# Table of Contents

**ACCOUNTING**

- ACC113: Introduction to Financial Accounting ............................................................... 5
- ACC123: Introduction to Managerial Accounting ............................................................. 5

**ADVERTISING ART/GRAPHIC DESIGN**

- ART104: Visual Literacy ..................................................................................................... 5

**AIR CONDITIONING AND REFRIGERATION**

- ACR111: Introduction to Refrigeration ............................................................................... 5

**ARCHITECTURAL TECHNOLOGY**

- ACH135: Architectural Computer Aided Drafting ............................................................ 5

**AUTOMOTIVE**

- AMT109: Automotive Electrical Fundamentals ................................................................. 6
- AMT112: Brake Systems .................................................................................................... 6
- AMT113: Steering and Suspension ..................................................................................... 6
- AMT126: Engine Electrical Systems .................................................................................. 6

**BIOLOGY**

- BIO103: Human Anatomy and Physiology Survey ............................................................ 6

**BUILDING CONSTRUCTION**

- BCT103: Construction Hand and Power Tools ................................................................. 6
- BCT109: Framing Principles .............................................................................................. 7
- BCT234: Masonry Principles ............................................................................................ 7

**CHEMISTRY**

- CHM100: Fundamentals of Chemistry ............................................................................ 7

**COLLISION REPAIR (AUTO BODY)**

- ........................................................................................................................................ 7
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC100</td>
<td>Introduction to Non-Structural Collision Repair</td>
<td>7</td>
</tr>
<tr>
<td>ABC104</td>
<td>Introduction to Non-Structural Collision Repair Applications</td>
<td>7</td>
</tr>
<tr>
<td><strong>COMPUTER-AIDED DRAFTING</strong></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>CAD120</td>
<td>AutoCAD - Comprehensive</td>
<td>8</td>
</tr>
<tr>
<td>CAD122</td>
<td>3D Parametric Modeling Using Autodesk Inventor®</td>
<td>8</td>
</tr>
<tr>
<td>CCD103</td>
<td>Technical Drawing I</td>
<td>8</td>
</tr>
<tr>
<td>CCD104</td>
<td>Detailing I</td>
<td>8</td>
</tr>
<tr>
<td><strong>COMPUTER TECHNOLOGY</strong></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>BWM150</td>
<td>Introduction to Web Page Development</td>
<td>8</td>
</tr>
<tr>
<td>CIT112</td>
<td>Introduction to Gaming and Simulation</td>
<td>8</td>
</tr>
<tr>
<td>CIT160</td>
<td>Introduction to Programming</td>
<td>9</td>
</tr>
<tr>
<td>CSC124</td>
<td>Information, Technology, and Society</td>
<td>9</td>
</tr>
<tr>
<td>EET145</td>
<td>Networking I</td>
<td>9</td>
</tr>
<tr>
<td><strong>CULINARY ARTS/HOSPITALITY</strong></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>FHD101</td>
<td>Foundations of Professional Cooking</td>
<td>9</td>
</tr>
<tr>
<td>FHD118</td>
<td>Sanitation</td>
<td>9</td>
</tr>
<tr>
<td>FHD137</td>
<td>Introductory Baking</td>
<td>10</td>
</tr>
<tr>
<td><strong>DENTAL HYGEINE</strong></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>DEN110</td>
<td>Dental Terminology</td>
<td>10</td>
</tr>
<tr>
<td><strong>DIESEL</strong></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>DSM119</td>
<td>Fuel Systems</td>
<td>10</td>
</tr>
<tr>
<td>DSM141</td>
<td>Heavy Duty Brake Systems</td>
<td>10</td>
</tr>
<tr>
<td><strong>EARLY CHILDHOOD</strong></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>EDU100</td>
<td>Child Development</td>
<td>10</td>
</tr>
<tr>
<td>EDU201</td>
<td>Health, Safety, and Nutrition for Early Childhood</td>
<td>10</td>
</tr>
<tr>
<td><strong>ELECTRONICS/ENGINEERING TECHNOLOGY</strong></td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>EET114</td>
<td>Introduction to Digital Electronics</td>
<td>11</td>
</tr>
<tr>
<td>EET115</td>
<td>Digital Circuits Applications</td>
<td>11</td>
</tr>
<tr>
<td>EET116</td>
<td>Electronic Circuits and Devices I</td>
<td>11</td>
</tr>
<tr>
<td>EET124</td>
<td>Engineering, Technology, and Society</td>
<td>11</td>
</tr>
</tbody>
</table>

Updated 7/10/17
EMERGENCY MANAGEMENT

BEM101: Introduction to Emergency Management Operations ................................................................. 11
BEM103: The History and Evolution of Emergency Management ............................................................... 11

EMERGENCY MEDICAL SERVICES

PMP122: Emergency Medical Technician .................................................................................................. 12
PMP199: Emergency Medical Responder .................................................................................................. 12

