

## COURSES BY DEPARTMENT

### ALLIED HEALTH (AHLT)

**101 Physical Assessment** 1 credit hour  
Fee: \$50.00.

This course will discuss adult physical examination used for patient care planning in an acute care, emergency, or long-term care setting. Topics to be discussed are: data collection; techniques of examinations and assessment; instruments used; and assessment of the skin, head, eyes, ears, nose, neck, thorax and lungs, heart, peripheral circulation, abdominal and neurological system, and extremities.

*In order to successfully pass this course, student must achieve a grade of "C" or better, along with meeting the academic standards of the college.*

*Prerequisite: First or second year clinical allied health student or permission of instructor.*

**104 Leadership and Conflict Management** 1 credit hour  
This course will provide students with leadership and conflict management skills. Topics include concepts on leadership styles, listening skills, and conflict resolution techniques.

*In order to successfully pass this course, student must achieve a grade of "C" or better, along with meeting the academic standards of the college.*

**106 Infection Control and Blood Borne Pathogens** 1 credit hour  
This course is designed to provide information on updated infection control methods and blood borne pathogens. Topics include standard precautions, and an overview of blood borne pathogenic diseases.

*In order to successfully pass this course, student must achieve a grade of "C" or better, along with meeting the academic standards of the college.*

*Prerequisite: First or second year clinical allied health student or permission of instructor.*

**107 Electrocardiography Analysis and Testing** 1 credit hour  
This course is designed to enable the student to run an EKG, and to interpret EKG rhythm strips. Topics to be discussed include an introduction to electrocardiography, EKG terminology, anatomy and physiology of the heart and cardiovascular system, basic cardiovascular electrophysiology, basic EKG interpretation, and basic concepts of cardiac diagnostics.

*In order to successfully pass this course, student must achieve a grade of "C" or better, along with meeting the academic standards of the college.*

*Prerequisite: First or second year clinical allied health student or permission of instructor.*

**111 Awareness of Special Populations** 1 credit hour  
This course will provide an overview of individuals with developmental, emotional, and physical disabilities. Topics to be discussed include: behavioral components, mobility issues with hearing and sight impaired individuals, interdisciplinary teamwork, and approaches to adaptive equipment.

*In order to successfully pass this course, student must achieve a grade of "C" or better, along with meeting the academic standards of the college.*

**113 Phlebotomy for Health Professionals** 1 credit hour  
Fee: \$80.00.

This course is designed to train allied health professionals in the skills necessary to ensure proper blood specimen collection. Participants will learn the techniques necessary to obtain a quality specimen for use in a laboratory setting or point of care testing environment.

*In order to successfully pass this course, student must achieve a grade of "C" or better, along with meeting the academic standards of the college.*

*Prerequisite: First or second year clinical allied health student.*

**117 Food Choices in Healthcare** 2 credit hours  
Fee: \$10.00.

Students will identify safety factors with food storage along with assisting patients to make wise decisions in menu selection. Cultural dietary preferences will also be discussed that relate to food and preparation. The role of therapeutic diets will be discussed, along with dietary requirements and limitations for a variety of diagnostic tests.

*In order to successfully pass this course, student must achieve a grade of "C" or better, along with meeting the academic standards of the college.*

**118 Cultures and Healthcare** 3 credit hours  
Fee: \$30.00.

Students will become familiar with a variety of customs they may encounter when providing healthcare support to patients and their family members. Students will explore their own attitudes toward a variety of cultures and their customs, and learn strategies to overcome stereotypical ideas.

*In order to successfully pass this course, student must achieve a grade of "C" or better, along with meeting the academic standards of the college.*

**119 Disaster Preparedness** 2 credit hours  
Fee: \$20.00

Students will identify what constitutes a disaster and what community resources are available. FEMA and the American Red Cross will be topics of discussion, along with their role in emergencies. Students will discuss the importance of sheltering-in-place versus evacuation. Various methods of preparing for a disaster, both at work and home, will be presented and students will learn how to prepare a basic disaster kit. Students will also compare a variety of disaster plans for patient care during an emergency.

*In order to successfully pass this course, student must achieve a grade of "C" or better, along with meeting the academic standards of the college.*

**126 Spanish for Health Occupations (Spanish 126)** 3 credit hours  
Students will be introduced to the workplace concepts of cultural competence and current demographics of the Latino population in an effort to understand the complexity of their life and their beliefs, and how this affects the way conversation should be approached with the patient/client. Students will learn to facilitate communication with Latino patients/clients and their families. Students will practice phrases for a variety of situations that could occur in the clinical setting. Students will be presented with the tools needed to develop a good command for speaking and understanding Spanish phrases at the end of the course. No previous Spanish is required.

**127 Ethical and Legal Issues in Health Care** 3 credit hours  
Fee: \$20.00 Inclusive Access Fee: \$65.00.

Students will receive an overview of the field of ethics in health care, liability, and the importance of the Health Information Portability and Accountability Act Privacy Rule. Students will learn about developing and maintaining professional behavior in different situations that might include miscommunication and challenging clients and families. Through lecture, discussion, debate, and group activities, students will be exposed to ethical theory, tools to be used in making ethical decisions, patient/client rights, patient/client advocacy, and specific examples of ethical and/or legal dilemmas they may encounter in the delivery of services in various settings including inpatient, outpatient and home care, and addictions.

*In order to successfully pass this course, student must achieve a grade of "C" or better, along with meeting the academic standards of the college.*

## 128 Health Care Professionalism

Fee: \$20.00

**2 credit hours**

Appropriate for students from all disciplines, students will acquire a variety of skill sets and knowledge to bolster their transition into a workplace. This course will cover development of soft skills and professionalism in the health care setting. The final project will be to develop a professional resume to prepare students for the job market.

*In order to successfully pass this course, student must achieve a grade of "C" or better, along with meeting the academic standards of the college.*

## 201 Infusion Therapy Basics

Fee: \$100.00.

**1 credit hour**

This course is designed to help the allied health professional develop skills that will provide a safe and competent administration and quality management of infusion therapy in the health care setting. Topics to be discussed include: infusion methods, types of catheters, infection control, care and maintenance of peripheral and central venous access devices, blood draws, complications, equipment and assembly, and venipuncture skills.

*In order to successfully pass this course, student must achieve a grade of "C" or better, along with meeting the academic standards of the college.*

*Prerequisite: Second year clinical allied health student.*

## 205 Advanced Cardiac Life Support

Fee: \$50.00.

**1 credit hour**

The schedule varies. Please check the current schedule.

This course is designed for health care professionals for managing a cardiac emergency. This Advanced Cardiac Life Support (ACLS) course is American Heart Association and Maryland Institute for Emergency Medical Services approved, and all new ACLS guidelines will be taught.

*In order to successfully pass this course, student must achieve a grade of "C" or better, along with meeting the academic standards of the college.*

*Prerequisite: Current BLS/CPR completion card, second year clinical allied health student or permission of instructor.*

## 209 Cross-section Anatomy

Offered summer session.

**1 credit hour**

This course is designed to provide a detailed understanding of the skeletal and visceral anatomy with relationships in transverse, sagittal, and coronal sections. Concepts and applications of the head, neck, thorax, abdomen, pelvis, extremities and articulations will be incorporated with the imaging modalities of CT Scanning, Magnetic Resonance Imaging (MRI) and Ultrasonography.

*In order to successfully pass this course, student must achieve a grade of "C" or better, along with meeting the academic standards of the college.*

*Prerequisite: First or second year clinical allied health student or permission of instructor.*

## ART (ART)

### 101 Art Appreciation

**3 credit hours**

Offered fall and spring semesters. Three hours a week. Lectures, demonstrations, discussions, field trips, and collateral readings.

This course is designed for the student interested in understanding the visual arts and their relationship to society. Special emphasis will be on basic trends in art, with consideration given to painting, sculpture, architecture, crafts, and the decorative arts. Techniques used in the visual arts are explored to train the student to appreciate and to evaluate the art forms.

### 103 Introduction to Art Techniques

**3 credit hours**

Offered fall semester. Four hours lecture/studio a week. Fee: \$30.00.

Students will investigate art by drawing, painting, sculpting, and printmaking. Designed for the curious non-art major.

### 110 Visual Imagery

**3 credit hours**

Offered fall and spring semesters. Four hours lecture/studio a week. Fee: \$30.00.

This lecture/studio course will investigate the developmental stages of art in children. The student will apply methods and theories in teaching art in the classroom while investigating various art media.

### 111 Design I

**3 credit hours**

Offered fall semester. Four hours lecture/studio a week. Fee: \$30.00.

This course offers understanding of and skill in two-dimensional design through the use of value graduation and color theory. The principles and elements of design are studied and practiced. The computer will be introduced as another art tool.

### 112 Design II (Sculpture)

**3 credit hours**

Offered spring semester. Four hours lecture/studio a week. Fee: \$30.00.

The course develops the understanding of and skill in three-dimensional design. The principles and elements of design dealt with in Art 111 are valuable assets in realizing the spatial concepts in this course, but not a prerequisite. Basic sculpture is explored in a variety of media.

### 114 Printmaking

**3 credit hours**

Four hours lecture/studio a week. Fee: \$30.00.

An introduction to basic printmaking techniques, including relief and intaglio. Students will work with lino, embossing, collagraphy, and silk-screen. Individual experimenting with techniques is encouraged.

### 121 Drawing I

**3 credit hours**

Offered fall semester. Four hours lecture/studio a week. Fee: \$30.00.

The study and use of line, shape and value in drawing objects in space. Contour line and perspective are used to represent still life, landscape, and the figure. Media include pencil, charcoal, pen and ink, and marker.

### 221 Drawing II

**3 credit hours**

Offered spring semester. Four hours lecture/studio a week. Fee: \$30.00.

The techniques and skill developed in Art 121 will be used in drawing the figure. A conceptual approach to drawing will be encouraged. The computer will be introduced as another art tool.

*Prerequisite: Art 121.*

### 223 Painting I

**3 credit hours**

Offered spring semester. Four hours lecture/studio a week. Fee: \$30.00.

Course provides basic foundation for painting in acrylic and tempera paints, with emphasis on color theory and composition. The student will paint from still life, nature, and imagination to discover the vast area of subject matter available.

### 224 Painting II

**3 credit hours**

Four hours lecture/studio a week. Fee: \$30.00.

A continuation of Art 223 through further study of color theory and composition. Use of the model will be stressed and the student will be encouraged to experiment with a variety of painting techniques such as stains, impasto, and his/her own personal approach to developing a style.

*Prerequisite: Art 223.*

### 231 Ceramics I

**3 credit hours**

Four hours lecture/studio a week. Fee: \$30.00.

Students will investigate the history and cultural significance of Ceramic Art, the physical properties of clay and glazes and the building, decorating

and firing techniques utilized in the production of Ceramic Art. Emphasis will be placed on the completion of original artwork and the development of the students' self-assessment and critical thinking skills through group discussions and critiques.

### 299 Independent Study

Fee: \$20.00.

Students may choose any area of concentration in studio art. Must have approval of art instructor. Preference given to students who have taken other college level art courses. Time is arranged between student and instructor. This course may be repeated for credit.

## AUTOMOTIVE TECHNOLOGY (AUTO)

### 101 Internal Combustion Engines I

4 credit hours

Offered fall semester. Three hours lecture and three hours demonstration a week. Fee: \$155.00.

This course provides a fundamental presentation of the design, construction, and operation of automotive gasoline and diesel engine components, including valve adjustments, cylinder head reconditioning, tool identification, and lubrication systems. Costs incurred for parts and/or supplies are the responsibility of the student.

### 102 Internal Combustion Engines II

4 credit hours

Offered spring semester. Three hours lecture and three hours demonstration a week. Fee: \$155.00.

This course is a continuation of Automotive Technology 101 and will teach the reconditioning procedures of the automotive gasoline and diesel engine. Students in this course will gain continued experience with the internal components of engines, service procedures, and the tools used. Costs incurred for parts and/or supplies are the responsibility of the student.

*Prerequisite: Automotive Technology 101.*

### 103 Automotive Electricity I

4 credit hours

Offered fall semester. Three hours lecture and three hours demonstration a week. Fee: \$155.00.

This course provides the fundamentals of magnetism, electron theory, Ohm's Law, and the use and operating principles of meters. Skills in troubleshooting and tracing wiring diagrams, construction and maintenance of batteries, cranking motors, regulators, relays, solenoids, alternators, transistors, integrated circuits, and the testing procedures for these units will be developed through discussion, demonstration, and evaluation. Costs incurred for parts and/or supplies are the responsibility of the student.

*Prerequisite: Automotive Technology students only.*

### 104 Automotive Fuel Systems

3 credit hours

Offered spring semester. Two hours lecture and three hours demonstration a week. Fee: \$155.00.

The purpose of this course is to provide the student with the necessary technical and practical information on the types of fuels and air-fuel ratios for automotive gasoline and diesel engines. Construction and operation of electric fuel pumps, electronic fuel injection, fuel distribution, manifolds, carburetor systems, multiple carburetion, and supercharging and turbo-charging will be examined in the lab and classroom. Costs incurred for parts and/or supplies are the responsibility of the student.

*Prerequisite: Automotive Technology 103.*

### 105 Related Technical Automotive

2 credit hours

Offered fall semester. One-hour lecture and three hours demonstration a week. Fee: \$155.00.

This course includes the discussion and demonstration of the nomenclature functions, relationships, and operating principles of the

various parts of the automobile, including body and accessories. Costs incurred for parts and/or supplies are the responsibility of the student.

*Prerequisite: Automotive Technology students only.*

### 106 Automotive Ignition Systems

2 credit hours

Offered spring semester. One-hour lecture and three hours demonstration a week. Fee: \$155.00.

This course provides the operating principles, construction, troubleshooting, and maintenance of breaker point ignition systems, electronic ignition systems, and computer spark control systems. Diagnosis of malfunctions using computer analyzer and oscilloscope is covered both in theory and practice. Costs incurred for parts and/or supplies are the responsibility of the student.

*Prerequisite: Automotive Technology 103.*

### 107 Basic Automotive Service

4 credit hours

Six hours lecture/lab per week. Fee: \$155.00.

This course is designed to develop knowledge and skills required for many general automotive underhood and undercar service areas. Topics include, but are not limited to: belts, hoses, fluids, oil and filters, tires, and multi-point inspections. Costs incurred for parts and/or supplies are the responsibility of the student.

### 109 Basic Engine Service

4 credit hours

Six hours lecture/lab per week. Fee: \$155.00.

This course is designed to develop knowledge and skills required for entry-level technicians to perform general service on automotive engines. Topics include, but are not limited to: engine mounts, gaskets and seals, cooling systems, lubrication systems, and timing components. Costs incurred for parts and/or supplies are the responsibility of the student.

### 110 Basic Transmission and Driveline Service

4 credit hours

Six hours lecture/lab per week. Fee: \$155.00.

This course is designed to develop knowledge and skills required for the general service of automobile transmissions and driveline components. Topics include, but are not limited to: automatic transmissions, manual transmissions, drive axles, and differentials. Costs incurred for parts and/or supplies are the responsibility of the student.

### 112 Basic Chassis and Brakes

4 credit hours

Six hours lecture/lab per week. Fee: \$155.00.

This course is designed to develop knowledge and skills required to service automotive chassis, steering and suspension, and brake components. Topics include, but are not limited to: steering components, chassis systems, drum brakes, disc brakes, and parking brakes. Costs incurred for parts and/or supplies are the responsibility of the student.

### 114 Automotive Brakes

2 credit hours

Offered fall semester. One-hour lecture and three hours demonstration a week. Fee: \$155.00.

This course studies the construction and operation of base brake systems: hydraulic systems, servo and non-servo drum brake systems, power brake systems and front and rear disc brakes systems. Rotor and drum machining and servicing of all of the components of the brake system is included. Costs incurred for parts and/or supplies are the responsibility of the student.

*Prerequisite: Automotive Technology students only.*

### 201 Automotive Transmissions

4 credit hours

Offered fall semester. Three hours lecture and three hours demonstration a week. Fee: \$155.00.

This course is a study of gears, gearing, and power train components. Emphasis is on construction, theory of operation, troubleshooting, and maintenance of various automatic transmissions, transaxles, transfer

cases, torque converters, and manual transmissions. Costs incurred for parts and/or supplies are the responsibility of the student.

*Prerequisite: Automotive Technology students only.*

**203 Engine Testing** **4 credit hours**  
Offered spring semester. Three hours lecture and three hours demonstration a week. Fee: \$155.00.

This course provides the means of diagnosing and locating problems encountered in the operation of the automotive engine. It involves the use of various types of testing equipment to diagnose problems in the following engine systems: mechanical components, ignition systems, charging systems, starting systems, fuel systems, emission controls, and computer engine control systems. Costs incurred for parts and/or supplies are the responsibility of the student.

*Prerequisite: Automotive Technology 103.*

**205 Body Repair and Refinishing** **3 credit hours**  
Offered fall semester. Three hours lecture and three hours demonstration a week. Fee: \$155.00. Body PPE Fee (Personal Protection Equipment): \$125.00.

This course provides students with the necessary technical and practical information on the types of hand and power tools, the principles of metal straightening, sanding, and patching rusted areas. Other topics covered will include various types of body plastics and fiberglass, masking and preparing surfaces for painting, spray-painting with automotive finishes, and body welding. Students in this course will gain experience performing the bodywork and painting of an automobile. Costs incurred for parts and/or supplies are the responsibility of the student.

*Prerequisite: Automotive Technology students only.*

**206 Air Conditioning** **2 credit hours**  
Offered spring semester. One-hour lecture and three hours demonstration a week. Fee: \$155.00.

This course is a study of the construction, operation, and maintenance of the automobile air conditioner, which includes R12 and R134A. Emphasis is placed on the practical problems which occur in the servicing of air conditioners, as these problems relate to the total functioning of the engine and electrical system. Costs incurred for parts and/or supplies are the responsibility of the student.

