credit hours

A study of federalism, theories of the origins and purposes of government and other aspects of the central government, including pressure groups, political parties, and the electoral process. Emphasis is also placed on constitutional backgrounds and the organization and functions of the executive, legislative, and judicial segments of the national government. *This course is a transferIN course*. 3 lecture hours.

#### POLS 201 - Introduction to Political Science - 3 credit hours

A study of the basic principles of government and its institutions. Provides a background for other courses in government. Required for students in political science and social work. *This course is a transferIN course*. 3 lecture hours. *Prerequisite(s): Students must qualify for ENGL 101*.

#### PSCI 101 - Physical Science - 3 credit hours

This course is an introduction to physical concepts and theories pertaining to current applications and trends which may be selected from areas of physics, chemistry, earth science, and astronomy. Concepts and factual knowledge are emphasized. *This course is a transferIN course*. 3 lecture hours. **Corequisite(s): PSCI 101L** 

Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079, or higher; and must qualify for MATT 107, or higher.

#### PSCI 101L - Physical Science Lab – 1 credit hour

Examines principles of PSCI 101. PSCI 101 and PSCI 101L have separate credit, but a common grade will be assigned to each. *This course is a transferIN course*. 2 laboratory hours. **Corequisite(s): PSCI 101** 

#### PSYC 102 - Identity and Experience: Exploring Values and Careers - 2 credit hours

This First-Year Experience course will guide students through identity exploration and a quantifiable decision-making process helping them envision and plan for a productive, achievable, and stimulating future. Course content will address self-awareness, personal growth, career-exploration, problem-solving, life-long learning, community building, and effective communication in personal and professional settings. 2 lecture hours.

# PSYC 142 - General Psychology – 3 credit hours

Provides a general survey of the science of Psychology. It includes the study of research methods, biological foundations, learning processes, human development, personality and abnormal psychology. *This course is a transferIN course*. 3 lecture hours. *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079*.

#### PSYC 201 - Developmental Psychology - 3 credit hours

This course covers human growth and development throughout the life span. Physical, psychosocial, and cognitive influences will be examined from conception to death. *This course is a transferIN course*. 3 lecture hours. *Prerequisite(s):* A grade of C or better in PSYC 142 or qualify for MATH 102 or higher, and ENGL 101.

#### PSYC 249 - Abnormal Psychology – 3 credit hours

Examines theories and research related to mental illness as well as etiology and treatment methods. *This course is a transferIN course*. 3 lecture hours. *Prerequisite(s): A grade of C or better in PSYC 141 or PSYC 142*.

Writing Reading and Speaking Intensive Course

#### REST 100 - Introduction to Hospitality Management - 3 credit hours

An introductory but comprehensive course covering the many management processes of menu planning, purchasing, production, service, cost controls, sanitation, and housekeeping. 3 lecture hours.

#### REST 120 - Food Service Sanitation - 3 credit hours

This course will cover the basics of food service sanitation including pathogenic food borne disease, proper handling and storage of perishable commodities, personal hygiene practices, sources and elimination of contamination, and sanitary procedures in purchasing, storage, equipment and facilities. The course will utilize the National Restaurant Association Certification textbook and test; therefore, students will receive NRA certificate upon successful completion. Students transferring to Purdue University must pass the NRA ServSafe Certification Exam in order for this course to transfer. 3 lecture hours.

## REST 155 - Quantity Food Purchasing - 3 credit hours

Using menu planning as the foundation of the food service industry, emphasis is placed on the techniques of specification and bid purchasing availability of products, selection of suppliers and the procedures for receiving, storage, inventory control, and ultimate economical use of product. 3 lecture hours.

#### REST 211 - Beverage I - Responsible Alcohol Service – 1 credit hour

This is a course that focuses on what front-of-the-house staff and managers need to know to serve alcohol responsibly. Proactive beverage practices for the safe serving of alcohol, effective ID checking, and related incident management will be included. The course will utilize the ServSafe Alcohol Certification book and test; therefore, students will receive a National Certificate upon successful completion. 1 lecture hour.

## REST 230 - Menu Planning and Facility Design - 3 credit hours

The basic aspects of menu planning design and pricing and the use of the menu as an internal selling device will be presented. Also included will be merchandising and promotion of the food product utilizing both internal and external methods, including personal selling, use of the media, presentation of the food items, decor, and other merchandising techniques used by the hospitality industry. This course will show the relationship between the menu and the design of the facility and selection of equipment. The placement of the equipment and the traffic flow of the kitchen will also be covered. 3 lecture hours.

#### **SOCL 151 - Principles of Sociology – 3 credit hours**

Presents students with generalized information about the various social processes that function in society, various analytical tools, and techniques of applying this information to everyday living. *This course is a transferIN course*. 3 lecture hours. *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079*.