ENGLISH

ENL111: English Composition I ................................................................................................................. 12

HEALTH/ MEDICAL TERMINOLOGY

HTH100: Introduction to Health Careers .................................................................................................. 12
MTR100: Medical Terminology Survey .................................................................................................... 13
MTR104: Basics of Medical Terminology .................................................................................................. 13

HISTORY

HIS115: World Civilization I ....................................................................................................................... 13
HIS125: World Civilization II ..................................................................................................................... 13
HIS136: United States Survey to 1877 ....................................................................................................... 13
HIS146: United States Survey from 1877 to the Present ......................................................................... 13

HORTICULTURE

HRT101: Introduction to Ornamental Horticulture ..................................................................................... 13
HRT113: Ornamental Plants ......................................................................................................................... 13

HUMAN SERVICES

HSR115: Introduction to Human Services .................................................................................................. 14

INDUSTRIAL DESIGN

BIX110: Introduction to Industrial Design ................................................................................................. 14

LAW

LAS101: Law and Society .............................................................................................................................. 14

MACHINIST GENERAL & MACHINE TOOL TECHNOLOGY

MTT118: Mill Applications .......................................................................................................................... 14
MTT119: Lathe Applications ....................................................................................................................... 14

Updated 7/10/17
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE NAME</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT105</td>
<td>Introduction to Business</td>
<td>15</td>
</tr>
<tr>
<td>MTH124</td>
<td>Technical Algebra and Trigonometry I</td>
<td>15</td>
</tr>
<tr>
<td>MTH125</td>
<td>Technical Algebra and Trigonometry II</td>
<td>15</td>
</tr>
<tr>
<td>PPT115</td>
<td>The Plastics Industry</td>
<td>15</td>
</tr>
<tr>
<td>PPT118</td>
<td>Polymer Processing Survey – Lecture</td>
<td>15</td>
</tr>
<tr>
<td>PLH113</td>
<td>Mechanical Systems Designs and Operation</td>
<td>16</td>
</tr>
<tr>
<td>PSC131</td>
<td>American Government-National</td>
<td>16</td>
</tr>
<tr>
<td>PSC141</td>
<td>State and Local Government</td>
<td>16</td>
</tr>
<tr>
<td>PSY111</td>
<td>General Psychology</td>
<td>16</td>
</tr>
<tr>
<td>SOC111</td>
<td>Introduction to Sociology</td>
<td>16</td>
</tr>
<tr>
<td>WEL114</td>
<td>Shielded Metal Arc I</td>
<td>16</td>
</tr>
<tr>
<td>WEL116</td>
<td>Shielded Metal Arc II</td>
<td>17</td>
</tr>
<tr>
<td>WEL120</td>
<td>Gas Metal Arc I</td>
<td>17</td>
</tr>
<tr>
<td>WEL123</td>
<td>Gas Tungsten Arc I</td>
<td>17</td>
</tr>
<tr>
<td>WEL124</td>
<td>Gas Metal Arc II</td>
<td>17</td>
</tr>
<tr>
<td>WEL129</td>
<td>Gas Tungsten Arc II</td>
<td>17</td>
</tr>
<tr>
<td>WEL132</td>
<td>Flux Cored I</td>
<td>17</td>
</tr>
<tr>
<td>WEL136</td>
<td>Flux Cored II</td>
<td>17</td>
</tr>
</tbody>
</table>
ACCOUNTING

ACC113: Introduction to Financial Accounting
Basic principles and applications of financial accounting for business students. Preparation and interpretation of financial information are emphasized. Course work provides the accounting knowledge necessary for success in more advanced accounting courses and in the business field. 3 Credits (3 Lecture - 0 Lab)

ACC123: Introduction to Managerial Accounting
Theory and application of the analytical skills necessary to make internal business decisions based on financial information. Emphasis on organizing data for decisions, developing sound measurements, and using managerial accounting methods for control and evaluation of economic activity. 3 Credits (3 Lecture - 0 Lab) Prerequisite(s): ACC113

ADVERTISING ART/GRAPHIC DESIGN

ART104: Visual Literacy
Development of the active processes that are used for problem solving, invention, and the creation of ideas in visual studies. 3 Credits (2 Lecture - 3 Lab)

AIR CONDITIONING AND REFRIGERATION

ACR111: Introduction to Refrigeration
Introduction to basic refrigeration systems. Topics include proper and safe use of tools, identification of materials, methods of assembling refrigeration systems, and proper handling of refrigerants. Emphasis on basic system components: evaporators, compressors, condensers, and test equipment. 5 Credits (3 Lecture – 6 Lab)
Sophomore-Approved Course