*Prerequisite: Automotive Electricity 103 or consent of instructor or advisor.*

**209 Automotive Diesel** **4 credit hours**  
Offered spring semester. Three hours lecture and three hours demonstration a week. Fee: \$155.00.

This course provides an introduction to automotive diesel engines and systems concentrating on domestic light-duty diesels. It involves the use of various types of testing equipment to diagnose problems in common systems such as Duramax, Cummins and PowerStroke. Studies include but are not limited to mechanical components, lubrication, air management, turbochargers, charging systems, starting systems, fuel systems, emission controls, and computer engine control systems. Costs incurred for parts and/or supplies are the responsibility of the student.

*Prerequisite: Must be an Automotive Technology Student.*

**210 Automotive Parts Management** **4 credit hours**  
Three hours lecture and three hours demonstration a week. Fee: \$155.00.

This course includes such topics as automotive parts familiarization, cataloging and pricing, inventory control, and basic principles of parts management. Also included will be the use of computers in inventory control, entering daily purchases and sales, and order production. This course covers the personal qualities needed by an automotive parts salesperson, such as courtesy and personal appearance, as well as effective marketing and merchandising methods.

*Prerequisite: Automotive Technology students only.*

**211 Introduction to Diesel** **3 credit hours**  
Offered summer session. Two hours lecture and three hours lab per week. Fee: \$155.00.

This course deals with the basic principles of the diesel engine. The diesel cycle and its application to modern power units will be emphasized. Topics include diesel air, fuel, cooling, and lubrication systems. Other topics will include maintenance, troubleshooting, and basic repair procedures. The course also introduces the basics of modern Cummins, Duramax, and Ford Powerstroke engine systems. Costs incurred for parts and/or supplies are the responsibility of the student.

*Prerequisite: consent of the Instructor.*

**212 Automotive Internship** **1 credit hour**  
Offered summer session. 2 hours a week lecture and 20 hours a week internship for ten weeks.

Application of knowledge acquired from lecture and laboratory instruction to gain relevant, practical on-the-job experience in repairing customer vehicles in an actual automotive service facility. An experienced service employee within the business supervises the student/apprentice and works with the automotive program coordinator in developing goals and evaluating performance. Students are required to work a minimum of 120 hours (an average of 20 hours a week) over the ten-week semester. Students will be placed into a service facility by the instructor. Students are able to pick a repair facility of their choice; however, it will be the responsibility of the student to find a repair facility willing to take on as an intern.

A.A.S. students must be entering their second year of study. Certificate students must be graduates of the certificate curriculum and will participate in a voluntary capacity.

**215 Steering and Suspension** **4 credit hours**  
Offered fall semester. Three hours lecture and three hours demonstration a week. Fee: \$155.00.

Study of the construction, operation, and maintenance of the various suspension and steering units, steering gears, constant velocity joints, front and rear axle assemblies; includes the theory, service and troubleshooting of computerized suspension systems and traction control systems; also covers computerized 4-wheel alignment. Costs incurred for parts and/or supplies are the responsibility of the student.

*Prerequisite: Automotive Technology students only.*

**216 Automotive Electricity II** **4 credit hours**  
Offered spring semester. Three hours lecture and three hours demonstration a week. Fee: \$155.00.

This course reviews the fundamentals of electricity, operating principles of meters and emphasizes the oscilloscope as a diagnostic tool. Oscilloscope voltage and current ramping forms are taught and practiced. Skills in troubleshooting and tracing wiring diagrams are further developed and practiced. Specific computer circuits and multiplexed systems such as body computer circuits, air bag, and traction control are analyzed and diagnosed. Digital dashes, driver information centers, and power train management systems will be analyzed and diagnosed; use of computer based test equipment will be initiated. Costs incurred for parts and/or supplies are the responsibility of the student.

*Prerequisite: Automotive Electricity 103.*

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## **BIOLOGICAL SCIENCE (BIO)**

**93 Essentials of Biology** **3 credit hours**  
Offered as demand warrants. Three hours lecture and discussion a week.

This course is designed to provide students, whose program requires completion of Biological Science 201 or Biological Science 207, but who have not achieved a satisfactory score on the Anatomy and Physiology

Placement Examination, with basic science knowledge for an anatomy and physiology class. The course includes a study of the cell structure, energy of the cell, mitosis and meiosis, cellular transport, inorganic and organic chemistry, acid-base, and biological macromolecules. This course does not meet associate degree graduation requirements. Course may be used to fulfill the prerequisites for Biological Science 201 or Biological Science 207.

*Prerequisite: Minimum high school GPA of 3.0 or appropriate assessment scores and Mathematics 90.*

**100 Biology for Allied Health Students** **4 credit hours**  
Offered fall and spring semesters. Three hours lecture and three hours laboratory a week. Fee: \$70.00. Inclusive Access Fee: \$87.00. Web Biology: Inclusive Access Fee: \$94.00

This course is designed for allied health majors and may serve as a prerequisite for Biological Science 201, 204 and 207. In this course, students will study the fundamental concepts common to all living organisms, be introduced to basic lab science skills, and learn about the systematic approach to studying life. The relevance of the following topics to humans is emphasized: the chemical basis of life, biological organization, cell structures and functions, metabolism, energy utilization, heredity, and basic human anatomy. Through laboratory exercises, experiments, and animal and organ dissection the students' understanding of the concepts discussed in lecture will be enhanced.

*Prerequisite: English 92 and Mathematics 90.*

**101 General Biology I** **4 credit hours**  
Offered fall and spring semesters and summer session. Three hours lecture and three hours laboratory a week. Fee: \$70.00. Inclusive Access Fee: \$94.00.

To present a study of the general characteristics and basic concepts of living organisms, which includes: the hierarchical organization of life, scientific method and experimental design, basic chemistry of life (inorganic and organic), cell types and structures, membrane structure and function, thermodynamics/energy flow, metabolic processes (photosynthesis & cellular respiration), the cell cycle, meiosis, and an introduction to genetics.

*Prerequisites: Mathematics 90 with a grade of C or better, appropriate test scores, or equivalent measures must be completed prior to taking this course. English 92 with a grade of C or better, appropriate test scores, or equivalent measures, must be completed before taking this course.*

**102 General Biology II** **4 credit hours**  
Offered spring semester. Three hours lecture and three hours laboratory a week. Fee: \$70.00. Inclusive Access Fee: \$94.00.

This course is a continuation of Biological Science 101. Includes a study of whole organism biology, including diversity of all kingdoms, macroevolution and microevolution, and basic principles of ecology. Ecological topics include population ecology, how species interact within communities, biogeochemical cycles, ecological pyramids, and ways that humans affect the environment. The laboratory work involves the examination of biological specimens, including some dissection of organisms.

*Prerequisite: Biological Science 101.*

**103 General Botany** **4 credit hours**  
Offered fall semester. Three hours lecture and three hours laboratory a week. Fee: \$70.00. Inclusive Access Fee: \$95.00.

A study of seed plants, conifers, and flowering plants, with emphasis on anatomy, morphology, taxonomy, and evolution. Principles of genetics, ecology, and physiology.

**109 Osteology** **4 credit hours**  
Offered fall semester. Three hours lecture and three hours laboratory a week. Fee: \$65.00.

This course is designed to provide a detailed understanding of the skeletal anatomy of the human body and a brief overview of the visceral anatomy with relationships in the different body positions as they relate to radiography.

*Prerequisite: Permission of instructor*

**110 Forest Ecology** **3 credit hours**  
Offered spring semester. Two hours lecture and three hours laboratory a week. Fee: \$70.00.

This course covers an ecological study of plants and animals of forest interest, approached through the study of individual ecosystems. Emphasis will be placed on the interrelations between groups of these organisms and the effect that the environment has on them. Some studies will be conducted in the field.

*Prerequisite: English 92 and Mathematics 90*

**114 Fundamentals of Nutrition** **3 credit hours**  
Offered fall and spring semesters. Three hours lecture a week.

This course presents a study of the fundamentals of nutrition and the relationship of nutrition and health throughout all stages of the life cycle.

*Prerequisites: Mathematics 90 with a grade of C or better, appropriate test score, or equivalent measures, must be completed prior to taking this course. English 92 with a grade of C or better, appropriate test scores, or equivalent measure, must be completed prior to taking this course.*

**116 Human Biology** **3 credit hours**  
Offered fall and spring semesters. Three hours lecture a week. Inclusive Access Fee: \$116.00

An introductory lecture course for the non-science major covering the basic structure and function of the human body with discussions on human ecology and genetics as appropriate. This course is not designed to fulfill laboratory science requirements of any curricula.

*Minimum high school GPA of 3.0 or appropriate assessment scores. Requisites: Mathematics 90 with a grade of C or better, appropriate test score, or equivalent measures, must be completed prior to taking this course. English 92 with a grade of C or better, appropriate test scores, or equivalent measure, must be completed prior to taking this course.*

**121 Musculoskeletal Anatomy of the Human** **4 credit hours**  
Offered fall semester. Three hours lecture and three hours laboratory a week. Fee: \$70.00

This course is designed to provide experience with basic concepts and terminology associated with the study of the human body. The major focus of the course is to develop the student's detailed knowledge of the human muscular system and skeletal system.

*Prerequisite: Mathematics 90 with a grade of C or better, appropriate test scores, or equivalent measure, must be completed before taking this course. English 92 with a grade of C or better, appropriate test scores, or equivalent measure, must be completed before taking this course. Biology 93 with a grade of C or better, appropriate test scores, or equivalent measure, must be completed before taking this course.*

**131 Inquiries Into Biology** **4 credit hours**  
Offered fall and spring semesters. Three hours lecture and three hours laboratory a week. Fee: \$70.00

This course takes an inquiry-based approach into the fundamental concepts of biology. Students discover information pertaining to biological concepts in lecture/ laboratory setting. Areas covered include: characteristics of life, biochemistry, cell biology, evolution, the use of diversity to discuss anatomical, physiological, and human health considerations of organisms, classifications, ecology, genetics, and energetics.

*Prerequisites: Mathematics 090 with a grade of C or better, appropriate test scores, or equivalent measure, must be completed before taking this course. English 92 with a grade of C or better, appropriate test scores, or equivalent measure, must be completed before taking this course.*

**145 Environmental Science 4 credit hours**

Three hours lecture and three hours laboratory a week. Fee: \$95.00  
Inclusive Access Fee: \$53.00.

This course emphasizes environmental topics relative to today's society. Topics will include environmental strategy, ecological principles, biotic and abiotic principles within ecosystems, structure and function of major ecosystems, human population dynamics, relationship of economics, government, and environment, various types of energy sources, pollution, and water. Some studies will be conducted in the field. All day field trips may be required.

*Mathematics 90, English 92.*

**150 Medicinal Botany 3 credit hours**

Two hours lecture and three hours laboratory a week. Fee: \$70.00.

This course is designed primarily for allied health professionals who want to expand their knowledge of holistic health care practices. Topics will include the history of medicinal plants, plant anatomy and function, phytochemicals, species identification, plant cultivation, sources of information, and safe practices. In addition to lectures the student will spend time in the laboratory, greenhouse, and field.

*Prerequisites: Mathematics 90 with a grade of C or better, appropriate test scores, or equivalent measure, must be completed before taking this course. English 92 with a grade of C or better, appropriate test scores, or equivalent measure, must be completed before taking this course.*

**175 Microbiology of Brewing 4 credit hours**

Offered fall semester. Three hours lecture and three hours lab per week. Fee: \$200.00.

This course will introduce microbiology and laboratory practices used in the brewing process. Topics will include the biology of yeast, the fermentation process, and microorganisms that contribute to beer quality and deterioration.

*Prerequisites: Math -090 with a grade of C or better, appropriate test scores, or equivalent measure, must be completed prior to taking this course. ENG-092 with a grade of C or better, appropriate test scores, or equivalent measures, must be completed prior to taking this course.*

**201 Human Anatomy and Physiology 4 credit hours**

Offered spring semester. Three hours lecture and three hours laboratory a week. Fee: \$70.00.

This course is designed to provide an understanding of the working of the human body in terms of the structure and function of representative systems. The laboratory work involves a complete study and dissection of selected animal organs and physiological activities with comparison to the human.

This course is designed for selected allied health majors and is not equivalent to Biological Science 207 or 208 (Anatomy and Physiology of the Human I and II). It is not an approved prerequisite for Biological Science 208.

*Prerequisites: Biological Science 100, 101, or 121 with a grade of C or better must be completed prior to taking this course, or consent of instructor.*

**204 Microbiology 4 credit hours**

Offered fall and spring semesters and summer session. Three hours lecture and three hours laboratory a week. Fee: \$70.00.

Principal topics of this course are prokaryotic cell morphology, metabolism, genetics, and growth; microbial control; the human immune system; and infectious diseases. Microbial diversity, their roles in the biosphere, and

the ways in which humans use microbes are also discussed. In the lab, students use aseptic techniques, staining, biochemical tests, and other procedures in order to become familiar with basic microbiology techniques and to identify an unknown bacterial culture. The process of science is also discussed in this course, and students create and test hypotheses via the scientific method.

*Prerequisites: A grade of C or better in a four-credit biological lab science or chemistry lab course, excluding Biology 145, or consent of instructor.*

**206 Biotechnology (Medical Laboratory Technology 206) 4 credit hours**

Three hours lecture and three hours laboratory a week. Fee: \$100.00.

Theory and techniques commonly used in biotechnology will be explored. Theory topics include structure, function, and synthesis of DNA, RNA, and protein and the conceptual bases of molecular biology techniques, including gel electrophoresis, plasmid preparation, transformation of cells, nucleic acid manipulation, blotting and probing techniques, polymerase chain reaction, and protein purification.

*Prerequisite: Medical Laboratory Technology 114, Biological Science 101, Chemistry 100 or 101, and Mathematics 102 or 119, or consent of instructor.*

**207 Anatomy and Physiology of the Human I 4 credit hours**

Offered fall and spring semesters and summer session. Three hours lecture and three hours laboratory a week. Fee: \$70.00. Inclusive Access Fee: \$94.00.

This course is designed to provide an understanding of the structure and function of the human body. Basic concepts are emphasized and the following systems are studied in detail: integumentary, skeletal, muscular, nervous, and special senses. The laboratory work involves related physiology exercises and the dissection of the cat and its comparison to man. Required of all Nursing students.

*Prerequisite: Biological Science 100, 101, 109, or 121 with a grade of C or better, or a satisfactory score on the Anatomy and Physiology Placement test. Mathematics 90 with a grade of C or better, or the appropriate test scores*

**208 Anatomy and Physiology of the Human II 4 credit hours**

Offered fall and spring semesters and summer session. Three hours lecture and three hours laboratory a week. Fee: \$70.00. Inclusive Access Fee: \$94.00.

A continuation of Anatomy and Physiology of the Human I. The following systems are studied in detail: circulatory, respiratory, digestive, urinary, reproductive, and endocrine. The laboratory work involves related physiology exercises and the dissection of the cat and its comparison to man. Required of all Nursing students.

*Prerequisite: Biological Science 207 with a grade of "C" or better.*

**213 Dendrology I 2 credit hours**

Offered fall semester. One-hour lecture and three hours laboratory a week. Fee: \$70.00. Refundable equipment deposit: \$200.00.

A taxonomic study of families, genera, and species of woody plants, with additional emphasis placed on those important in forestry and related fields. Forest communities, distributions, key usage, and field identification will be integral to this course. Greater emphasis will be placed on the angiosperms than on the gymnosperms.

*Prerequisite: Biological Science 103 as a corequisite, or consent of the instructor.*

**214 Dendrology II 2 credit hours**

Offered spring semester. One-hour lecture and three hours laboratory a week. Fee: \$70.00. Refundable equipment deposit: \$200.00.

A continuation of Dendrology I, with greater emphasis placed on the gymnosperms than on the angiosperms.

*Prerequisite: Biological Science 213.*

## **220 Essentials of Cell Biology and Genetics 4 credit hours**

Three hours lecture and three hours laboratory a week. Fee: \$95.00.

Issues critical to understanding cellular biology will be explored. These include: structure and function of biological macromolecules, enzymology, basic metabolism, membrane mechanics, structure and function of cellular organelles, cell communication, cell division, and cell cycle control. Concepts in genetics include structure and function of genes and chromosomes, genetic variation and gene regulation. This course will allow the student to develop experience in lab safety, good laboratory and manufacturing practice (GMP), documentation of all procedures and use of computers for statistical and graphical data analysis.

*Prerequisite: Medical Laboratory Technology 114, Biological Science 101, Chemistry 100 or 101, and Mathematics 102 or 119, or consent of instructor.*

## **297 Field Studies in Biology and Geology (Physics 297) 4 credit hours**

Consult with instructor prior to registration. Fee: To be established based on location of field studies.

An interdisciplinary study of ecosystems in their natural settings. Emphasis will be placed on plant communities and key animal populations, geology, climate, and the influence of humans as they are related to one another. Studies, which will include lectures and laboratories, will be conducted in the field where specimens will be collected and catalogued. Course may be repeated one time for credit. Course may be taken again as audit status, but all fees and tuition will apply.

*Prerequisite: Biological Science 101 or 103 or 107 or Physics 105. Instructor consent required.*

## **299 Special Problems 1-4 credit hours**

Fee: \$70.00.

Study projects under the direct supervision of the instructor. Library and laboratory research on selected problems. This course may be repeated for credit. Honors credit by contract may be available in some sections of this course. Qualified students should consult the instructor.

*Prerequisite: Biological Science 102, or 110; or consent of instructor.*

## **BUSINESS ADMINISTRATION (BUAD)**

### **101 Introduction to Business 3 credit hours**

Offered fall and spring semesters. Three hours lecture and discussion a week.

An introduction to the nature of business organizations, surveying their methods of financing, marketing and control. A study of the environmental factors and forces which cause changes, including the current trend toward international business and marketing. An analysis of business structure and functions, and of the problems that have faced business in the past and may be expected to exist in the future.