# SOCL 245 - Cultural Diversity: Sociology – 3 credit hours

Utilizing a sociological approach, this course will provide students with an opportunity to explore their own ethnic roots. In addition, it will increase their understanding of the main ethnic groups in the United States: Appalachians, Native Americans, Afro-Americans, Asian-Americans, Pacific Islanders, and Hispanics. The social and religious impact on the cultural integration of these groups will be introduced. Discussions on how these aspects of United States culture may affect international dialogues will also be included. SOCL 245 and HUMN 245 - Cultural Diversity: Humanities are equivalent courses; therefore, students with credit in SOCL 245 will NOT receive additional credit in HUMN 245. 3 class hours. *Prerequisite(s): A grade of C or better in ENGL 101*.

Writing Reading and Speaking Intensive Course

#### SOCL 252 - Social Problems – 3 credit hours

This course has as its primary aim the introduction of some of the more complex and important problem areas in the American social context and includes a presentation of contemporary thinking relative to the identification, analysis, and alleviation of these problems. *This course is a transferIN course*. 3 lecture hours. *Prerequisite(s): A grade of C or better in SOCL 151*.

#### SPAN 101 - Spanish Level I – 4 credit hours

An introduction to the Spanish language and culture with emphasis on listening and speaking skills. Guided communication tasks, vocabulary building. Use of audio-visual aids, video, language lab, and "less-stress" techniques. *This course is a transferIN course*. 4 class hours.

# SPAN 103 - Spanish Level II - 4 credit hours

A continuation of SPAN 101 with structured oral communication, vocabulary building. Continued emphasis on listening and speaking skills. Reading of graded and glossed materials, basic grammatical structures, writing. *This course is a transferIN course*. 4 class hours. *Prerequisite(s): A grade of C or better in SPAN 101 or appropriate placement test score.* 

#### SPAN 201 - Spanish Level III - 4 credit hours

Emphasis on reading. Conversation coordinated with reading of cultural text, written and oral reports. Continued study of grammar structures, vocabulary building. *This course is a transferIN course*. 4 class hours. *Prerequisite(s): A grade of C or better in SPAN 103 or appropriate placement test score.* 

## SPAN 203 - Spanish Level IV - 4 credit hours

A continuation of SPAN 201 with emphasis on writing. Cultural and contemporary topics. *This course is a transferIN course*. 4 class hours. *Prerequisite(s): A grade of C or better in SPAN 201*.

## SSKL 103 - Study Skills - 3 credit hours

This course is designed to assist students in developing basic study skills. Course content includes academic skills, life management skills, and information pertinent to VU. Specific topics include goal-setting, textbook reading, test-taking, stress management, critical thinking, library skills, note taking, listening, memory, career planning, and organizational skills. 3 lecture hours.

#### SSKL 104 - Success Strategies – 3 credit hours

This course is designed to assist students in developing the motivation and self-esteem necessary for success in college, at work, and in their personal lives. Specific topics include becoming self-aware, setting goals, and overcoming obstacles. Students will work to develop confidence and optimistic thinking and establish positive self-esteem, self-discipline, and self-motivation. Additionally, students will practice effective communication, including solutions for career and life planning. 3 class hours.

#### SSKL 105 - Learning Strategies - 3 credit hours

This course is designed to assist college students in developing the higher learning strategies necessary for success in college. Students will be introduced to procedures and techniques, which facilitate the efficient use of their learning capacity. Acquisition of textbook reading skills and college study skills through practical applications on a target course of the student's choice. 3 class hours. *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079, or higher.* 

# SSKL 106 - Career Planning - 2 credit hours

The purpose of this course is to assist students in examining the components of career choice, especially as it relates to the selection of a college major or a career direction. It is appropriate for students who are uncertain about an educational goal. The focus is on career awareness, personal awareness, and educational awareness as they relate to the process of career choice. Emphasis is placed on planning skills, self-assessment, career options, gathering occupational information, decision making strategies, interviewing skills, and job search techniques. 2 class hours.

#### THEA 100 - Theatre Appreciation – 3 credit hours

An introduction to theatre's role in the modern world including the collaborative nature of theatre and the functions of the actor, director, designer, audience and critic. Students will gain appreciation of theatre through projects, performances, and class discussion. *This course is a transferIN course*. 3 lecture hours. *Prerequisite(s): Students must qualify for ENGL 010 or ENGL 079*.

#### THEA 245 - Theatre History – 3 credit hours

A survey course emphasizing the historic and cultural development of the theatre from Ancient Greece through present day. Introduces the major elements of technical theatre, performance, and dramatic literature. 3 class hours. *Prerequisite(s): Students must qualify for ENGL 101.* 

Writing Reading and Speaking Intensive Course

## WELD 101 - Oxy-Acetylene Welding - 3 credit hours

A basic class in the theory and application of Oxy-Acetylene welding and cutting, including the correct use and maintenance of oxy-acetylene equipment and accessories. Proper techniques of welding, cutting and brazing with emphasis of safe welding practice are covered extensively. Types of welds covered include stringer beads, tee lap and butt joints on light gage steel. These welds will be made in the flat, horizontal and vertical positions in the forehand technique. 1 lecture hour, 5 laboratory hours.