ARCHITECTURAL TECHNOLOGY

ACH135: Architectural Computer Aided Drafting
Introduction and practical application of Computer-Aided Drafting (CAD) techniques and standards used to create two-dimensional architectural drawings. Focus on hardware and software components, operating systems, file management, CAD commands, system variables, drawing setup, creation of lines and shapes, and the editing, saving, and printing of drawings. Advanced topics include external references, layouts, paper space, attributes, dimensioning, text, and the creation of a symbols library. 3 Credits (2 Lecture - 3 Lab)

Updated 7/10/17
**AUTOMOTIVE**

**AMT109: Automotive Electrical Fundamentals**
Study of the electron theory of electricity. Topics include Ohm’s law and Kirchhoff’s law; AC and DC principles; series and parallel circuits; test meters; wiring diagrams; basic solid state devices; circuit analysis; and the concepts of capacitance, inductance, and impedance. Overview of integrated circuits and on-board microcomputers. 3 Credits (2 Lecture - 3 Lab) Prerequisite(s): MTH011 or MTH004 or Placement by Examination. Corequisite(s): AMT126

**AMT112: Brake Systems**
Fundamentals of brake hydraulics, including theory and operation of servo and non-servo drum brakes, disc and drum brake machining, operation of disc brakes, operation of power assist brakes, and overview of electronic anti-skid brakes. 3 Credits (2 Lecture - 3 Lab) Prerequisite(s): Placement by Examination or MTH004 and Placement by Examination or RDG001. Corequisite(s): AMT242

**AMT113: Steering and Suspension**
Principles of operation of steering and suspension, rack and pinion steering gears, and conventional steering gears. Study includes the theory of operation of power steering gears, steering geometry, wheel alignment principles, and static and dynamic wheel balancing. 3 Credits (2 Lecture - 3 Lab) Prerequisite(s): Placement by Examination or MTH004 and Placement by Examination or RDG001. Corequisite(s): AMT242

**AMT126: Engine Electrical Systems**
Principles of engine electrical systems, including testing equipment and procedures. Topics include wiring, connectors, and circuit protection devices; batteries and battery tests; cranking circuits, starter motors, and drives; charging circuits, alternators, and voltage regulators; ignition systems; engine computer controls and electronic fuel injection; and the oscilloscope and other special test equipment. 4 Credits (3 Lecture - 3 Lab) Prerequisite(s): Placement by Examination or MTH004 and Placement by Examination or RDG001. Corequisite(s): AMT109

**BIOLOGY**

**BIO103: Human Anatomy and Physiology Survey**
Overview of human anatomy and physiology designed for non-science majors. Emphasis on the relationships between the structures and functions in each body system as well as the interrelationships among all body systems in the maintenance of homeostasis. Laboratory work complements and reinforces lecture materials. 4 Credits (3 Lecture - 3 Lab) Prerequisite(s): MTH004 or Placement by Examination. Corequisite(s): ENL111

**BUILDING CONSTRUCTION**

**BCT103: Construction Hand and Power Tools**
Survey of hand and power tools typically used to perform construction work. Emphasis on the development of skills needed to effectively perform layout, measurement, cutting, fastening, and finishing operations. Study also includes maintenance of tools and equipment, safe use of hand and power tools, and emerging tool technology. 1 Credit (0 Lecture – 3 Lab). **Sophomore-Approved Course**

Updated 7/10/17
BCT109: Framing Principles
Theory and application of framing techniques in residential and light commercial construction. Emphasis on basic principles and skills used in hand and machine woodworking operations. 4 Credits (2 Lecture − 6 Lab) Corequisite(s): BCT102 and BCT103 or BCT103 and BCT104

BCT234: Masonry Principles
Introduction to masonry construction materials and methods, with an emphasis on the terms, definitions, and methods of construction practices related to concrete block, brick construction, and thin masonry veneer. Topics also include the different types of mortar mixes and their strengths and uses, reinforcement of masonry walls, masonry cleaning, weather protection for masonry, and estimating supplies and materials. 5 Credits (2 Lecture - 9 Lab) Prerequisite(s): BCT102 and BCT103 or BCT103 and BCT104.

CHEMISTRY

CHM100: Fundamentals of Chemistry
Basic principles of chemistry and its practice in the laboratory. Emphasis on the underlying structure of matter (atoms, ions, molecules) and how structure determines properties. Designed to teach chemistry terminology and symbols, as well as to develop analytical and critical thinking skills. Appropriate for non-science majors needing one term of chemistry or to satisfy a lab science requirement. Also appropriate for those who desire background before taking General Chemistry I (CHM111). No prior knowledge of chemistry is assumed, but some algebra skills are needed. 4 Credits (3 Lecture - 3 Lab) Prerequisite(s): Placement by Examination or MTH005. Sophomore-Approved Course

COLLISION REPAIR (AUTO BODY)

ABC100: Introduction to Non-Structural Collision Repair
Analysis of basic principles and industry best practices, including issues of human and environmental safety. Theory/overview of removing, repairing, replacing, and adjusting outer body panels; straightening and roughing out of damaged steel panels and preparing them for body filler; and repairing aluminum panels. Study of proper replacement of corrosion protection to the repaired panels and adjustment of panels for proper fit. Introductory theory of cutting and welding of steel. Group interaction/activities; application of assessment tools. 2 Credits (2 Lecture − 0 Lab) Corequisite(s): ABC104