### **102 Introduction to Agribusiness Management 1 credit hour**

Three hours lecture for five weeks.

This course is designed to introduce students to the career area of agribusiness management. Many people are unaware of the diversity, complexity, and high technical nature of modern production agriculture and the management skills needed to succeed within it. The material covered in the course will increase the student's understanding of this industry, the types of managerial skills needed for success, and possible careers.

### **104 Sales and Customer Service 3 credit hours**

Offered spring semester. Three hours lecture and discussion a week.

This course is designed to provide the student with the skills necessary to become customer-oriented as a manager or employee. Effective selling

techniques will be practiced and all aspects of the provision of exceptional customer service will be developed.

### **108 Personal Finance 3 credit hours**

Offered fall semester. Three hours lecture and discussion a week.

This course is designed to foster lifelong financial decision-making skills. It takes a hands-on approach that draws on economics, accounting, finance, consumer law, tax law and consumer psychology and provides numerous opportunities for students to exercise critical thinking in order to make sound personal financial decisions.

### **110 Business Professionalism and Ethics 2 credit hours**

Offered fall and spring semesters. Two hours lecture and discussion a week.

This course is designed to develop skills necessary in today's workplace and to help students improve their ability to make ethical decisions in business. Topics include: business etiquette, business communications, professional attire, organizational relationships, and ethical decision-making.

### **206 Entrepreneurship 3 credit hours**

Inclusive Access Fee: \$47.00

Offered fall semester. Three hours lecture and discussion a week.

This course is designed to provide an understanding of the complexities of launching a new business. Topics for discussion include: developing a business plan, identifying and marketing to potential customers, financial planning, and legal risks and benefits.

### **207 Managerial Accounting 3 credit hours**

Offered fall semester. Three hours lecture and discussion a week.

Study of the nature, preparation, and analysis of accounting reports primarily from the management point of view. Application of accounting systems and concepts to provide information and tools for management decision-making and control. Emphasis is given to the interpretation and interrelationships of financial statements and managerial control.

*Prerequisite: Business Administration 215.*

### **209 Human Resources and Supervision 3 credit hours**

Three hours lecture and discussion a week.

The central theme of this course is working with people and developing supervisors to become more effective and efficient. Course topics include planning and organizing, communicating, motivating, leadership, coaching, control, and managing human resources and diversity.

### **210 Business Law 3 credit hours**

Offered fall and spring semesters. Three hours lecture and discussion a week.

An introduction to contracts, agency relationships, negotiable instruments, business association, property rights, and torts.

*Prerequisite: Business Administration 101, concurrent registration, or consent of instructor.*

### **213 Principles of Management 3 credit hours**

Offered spring semester. Three hours lecture and discussion a week.

An introductory course in the theory and practice of business management, including an analysis of the management functions of planning, organizing, motivating and controlling. The course provides a basis for future studies in the fields of personnel management, business organizations structure and control. Emphasis is placed on such factors as communication, leadership and the influence of the behavioral sciences on management practices.

### 215 Financial Accounting

3 credit hours

Offered fall and spring semesters. Three hours lecture and discussion a week.

An introduction to the principles and concepts of financial accounting. Coverage includes the basic accounting process and making informed decisions based on financial statement information.

### 216 Principles of Marketing

3 credit hours

Offered fall and spring semesters. Three hours lecture and discussion a week.

Principles of marketing will discuss the principles, methods, and problems involved in the distribution and marketing of goods and services. The course will examine various marketing agents. The course will discuss problems and policies in relation to product, price, place, promotion, cost, and customer.

This course provides the student with an orientation to the field of marketing.

### 218 Accounting Systems and Software

3 credit hours

Offered spring semester.

The course develops an in-depth understanding of the accounting cycle, and includes special topics such as depreciation and payroll. Application of these issues to real-world problems will be addressed with established and operating PC-based financial software, especially Quickbooks.

*Prerequisite: Business Administration 215 and successful completion of Computer Technology 101.*

### 220 Social Media Marketing

3 credit hours

Offered spring semester. Three hours lecture and discussion a week. Fee: \$70.00

Explores the dynamic nature of social media as it transforms marketing communications from traditional mass media to individualized marketing. Using a variety of social media tools and platforms, this class identifies, explains and critiques the different methodologies used for social media marketing. Topics include creating social media, integrating social media into a marketing campaign, engaging in viral marketing, measuring social media success through analytics, and using social media marketing to maximize success in a variety of small and large organizations.

*Prerequisite: Business Administration 216.*

### 270 Field Placement

3 credit hours

Offered spring semester. Two hours lecture and approximately seven hours field work a week.

This course introduces on-the-job training in the business field. Students will work a minimum of 100 hours a semester with two hours a week with the instructor. Included in this course will be the applications of communication skills, teamwork, professionalism, and leadership skills. Attention will be given to resume writing, interviewing, and other practical workplace skills.

*Prerequisite: A 2.0 (or better) overall GPA.*

### 299 Study Projects

1-3 credit hours

Study projects directly related to the Business Management curriculum under the supervision of the instructor. Library and field contacts assigned on selected projects. This course may be repeated for credit (up to a maximum of 3 credits).

*Prerequisite: Business Administration 101 and 215 and consent of the instructor.*

## CHEMISTRY (CHEM)

### 100 Elements of Chemistry

4 credit hours

Offered fall and spring semesters. Three hours lecture and discussion plus three hours laboratory a week. Fee: \$115.00.

A study of the fundamental principles of chemistry, including the structure of matter, the nature of solutions, acids, bases, and salts, pH, and buffer action. The compounds and reactions studied are chosen mainly from the fields of organic chemistry and biochemistry and relate to the nature of life processes.

*Prerequisite: Appropriate Placement Assessment scores or grade of "C" or better in Mathematics 90 and Reading 93.*

### 101 General Chemistry I

4 credit hours

Offered fall and spring semesters. Three hours lecture plus three hours laboratory a week. Fee: \$115.00.

A study of the fundamental principles of chemistry, including the structure of matter, the periodic table, energy relationships, and the chemistry of some of the common elements and their compounds.

*Prerequisite: Minimum high school GPA of 3.0 or appropriate assessment scores and Mathematics 93.*

*Note: Concurrent registration in Mathematics 119 is required if the student is planning to take Chemistry 102.*

### 102 General Chemistry II

4 credit hours

Offered spring semester. Three hours lecture plus three hours laboratory a week. Fee: \$115.00.

Chemical thermodynamics, rates, ionic equilibria, and nuclear chemistry are emphasized. Selected topics in organic and inorganic chemistry are included. The representative elements and biotechnology are studied in the laboratory.

*Prerequisite: Chemistry 101 and Mathematics 119.*

### 203 Organic Chemistry I

4 credit hours

Offered fall semester. Three hours lecture and three hours laboratory a week. Fee: \$115.00.

Fundamental principles and theories of organic chemistry, methods of preparation and reactions of the hydrocarbons, alkyl halides, ethers and alcohols, and laboratory techniques are studied.

*Prerequisite: Chemistry 102.*

### 204 Organic Chemistry II

4 credit hours

Offered spring semester using alternative instructional delivery methods. Three hours lecture and three hours laboratory a week. Fee: \$115.00.

A continuation of Chemistry 203, with emphasis in the properties, preparation and reaction of aldehydes, ketones, carboxylic acids and their derivatives, amines, heterocyclic compounds, sugars, lipids, proteins, and nucleic acids.

*Prerequisite: Chemistry 203.*

### 299 Special Problems

1-4 credit hours

Fee: \$115.00.

Study projects under the direct supervision of the instructor. Library and laboratory research on selected problems. Honors credit by contract may be available in some sections of this course. Qualified students should consult the instructor. This course may be repeated for credit.

*Prerequisite: Chemistry 102 and consent of the instructor.*

## COMPUTER TECHNOLOGY (COMP)

### 101 Computer Literacy

3 credit hours

Three hours lecture and application a week. Fee: \$50.00.

Students will acquire and/or demonstrate proficiency understanding basic computer terminology, using basic operating system features, e-mail, Internet, word processing, spreadsheet, database and presentation software. **This course requires the use of software that students will**



either be required to purchase or the students will have to use the designated campus labs.

### 103 Computer Logic 4 credit hours

Four hours lecture and application a week. Fee: \$50.00.

A first course in the study of computer logic and computational thinking. Topics covered include details of data storage concepts, computer arithmetic, Boolean logic, control structures, and software engineering. Major emphasis is given to computer logic, computer architecture, and logic circuits. Also included is an initial exposure to programming languages. This course is a prerequisite for all computer programming language courses.

*Prerequisite: Computer Technology 101, or concurrent registration, or consent of instructor.*

### 107 Introduction to Cybersecurity 3 credit hours

Three hours lecture and application a week. Fee: \$50.00.

This course provides a broad overview of computer security, ethical issues and information assurance. Students will gain an understanding of digital information security and threats related to the internet, malware, cryptography, intrusion detection, operating systems, networking, cloud computing and other security topics.

### 109 Emerging Technologies 3 credit hours

Fee: \$50.00.

This course is designed to introduce students to emerging technologies in both computer and information technology as well as challenges facing IT professionals implementing emerging technologies within their organizations. This course will help students keep pace with the latest cutting-edge technology and innovation in the field.

*Prerequisites: Computer Technology 101 and Computer Technology 107, or instructor consent.*

### 114 Mobile Application Development 3 credit hours

Three hours lecture and application a week. Fee: \$50.00.

This course introduces students to the design, development and programming technologies for mobile applications. Topics include an overview of mobile devices, industry standards and operating systems. Upon completion, students should be able to create basic applications for mobile devices.

*Prerequisite: Computer Technology 103, or concurrent registration, or consent of instructor.*

### 180 PC Architecture 3 credit hours

Offered fall semester. Three hours lecture and application a week. Fee: \$50.00.

This course is designed to teach the skills necessary to be a computer technician, preparing students for CompTIA's A+ Certification. The course will provide hands-on experience assembling, configuring, troubleshooting and maintaining computer systems.

*Prerequisite: Computer Technology 101 or consent of instructor.*

### 190 Computer Languages Survey 3 credit hours

Three hours lecture and application a week. Fee: \$50.00.

A survey course of current computer languages with an emphasis on object-based programming. An emphasis is given to new and emerging languages and languages that would not normally be defined in the traditional computer language paradigm. This course would be open to non-computer technology majors. A sound knowledge of the Windows operating system environment is required.

*Prerequisite: Computer Technology 101.*

### 191 Web Page Development 3 credit hours

Three hours lecture and application a week. Fee: \$50.00.

A practical study of the design and development of Web sites, covering principles and methods of designing and maintaining Web sites using HTML and current leading Web designing programs. Hands on approach to creating dynamic Web sites using latest Web technologies such as Cascading Style Sheets and animation. **This course requires the use of software that students will either be required to purchase or the students will have to use the designated campus labs.**

*Prerequisite: Computer Technology 101, or concurrent registration, or consent of instructor.*

### 201 Security + 3 credit hours

Three hours lecture and application a week. Fee: \$50.00.

This course provides foundational principles for securing a network and managing risk. Students will be taught access control, identity management, cryptography and preventative techniques to address network attacks and vulnerabilities. This course is intended to prepare students for the Computing Technology Industry Association's (CompTIA) Security+ certification exam.

*Prerequisite: Computer Technology 107, Computer Technology 225, or consent of instructor.*

### 202 Digital Forensics 3 credit hours

Three hours lecture and application a week. Fee: \$50.00.

This course will explore technical and legal aspects of collecting and handling digital evidence in both criminal and civil investigations. Students will learn how to utilize different tools to collect, acquire, and examine digital evidence. The course will also examine the technical and legal aspects of evidence recovery and processing as well as discuss reporting and testimony.

*Prerequisites: Computer Technology 101 and 107 or consent of instructor.*

### 216 Cyber Law (Criminal Justice 216) 3 credit hours

Offered as Demand Warrants. Three hours online lecture and discussion a week.

The course explores the legal and policy issues associated with the Internet and cyberspace. The course will focus on cases, statutes, regulations, and constitutional provisions that affect people and businesses interacting through computers and the Internet. Topics include intellectual property, e-commerce, online contracts, cybercrimes, torts, and privacy issues.

*Prerequisite: Computer Technology 107 for students enrolled in the Computer Technology/ Cybersecurity/Information Systems Programs. Criminal Justice 101 and 103 for students enrolled in the Criminal Justice Program.*

### 219 Operating Systems 3 credit hours

Three hours lecture and application a week. Fee: \$50.00.

This course provides a comprehensive study of operating systems. This course will review the history of computer operating systems and advanced operating system features. Concepts covered will include system utilities, file systems management, script file editing, hardware management, and windows products. The future of computer operating systems will be discussed. **This course requires the use of software that students will either be required to purchase or the students will have to use the designated campus labs.**

*Prerequisite: Computer Technology 101, or concurrent registration, or consent of instructor.*

### 220 Linux Operating System 3 credit hours

Fee: \$50.00.

This course provides an introduction to the Linux operating system. The topics in this course align with the industry standard CompTIA Linux+ Certification Exam. The course will prepare students to pass this exam.

*Prerequisite:* Computer Technology 101, concurrent registration, or consent of instructor.

**221 Office Applications I** **3 credit hours**  
Three hours lecture and application a week. Fee: \$50.00.

An introduction to several of the more popular computer applications in use today. Students will have hands-on experience using Windows concepts, spreadsheet, database management, computer presentation, Internet, and business oriented software packages. **This course requires the use of software that students will either be required to purchase or the students will have to use the designated campus labs.**

*Prerequisite:* Computer Technology 101 or consent of instructor.

**224 Advanced Web Page Development** **3 credit hours**  
Offered spring semester. Three hours lecture and application a week. Fee: \$50.00.

An advanced study of web development concepts and technologies required to manage e-commerce and corporate intranet/internet web sites. Students will gain an understanding of advanced web server technologies including server side scripting, database connectivity, application frameworks and web protocols. Students will apply that knowledge using the latest web development and programming technologies. **This course requires the use of software that students will either be required to purchase or the students will have to use the designated campus labs.**

*Prerequisite:* Computer Technology 191 or consent of instructor.

**225 Introduction to Networking** **3 credit hours**  
Three hours lecture and application a week. Fee: \$50.00.

This course introduces the architecture, structure, functions, components, and models of the Internet and computer networks. The principles of IP addressing and fundamentals of Ethernet concepts, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing. This is the first course in a series designed to prepare students for the Cisco Certified Network Associate (CCNA) certification exam.

*Prerequisite:* Computer Technology 101 or consent of instructor.

**229 Database Design and Implementation** **3 credit hours**  
Offered spring semester. Three hours lecture and application a week. Fee: \$50.00.

An introduction to relational databases with an emphasis on designing end-user applications using integrated database programming languages and development tools (screen, report, menu, and SQL builders). Students will implement an end-user application utilizing Third Normal Database techniques, user menus, Structured Query Language reports, advanced screen and report design, and Event-Driven Programming.

*Prerequisite:* Computer Technology 103 or consent of instructor.

**232 Wireless Network Security** **3 credit hours**  
Fee: \$50.00.

This 3-credit course explores wireless network and mobile device security. Students will begin by reviewing the history of data networks and the evolution of wired and wireless networking, as well as the mobile revolution. They will explore wireless local area network (WLAN) design and the operation and behavior of wireless in general, particularly on 802.11 WLANs, along with associated threats and vulnerabilities, various topologies, and devices. The course then addresses basic security measures for small office/home office (SOHO) networks, as well as more-advanced wireless security concepts unique to the needs of larger

organizations. Finally, students will examine risks and vulnerabilities of mobile devices, security models associated with the most common mobile operating systems, and mobile device fingerprinting techniques.

*Prerequisite:* Computer Technology 101, 225, or consent of instructor.

**234 Computer Science Programming I** **4 credit hours**  
Offered fall semester. Four hours lecture and application a week. Fee: \$50.00.

This course introduces the fundamental concepts of high level programming using the object oriented programming language Java. Students will learn fundamental concepts of the Software Development Cycle, Input/Output, simple data types, variables, operators, expressions, control structures, functions, arrays, strings, algorithms, objects, classes, testing and debugging. **This course requires the use of software that students will either be required to purchase or the students will have to use the designated campus labs.**

*Prerequisite:* Computer Technology 103.

**236 Web Programming** **3 credit hours**  
Offered spring semester. Three hours lecture and application a week. Fee: \$50.00.

This course focuses on the PHP scripting language and its application in building dynamic content for the web. Topics include PHP language basics, library functions, writing structured code, Object-Oriented features, and database connectivity. Integration with web servers and different operating systems will be addressed. Students will explore techniques for writing effective and maintainable dynamic content systems and will create a capstone project that integrates PHP, HTML, and a relational database into a real-world web application.

*Prerequisite:* Computer Technology 103 and 191 or consent of instructor.

**238 Computer Science Programming II** **4 credit hours**  
Offered spring semester. Four hours lecture and application a week. Fee: \$50.00.

This course is a continuation of Computer Science Programming I and will cover advanced concepts using the object oriented programming language Java. Students will learn the fundamentals of design and implementation of data structures, which includes linked lists, stacks, queues, sorting, searching, recursion, testing and debugging.

*Prerequisite:* Computer Technology 234.

**239 Cisco Networking 2** **3 credit hours**  
Three hours lecture and application a week. Fee: \$50.00.

This course covers the architecture, components, and operations of routers and switches in a small network. Students will learn to configure routers and switches for basic functionality and troubleshooting. This is a second course designed to prepare students for the Cisco Certified Network Associate (CCNA) certification exam.

*Prerequisite:* Computer Technology 225 or consent of instructor.

**240 Field Placement** **3 credit hours**  
One-hour lecture and eight hours internship a week (sixteen hours a week if offered in A or B-terms).