# WELD 102 - Shielded Metal Arc Welding I - 4 credit hours

This course involves the theory and application of the Shielded Metal Arc Welding process. Process theory will include basic electricity, power sources, electrode selection and all aspects pertaining to equipment operation and maintenance. Laboratory welds will be performed in basic weld joints with a variety of electrodes in the flat, horizontal and vertical positions. Emphasis will be placed on developing the basic skills necessary to comply with AWS industry standards. 2 lecture hour, 8 laboratory hours.

#### WELD 103 - Gas Metal Arc Welding - 4 credit hours

A course designed to cover the operation of Gas Metal Arc Welding (MIG) equipment. This will include all settings, adjustments and maintenance needed to weld with a wire feed system. Instruction on both short-arc and spray-arc transfer methods will be covered. Tee, lap and open groove joints will be done in all positions with solid, fluxcore and aluminum wire. Test plates will be made for progress evaluation. 2 lecture hour, 8 laboratory hours.

#### WELD 104 - Gas Tungsten Arc Welding - 3 credit hours

The theory and practical application of the Gas Tungsten Arc Welding process. Topics to be addressed will be shielding gas, electrode, current and polarity selection including all settings necessary to perform the GTAW process on steel, stainless, aluminum and the root penetration on steel pipe. All lab assignments will be evaluated to AWS industry standards. 1 lecture hour, 6 laboratory hours.

#### WELD 105 - Shielded Metal Arc Welding II - 3 credit hours

This is an advanced course in the Shielded Metal Arc Welding process which students will devote time to developing skills in all out of position welds on plate and pipe. Correct welding techniques and joint preparation for complete joint penetration necessary to pass pre-employment weld tests will be covered. The theory and application of AWS welding symbols to blueprints and lab assignments will be emphasized. All lab assignments will be evaluated according to AWS D1.1 standards. 1 lecture hour, 6 laboratory hours. *Prerequisite(s): A grade of C or better in WELD 102*.

## WELD 106 - Welding Certification Review - 3 credit hours

This course focuses on preparing the student to take welding certification tests, which will be required by most fabrication shops and manufacturers. The student will be instructed in the preparation of test coupons used in certifications in accordance with the American Welding Society D1.1 Structural Steel Welding Code. A review of 6010 and 7018 filler metals used in a majority of SMAW certifications will be extensively covered. 1 lecture hour, 5 laboratory hours. Corequisite(s): WELD 104 and WELD 105.

## WELD 107 - Industrial Blueprint Reading for Welding – 2 credit hours

This course is designed to develop students' ability to interpret needed information contained on industrial welding blueprints. An overview of reading the blueprint as well as its views, dimensions, tolerances and finishing marks will be stressed. Assembly and detailed drawings will be examined on an advanced level. Geometric symbols will be covered in detail. 2 lecture hours.

#### WELD 108 - CNC Plasma Arc Cutting – 2 credit hours

This course is designed to focus student learning on a CNC Plasma Arc Cutter and how it is used in the welding/fabricating industry. Classroom discussion will include maintenance, terminology, safety, use of machine, and use of CAD software. Using this machine and CAD software, students will be required to design, cut, and fabricate a project of their choice. Students will gain experience in operation of equipment, CAD design, and fabrication. 1 lecture hour, 1 laboratory hour. *Prerequisite(s): A grade of C or better in WELD 101*.

#### WELD 160 - General Welding - 2 credit hours

Conventional techniques in Oxy-Acetylene Welding and Cutting, Shielded Metal Arc Welding, Gas Metal Arc Welding, Gas Tungsten Arc Welding, and Plasma Arc Cutting will be covered. Extensive practice will be given for the successful completion of the various required welds. 1 lecture hour, 3 laboratory hours.

# WELD 165 - Advanced General Welding - 2 credit hours

Conventional techniques in Oxy-Acetylene Welding and Cutting, Shielded Metal Arc Welding, Gas Metal Arc Welding, Gus Tungsten Arc Welding, and Plasma Arc Cutting will be covered. Extensive practice will be given for the successful completion of the various required welds in the Vertical and Overhead positions. Emphasis will be placed on safety, equipment set-up, and proper welding procedures. 1 lecture hour, 3 laboratory hours. *Prerequisite(s): One year of high school welding or WELD 160 is recommended.* 

#### WELD 185 - Automotive Welding - 2 credit hours

A course designed to introduce students to welding practices commonly performed within an automotive repair environment. Course coverage will include: overview, setup, usage, maintenance, and troubleshooting associated with MIG and TIG welding, plasma cutting, oxy-acetylene heating and cutting, personal protection equipment, safety, destructive testing, MIG welding plug welds on 18 gauge or thinner mild steel, as well as a basic overview of the different types of metals commonly used in the construction of automobiles. 4 laboratory hours.