ABC104: Introduction to Non-Structural Collision Repair Applications
Application of theory, techniques, principles, and industry best practices, including issues of human and environmental safety. Applied skills include removing, repairing, replacing, and adjusting outer body panels; straightening and roughing out damaged steel panels and preparing them for body filler; repairing aluminum panels for proper replacement of corrosion protection; and adjusting panels for proper fit. Group interaction/activities; application of assessment tools. 3 Credits (0 Lecture − 9 Lab) Corequisite(s): ABC100

Updated 7/10/17
**COMPUTER-AIDED DRAFTING**

**CAD120:  AutoCAD - Comprehensive**  
Comprehensive application of 2D and 3D techniques using AutoCAD® software. Topics include the generation, editing, and analysis of geometry in alignment with industry standards with an emphasis on productivity.  
3 Credits (2 Lecture - 3 Lab)

**CAD122:  3D Parametric Modeling Using Autodesk Inventor®**  
Study and application of solid and surface modeling using Autodesk Inventor® parametric modeling software. Topics include the generation and editing of mechanical parts and assemblies, analysis of mass properties, rendering and animation, and the development of physical models using rapid prototyping (additive manufacturing) equipment. Also included are basic 3D-to-2D documentation techniques. (Formerly CAD119)  
3 Credits (2 Lecture - 3 Lab)

**CCD103:  Technical Drawing I**  
Basic principles and skills of drafting as a graphic using the parametric modeling approach. Topics include technical sketching, SolidWorks® CAD operations and procedures, shape description, geometric construction, multiview projection, sectional views, auxiliary views, revolutions, threads and fasteners, and application of dimensions and tolerancing. Other topics include detail views, part drawings, assembly drawings, manufacturing processes, surface finishing, descriptive geometry, and the use of vendor part catalogs. ANSI/ASME drawing standards and practices are emphasized.  
4 Credits (3 Lecture - 3 Lab) Corequisite(s): CCD104

**CCD104:  Detailing I**  
Technical drawing procedures using SolidWorks® CAD operations in compliance with the ANSI standards to develop finished drawings. Drawing assignments involve technical sketching, shape description, geometric construction, multiview projection, sectional views, auxiliary views, revolutions, threads and fasteners, application of dimensions and tolerancing, detail views, part drawings, and assembly drawings. Other topic will include manufacturing processes, surface finishing, descriptive geometry, and acquiring and using vendor part catalogs. ANSI/ASME drawing standards and practices are emphasized.  
3 Credits (0 Lecture - 9 Lab) Corequisite(s): CCD103

**COMPUTER TECHNOLOGY**

**BWM150:  Introduction to Web Page Development**  
Introductory coverage of the Internet and online Web technologies. Skills learned include how to plan, create, and maintain static web pages.  
3 Credits (3 Lecture – 0 Lab) Prerequisite(s): Placement by Examination or MTH004 and Placement by Examination or RDG111

**CIT112:  Introduction to Gaming and Simulation**  
Introductory topics include gaming industry history, game development processes, game genres,storyboarding, game environment, character design, interface design, game play, AI, the psychology of game design, and professionalism. Study provides overall view of the gaming and simulation
components. Practical hands-on application includes using a simple game design environment to
design and write simple games. 3 Credits (3 Lecture - 0 Lab) Prerequisite(s): CSC124

**CIT160: Introduction to Programming**
Introduction to problem-solving techniques, elementary programming, and the application of these
techniques in developing structured programs. A current high-level language is used to illustrate the
implementation phase of program development. 3 Credits (3 Lecture) Prerequisite(s): Placement by
Examination or MTH006.

**CSC124: Information, Technology, and Society**
Introduction to the basic concepts and applications of computer and Internet-related information
technology and its impacts on individual users, businesses, groups, organizations, and society. Topics
include access, evaluation, and use of digital information, ethical and security implications of
information use and storage; human-computer interactions; social aspects of information systems;
economic and legal issues; and professional presentation and communication of information.
Information literacy skills that promote lifelong learning are developed through exposure to various
existing and emerging technologies, including information resources, communication methods and
technology. 3 Credits (3 Lecture – 0 Lab) Prerequisite(s): RDG111 or Placement by Examination.
Sophomore-Approved Course

**EET145: Networking I**
Fundamental concepts of operation, installation, and configuration of the hardware and operating
system software for computer networks. Emphasis on the hands-on, practical experiences needed to
service enterprise computing systems used in industry. Network topologies, protocols, cabling systems,
and server operating system software installation and service configuration are covered, with an
emphasis on entry-level skills for network professionals. 4 Credits (3 Lecture - 3 Lab) Prerequisite(s):
Placement by Examination or MTH006. No new teachers for 2017-2018 school year.