This course provides students on the job training with a local business. Students will complete worksite assignments in a structured environment as determined by the instructor and the internship site supervisor. Attention will be given to resume writing, interviewing, communication and other applicable workplace skills.

*Prerequisite:* 2.75 GPA (or higher) and successful completion of two Computer Technology courses. Instructor consent required.

**241 Python Programming I** **3 credit hours**  
Fee: \$50.00.

This course is an introduction to the Python programming language. The Python programming language has an easy to understand syntax, and a powerful set of libraries. It is an interpreted language, with a rich programming environment, including a robust debugger and profiler. The course will cover such topics as data types, control flow, object-oriented programming techniques and concepts, and graphic user interface-driven applications.

*Prerequisite:* Computer Technology 101 and 103, or consent of instructor.

**245 Ethical Hacking** **3 credit hours**  
Fee: \$50.00.

This course is an introduction to hacking tools and incident handling. Areas of instruction include various tools and vulnerabilities of operating systems, software and networks used by hackers to access unauthorized information. This course also addresses incident handling methods used when information security is compromised.

*Prerequisite:* Computer Technology 225, or consent of instructor.

**246 Python Programming II** **3 credit hours**  
Fee: \$50.00.

This course is an advanced study of the Python programming language with a focus on enterprise development. Students learn how to leverage OS (Operating System) services, code graphical application interfaces, create modules and run unit tests, define classes, interact with network series, query databases, and process XML (Extensible Markup Language) data

*Prerequisite:* Computer Technology 241.

**250 R Programming** **3 credit hours**  
Fee: \$50.00.

In this course, students will learn about the programming language known as R. Students will use RStudio, the environment that allows them to work with R. This course will also cover the software applications and tools that are unique to R, such as R packages. Students will learn how R can clean, organize, analyze, visualize, and report data in new and more powerful ways.

*Prerequisite:* Computer Technology 103.

**288 A+ Certification Exam Review** **1 credit hour**  
One-hour lecture and application a week. Fee: \$22.00. Test Out PC Pro License Fee: \$151.00.

This course is a final preparation for the Computing Technology Industry Association's (CompTIA) A+ Certification Exam. It is designed as a capstone review course for this industry certification. Students will use computer-based training modules to prepare for the CompTIA A+ Certification Exam.

*Prerequisite:* Computer Technology 180.

**289 Security+ Certification Exam Review** **1 credit hour**  
One-hour lecture and application a week. Fee: \$22.00.

This course is intended to prepare students for the Computing Technology Industry Association's (CompTIA) Security+ certification exam. This course presents foundational principles for securing a network and managing risk. Students will learn access control, identity management, cryptography, and preventive techniques to address network attacks and vulnerabilities.

*Prerequisite:* Computer Technology 201.

**299 Independent Study** **2-4 credit hours**  
Fee: \$50.00.

Study projects directly related to the Computer Technology curriculum under the supervision of the instructor.

Instructor consent required to take this course.

*Prerequisite:* Computer Technology 101, 103, and consent of the instructor.

## CRIMINAL JUSTICE (CRIM)

**101 Introduction to Criminal Justice** **3 credit hours**  
Offered fall and spring semesters. Three hours lecture and discussion a week. Fee: \$45.00.

A survey of the history, philosophy and social development of police, courts and corrections in a democratic society. Identification and operations of local, state and federal agencies will be covered with emphasis on criminal justice career orientation.

**102 Administration of Criminal Justice** **3 credit hours**  
Offered as demand warrants. Three hours lecture and discussion a week.

A study of the core components of the criminal justice system from an organizational perspective. Students will analyze organizational effectiveness of the police, courts, and corrections in depth to fully understand the operations of these justice systems. The course will examine key theoretical approaches and concepts of organizational principles, models and typologies.

**103 Criminal Law** **3 credit hours**  
Offered fall and spring semesters. Three hours lecture and discussion a week.

A study of substantive criminal law as it is applied at local, state and federal levels. Elements of crimes as prosecuted in a court of law are examined, and court decisions are used to study the sources and types of criminal laws.

**104 Criminal Evidence and Procedure** **3 credit hours**  
Offered spring semester. Three hours lecture and discussion a week.

Examines the principles and techniques of criminal procedure employed during trials to determine the admissibility of physical and testimonial evidence. An analysis of laws and court decisions relating to the admissibility is emphasized.

**105 Criminal Investigation** **3 credit hours**  
Offered fall semester. Three hours lecture and discussion a week. Fee: \$75.00.

A study of the fundamental principles and procedures employed in investigation of crime. Emphasis is placed on the investigation of specific crimes, identification of information sources and procedures required for the proper handling of evidence. This course is designed to develop a working knowledge of investigation techniques from securing the crime scene to preparing and presenting evidence in court.

**106 Introduction to Corrections** **3 credit hours**  
Offered spring semester. Three hours lecture and discussion a week. Fee: \$45.00.

A survey of the field of corrections as it relates to the criminal justice system. Emphasis is placed on the history of corrections and the various forms of criminal sanctions imposed at local, state and federal levels.

**111 Criminology** **3 credit hours**  
Offered as demand warrants. Three hours lecture and discussion a week.

This course is a study of the scientific analysis of criminal behavior, of the criminalization processes and of the processes of social control. The course will examine the historical development of social and behavioral explanations of adult and juvenile crime. Crime causation theories are explained in relation to policies developed from these theories and the real and intended impact of these policies are discussed to demonstrate their impact on society in regard to crime prevention and control and criminal rehabilitation.

*Prerequisite:* Criminal Justice 101 or consent of faculty advisor.

### 115 Juvenile Justice

**3 credit hours**

Offered fall semester. Three hours lecture and discussion a week. Fee: \$30.00.

Juvenile Justice is a comprehensive study of the prevention, detection, and correction of juvenile delinquency. The course includes a study of laws relating to young offenders, police procedures dealing with youth and the Juvenile Court process. The course also focuses on the processes of juvenile justice intake, assessment, community programs and the institutional treatment of youth.

### 128 Physical Education for Criminal Justice (Physical Education 128)

**1 credit hour**

Offered as demand warrants. One hour a week. Fee: \$15.00.

This course is organized with a primary focus on the physical dimension of wellness using a variety of physical activities to give the student practical experiences toward taking a physical fitness examination required by criminal justice agencies. Students will train in a variety of methods with the ultimate goal of a healthier lifestyle and the ability to pass an academy physical fitness test.

### 203 Ethics and Leadership in Criminal Justice

**3 credit hours**

Offered fall semester. Three hours lecture and discussion a week.

A topical study of the various philosophical approaches for developing appropriate ethical decision-making tools for the criminal justice professional. Ethical dilemmas are illustrated in actual application in police, courts, corrections, criminal justice policy, and criminal justice scenarios. Students are exposed to the significance of ethics and to reflect critically on matters especially pertinent within criminology and criminal justice curricula.

*Prerequisite: Criminal Justice 101, or consent of instructor.*

### 205 Introduction to American Constitutional Law (Political Science 205)

**3 credit hours**

Offered fall semester. Three hours lecture and discussion a week.

A topical study of the development of the U.S. Constitution through the interpretation by the Supreme Court. Subjects include judicial review, federalism, Congressional and Presidential authority, the First Amendment, criminal rights, due process, and equal protection of the law.

### 207 Criminalistics

**3 credit hours**

Offered spring semester. Three hours lecture and application per week. Fee: \$45.00.

Criminalistics focuses on the field of forensic science from a criminal justice perspective. The course emphasizes the role of the crime investigator in preserving, recording, and collecting physical evidence at the crime scene. Students will learn about the use of DNA in forensics, as well as discuss admission of scientific/DNA evidence into court proceedings. The course utilizes hands-on forensic science related activities.

### 208 Interpersonal Communications in Criminal Justice

**3 credit hours**

Offered as demand warrants. Three hours lecture and discussion a week. Fee: \$25.00.

This course studies communications in law enforcement, criminal courts and corrections. The course will focus on students developing the skills of both oral and written communication in the field of criminal justice. Students will practice writing skills related to note-taking, memoranda, interviews, and investigative reports. The course also features case presentation, testifying in court, and communicating with victims of crime.

*Prerequisite: Criminal Justice 101 and English 101 or consent of faculty advisor.*

### 209 Forensics Photography

**1 credit hour**

Offered as demand warrants. One hour lecture and application per week. Fee: \$15.00.

In this course students learn the basic principles of digital photography in the field of forensics. Students will develop basic photographic skills, as well as learn the procedures for proper photographic techniques as required in the criminal justice field.

### 210 Policing

**3 credit hours**

Offered spring semester. Three hours lecture and discussion a week. Fee: \$45.00.

This course is a study of contemporary police practices, issues, and strategies. The course focuses on police proficiencies and procedures applied through critical thinking techniques and practical demonstrations. The role of police in society, police and community relations, police specialization and supervision, and current and future police issues are explained in this advanced criminal justice elective course. The course is designed to broaden the students' educational experience through real-world models and appropriate observational assignments, and is taught in conjunction with local law enforcement.

### 216 Cyber Law (Computer Technology 216)

**3 credit hours**

Offered as demand warrants. Three hours online lecture and discussion a week.

The course explores the legal and policy issues associated with the Internet and cyberspace. The course will focus on cases, statutes, regulations, and constitutional provisions that affect people and businesses interacting through computers and the Internet. Topics include intellectual property, e-commerce, online contracts, cybercrimes, torts, and privacy issues.

*Prerequisite: Computer Technology 107 for students enrolled in the Computer Technology/Cybersecurity/Information Systems Programs. Criminal Justice 101 and 103 for students enrolled in the Criminal Justice Program.*

### 299 Independent Study

**1-3 credit hours**

Study projects directly related to the Criminal Justice curriculum under the supervision of the instructor. Library and field contacts assigned on selected problems.

*Prerequisite: Criminal Justice 101, 102, 103, 104, or 105. Instructor consent required.*

## CULINARY ARTS (CULA)

### 150 Culinary Techniques I

**3 credit hours**

Offered fall semester. Two hours lecture a week. One hundred hours practicum a semester. Fee: \$250.00. Knife Kit Fee: \$194.00.

Application of scientific principles and techniques to food preparation. Focus will be on production of sauces, stocks, soups, salads, vegetables, and pasta.

*Prerequisite: Hospitality Management 110 or concurrent registration.*

### 201 Culinary Techniques II

**3 credit hours**

Offered spring semester. Two hours lecture a week. One hundred hours practicum a semester. Fee: \$250.00.

A continuation of Culinary Techniques I. Emphasis will be on the production of meats, poultry, fish/seafood, breads, pastries, and desserts.

*Prerequisite: Culinary Arts 150.*

### 208 International Cuisines

**2 credit hours**

Offered fall semester. One hour lecture a week. Fifty hours practicum a semester. Fee: \$250.00.

A course in the fundamentals of food preparation and service in a variety of international cuisines. The course is designed to include a history and

development of major world cuisines. Production will include preparation and presentation of classical menu items.

*Prerequisite or Corequisite: Hospitality Management 110.*

**212 Baking I** **3 credit hours**  
Offered fall semester. Two hours lecture a week. Fifty hours practicum a semester. Fee: \$250.00.

A course in baking, which involves preparation of yeast rolls, breads, pies, cakes, cookies, tarts, doughnuts, and holiday specialties. Topics include proper use and care of equipment, sanitation, and hygienic work habits.

*Prerequisite or Corequisite: Hospitality Management 110.*

**213 Baking II** **3 credit hours**  
Offered spring session. Two hours lecture a week. Fifty hours practicum a semester. Fee: \$250.00.

A continuation of Baking I. Emphasis will be on the development of higher competency levels in baked good production.

*Prerequisite: Culinary Arts 212.*

**216 Dining Room Management** **3 credit hours**  
Offered fall semester. Two hours lecture and fifty hours practicum a semester. Fee: \$220.00. Uniform Fee: \$40.00

A course designed to provide an understanding of dining room procedures and principles used for full service operations and buffet services. Included in the course are classic methods of table service, dining room preparation, sanitation, customer relations, and tableside cookery.

*Prerequisite: Hotel and Restaurant Management 101 and 110.*

**217 Beverage Management** **2 credit hours**  
Offered spring semester. Two hours lecture a week. Fee: \$200.00.

A course in the dining service appropriate to coffee shops and lounges/taverns. Emphasis is on liquor laws, purchasing, and production of alcoholic and non-alcoholic beverages.

*Prerequisite: Hospitality Management 101.*

**250 On-Site Practicum** **5 credit hours**  
Offered summer session. Two hours lecture and one hundred hours practicum a semester. Fee: \$250.00.

Supervised on-the-job training in approved food service production facilities. Placement and supervision are coordinated by the college. Weekly classroom discussions cover topics such as: employee recruitment and orientation, staff training, customer service, and supervision.

*Prerequisite: Hospitality Management 101 and 110, Culinary Arts 150 and 212.*

## DATA ANALYTICS (DATA)

**101 Introduction to Data Analytics** **3 credit hours**  
Offered fall semester. Fee: \$42.00.

Using a Statistics framework, this course covers the basic principles of what Data Analytics is. The course will review the steps to begin data analysis and provide an overview of how data analysis can be conducted in preparation for the advanced courses in the curriculum.

**103 Introduction to Machine Learning** **3 credit hours**  
Offered spring semester. Fee: \$42.00.

Machine learning is an integral part of data analytics, which deals with developing data-driven insights for better designs and decisions and gives computers the ability to learn without being explicitly programmed. Supervised and unsupervised machine learning will be covered. This

introductory course gives an overview of machine learning concepts, techniques and algorithms.

*Prerequisite: Data Analytics 101.*

**105 Introduction to Data Visualization** **3 credit hours**  
Offered fall semester. Fee: \$42.00.

The primary focus of this course concerns the art and science of turning data into readable graphics known as data visualization using features in software applications such as Excel and Access. Students will also learn to evaluate the effectiveness of visualization designs, and think critically about each design decision, such as choice of color and choice of visual encoding as they begin to explore data visualization tools used by professionals in data analytics.

*Prerequisite: Data Analytics 101.*

**201 Advanced Data Analytics** **3 credit hours**  
Offered spring semester. Fee: \$42.00.

This course builds on the concepts learned in the introductory course for data analytics. It prepares students to gather, describe, and analyze data, and use advanced statistical tools to make decisions on operations, risk management, finance, marketing, etc. Topics include probability, statistics, hypothesis testing, regression, clustering, decision trees, and forecasting.

*Prerequisite: Data Analytics 101.*

**206 Python for Data Analytics** **3 credit hours**  
Offered fall semester. Fee: \$42.00

In this class students will learn how to wield the powerful Python tools used in the field of Data Analytics. The Python programming language, in conjunction with these tools, are used by most data analytics professionals. Students will learn how to manipulate, process, "clean," analyze, and visualize data in Python. It is also a practical, modern introduction to scientific computing in Python, tailored for data-intensive applications. This is a course about the parts of the Python language and libraries one will need to effectively solve a broad set of data analysis problems.

*Prerequisite: Computer Technology 241.*

**210 Data Warehouse Implementation** **3 credit hours**  
Offered fall semester. Fee: \$42.00.

In this course, students will learn how to implement a data warehouse platform to support a business intelligence (BI) solution. Students will discover how to create a data warehouse, implement, extract, transform, and load (ETL) with SQL Server Integration Services (SSIS), and validate and cleanse data with SQL Server Data Quality Services (DQS) and SQL Server Master Data Services.

*Prerequisite: Data Analytics 101.*

**214 Advanced Data Visualization** **3 credit hours**  
Offered spring semester. Fee: \$42.00.

In this course, students discover how new and advanced data visualization tools used by industry professionals offer analytics capabilities that can help groups understand large and complex data which can arise from networks, high-dimensional point clouds, multivariate functions, heterogeneous personal data and ensembles. This course will enable the students to become familiar with innovative techniques and tools that combine data analysis with data visualization, from both algorithmic and implementation perspectives.

*Prerequisite: Data Analytics 105.*

**216 Data Analysis in the Cloud** **3 credit hours**  
Offered spring semester. Fee: \$42.00.

This course is tailored for individuals aiming to excel in the field of data analysis using cloud technologies. Students will embark on an in-depth exploration of data analysis methodologies, leveraging the advanced capabilities of Google Cloud Platform (GCP). This course is designed to blend theoretical knowledge with practical, hands-on experience, ensuring graduates are well-equipped for the demands of the data analysis industry.

*Prerequisite: Data Analytics 101 and 103.*

#### **240 Field Placement 3 credit hours**

Offered fall and spring semester. Fee: \$42.00.

This course provides students on the job training in data analytics. Students will complete worksite assignments in a structured environment as determined by the instructor and the internship site supervisor. Attention will be given to resume writing, interviewing, communication and other applicable workplace skills.

*Prerequisite: Cumulative 2.75 GPA (or higher) of the courses required within the degree and successful completion of two Data Analytics courses. Instructor consent required.*

### **DENTAL HYGIENE (DENT)**

#### **101 Introduction to Dental Health 2 credit hours**

Fee: \$20.00.

Offered fall semester. Two hours lecture and demonstration a week.

An introduction to professional health services, with study of the history and development of the dental health professions. The organization of the dental professional associations is outlined. The course presents an orientation to the various specialties of dentistry including Pedodontics, Orthodontics, Prosthodontics, Periodontics, Oral Pathology, Oral Surgery, Endodontics, Dental Public Health, and Operative Dentistry. Problems in first aid are discussed, and such dental office emergencies as obstructed airway, syncope, hemorrhage, stroke and shock are demonstrated.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Instructor consent required.*

#### **102 Dental Histology and Embryology 2 credit hours**

Offered spring semester. Two hours lecture a week.

The microscopic study of the structural and functional units of living tissue. Emphasis will be placed on the histological structures and embryological development of the teeth and oral tissues.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Dental Hygiene 101. Instructor consent required.*

#### **103 Oral Anatomy 4 credit hours**

Offered fall semester. Three hours lecture and three hours laboratory a week. Fee: \$125.00.