**CULINARY ARTS/HOSPITALITY**

**FHD101: Foundations of Professional Cooking**
Introduction to professional food preparation skills and kitchen organizational practices through theory and
performance-based learning lab activities. Theory relates manual skills to basic production techniques. Principles
of classic cooking methods, heat transfer, knife skills, ingredient identification, sensory analysis, and industry
professionalism are emphasized. 3 Credits (1 Lecture - 6 Lab) Corequisite(s): FHD118. Sophomore-Approved
Course

**FHD118: Sanitation**
Integration of the Applied Foodservice Sanitation Certification Course as approved by The Educational
Foundation of the National Restaurant Association. Topics include the principles of food microbiology,
applied measures for the prevention of food borne illness, and emphasis on working through people to
maintain a sanitary foodservice operation. Hazard Analysis Critical Control Point (HACCP) fundamentals
and steps for implementation is a key component of the course. Course work prepares students for the

Updated 7/10/17
ServSafe® certification test and is part of the Professional Management series of the National Restaurant Association. 1 Credit (1 Lecture - 0 Lab). **Sophomore-Approved Course**

**FHD137: Introductory Baking**
Fundamental principles and procedures used to prepare a variety of bakery products and desserts. A study of ingredients and mixing methods for producing various baked goods. 3 Credits (1 Lecture - 6 Lab) **Corequisite(s):** FHD118.

**DENTAL HYGEINE**

**DEN110: Dental Terminology**
Survey of terminology related to the science of dentistry. Designed to develop the reading, comprehension, and writing skills necessary to function and communicate effectively within the dental field. 1 Credit (1 Lecture)

**DIESEL**

**DSM119: Fuel Systems**
Basic introduction to the theory and operation of mechanical and electronic fuel injection systems as they apply to the heavy-duty diesel engine field, with a focus on operation, maintenance, troubleshooting and repair, and safety. 2 Credits (2 Lecture - 0 Lab)

**DSM141: Heavy Duty Brake Systems**
Explanation and theory of brake systems common to heavy duty vehicles and equipment. Selected topics include air, hydraulic, and anti-lock systems with emphasis on troubleshooting and practical applications of repair and maintenance. 2 Credits (2 Lecture - 0 Lab) **Corequisite(s):** DSM142 or DSM155

**EARLY CHILDHOOD**

**EDU100: Child Development**
Overview of typical growth and development of young children from birth to age eight. Cognitive, language, physical growth, gross and fine motor, emotional and social developmental milestones are the focus of this course, with a special emphasis on the implications they have for the care and education of young children. Other topics include an introduction to the basic concepts of major developmental theories; principles of learning and development; and developmentally appropriate practice. A strong focus on a family-centered approach is integrated throughout the course. 3 Credits (3 Lecture - 0 Lab)

**EDU201: Health, Safety, and Nutrition for Early Childhood**
Study of the specific health and hygiene concerns of early childhood. Discussion includes common childhood diseases, chronic illnesses, disorders, and conditions, with emphasis on identification and management within an early childhood setting. Additional topics include assisting young children in the development of personal hygiene, safety skills, and nutrition education. State licensing regulations and community service agencies in
health, safety, and nutrition are examined. 3 Credits (3 Lecture) Prerequisite(s): EDU100. Course has limited availability for 2017-2018 school year.

**ELECTRONICS/ENGINEERING TECHNOLOGY**

**EET114: Introduction to Digital Electronics**
Digital number system and codes. Introduction to combinational and sequential logic circuits. Examination of logic families and their applications. 3 Credits (3 Lectures – 0 Lab) Corequisite(s): EET115

**EET115: Digital Circuits Applications**
Construction of prototype logic circuits. Measurement of both static and dynamic characteristics. Proto Board and wire wrapping prototyping methods are introduced. 1 Credit (0 Lecture – 3 Lab) Corequisite(s): EET114

**EET116: Electronic Circuits and Devices I**
Introduction to the basic principles of electronics and common solid state devices. Emphasis on basic electronic parameters such as current, voltage, resistance, inductance, and capacitance. Additional topics include series, parallel, and series/parallel circuits as well as discrete solid state devices, including rectifying diodes, light emitting diodes, photodiodes, zener diodes, bipolar transistors, and thyristors. 5 Credits (3 Lecture – 6 Lab) Prerequisite(s): MTH004 or Placement by Examination

**EET124: Engineering, Technology, and Society**
Introduction to the basic concepts and applications of computer and engineering technologies and the effects on professional and casual users, their employers and employees, and society. Applied skills include the use of current computer technology for data/information collection and organization; visualization, analysis, and interpretation of numeric computations; and the dissemination and presentation of solutions to engineering technology problems. 3 Credits (2 Lecture - 3 Lab). Sophomore-Approved Course

**EMERGENCY MANAGEMENT**

**BEM101: Introduction to Emergency Management Operations**
Introduction to the theories, principles, and organized approaches to emergency management at local, state, and federal levels. Topics include the history of human vulnerability to natural, man-made, and technological hazards; the advent of emergency management professions; and an examination of current emergency response systems. 3 Credits (3 Lecture)

**BEM103: The History and Evolution of Emergency Management**
Analysis of the history and evolution of emergency management in the United States. Topics trace events that have impacted and motivated change in approach to EM with analysis of the situations within its governing body. 3 Credits (3 Lecture)
EMERGENCY MEDICAL SERVICES

PMP122: Emergency Medical Technician
Skills and knowledge required at the level of Emergency Medical Technician-Basic. Introduction to emergency medical services; well being; medical, legal and ethical issues; baseline vital signs; and proper lifting and moving. Airway management at a basic life support level is included with completion of a cardiopulmonary resuscitation course. A structured patient assessment is modeled in a variety of medical and traumatic situations. Situational issues include emergencies involving infants and children, ambulance operations, rescue operations, and mass casualty scenarios. Participation requirements: 64 clock hours (minimum) of clinical/field assignment. Successful completion required for admission to the paramedic program. 8 Credits (6 Lecture - 6 Lab). Sophomore-Approved Course; course has specific facility and instructor requirements.

PMP199: Emergency Medical Responder
An Emergency Medical Responder’s primary focus is to initiate immediate lifesaving care to critical patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide lifesaving interventions while awaiting additional EMS response and to assist higher level personnel at the scene and during transport. Emergency Medical Responders function as part of a comprehensive EMS response, under medical oversight. Emergency Medical Responders perform basic interventions with minimal equipment. After initiating care, the Emergency Medical Responder transfers care to higher level personnel. The Emergency Medical Responder serves as part of an EMS response system that ensures a progressive increase in the level of assessment and care. Successful completion of the Emergency Medical Responder program will allow the participant to sit for National Registry (NR-EMR) and Pennsylvania Department of Health (Pa-EMR) certification. 3 Credits (2 Lecture/1 Laboratory). Co-requisite(s): Hazardous Materials – First Responder Awareness Level, ICS100-Introduction to ICS, or equivalent, and FEMA IS-700: NIMS, An Introduction. Sophomore-Approved Course; course has specific facility and instructor requirements.

ENGLISH

ENL111: English Composition I
Fundamental writing and research skills with an emphasis on expository writing. Emphasis on analysis, discussion, and practice of writing that explores, explains, and argues. Course work includes a significant research component. 3 Credits (3 Lecture - 0 Lab) Prerequisite(s): Placement by Examination or ENL001. Senior-Only Course

HEALTH/ MEDICAL TERMINOLOGY

HTH100: Introduction to Health Careers
Examination of health majors and careers, including an evaluation of personalities in relation to career interests and values needed for success and satisfaction in the health care professions. Topics include discussion of requirements, daily roles, employment opportunities, and projections for the future in each of the selected health care fields. 2 Credits (2 Lecture - 0 Lab). Sophomore-Approved Course

Updated 7/10/17
MTR100: Medical Terminology Survey
Introduction to the basic structures and rules of interpreting medical terminology, designed to develop the ability to read, understand, and write the medical language. 1 Credit (1 Lecture - 0 Lab)

MTR104: Basics of Medical Terminology
Foundation for the use of the language of medicine, with emphasis on correct pronunciation and spelling, various word parts, abbreviations and symbols, and terms pertaining to body systems. Etiology, symptomatology, pathology, and diagnostic procedures for identifying various disease processes provide an increased understanding of medically related conditions and procedures. 3 Credits (3 Lecture - 0 Lab)

HISTORY

HIS115: World Civilization I
Study of the history of humanity from its beginnings to C.E. (Common Era) 1500. Equal emphasis on the political, economic, and social development of Western and non-Western civilizations. 3 Credits (3 Lecture - 0 Lab) (Cultural Diversity)

HIS125: World Civilization II
Study of the history of humankind from A.D. 1500 to the present. Equal emphasis is placed on the political, economic, and social development of Western and non-Western civilizations. 3 Credits (3 Lecture - 0 Lab) (Cultural Diversity)

HIS136: United States Survey to 1877
Political, economic, and social development of the United States from colonial times through the Civil War and Reconstruction Period. 3 Credits (3 Lecture - 0 Lab)

HIS146: United States Survey from 1877 to the Present
Political, economic, and social development of the United States from 1877 up to and including the Civil Rights Movement. 3 Credits (3 Lecture - 0 Lab)

HORTICULTURE

HRT101: Introduction to Ornamental Horticulture
Overview of the diverse ornamental horticulture industry, including the worldwide scope and economic impact of the industry in today's marketplace. Emphasis on information access through the Internet, trade journals, trade organizations, the horticulture industry, guest speakers, and visitations to various horticultural businesses. Exploration includes products, services, and information used in the industry; production and marketing (wholesale and retail) of horticultural products and services; and traditional and nontraditional career paths within the industry. 1 Credit (1 Lecture)