This course covers the detailed study of the human skull with emphasis on the anatomy of the mouth and surrounding structures including: oral tissues, tooth morphology, nerve innervation, bones, muscles, lymphatic system, and circulation. Laboratory time will be spent studying the human skull as well as identifying and studying the importance of tooth anatomy and occlusion in relation to function and health.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Instructor consent required.*

#### **104 Dental Materials 2 credit hours**

Offered spring semester. One-hour lecture and three hours laboratory a week. Fee: \$175.00.

A multidisciplinary study that draws on all branches of science. A study of the properties, structure, and processing of materials and the interactions with the tissues of the oral cavity. Emphasis is placed on the manipulation, handling, and disposal of various materials.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Dental Hygiene 101. Instructor consent required.*

#### **107 Dental Hygiene Techniques 4 credit hours**

Offered fall semester. Two hours lecture and nine hours laboratory a week. Fee: \$175.00. Criminal Background Check Fee: \$65.00. Nurse Managed Wellness Clinic Fee: \$60.00. Software Access Fee: \$59.00.

An introduction to the practice of dental hygiene, with emphasis on the fundamental principles. Lectures and laboratory instruction will be devoted primarily to the use of instruments, the initial development of manual dexterity, infection control procedures, and an introduction to clinical experience, as well as charting and record keeping. Practical experience in the use of instruments for scaling and polishing.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Instructor consent required.*

#### **108 Clinical Dental Hygiene I 2 credit hours**

Offered spring semester. One-hour lecture, eight hours clinic, and three hours laboratory/clinic a week. Fee: \$175.00. Nurse Managed Wellness Clinic Fee: \$60.00.

This course includes lectures and demonstrations related to the clinical practice of dental hygiene. Clinic time is devoted to practical experience in delivery of preventative, educational, and therapeutic services to the public. Emphasis is placed on improving the skills and techniques of dental hygiene practice. Management of dental emergencies and special needs patients will also be covered.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Dental Hygiene 107. Instructor consent required.*

#### **109 Radiology 3 credit hours**

Offered spring semester. Two hours lecture and five hours laboratory a week. Fee: \$175.00.

This course is an introduction to the basic principles and procedures in radiographic techniques. Emphasis is placed on awareness of radiation protection and safety. Several radiographic techniques are taught including: short cone, long cone, panoramic, and digital radiography. Practical experience is gained in placing, exposing, developing, and interpreting both intra-oral and extra-oral dental radiographs.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Dental Hygiene 103. Instructor consent required.*

#### **200 Pharmacology and Pain Management 3 credit hours**

Offered fall semester. Three hours lecture and demonstration a week. Fee: \$175.00.

This course covers the study of drugs as they affect the clinical practice of dental hygiene. In addition, the pharmacology, anatomy, physiology, medical emergencies, legal considerations, armamentarium and techniques for the administration of local anesthesia will be covered. Nitrous Oxide sedation will be studied and demonstrated in a clinical environment. The psychology of pain management will also be covered.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Dental Hygiene 108. Instructor consent required.*

**201 Clinical Dental Hygiene II****4 credit hours**

Offered fall semester. One-hour lecture and twelve hours clinic a week.  
 Fee: \$200.00. Nurse Managed Wellness Clinic Fee: \$60.00.

This course offers students continued clinical practice of Dental Hygiene services. A minimum of 8 contact hours will be devoted to the clinical administration of local anesthesia. Clinical experience study in improving skills and techniques is enhanced. Group discussions of problems related to clinical practice of dental hygiene are held. Demonstrations and practical experience on special cases are discussed.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Dental Hygiene 108. Instructor consent required.*

**202 Clinical Dental Hygiene III****5 credit hours**

Offered spring semester. One-hour lecture and sixteen hours clinic a week.  
 Fee: \$250.00. Nurse Managed Wellness Clinic Fee: \$60.00. Mock Board Fee \$250.00.

This course will incorporate dental hygiene care with critical thinking and case studies to prepare students for their national and regional board exams. Group discussions of problems related to clinical practice of dental hygiene are held. Continued clinical experience in enhancing clinical skills and techniques will be emphasized.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Dental Hygiene 201. Instructor consent required.*

**203 Oral Pathology****3 credit hours**

Offered fall semester. Three hours lecture and discussion a week.

A study of disease and the disease processes in man, with emphasis on the relationship of general diseases of the body to diseases of the teeth and supporting tissues. Particular attention to oral diseases and the importance of recognition of abnormal conditions in the mouth by the dental hygienist.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Dental Hygiene 108. Instructor consent required.*

**204 Dental Office Management, Ethics, and Jurisprudence****1 credit hour**

Offered spring semester. One-hour lecture a week.

This course is divided into two parts. The first part covers professional ethics, Maryland dental jurisprudence, and legislation. The second part covers the business management aspects of the dental practice: resume writing, office procedural manual, recall and inventory systems, job interviewing, and job descriptions.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Dental Hygiene 201. Instructor consent required.*

**207 Community Dental Health Education I****2 credit hours**

Offered fall semester. Two hours lecture per week. Fee: \$25.00.

This class covers the principles and concepts of community public health and dental health education emphasizing community assessment, planning, implementation, and evaluation. This course also explores methods and materials used in teaching dental health education in various community settings. Additional topics include epidemiology, biostatistics and concepts of dental research.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Dental Hygiene 108. Instructor consent required.*

**208 Community Dental Health Education II****2 credit hours**

Offered spring semester. One-hour lecture and three hours laboratory and demonstration a week. Fee: \$100.00.

The history and philosophy of public health practice and administration are reviewed. Evaluation and analysis of Health Care Delivery System with emphasis on preventive dentistry is examined. Designing a "community needs" project is a requirement of the course.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Dental Hygiene 201. Instructor consent required.*

**209 Periodontics****2 credit hours**

Offered fall semester. Two hours lecture and discussion a week.

A specialty of dentistry that studies the periodontium, the hard and soft tissues that support the teeth, along with the diseases and conditions affected. Classification of periodontal disease. Clinical aspects and preventive measures within the scope and responsibility of the dental hygienist.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Dental Hygiene 108. Instructor consent required.*

**213 Nutrition****2 credit hours**

Offered spring semester. Two hours lecture and discussion a week.

This course presents an overview of the major nutrient classifications, structures, functions, and deficiencies as they relate to the whole body. Emphasis is placed on the effects in the oral cavity. An overview is given of the digestion and absorption of carbohydrates, lipids and protein, with related disorders. Energy expenditure, body composition and weight management are discussed. Dietary supplements, including some herbs, are discussed as to the benefits and the possible complications from interactions with medications and megadoses. Information is presented on Nutritional Counseling, including an Oral Health Nutritional Assessment and Self Nutritional Analysis.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Dental Hygiene 101. Instructor consent required.*

**ECONOMICS (ECON)****103 Contemporary Economic Problems****3 credit hours**

Three hours lecture and discussion a week.

A basic understanding of contemporary economics important for achieving an intelligent grasp of public affairs. Included is a study of the design, development, and implementation of public economic policies.

**201 Principles of Macroeconomics****3 credit hours**

Offered fall semester. Three hours lecture and discussion a week.

An introduction to basic economic concepts regarding demand and supply, comparative economic systems, and national accounts, employment theory, and fiscal and monetary policy, emphasizing the interplay of households, business, and government in various economic situations.

**202 Principles of Microeconomics****3 credit hours**

Offered spring semester. Three hours lecture and discussion a week.

An introduction to price theory, cost, and production and distribution analysis. International trade and economic development concepts emphasizing equilibrium situations found under various market conditions. Selected topics include marginal utility, income and substitution effects, resource determination and allocation, pure competition, monopoly, and oligopoly together with monopolistic competition.

## EDUCATION (EDUC)

### 100 Career Analysis in Education 1 credit hour

Offered fall and spring semesters. One-hour lecture a week. Fee: \$20.00. Criminal Background Check Fee: \$60.00.

This course is an introductory analysis of education in America and the potential roles to be played in schools and in the wider community. It provides the student with a preliminary assessment of how the student's interests and abilities match the demands of the education profession. Course objectives include portfolio development, observations with reflections, and self-assessments. Required: Taken prior to admission to Phase I if attending Frostburg State University. Recommended: Taken within the first two semesters of coursework within an Education program.

Students will need to complete the fingerprint and background clearance process and be issued the appropriate identification prior to being scheduled for a field experience or school-site assignment.

### 190 Preparation for the Pre-Professional Sequence 1 credit hour

This course is offered on a Pass/Fail basis. Offered fall and spring semesters, and summer session. Five-three-hour lecture/application classes per semester. Fee: \$15.00.

This course is designed to familiarize students with the pre-professional assessment series requirements and sequence for education students who intend to transfer to a four-year institution. Course objectives include the role of the Praxis Series in teacher preparation programs, appropriate state passing scores, the registration process, sequence and testing protocols. The coursework will include the assessed competencies and skills, the assessment format and test-taking proficiencies. Candidates for admission to education programs at Maryland four-year institutions must receive the Maryland passing score on the Reading, Writing and Mathematics sections for admission to the third-year professional phase of education programs.

PLEASE NOTE: Maryland State Department of Education and most Maryland four-year institutions will waive this testing requirement if students have received waiver scores on either the SAT or the ACT.

### 191 Education Assistantship 1 credit hour

Four hours lecture each semester and an average of three hours field experience, written plans and reflections weekly.

This course is designed to provide the education major with practical, school-based instructional and non-instructional service experiences. Students will be instructed in the use of school-based and campus-based resources, and basic instructional strategies, prior to actual experiences at an assigned school site. Students will maintain a log/journal that demonstrates planning and reflection. The course will offer students the opportunity to complete the "service to diverse populations" requirement for entrance to the first phase of education programs at most four-year institutions.

Students will need to complete the fingerprint and background clearance process and be issued the appropriate identification prior to being scheduled for a field experience or school-site assignment.

This course may be repeated for up to five credits.

*Prerequisite: Education 100 and 201. It is also recommended that students have completed, or be concurrently enrolled in, Education 204. Instructor consent required.*

### 195 Introduction to Emergent Literacy Skills 2 credit hours

Offered spring semester. Two hours lecture and discussion a week.

This course is designed to provide the education major with foundational knowledge in the characteristics, development stages and pre-requisite skills of emergent and early-emergent readers. Students will acquire a foundation in phonological awareness, phonemic awareness, phonics and the alphabetic principle. Students will be introduced to Scientifically Based Reading Research (SBRR), and the role it plays in shaping classroom practice and curriculum development. Students will be introduced to informal screening/assessment instruments, lesson plans, and classroom

instructional resources and strategies. Course content will also include manuscript and cursive handwriting basics, modifications for learners with special needs and the application of Multiple Intelligences theory in literacy learning. The course includes field experience opportunities. This course should be completed prior to enrollment in Education 295.

*Prerequisite: Education 100, previous completion or concurrent enrollment in Education 201 or consent of instructor.*

### 201 Foundations of Education, Philosophy, and Practice 3 credit hours

Offered fall and spring semesters. Three hours lecture and discussion a week. Fee: \$30.00.

This course includes an overview of contemporary American education, with an emphasis on historical and philosophical development and current practice, and serves as the basis for study in legal and ethical issues. Course content also includes issues of diversity, current educational events of national and local implications, and the roles of educational professionals and agencies.

Students will need to complete the fingerprint and background clearance process and be issued the appropriate identification prior to being scheduled for a field experience or school-site assignment.

*Prerequisite: Education 100 or concurrent enrollment.*

### 203 Human Growth and Development (Psychology 203) 3 credit hours

Offered fall and spring semesters. Three hours lecture and discussion a week.

The processes affecting and effecting human development, with implications for educational practices used by and in the family, school, and community. Attention given to measurements and evaluative techniques for assessing total growth. The case method will be used, with direct and recorded observation being required.

*Prerequisite: Psychology 101 or consent of instructor.*

### 204 Psychology of Learning and Teaching (Psychology 204) 3 credit hours

Offered fall and spring semesters. Three hours lecture and discussion a week. Fee: \$20.00.

A study of human development and its relationship to the theories and principles of learning and teaching. Topics investigated will include self-development, group functioning, individual learning alternatives, and teacher evaluative techniques as they affect learning.

Students will need to complete the fingerprint and background clearance process and be issued the appropriate identification prior to being scheduled for a field experience or school-site assignment.

*Prerequisite: Psychology 101 and Education 201.*

### 214 Professional Practice and Classroom Management 2 credit hours

Offered spring semester. Two hours lecture a week.

This course is designed to deepen and to coalesce previously studied concepts, such as developmentally appropriate practice, the accommodation and inclusion of cultural, behavioral and educational diversity, and the social, emotional, language and cognitive stages of child development that have been introduced and explored throughout the student's preparation program. Students will learn the principles necessary to effectively integrate the elements of time, space and resources into healthy, respectful and collaborative learning environments to both support and challenge the learner. Additional aspects to be studied are: legal and ethical issues, technology as a classroom support, recordkeeping, observation, cumulative and formative assessment and family and community partnerships.

*Prerequisite: Appropriate criminal background clearance, Education 100 and 204, and either 201 or 252.*



**216 Mathematics for Teacher Education I (Mathematics 216)****3 credit hours**

Offered fall semester. Three hours lecture and discussion a week.  
Inclusive Access Fee: \$95.00.

This course is a program requirement designed specifically for students majoring in Teacher Education. It is intended to enhance and broaden the students' mathematical knowledge. Cooperative learning and collaborative group investigations will be utilized to solve problems, conduct mathematical experiments, formulate mathematical models, make predictions, and other related learning activities. Topics in the course include problem solving and reasoning, set theory, functions, estimation, numeration and mathematical systems, the real number system and elementary number theory. Mastery of basic communication skills is required to successfully complete the course. Students will be required to make both oral and written reports as they communicate mathematics. Education 216 does not meet the general education requirement for an Associate Degree.

*Prerequisite: Appropriate Placement Assessment score or grade of "C" or better in Mathematics 90.*

**217 Mathematics for Teacher Education II (Mathematics 217)****3 credit hours**

Offered spring semester. Three hours lecture and discussion a week.  
Inclusive Access Fee: \$95.00.

Cooperative and collaborative group activities will be utilized in the investigation of topics in basic geometry, measurement techniques, introductory probability and elementary statistics. Communicating mathematics, utilizing technology as a tool for problem solving basic experimentation and data collecting, and connections between mathematical concepts, patterns and models to real world applications are activities stressed in this course.

*Prerequisite: Appropriate Placement Assessment score or grade of "C" or better in Mathematics 90.*

**252 Early Childhood Foundations****3 credit hours**

Offered fall semester. Three hours lecture and discussion a week. Fee: \$40.00.

This course is an introduction to the profession of early childhood education. Objectives include growth and development of young children. This course examines the historic, theoretical, and philosophical underpinnings of current early childhood programs. This course explores pay, learning environments, and curriculum and looks at the context of families and communities. Students are required to prepare reflective journals, to engage in field observations, and to contribute to portfolio development.

Students will need to complete the fingerprint and background clearance process and be issued the appropriate identification prior to being scheduled for a field experience or school-site assignment.

*Prerequisite: Education 100 and 201.*

**293 Early Childhood Learning Environments****4 credit hours**

Offered spring semester. Three hours lecture and discussion a week and three hours field experience a week.

This course examines and assesses developmentally appropriate environments for young children birth to age eight and includes the planning of physically and psychologically safe and healthy learning environments. This course is designed to provide early childhood teacher candidates with the knowledge, skills, and disposition to effectively establish, adapt, maintain and assess instructional environments appropriate for infants, toddlers, preschoolers, and primary-aged children. Students will complete objective-specific field experience assignments in local public pre- kindergarten through third-grade classrooms. These field experiences will include a variety of instructional and non-instructional activities, thorough preparation and pre-planning, evaluation and reflection, and the collection of journal portfolio artifacts.

Students will need to complete the fingerprint and background clearance process and be issued the appropriate identification prior to being scheduled for a field experience or school-site assignment.

*Prerequisite: Education 252.*

**295 Processes and Acquisition of Reading****3 credit hours**

Offered fall semester. Three hours of lecture and discussion a week.

The course content includes the process of language development, including impact of phonemic awareness, how the brain responds to reading acquisition and practical applications of research in language development, acquisition, and use. Course objectives develop an understanding of the role of experiential background and prior knowledge, motivation, and relevancy to emerging readers. Major themes of the course are the acquisition of literacy skills through a balanced approach and multiculturalism. Course requirements include classroom observation and the demonstration of reading materials, reading series, and other reading resources used by classroom teachers.

Students will need to complete the fingerprint and background clearance process and be issued the appropriate identification prior to being scheduled for a field experience or school-site assignment.

*Prerequisite: Education 201 and 195.*

**296 Special and Multicultural Education****3 credit hours**

Offered spring semester. Three hours of lecture and discussion a week.

This course explores the history of the development of special education in America and the legal implications on American schools and community agencies. The characteristics of children with exceptionalities, and an understanding of how exceptionalities, culture, race, ethnicity, socio-economic class, religion, age, language, and intellectual ability influence learning are introduced. Course objectives include an overview of current service delivery models and applicable teaching methods. Students will complete controlled observations.

Students will need to complete the fingerprint and background clearance process and be issued the appropriate identification prior to being scheduled for a field experience or school-site assignment.

*Prerequisite: Education 201.*

**ENGINEERING - AUTOMATED MANUFACTURING TECHNOLOGY (ENGT)****101 Machine Tool Applications, Material Handling/ Fluid Power & Metallurgy****3 credit hours**

Offered fall semester. Three hours of lecture with practicum applications. Fee: \$90.00. Testing/Subscription Fee: \$125.00. Tool Kit: \$773.