HRT113: Ornamental Plants
Introduction to the fields of study of horticulture. Outdoor identification of annuals, perennials, woody shrubs and trees, weeds, and wildflowers. The use of these plant materials in the landscape is stressed. 3 Credits (2 Lecture - 3 Lab)

Updated 7/10/17
HSR115: Introduction to Human Services
Examination of the range of human problems, and the programs and systems designed to help individuals address problems. Exploring the roles professionals might assume as human service workers and participating in a supervised field experience are also a part of the course. In addition to the in-class time and supervised 30-hour field experience, a mandatory outside-of-class three-hour seminar meeting to review the professional and personal responsibility requirements for successful completion of the program is also required. 3 Credits (3 Lecture) Prerequisite(s): Placement by Examination or ENL001

BIX110: Introduction to Industrial Design
Introduction to industrial design techniques, aesthetic concepts, and practical rendering skills. Integration of aesthetics, ergonomics, material selection, and safety principles into product design. Creative solutions to design problems using two and three dimensional renderings in sketches, clay models, and optional castings of designs. (Formerly BID 110) 3 Credits (2 Lecture - 3 Lab)

LAS101: Law and Society
Overview of the American legal system and the impact of law on our society. Includes a comparison of civil and criminal law systems, the sources of American law, structure and operation of the court systems, rights of the criminally accused, principles of contract and tort law, basic legal terminology, and an introduction to legal research sources. 3 Credits (3 Lecture)

MTT118: Mill Applications
Introduction to the theory and practical applications of basic metalworking. Emphasis on mill applications, industrial shop safety, material selection, job planning, bench-work, quality control, and inspection. Milling machines, hand tools, drill presses, pedestal grinders, band saws, and precision-measuring equipment are used to complete required projects. 4 Credits (1 Lecture - 9 Lab)

MTT119: Lathe Applications
Introduction to the theory and practical applications used to safely set up and operate a metal turning engine lathe. Operations such as turning, facing, boring, grooving, drilling, turning tapers, single-point threading, and performing cut-off procedures are implemented. Three and four-jaw chucking techniques and turning between centers are used to complete required projects. 4 Credits (1 Lecture - 9 Lab)

Updated 7/10/17
MANAGEMENT

MGT105:  Introduction to Business
Introduction to a variety of business concepts and practices that impact all organizations, as well as the knowledge and skills needed to be successful in an organization. Topics include interpersonal communications, emotional intelligence, economics, accounting, and finance and investments. An integrative approach connects topics and provides context within organizational environments, relevance to current business situations, and advances across various fields of business. 3 Credits (3 Lecture - 0 Lab) Sophomore-Approved Course

MATHEMATICS

MTH124:  Technical Algebra and Trigonometry I
Study of intermediate algebra and trigonometry, designed to prepare students for course work in their technical majors. Topics include algebraic expressions, linear equations, systems of equations, right triangle trigonometry, functions, graphs, geometry, ratio and proportion, and variation. Emphasis on problem solving and technical application as well as the use of technology. Not designed to prepare students for calculus. 3 Credits (3 Lecture - 0 Lab) Prerequisite(s): MTH005 or Placement by Examination. Course requires additional instructor qualification; no new teachers for 2017-2018.

MTH125:  Technical Algebra and Trigonometry II
Study of intermediate algebra and trigonometry, designed to prepare students for course work in their technical majors. Topics include factoring, algebraic fractions and equations, quadratic equations, trigonometric functions and graphs, radicals, complex numbers, exponential and logarithmic functions and graphs, nonlinear systems, and inequalities. Emphasis on problem solving and technical application as well as the use of technology. Not designed to prepare students for calculus. 3 Credits (3 Lecture - 0 Lab) Prerequisite(s): MTH124. Course requires additional instructor qualification; no new teachers for 2018-2018.

PLASTICS AND POLYMER TECHNOLOGY

PPT115:  The Plastics Industry
Overview of the plastics industry, including materials and processes. Topics include the many types of career opportunities in the industry, inviting individual interest-based exploration. Discussion also covers the nature of plastic product manufacturers, including size, work environment, and typical processes used. 2 Credits (2 Lecture - 0 Lab). Sophomore-Approved Course

PPT118:  Polymer Processing Survey – Lecture
Introduction to polymer processing techniques, including injection molding, extrusion, blow molding, rotational molding, and thermoforming. 3 Credits (3 Lecture - 0 Lab)
PLUMBING

PLH113: Mechanical Systems Designs and Operation
Study of fluid and gas conveyance within residential construction, with emphasis on the selection and application of tools and materials appropriate for code approved system installation and operation. Additional topics include the study of dynamic and static forces impacting fluid transfer, introductory plan and specification development, and basic material and cost estimating. 4 Credits (2 Lecture - 6 Lab).