This course will provide the theory and practical applications of projects using fundamental shop equipment such as manual mills, manual lathes, drill presses, surface grinders and Computer Numeric Control (CNC) mills and lathes. Emphasis will be on shop safety, quality control, and safety. Students will also be introduced to the science of physical metallurgy, the physical properties of metals and their application to modern manufacturing and selection of metals. Students will be eligible for the NIMS I - Measurement, Materials, & Safety industry certification assessment.

*Prerequisite: Minimum high school GPA of 3.0 or appropriate assessment scores.*

**102 Quality Control with Geometric Dimensions & Tolerances****3 credit hours**

Offered fall semester. Three hours of lecture with practicum applications. Fee: \$90.00.

This course will provide the proper use of modern precision measurement tools such as micrometers/calipers, surface plate work, laser micrometers, digital height gages, coordinate measuring machines (CMM) and the interpretation of the data obtained from their use. Use of these tools will

ensure that machined parts are acceptable as defined by the GD&T documents. Hands-on skills competencies include the areas of reaming, sawing, threading, and safety. Students will learn how to read and interpret blueprints and study different views of an object, including dimensioning techniques, tolerance methods and drawing notes. Students will be eligible for NIMS I - Job Planning, Benchwork & Layout industry certification assessment.

*Prerequisite:* Minimum high school GPA of 3.0 or appropriate assessment scores.

*Corequisite:* Engineering-Automated Manufacturing Technology 101.

### **103 Mill Applications 3 credit hours**

Offered spring semester. Three hours of lecture with practicum applications. Fee: \$90.00.

This course will introduce theory and practical applications of basic metalworking with the manual mill. The class will emphasize manual mill applications, shop safety, and continue with material selection, job planning, benchwork, and layout. Students will be eligible for NIMS I - Drill Press and NIMS I - Milling industry certification assessments.

*Prerequisite:* Engineering-Automated Manufacturing Technology 101 and 102.

### **104 Lathe Applications 3 credit hours**

Offered spring semester. Three hours of lecture with practicum applications. Fee: \$90.00.

This course will provide the basic theory and practical applications used to safely set up and operate manual metal turning engine lathes. The class will emphasize manual lathe applications, shop safety, and continue with material selection, job planning, benchwork, and layout. Students will be eligible for the NIMS I - Turning (Between Centers) and NIMS I - Turning (Chucking) industry certification assessments.

*Prerequisite:* Engineering-Automated Manufacturing Technology 101 and 102.

### **110 Introduction to Computer-Aided Design/Computer-Aided Manufacturing 3 credit hours**

Offered fall semester. Three hours of lecture with practicum applications. Fee: \$90.00.

This course will introduce computer applications including hands-on experience with computer-aided design (CAD)/computer-aided manufacturing (CAM) systems. Students will gain knowledge and skills to create and interpret basic mechanical drawings using computer-aided design CAD/CAM software. Emphasis will be on standard and Geometric Dimensioning and Tolerancing (GD&T) drawing techniques based on the American Society of Mechanical Engineers (ASME) industry-recognized standards.

*Corequisite:* Computer Technology 103

### **120 Introduction to Computerized Numeric Control Programming and Machining 3 credit hours**

Offered spring semester. Three hours of lecture with practicum applications. Fee: \$90.00.

This course will introduce Computer Numerical Control (CNC) machining practices and programming. Students will demonstrate the ability to set and operate both a CNC milling center, as well as CNC turning center, maintain quality and safety standards, keep records, and maintain equipment and supplies. Students will be eligible for the NIMS I - CNC Mill Operations and NIMS I - CNC Lathe Operations industry certification assessments.

*Prerequisite:* Engineering-Automated Manufacturing Technology 102 and Computer Technology 103.

### **201 Fixture Design and Fabrication 4 credit hours**

Offered fall semester. Four hours of lecture with practicum applications. Fee: \$90.00.

This course will provide fundamental hands-on skills required to design and print 3D prototypes using CAD/CAM software. Digital design terminology, techniques and software, combined with an understanding of how 3D-printers function, will all be delivered through various fundamental projects. Students will learn about practices for fabrication in the industry and how that relates to manufacturing. Students will utilize previously acquired CAD/CAM skills to design projects and simulations for 3D-printing.

*Prerequisite:* Engineering-Automated Manufacturing Technology 210.

*Corequisite:* Engineering-Automated Manufacturing Technology 220.

### **210 Advanced Computer-Aided Design/Computer-Aided Manufacturing 3 credit hours**

Offered spring semester. Three hours of lecture with practicum applications. Fee: \$90.00.

This course will provide advanced applications including hands-on experience with computer-aided design (CAD)/computer-aided manufacturing (CAM) systems. Emphasis is on understanding how displayed objects are represented and manipulated on the computer and the advantages and limitations of CAD/CAM systems. Students will learn the translation of part geometry to and from CAD/CAM systems and manufacturing applications to generate parts for manufacturing.

*Prerequisite:* Engineering-Automated Manufacturing Technology 110.

### **213 Quality Assurance 3 credit hours**

Offered spring semester. 3 hours of lecture with practicum applications. Fee \$50.00

This course will provide theory and practical application in quality assurance for dimensional measurement and CMM (coordinate measuring machine) programming. Students will demonstrate hands-on skills including programming using a CMM, performing bench inspections, and inspecting manufactured parts for precision measurements. Students will be eligible for the NIMS I Quality Inspector industry certification assessment.

*Prerequisites:* ENGT 201, ENGT 220

### **215 Abrasive Machining and Heat Treatment 3 credit hours**

Offered spring semester. Three hours of lecture with practicum applications. Fee: \$90.00.

This course will provide the theory and application of precision abrasive machining, including surface, form, cylindrical (ID/OD), and cutter grinding. Students will demonstrate heat treatment processes such as carburizing, hardening, tempering, and annealing on both carbon and steel projects. Aluminum oxide, silicon carbide, cubic boron nitride, and diamond wheels will be utilized in the grinding process. Students will be eligible for the NIMS I - Grinding and the NIMS I - Metalforming industry certification assessments.

*Prerequisite:* Engineering-Automated Manufacturing Technology 101 and 102.

### **220 Advanced Computerized Numeric Control Programming and Machining 4 credit hours**

Offered fall semester. Four hours of lecture with practicum applications. Fee: \$90.00. Testing/Subscription Fee: \$125.00

This course will provide advanced theory and practice in Computer Numerical Control (CNC) programming using G Code, Conversational, and Computer Aided Design (CAD)/Computer Aided Manufacturing (CAM) programming for two, three, and four-axis millings and turning Centers. Students will be eligible for the NIMS I - CNC Mill Programming Setup & Operations and NIMS I - CNC Lathe Programming Setup & Operations industry certification assessments.

*Prerequisite: Engineering-Automated Manufacturing Technology 120.*

### **225 Manufacturing Capstone 4 credit hours**

Offered spring semester. Four hours of lecture with practicum applications. Fee: \$90.00.

This course will enable students to gain an appreciation of how the different aspects of manufacturing and engineering come together. Students will design and develop an invention using the skills and knowledge they have learned throughout the previous semesters. The course is not an in-depth study of any one function or technical aspect, but rather a synergistic overview of the project process. Students will complete regional site visits to better understand what employment opportunities are available in the industry. The course also integrates written and oral communications, including resume writing and interview skills, leading to successful employment in the field.

*Prerequisite: Engineering-Automated Manufacturing Technology 210, 220, and 201.*

## **ENGLISH (ENG)**

### **92 Reading/Writing Workshop I 5 credit hours**

Offered fall and spring semesters. Five hours lecture and discussion a week.

Integrated instruction in reading and writing will help students develop the critical thinking skills necessary for college-level courses. Students will engage in a variety of reading and writing activities, concentrating on logical interpretation of what they read and on clear expression of what they understand. Students will build their vocabularies as they encounter increasingly complex reading materials, and they will become more sophisticated writers and thinkers as they explore ideas through writing. This course includes a supplemental lab for additional support. This course fulfills the developmental requirements for students whose placement assessment scores indicate the need. Open to all students. This course does not meet associate degree graduation requirements.

*This course is limited to two attempts. A grade of A, B, C, D, F, W, R, or X is considered an attempt. The second attempt will require a minimum of one additional hour of instructional time each week in a designated ACM study lab.*

*Prerequisite: Appropriate placement assessment scores.*

*Prerequisite or Corequisite: Student Development 106 (Connections: On Course for Success – 3 credit hours).*

### **93 English Leap 2 credit hours**

Offered fall and spring semesters. Two hours lecture and discussion a week.

This course is taken concurrently with English 101. Students will concentrate on expressing ideas in increasingly sophisticated paragraphs while reviewing rules of grammar and punctuation. Emphasis will be placed on verb usage, common sentence errors, subject-verb agreement, pronoun agreement, pronoun case, plurals and possessives, and common word errors. Required of all students whose placement assessment scores and writing samples indicate the need. (Exceptions can be made for students not pursuing a degree or certificate.) Open to all students. This course does not meet associate degree graduation requirements.

*This course is limited to two attempts. A grade of A, B, C, D, F, W, R, or X is considered an attempt. The second attempt will require a minimum of one additional hour of instructional time each week in a designated ACM study lab.*

*Prerequisite: Appropriate placement assessment scores. Corequisite: English 101.*

*Prerequisite or Corequisite: Students required to take this course must complete one of the following options: Student Development 106 (Connections: On Course for Success – 3 credit hours) OR Student Development 103 (Habits for Success – 1 credit hour).*

### **95 Reading/Writing Workshop II**

**5 credit hours**

Offered fall and spring semesters. Five hours lecture and discussion a week.

Students will engage in a variety of reading and writing activities, concentrating on logical interpretation of what they read and on clear expression of what they understand. Students will build their vocabularies as they encounter increasingly complex reading materials, and they will become more sophisticated writers and thinkers as they explore ideas through writing. This course fulfills the developmental requirements for students whose placement assessment scores indicate the need. Open to all students. This course does not meet associate degree graduation requirements.

*This course is limited to two attempts. A grade of A, B, C, D, F, W, R, or X is considered an attempt. The second attempt will require a minimum of one additional hour of instructional time each week in a designated ACM study lab.*

*Prerequisite: Appropriate placement assessment scores.*

*Prerequisite or Corequisite: Students required to take this course must complete Student Development 106 (Connections: On Course for Success – 3 credit hours).*

### **101 English Composition I**

**3 credit hours**

Offered fall and spring semesters and summer session. Three hours lecture and discussion a week.

Students develop skills in expository and argumentative academic writing by reading and responding to texts; by engaging in the writing process of prewriting, drafting, revising and editing; and by mastering the conventions of American Edited English. The course includes instruction in research methods such as use of library resources, documentation, citation, and the avoidance of plagiarism. Credit may be conferred by way of the CLEP general examination in English composition (with essay). Students seeking to earn credit by examination should consult their advisors.

Students must earn minimum grade of "C" to pass the course.

*Pre-Requisite: Appropriate placement assessment scores for reading and writing or successful completion of developmental reading and writing requirements (grade of "C" or better in English 92 or English 95).*

### **102 English Composition II**

**3 credit hours**

Offered fall and spring semesters. Three hours lecture and discussion a week. Check with advisor regarding transfer information.

Students further develop skills in academic writing introduced in English Composition I by reading, analyzing, interpreting, and evaluating texts, and by developing research-based argumentative essays. Research methods and use of a recognized documentation and citation style such as APA or MLA are emphasized.

*Prerequisite: English 101.*

### **103 Introduction to Literature**

**3 credit hours**

Offered fall and spring semesters. Three hours lecture and discussion a week.

Intended to introduce the student to literary forms and approaches to literary criticism, to increase his/her reading ability and analytical skills, and to lead the student to form standards of taste and judgment. Recommended for pre-law students, students in humanities or social and behavioral sciences, and all those whose chosen careers involve analysis, interpretation, and evaluation.

*Prerequisite: English 101.*

### **112 Business and Technical Communication**

**3 credit hours**

Offered fall and spring semesters. Three hours lecture, discussion, and writing exercises a week.

Emphasis is upon the development of practical skills in selection, organization, and presentation of data in technical reports and

communications frequently used in business, industrial, and scientific fields. Additional study will be done in the methods of investigating information and writing a research report.

*Prerequisite: English 101.*

**170 College Vocabulary Development 3 credit hours**

Offered fall and spring semesters. Three hours lecture and discussion a week.

Intended to systematically expand vocabulary development for improved communication skills. Emphasis placed on Greek, Latin and native English roots and affixes (prefixes and suffixes) so that the student can subsequently attempt to deduce the meaning of a new word that contains previously discussed morphemes. Contextual clues, etymology, semantic change, and the rules of spelling will also be treated.

*Prerequisite: English 93.*

**203 A Survey of European and Neo-European Literature 3 credit hours**

Offered spring semester of odd numbered years. Three hours lecture and discussion a week.

Students will read works, in translation, important to European and Neo-European cultures, such as selections from the Hebrew Bible, the literature of ancient Greece and Rome, Italian, French, Spanish, German and Russian literatures.

*Prerequisite: English 101.*

**213 Survey of American Literature 3 credit hours**

Offered fall semester. Three hours lecture and discussion a week.

A survey of American literature focusing on major authors and genres starting with the influence of Puritanism and following through with the fiction, drama, and poetry of the present.

*Prerequisite: English 101.*

**223 Survey of British Literature 3 credit hours**

Offered spring semester of even numbered years. Three hours lecture and discussion a week.

A survey of British Literature from the Old English period to the present. Students will read selections from such works as The Canterbury Tales, a Shakespeare play, and representative fiction and poetry.

*Prerequisite: English 101.*

**233 African American Literature 3 credit hours**

Offered fall semester, three hours lecture and discussion a week. An historical survey and critical examination of major African American writers from Colonial period to the present, emphasizing oral and literary traditions and cultural contexts.

*Prerequisite: English 101.*

**251 Creative Writing 3 credit hours**

Offered spring semester. Three hours lecture and discussion a week.

An introduction to many forms of creative writing, including the short story, the poem, and the one-act play. The student is encouraged to attempt original work in these and other forms.

*Prerequisite: English 101 or consent of instructor.*

**299 English Reading Project 1-4 credit hours**

This course is designed to facilitate the student's individual reading and research in the field of English. The student may choose to concentrate on one particular genre, author, period, or topic. Extensive reading will be required, with periodic discussions, and examinations, oral and written, and/or performances during the semester. May be repeated for credit.

*Prerequisite: English 101 and consent of instructor.*

**FOREST TECHNOLOGY (FOR)**

**101 Introduction to Forestry 2 credit hours**

Offered fall semester. Two hours lecture a week.

Includes the study of the historical development of forestry and forest policy in the United States and its relation to the welfare of the people and the national economy. Private and public forestland management and an introduction to the several fields of forestry will be examined.

**103 Tree Climbing 1 credit hour**

Offered fall semester. Five hours lecture and thirty hours laboratory a semester. Fee: \$150.00.

This course will teach the skills needed by the urban tree care professional in order to efficiently and safely work within the tree canopies of the urban forest. Professional arborist from the tree care industry will teach specific equipment use, techniques and skills beyond those expected of entry-level employees.

*Prerequisite: Consent of instructor.*

**112 Forestry Software Applications 2 credit hours**

Offered spring semester. One hour lecture and three hours laboratory a week. Fee: \$150.00.

One of the most useful technologies in the field of forestry today is the Geographic Information System (GIS). In this course, students will learn how to use ArcGIS software for forestry. The course will include practical applications of GIS for natural resources such as property mapping, geoprocessing, spatial analysis, and more. Upon completion of the course, students will be prepared to analyze spatial data and create visually appealing map documents for use in natural resource management. The course will begin with a brief overview of the use of Microsoft Office Suite and its applications in forestry and GIS.

*Prerequisite or Corequisite: Mathematics 102 or 119, or consent of instructor.*

**120 Land Surveying 3 credit hours**

Offered spring semester. Two hours lecture and three hours laboratory a week. Fee: \$150.00.

Lecture and field problems in established procedure of measuring angles, directions and distances to locate and designate property lines, boundaries and elevation differences. Traversing methods, map drafting, computation of land areas and using mapping grade Global Positioning System receivers to collect quality data and make professional maps will be covered.

*Corequisite: Mathematics 102 or consent of instructor.*

**122 Forest Measurements 3 credit hours**

Offered spring semester. Two hours lecture and three hours laboratory a week. Fee: \$150.00.

The basics of measuring forest products, grading and scaling techniques, log rules and volume tables; the measurement of the diameter, height, and volume of individual trees and stands. Estimating or "cruising" timber volumes, with emphasis on reliable and consistent field practices.

*Prerequisite: Forest Technology 101.*

*Corequisite: Mathematics 102 or consent of instructor.*

**221 Forest Products 3 credit hours**

Offered fall semester. Two hours lecture and three hours laboratory a week. Fee: \$150.00.

Wood properties and products will be examined extensively, including wood identification and mechanical and physical properties of wood. Products that are made from wood will be studied from the standing tree,

through the various manufacturing processes, to the finished product. Various wood utilization facilities will be visited.

*Prerequisite: Forestry 101 or consent of instructor.*

**222 Advanced Forest Measurements** **2 credit hours**  
Offered fall semester. One hour lecture and three hours laboratory a week. Fee: \$150.00.

This course is an extension of the basic Forest Measurements course. It includes statistical determination of cruising accuracy and the use of aerial photos for forestry purposes. The aerial photos portion will include stereoscopic viewing, identification of natural and man-made features, type mapping, area determination, boundary location, estimates of timber volume, and the use of aerial photos for planning purposes. Collection and analysis of data from a forest will take place in this course and will be used as a component of the management plan preparation for Forest Management (FOR 226). A complete statistical analysis will be completed using these data.

*Prerequisite: Forest Technology 112, 120, and 122.*

**223 Wildlife Management** **2 credit hours**  
Offered fall semester. One hour lecture and three hours laboratory a week. Fee: \$150.00.

Students will learn about the principles of managing the forest to support wildlife populations. Ecological concepts related to wildlife will be discussed as well as different forest management techniques and their impact on wildlife, current issues in wildlife management, and management of public lands for wildlife. This course includes a unit on fisheries management that analyzes freshwater habitat improvement. Additionally, students will be expected to identify common birds of the eastern United States.

*Prerequisite: Forest Technology 112 or consent of instructor.*

**224 Forest Recreation and Human Resource Management** **2 credit hours**  
Offered fall semester. One-hour lecture and one three-hour laboratory a week. Fee: \$150.00.

This course will examine the historical development of forest recreation as an integral consideration of forest management within private industry, state and local governments, and federal land management agencies such as the US Forest Service and the US Park Service. Management practices, that enhance recreational use of the forest, will be studied and implemented. Field trips will be taken to recreational facilities that depend on a natural environment. Additionally, various methods of dealing with the human resource will be examined. Personnel supervision and leadership styles will be presented which will enable the graduate to progress more naturally into a supervisory position.

*Prerequisite: Forest Technology 101 or consent of instructor.*

**225 Forest Insects and Diseases** **3 credit hours**  
Offered fall semester. Two hours lecture and three hours laboratory a week. Fee: \$150.00.

A study of common forest insects and diseases; identification of the organisms and the damage that they cause, as well as control measures, are emphasized.

*Prerequisite: Biological Science 110 and Forest Technology 101, or consent of instructor.*

**226 Forest Management** **3 credit hours**  
Offered spring semester. Two hours lecture and three hours laboratory a week. Fee: \$150.00.

This capstone course covers principles of forest management, including inventory, sustained yield, cost of forest management, silvicultural systems, regulation of cut, forest economics, tax strategies and challenges of multiple-use forestry. Students will complete a forest management plan

using data collected and analyzed in the Advanced Forest Measurements course.

*Prerequisite: Forest Technology 112, 120, 122, 222, 223, and 229.*

**227 Forest Fire Control** **2 credit hours**  
Offered spring semester. One hour lecture and three hours laboratory a week. Fee: \$150.00.

Students will complete the online training necessary to obtain their Red-Card certification for Maryland Type II Wildland Firefighting. This training covers the incident command system, fire suppression, firefighter safety, fire weather, and other topics related to forest fire control. Students will study catastrophic fires in order to understand forest fire control techniques and the evolution of firefighter safety. The course will also examine forest fire history in the United States, fire ecology and the role of fire in forests, prescribed fire, and managing the wildland urban interface.

**228 Urban Forestry** **3 credit hours**  
Offered spring semester. Two hours lecture and three hours laboratory a week. Fee: \$150.00.

A study of trees and tree communities in urban situations including shade, ornamental and street side trees. Tree inventory, valuation, selection, planting, climbing, pruning, maintenance and care and diagnosis of problems will be covered. This course is intended to give additional skills to individuals who are serious about becoming a part of the urban tree care industry as well as those more traditional forestry students. It should provide skills as well as professional credentials that will enhance employment opportunities for students enrolled in the Tree Care Technician Certificate program as well as the Forest Technology Curriculum.

*Prerequisite: Forest Technology 101 or consent of instructor.*

**229 Silviculture** **4 credit hours**  
Offered fall semester. Two hours lecture and one six-hour laboratory a week. Fee: \$150.00.

Introduction to climactic, soil, and biotic factors affecting the composition and growth of forest stands; development of trees and stands with respect to height, diameter, volume growth, and reproduction; improvement and reproduction of forest stands, employing basic silvicultural practices of weeding and improvement cuttings, thinnings, pruning, reproduction cuttings, and marking of stands prior to logging; principles of artificial establishment of forest plantations, including site evaluation, selection of species, nursery production and management, and seeding and planting methods.

*Prerequisite: Forest Technology 101 and Biological Science 214.*

**250 Harvesting and Primary Manufacturing** **3 credit hours**  
Offered summer session. Five eight-hour days for four weeks. Fee: \$150.00.

Students will participate in a timber harvesting operation including planning the harvest, methods of harvesting, operation of logging equipment, business methods, and marketing of wood products. Students will gain experience in various primary wood manufacturing methods.

*Prerequisite: Forest Technology 112, 120, and 122.*

**251 Forest Measurement and Surveying Field Practices** **4 credit hours**  
Offered summer session. Five nine-hour days a week for three weeks. Fee: \$150.00.

This course covers field techniques in surveying and mapping large land ownerships. Emphasis is placed on determining property ownership through deed research, conversation with the land owner and abutters, and the use of various technologies including GPS receivers and GIS maps. Students will apply various field inventory methods, tools and data analysis techniques to compare forest stands.

*Prerequisite: Forest Technology 112, 120, and 122.*

**254 Urban Forestry Internship** **2 credit hours**  
Offered spring semester. Forty hours a week for four weeks.

This experience is intended to present most of the activities associated with being a professional within the urban tree care industry. The student is expected to fully participate in activities that may include customer relations, contracts and sales, Integrated Pest Management, right-of-way clearing, landscape development, tree pruning, fertilization, maintenance and removal as well as an understanding of the maintenance, management and safety issues involved in the operation of a successful tree care company or department. This position may be undertaken on a volunteer or a for-pay basis and must encompass at least 160 hours of documented work with an approved private tree care company or urban tree care division within state, federal or city government.

*Prerequisite: Forest Technology 103 and Biological Science 213.*

**299 Forest Special Topics** **1-4 credit hours**  
Study or field project in forestry under the supervision of a staff member. This course is intended for qualified sophomore standing students with special interest in a forestry topic. Any unusual costs, travel, and special supplies, will be borne by the student.

A sophomore status and instructor consent required to take this course.

*Prerequisite: Forest Technology 101, sophomore standing, and consent of instructor.*

## GEOGRAPHY (GEOG)

**102 Cultural Geography** **3 credit hours**  
Offered fall and spring semesters. Three hours lecture and discussion a week. Inclusive Access Fee: \$47.00.

The elements of geography are studied through regional delineation to understand utilization of one's surroundings. Geographical interpretations of international relationships are emphasized.

## HISTORY (HIST)

**101 History of Western Civilization I** **3 credit hours**  
Offered fall semester. Three hours lecture and discussion a week.

The development of Western civilization and its worldwide influence. Emphasis on the evolution of military, political, social, and economic institutions, as well as the cultivation of arts (prehistory to 1500).

**102 History of Western Civilization II** **3 credit hours**  
Offered spring semester. Three hours lecture and discussion a week.

The contest for world empire, liberal and national movements, revolutions, economic, social, and scientific changes, imperialism, First World War, Soviet Russia, the rise of fascism, and the Second World War and its aftermath (1500 to the present).

**103 United States History I** **3 credit hours**  
Offered fall semester. Three hours lecture and discussion a week.

A survey of the impact of various forces on American life, ranging from European background to the close of Reconstruction.

**104 United States History II** **3 credit hours**  
Offered spring semester. Three hours lecture and discussion a week.

A study of industrial, economic, and social developments in the United States from the end of Reconstruction to modern times, including an analysis of conflicts, which have shaped contemporary events.

**105 Contemporary World History** **3 credit hours**  
Three hours lecture and discussion a week.

This course is a survey of the major forces and events, which have shaped the modern world. Topics include the causes and results of world wars, the rise of communism, the development of fascism and Nazism, the decline of colonialism and the emergence of the third world, the Cold War, the impact of technology and science on the twentieth century, and prospects for the future. History 105 is designed to meet the specialized needs of the career and transfer student.

**178 Local History** **3 credit hours**  
Three hours lecture and discussion a week.

A survey of the development of Allegany County and surrounding area from earliest times to the present. All aspects of the story of regional development will be examined, including social, economic and architectural history. Emphasis will be placed on ways in which local development mirrored the major themes of national history and the ways in which the region was affected by national events.

*Prerequisite: History 103 and 104 are recommended.*

**298 Special Topics in History** **3 credit hours**  
This course is designed to address a range of historical topics in the field of history. The format and content will vary depending on the course topic. The course will cover topics that are otherwise beyond the scope of a 100 level history course. This course is repeatable for up to 6 credits.

*Prerequisite: One History course or consent of instructor.*

**299 History Reading Project** **3 credit hours**  
Individual reading and periodic discussions.

This course is designed to allow the student to do individual reading in topics of interest in history under the guidance of an instructor. The reading of approximately fifteen books will be required, with periodic written reports, discussions, and examinations throughout the semester.

*Prerequisite: Sophomore standing with 2.00 average or higher and consent of instructor. Priority will be given to history majors.*

## HOSPITALITY MANAGEMENT (HRMG)

**101 Introduction to Hospitality** **3 credit hours**  
Offered fall semester. Three hours lecture and discussion a week. Fee: \$200.00.

A survey of the history, organization, opportunities, and problems of the hospitality industry. Includes departmental functions, personnel practices, and typical job requirements. Emphasis will be on current trends and developments in the industry. The nature and scope of management functions in the industry will be discussed with emphasis on operation practices and problems.

**102 Brewing History and Introduction** **3 credit hours**  
Offered fall semester. Three hours lecture per week. Fee: \$200.00.

This course provides an introduction to fermented products and their history. Emphasis will be placed on agriculture, production, product characteristics and taxonomy. Career opportunities in the brewing industry will be highlighted.

**105 Sustainable Brewing** **3 credit hours**  
Offered fall semester. Three hours lecture per week. Fee: \$250.00.

This course introduces aspects of environmental sustainability in brewery design and operation. Topics include: wastewater consumption and disposal; waste reduction; utility usage; recycling; design considerations for sustainable development.

**110 Food Service Sanitation** **1 credit hour**  
Offered fall and spring semesters. One-hour lecture a week. Fee: \$200.00.

This course emphasizes principles of safe food handling and preparation. Topics include: causes of food borne illness; safe food purchasing, storage

and preparation; insect and rodent control; and government regulations pertaining to food service sanitation. Upon completion of the course, students will take the national ServSafe examination offered by the National Restaurant Association.

**115 Brewing Equipment/Maintenance** **3 credit hours**  
Offered fall semester. Two hours lecture per week and 50 hours practicum per semester. Fee: \$200.00.

This course provides an overview of the various types of equipment used throughout the modern brewing process. Emphasis is placed on the cleaning, sanitizing, care, and maintenance of equipment so that all laws and regulations regarding brewing are followed. Students will be able to troubleshoot common equipment malfunctions in the production process.

**125 Brewing Methods and Production** **3 credit hours**  
Offered fall semester. Two hours lecture per week and 50 hours practicum per semester. Fee: \$250.00.

This course introduces and develops entry-level skills in craft beer brewing. Topics include recipe development, techniques and equipment used in the production of craft beer, packaging, storage, and product delivery.

**165 Catering Operations** **3 credit hours**  
Offered Spring Semester. Two hours lecture and fifty hours practicum a semester. Fee: \$250.00.

This course provides students with a comprehensive hands-on experience in planning, starting, and operating a successful catering business. Whether on premise, inside a hotel, part of a restaurant or small commercial kitchen, the student will develop the necessary skills in production and management to become a qualified, competent, and creative caterer.

**200 Sensory Evaluation of Beer** **3 credit hours**  
Offered spring semester. Two hours lecture per week and 50 hours practicum per semester. Fee: \$250.00.

This course provides an introduction to the critical evaluation and judging of a beer's sensory properties. Students will learn the vocabulary associated with judging and will develop their ability to identify a wide range of beer flavors and detect defects in beer.

NOTE: Students must be age 21 or older prior to enrolling in this course and provide appropriate documentation.

*Prerequisite: Hospitality Management 102, 115, and 125.*

**203 Hospitality Purchasing, Inventory, and Cost Control** **3 credit hours**  
Offered spring semester. Two hours lecture and five hours practicum a week for ten weeks. Fee: \$200.00.

Topics include selections, procurement, and inventory procedures for foods, supplies, and services in the hospitality industry. Special emphasis is placed on determining correct order sizes and times, security procedures, and quality control.

*Prerequisite: Hospitality Management 101, concurrent registration, or consent of instructor.*

**204 Menu Planning and Food Merchandising** **3 credit hours**  
Offered fall semester. Two hours lecture and five hours practicum a week for ten weeks. Fee: \$250.00.

A course designed to interrelate nutrition, cost, personnel, equipment, and customer appeal in menu development. Includes discussions of food presentation and actual practice in preparing and costing a menu.

*Prerequisite: Hospitality Management 101, 160, and 203, or consent of instructor.*

**205 Food and Beverage Cost Control** **3 credit hours**  
Offered spring semester. Two hours lecture and fifty hours practicum a semester. Fee: \$200.00.

A course to examine, with examples and applications, the process of forecasting, budgeting, staffing, and purchasing. Emphasis is placed on the check and balances necessary to achieve and continue to improve business profitability.

**207 Principles of Event Management** **3 credit hours**  
Offered fall semester. Three hours lecture per week. Fee: \$250.00.

This course will introduce the key principles of event management. Students will develop an understanding of the roles and responsibilities of an Event Manager. Emphasis will be placed on site selection, vendor selection, staff scheduling, and event coordination.

**209 Front Office Management** **3 credit hours**  
Offered fall semester. Three hours lecture a week. Fee: \$200.00.

An examination of lodging and resort organization and services. Emphasis is placed on front office procedures such as reservations and registrations, accounting principles, salesmanship, operating systems, and human relations.

*Prerequisite: Hospitality Management 101.*

**210 Internship I** **5 credit hours**  
Offered summer session. Two hours lecture and one hundred hours practicum a semester. Fee: \$250.00.

Supervised on-the-job training in approved hospitality businesses. Placement and supervision is coordinated by the College.

*Prerequisite: Hospitality Management 101, 203, and 204.*

**211 Hospitality Supervision** **3 credit hours**  
Offered fall semester. Three hours lecture a week. Fee: \$200.00.

Human resources management in foodservice operations presents special challenges. This course will review supervision, leadership, staffing, performance evaluations, delegation, and diversity. In addition, students will develop job-seeking skills in their career field of interest.

*Prerequisite: Hospitality Management 210 or Culinary Arts 250 or concurrent registration.*

**218 Hospitality Marketing** **3 credit hours**  
Offered spring semester. Three hours lecture a week. Fee: \$200.00.

Elements of marketing as applied to the hospitality industry. Topics include the analysis of marketing opportunities, fundamentals of advertising and promotion, feasibility studies, and public relations. The differences between marketing products and services will be stressed.

*Prerequisite: Hospitality Management 101, 203, and 209.*

**219 Mechanics of Event Management** **4 credit hours**  
Offered fall semester. Two hours lecture per week and fifty hours practicum per semester. Fee: \$250.00.

A course intended to develop and enhance skills in planning events for private, corporate and industry clients, including milestone parties, retreats, product launches and more.

**220 Internship II** **5 credit hours**  
Offered spring semester. Two hours lecture and one hundred hours practicum a semester. Fee: \$250.00.

Supervised on-the-job training in approved hospitality businesses. Placement and supervision is coordinated by the College. Contact hours at the placement site increase in this second internship.

*Prerequisite: Hospitality Management 210 or consent of instructor.*

### 230 Event Production Internship

**5 credit hours**

Offered spring semester. Two hours lecture per week and one hundred hours practicum per semester. Fee: \$250.00.

This course is designed to provide intermediate and advanced levels of knowledge in special event creation and execution, along with the necessary organizational, site, design, production and execution strategies. Emphasis is placed on balancing corporate objectives and cost ratios, design objectives, vendor management, risk management plans, communications, timelines, production schedules and post-event analysis. A key component of the course will focus on integrating food truck operations into event planning, covering aspects such as menu selection, vendor negotiation, logistics for on-site service, compliance with health regulations, and enhancing guest experience through diverse culinary offerings.

*Prerequisite: Hospitality Management 207 and 219.*

## HUMAN SERVICE ASSOCIATE (HSRV)

### 102 Introduction to Mental Health Perspectives

**3 credit hours**

Offered fall semester.

This course will introduce the student to difficulties faced by those diagnosed with mental illness. Students will gain an overview of the population's unique service needs within a holistic and person-centered approach. Course work will include client advocacy, stigma within the field, connecting of resources, and the importance of self-care for the helper and those they support.

*Prerequisites: Sociology 104.*

### 103 Group Process

**3 credit hours**

Offered fall semester. Two hours lecture and two hours laboratory a week. Fee: \$65.00. Learning Harbor Fee: \$25.00. Criminal Background Check Fee: \$39.00.

Students practice skills needed to lead task, education, growth, support, and therapeutic groups and also complete a team-based advocacy project with clients at a local agency. An experiential lab focuses on personal goal setting, group dynamics, stages of group development, and basic group work skills. Self-awareness regarding interpersonal style and communication patterns is developed and mind/body skills applied to personal renewal and professional practice.

In order to successfully pass this course, student must achieve a grade of "C" or better.

*Prerequisite: Sociology 104 and approval of Human Service Admissions Committee.*

### 111 Introduction to Case Management

**3 credit hours**

Offered spring semester.

Students will be provided with foundational training in case management encompassing historical insights, service delivery methodologies, and engagement with diverse populations. Furthermore, the curriculum will encompass theoretical and practical aspects of case management, assessment techniques and intake interviewing procedures. A comprehensive examination of the ethical and legal aspects concerning client confidentiality will be undertaken, with a focus on the practical application through case study analyses. Additionally, the course will explore documentation practices within the helping profession, equipping students with the necessary skills to proficiently gather data, formulate treatment plans, and write professional progress notes.

*Pre-requisite Sociology 104.*

### 123 Introduction to Counseling and Interviewing

**3 credit hours**

Offered fall semester. Two hours lecture and three hours laboratory/simulation a week. Fee: \$55.00. Theravue Software Fee: \$59.00. MBTI Profile Fee: \$49.00.