POLITICAL SCIENCE

PSC131: American Government-National
Federal government, its power, and organization. Functions of legislative, executive, and judicial branches. Students examine the historical development of our federal system and analyze the relationships between social forces, government, and political action. 3 Credits (3 Lecture - 0 Lab) Course has limited availability in 2017-2018.

PSC141: State and Local Government
State and local government institutions, their functions and responsibilities; intergovernmental relations. 3 Credits (3 Lecture - 0 Lab) Course has limited availability in 2017-2018.

PSYCHOLOGY

PSY111: General Psychology
Introduction to the science of human behavior and mental processes. Students examine the relation between the nervous system and behavior, learning, perception, language, personality, intelligence, and psychopathology. 3 Credits (3 Lecture - 0 Lab) Prerequisite(s): Placement by Examination or RDG001 Course has limited availability in 2017-2018.

SOCIOLOGY

SOC111: Introduction to Sociology
Introduction to the theories, principles, concepts, and major research in sociology. Study includes society’s impact on human behavior and consciousness as well as the ways in which individuals and groups affect cultures and their social structures. A comparison of different cultures and subcultures provides an understanding of the relativity and universality of social values, norms, and beliefs. 3 Credits (3 Lecture) Course has limited availability in 2017-2018.

WELDING

WEL114: Shielded Metal Arc I
Introduction to the principles and practices of basic Shielded Metal Arc Welding (SMAW) using various types of mild steel electrodes in the flat position. The fundamentals of AC and DC current and various types of power sources are covered. 2 Credits (1 Lecture – 3 Lab) Corequisite(s): WEL116 Sophomore-Approved Course

Updated 7/10/17
WEL116: Shielded Metal Arc II
Hands-on practice with various electrodes and power sources using AC and DC current in all positions. 2 Credits (0 Lecture - 6 Lab) Corequisite(s): WEL114. Sophomore-Approved Course

WEL120: Gas Metal Arc I
Principles and applications of Gas Metal Arc Welding (GMAW), applied to ferrous and non-ferrous metals and their alloys. Hands-on work includes performing single and multi-pass welds using a variety of electrode wire types, diameters, and transfer modes. 2 Credits (1 Lecture - 3 Lab) Corequisite(s): WEL124

WEL123: Gas Tungsten Arc I
Introduction to the Gas Tungsten Arc Welding (GTAW) process. Theory is applied to related equipment, electrical concepts, material properties, arc characteristic, puddle control, and appropriate application of filler materials. Welding of ferrous and non-ferrous metals in all positions is covered. Admittance to course by successful completion of prerequisites or permission of instructor. 2 Credits (1 Lecture - 3 Lab) Prerequisite(s): WEL113. Corequisite(s): WEL129

WEL124: Gas Metal Arc II
Continued laboratory practice of Gas Metal Arc Welding (GMAW). Activities include fundamental applications on ferrous and non-ferrous metals in all positions using various modes of metal transfer and wire electrodes. 2 Credits (0 Lecture - 6 Lab) Corequisite(s): WEL120

WEL129: Gas Tungsten Arc II
Laboratory activities, with emphasis on the welding of ferrous and non-ferrous metals in various joint configurations. All welding is done using all positions. Joining dissimilar metals and metal identification are covered. Admittance to this course by successful completion of prerequisites or permission of instructor. 2 Credits (0 Lecture - 6 Lab) Prerequisite(s): WEL113. Corequisite(s): WEL123

WEL132: Flux Cored I
Advanced theory on the advantages and disadvantages of Flux-Cored Arc Welding (FCAW) will be emphasized. The American Welding Society’s (AWS) numbering system for FCAW will be explained. Other topics, which will be covered, are technical terms, gases, their mixtures, and the various types of fluxes used. 2 Credits (1 Lecture - 3 Lab) Corequisite(s): WEL136

WEL136: Flux Cored II
Continuation of the hands-on activities introduced in WEL132. Weld with the flux-cored arc welding process using semi-automatic machines in all positions with a variety of electrode wires, diameters and gases. 2 Credits (0 Lecture - 6 Lab) Corequisite(s): WEL132
Sophomore-Approved Courses 2017-2018

ACR111: Introduction to Refrigeration
BCT103: Construction Hand and Power Tools
CHM100: Fundamentals of Chemistry
CSC124: Information, Technology, and Society
EET124: Engineering, Technology, and Society
FHD101: Foundations of Professional Cooking
FHD118: Sanitation
HTH100: Introduction to Health Careers
MGT105: Introduction to Business
PMP122: Emergency Medical Technician
PMP199: Emergency Medical Responder
PPT115: The Plastics Industry
WEL114: Shielded Metal Arc I
WEL116: Shielded Metal Arc II

Senior-Only Courses 2017-2018

ENL111: English Composition I