Students are introduced to basic counseling, case management, ethical decision-making, and cultural competency skills. Role plays and case study lab application are used to practice the active listening skills, genuineness, empathy, and unconditional positive regard required for building a therapeutic relationship. Simulation sessions will focus on skills needed for telehealth and students will practice online role play using the Theravue Simulation Program. Self-reflection on professional practice is used to enhance personal development.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Sociology 104 and approval of Human Service Admissions Committee.*

### 170 Helping Techniques I

**3 credit hours**

Offered spring semester. Two hours lecture and three hours laboratory/simulation a week. Fee: \$65.00. Theravue Software Fee: \$59.00.

Students are introduced to therapeutic approaches used in the helping field. The approaches include Adlerian Therapy, Person Centered Therapy, Gestalt Therapy, Reality Therapy, Behavior Therapy, and Cognitive-Behavior. Laboratory sessions focus on developing skills in Solution Focused therapy, case management practice, and ethical decision-making. Simulation sessions will focus on skills needed for telehealth and students will practice online role play using the Theravue Simulation Program.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Human Service 103 and 123.*

### 190 Human Service Practicum I

**4 credit hours**

Offered spring semester. Three hours lecture and two hours of clinical simulation lab. Fee: \$55.00.

The focus of this Clinical Simulation course is on preparing students for fieldwork and the workforce. Students will participate in 3 hours of lecture and 2 hours of clinical simulation. Course work will include case management, stages of change, self-care, professionalism, work ethic, utilizing field work supervision, and client advocacy. Clinical simulation will involve appropriate documentation, case study analysis, mock interviews, supervisor/intern role plays, and team building exercises.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Human Service 103 and 123.*

### 201 Helping Techniques II

**3 credit hours**

Offered fall semester. Two hours lecture and three hours laboratory/simulation a week. Fee: \$65.00. Theravue Software Fee: \$59.00. EHR Go Fee: \$70.00.

The focus for this advanced course in Helping Techniques will include skills for working with individual with substance use disorders and children/adolescents with mental health and behavior disorders. Students will also learn about and demonstrate skills for Cognitive Behavior Therapy.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Human Service 170 and 190.*

### 207 Human Service Practicum II

**5 credit hours**

Offered fall semester. Two hours lecture and minimum twelve hours field work a week. Fee: \$55.00. Trajecsys Access Fee: \$58.00.

Students practice skills in basic crisis intervention with specific emphasis on the application of mind/body skills and brain science to crisis situations. Basic concepts in trauma informed care are introduced. Knowledge of specific service populations (battered women, suicide victims, bereaved individuals, victims of sexual assault and others) is acquired. Case management skills in assessment, documentation, and service planning are applied to a case study and to client record keeping and political action



strategies for social change are examined. In preparation for graduation, future career directions that build on the human service degree are explored. Students complete a semester of fieldwork at one placement site supervised by the cooperating agency, institution, or school.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Human Service 170 and 190.*

### **210 Human Service Practicum III 5 credit hours**

Offered spring semester. Two hours lecture, two hours small group laboratory and ten hours practicum a week. Fee: \$55.00. Trajecs Access Fee: \$58.00

Working in groups, students complete a capstone project on a social and political action issue which demonstrates competencies acquired in group work, nonviolent communication, leadership, civic engagement, workforce wellness, advocacy, and oral/written communication. Students learn and practice skills in program planning and community organization as well as complete a career-planning unit in preparation for employment. Students complete a semester of fieldwork at one placement site supervised by the cooperating agency, institution, or school.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Human Service 201 and 207.*

### **230 Human Service Clinical Skills Capstone 3 credit hours**

Offered spring semester. EHR Go Fee: \$70.00. Theravue SW Fee: \$59.00.

The focus of this course will be on professional documentation using an electronic health record for gathering client data and utilizing all skills in the development of a therapeutic relationship with clients. Students will practice working with a "client" throughout the semester and using the evidence-based practices of Solution Focused and Cognitive Behavior Therapies. A professionally written capstone paper that provides a narrative on their "client" and identifies all the skills learned throughout the 4 semesters of the program will be completed.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Human Service 201 and 207.*

### **297 Addictions Internship for Licensure 1-6 credit hours**

This course provides an agency internship in addictions counseling and service delivery for individuals who are preparing for the Maryland State Addictions Board Licensing examination. Students will be assigned to one addictions program/agency for the entire semester. Participation in fieldwork will be supervised by the instructor of the course and the cooperating agency, institution, or school. May be repeated for up to six credits.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Enrollment in or completion of an approved Maryland Addictions Licensing Board Associates or Bachelor's Degree program and written approval of an addictions services employer who is willing to provide a field placement and supervision for the student. Instructor consent required.*

### **298 Special Topics in Human Service 1-4 credit hours**

Offered fall and spring semesters.

This course is designed to address a range of topics and emerging areas of evidence-based best practices in the field of human service. The format and credits offered vary depending on the course content.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Instructor consent required.*

### **299 Independent Study**

**1-4 credit hours**

Offered fall and spring semesters.

This course is designed to allow students in the Clinical Phase of the Human Service Program the opportunity to pursue advanced study or research on topics of individual interest related to the helping professions. Approval by the Human Service Program Coordinator to pursue Independent Study Program is required. This course may be repeated for credit (up to a maximum of 8 credits), based upon approval of the Human Service Coordinator.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

## **HUMANITIES (HUM)**

### **100 Mini-Civilizations**

**3 credit hours**

Two hours lecture a week and one-hour discussion.

A survey of the major art forms and cultural epochs of the western world, exploring the idea that the arts reflect the work in which they are produced. The course ties together worldviews, philosophical schools, historical events, and major art forms, including painting, sculpture, architecture, and music in different eras. Included are the epochs of the Greeks, Romans, Middle Ages, Renaissance, Baroque, Enlightenment, Romanticism, Early Industrial Era, and the modern world. The course includes an introduction to major art forms.

### **110 Interdisciplinary Leadership I**

**3 credit hours**

Offered fall and spring semesters and summer session. Meets forty-five hours a semester. Meeting times vary. Please check the semester schedule. Fee: \$175.00 (Non-refundable). Book Rental/Shirt Fee: \$90.00.

This interdisciplinary course focuses on the development of leadership ability. Using classic films, literature, contemporary essays, and experiential activities, the course provides participants with a basic understanding of leadership and group dynamics theory, assists in identifying a personal leadership philosophy and style, creates an awareness of the moral and ethical responsibilities of leadership, and provides the opportunity to practice essential leadership skills. Readings are drawn from the works of classic writers as well as contemporary experts from the fields of business, human resources, political science, history, sociology, psychology, and the humanities.

### **210 Interdisciplinary Leadership II**

**3 credit hours**

Offered fall and spring semesters. Meets forty-five hours a semester. Meeting times vary. Please check the semester schedule. Fee: \$750.00 (Non-refundable).

This course will emphasize the application of Leadership skills learned in Leadership I and explore emerging issues in the field of Leadership. Additional discussions and experiential activities will include topics in creativity and risk taking, conflict resolution, cultural diversity, appropriate use of humor and changes in leadership context and its consequences. Analysis of contingency models and different leadership styles will also be included.

*Prerequisite: Humanities 110 or consent of instructor.*

### **298 Special Topics in Humanities**

**1-3 credit hours**

Students enrolled in Humanities 298 will study special topics using an integrated approach of the humanities discipline such as language and culture, philosophy, religion, and/or arts. Students will apply the tools of humanities—reading texts, research, critical reasoning and analysis, to expand the breadth and depth of inquiry in a special topic. In addition to examinations, students will produce written, oral and/or visual projects. The course may be repeated for credit. Instructor consent is required to take the course.

*Prerequisite: English 101 or consent of division chair.*

## INTEGRATIVE HEALTH (IHLT)

**101 Mind/Body Skills for Health and Healing** 1 credit hour  
Meets fifteen hours a semester. Meeting times vary. Please check the semester schedule. Fee: \$10.00.

This course will provide an experiential introduction and appreciation of the relationship among Mind/Body skills, group processes, and healing. Students will develop self-awareness about their unique response to stress and relaxation, the connection between this response and wellness, and the healing power of relationships. Utilizing a variety of Mind/Body skills such as meditation, biofeedback, breathing and imagery, students will acquire basic skills essential to personal health and professional practice.

**106 Introduction to Energy Healing** 1 credit hour  
Meets fifteen hours a semester. Meeting times vary. Please check the semester schedule. Fee: \$10.00.

This course introduces basic components of evidence based energy healing. Students learn the anatomy of subtle body energies and acquire an overview of various types of energy healing and the research that supports their effectiveness in health care settings. Reiki, Chi Gong, thought field analysis and other energy-based approaches will be covered.

**107 Energy Healing II** 1 credit hour  
Meets fifteen hours a semester. Meeting times vary. Please check the semester schedule. Fee: \$10.00.

This course builds on the basics taught in Introduction to Energy Healing. Students continue their learning of energy systems through working with the chakras and reiki in connection with evidenced based research.

*Prerequisite: Integrative Health 106.*

**109 Becoming A Healing Presence** 2 credit hours  
Two hours lecture a week. Fee: \$10.00.

This course equips students with the knowledge and tools to be a healing presence in any situation whether professional or personal. Students will explore empirical evidence from the healthcare perspective of the meaning of presence and of healing. Practice logs, group discussions, and experiential exercises will be used to deepen understanding of what it means to be present to another person.

**110 Tai Chi** 1 credit hour  
Two and a half hours of lecture, demonstration, and participation a week. Fee: \$10.00.

This course will provide students with the knowledge and skills to perform Tai Chi, a Chinese martial art and meditation that combines a series of movements with mental concentration and coordinated breathing. Topics to be discussed are: Tai Chi movements, the history of Tai Chi, and how to incorporate Tai Chi into your lifestyle.

**111 Introduction to Qigong** 2 credit hours  
Two hours lecture and experiential learning activities each week. Fee: \$10.00.

This course provides an introduction to the ancient Chinese mind/body/spirit practice of Qigong. Through a combination of lecture and experiential learning, the class will provide an overview of the research on health applications of Qigong, a foundational understanding of the philosophy and historical development of Qigong, and an introduction to the basic practice of this ancient form of "moving meditation".

**112 Spirituality and Healing Traditions** 1 credit hour  
Meets fifteen hours a semester. Meeting times vary. Please check the semester schedule. Fee: \$10.00.

This course explores the many facets of the world's wisdom and healing traditions in order to apply diverse spiritual approaches to personal health and professional practice. Emphasis will be upon developing an understanding of one's own spiritual beliefs and resources within the

multi-cultural context of the world's spiritual traditions. Students will utilize research, self-reflection, and practical application to identify the unique aspects of each tradition as well as the commonalities which underlie all of the areas studied. This course is especially appropriate for students entering the healthcare, social service, or education professions.

**114 Integrative Approach to Health and Healing** 2 credit hours  
Offered fall and spring semesters. Two hours lecture a week. Fee: \$10.00.

This course provides an overview of the philosophy, principles, and practices of integrative health care - holistic (mind/body/spirit) approach to health and healing based on a partnership between the health care provider and the patient in which conventional, complementary, and self-care strategies are used to stimulate and support the body's natural healing potential. Students will examine current research on such complementary and self-care practices including massage, meditation, imagery, prayer, yoga, tai chi, acupuncture, humor, expressive arts, and others. The role of relationships, self-awareness, beliefs, spirituality, and emotions in health and healing will also be examined. Field trips, lecture, film, demonstration, and experiential activities enable the student to apply course content to personal and professional practice.

**126 Yoga for Wellness I (Physical Education 126)** 1 credit hour  
Offered spring semester. Two hours a week. Fee: \$10.00.

This course includes the history, basic skills, principles, and Yoga postures to develop a personal routine for mental, physical, and spiritual training. Students will develop an understanding of how Yoga can improve physical flexibility and control relaxation to harmonize the body, mind, and spirit.

**127 Yoga for Wellness II (Physical Education 127)** 1 credit hour  
Two hours a week. Fee: \$10.00.

This class will build on the skills learned in Integrative Health 126 and will also focus on the healing benefits of Asana (posture), Pranayama (breathwork), and Meditation. More advanced asanas will also be explored, including inversions.

*Prerequisite: Integrative Health 126.*

**230 Introduction to Health Psychology** 3 credit hours  
(Psychology 230)  
Offered spring semester. Three hours lecture and discussion a week. Fee: \$10.00.

This course provides an introduction to the field of health psychology. Course content includes an overview of scientific principles and current research findings; applications to specific diseases, stress management, and to health promotion; demonstration of the most widely used and effective intervention strategies; and the role of health psychology and mind/body medicine in health care practice. Experiential learning, lecture, and a case-based approach are the primary teaching learning approaches.

*Prerequisite: Psychology 101 or consent of instructor.*

**298 Special Topics in Integrative Health** 1-4 credit hours  
Offered fall and spring semesters. Fee: \$10.00.

This course is designed to address a range of topics and emerging areas of evidence-based practice in the field of integrative health. The format and credits offered varies depending on the course content and will be of special interest to allied health, education, and human service professionals and students.

## LEGAL STUDIES (LEGL)

**101 Introduction to Legal Studies** 3 credit hours  
Offered fall semester. Three hours lecture a week. Fee: \$50.00.

This course is designed to provide the student with the necessary foundation to comprehend the basics of law. The course covers the development of the law. The course will also introduce students to various areas of the law including torts, criminal law, contract law, and others. The

course will also provide an overview of legal terminology to prepare the student for future legal studies courses.

#### 104 Litigation 3 credit hours

Offered spring semester. Three hours lecture a week. Fee: \$55.00.

Examines stages of civil law suits, from pre-trial preliminaries through trial and post-trial procedures. Covers gathering information through client interviews; drafting of pleadings, motions, and other documents; discovery and disclosures; preparation of briefs and memoranda.

#### 202 Legal Research and Writing 3 credit hours

Offered spring semester. Three hours lecture and discussion a week. Fee: \$55.00.

Learn and apply advanced legal research techniques, electronic legal research, and advanced legal writing techniques. Explore federal and state legal research issues, multi-jurisdictional practice, and emerging trends in legal research. Learn and apply advanced writing skills to prepare legal memoranda, briefs, and other legal documents.

*Prerequisite: Legal Studies 101 and English 101 or consent of instructor.*

#### 203 Family and Estate Law 3 credit hours

Offered fall semester. Three hours lecture and discussion per week. Fee: \$55.00.

Explore laws governing the family, parenting, custody, wills, estates and trusts. Analyze legal matters relating to marriage, divorce, custody, child support, adoption, and related topics. Examine the Paralegal's role in the client relationship, including drafting documents, administering wills and estates, and organizing trusts.

#### 204 Real Property and Title Examination 3 credit hours

Offered spring semester. Three hours lecture a week. Fee: \$55.00.

This course will examine the basic principles of real property law, including the creation of various estates and interests in land, shared ownership, easements, covenants, mortgages, and deeds of trust. Students will gain practice in the preparation of documents such as leases, sales contracts, settlement statements, deeds, notes, mortgages, and other documents. Students will also be exposed to the rudiments of title examination.

#### 206 Torts 3 credit hours

Offered spring semester. Three hours lecture a week. Fee: \$55.00.

Introduces the elements of tort law; negligence, duty of care, foreseeability, proximate cause, breach, damages and recovery, specific torts, and their defense. Examines pre-trial, trial, and appellate procedures.

### MESSAGE THERAPY (MASG)

#### 101 Introduction to Massage Therapy 1 credit hour

Fee: \$25.00.

This course will provide an overview of the history of touch and massage. The benefits and effects of touch will be explored through experiential learning and literary searches. The various modalities, cultural diversities and professional ethics of massage will be addressed.

#### 103 Massage Anatomy, Physiology and Movement 3 credit hours

Offered fall semester. Two hours lecture and three hours laboratory a week. Fee: \$75.00. Exam Coach Fee: \$65.00.

This course will build on the basic anatomy and physiology concepts. It is an in-depth study of the musculoskeletal system specific to massage, and functional movement as it applies to massage.

*Prerequisite: Massage Therapy 101.*

#### 104 Anatomy and Physiology Interrelationships 2 credit hours

Offered spring semester. Two hours lecture a week. Fee: \$75.00.

This course will explore the structure and function the various systems of the body. Classes will address the interrelationship of the mind body connection. Energy anatomy will also be examined.

*Prerequisite: Successful completion of first semester Massage Therapy courses.*

#### 108 Clinical Practice I 1 credit hour

Offered spring semester. Three hours of clinical a week. Pass-fail grading. MBLEX Exam Fee: \$265.00. Nurse Managed Wellness Clinic Fee: \$60.00.

This course will provide clinical experience for students in massage therapy and advanced massage techniques. Students will spend three hours each week in the clinical setting performing massage therapy on clients under professional supervision of a massage therapist.

*Prerequisite: Successful completion of first semester Massage Therapy courses.*

#### 110 Holistic Approach to Wellness 1 credit hour

Offered spring semester. Meets 15 hours a semester. Meeting times vary. Please check semester schedule. Fee: \$50.00.

This course will address self-care as it relates to massage therapy. Students will explore wellness by examining levels of health including, but not limited to, such issues as self responsibility, eating, exercise, play, movement, work, stress, and transcendence from the holistic perspective.

#### 113 Principles of Massage Therapy I 4 credit hours

Offered fall semester. Two hours lecture and seven hours laboratory a week. Fee: \$150.00. Criminal Background Check Fee: \$62.00.

This course will provide experiential learning for students in Swedish massage. Students will spend nine hours each week learning theory and principles of Swedish massage as well as practical application of the techniques along with cautions and contraindications.

*Prerequisite: Massage Therapy 101.*

#### 118 Clinical Practice II 1 credit hour

Offered summer session. Four hours two days a week for six weeks. Pass-fail grading. Fee: \$150.00. Nurse Managed Wellness Clinic Fee: \$60.00.

The student will use and perfect skills developed during the first year of the program.

*Prerequisite: Successful completion of second semester Massage Therapy courses.*

#### 120 Principles of Massage Therapy II 4 credit hours

Offered spring semester. Two hours lecture and seven hours laboratory a week. Fee: \$150.00.

This course will provide experiential learning for students in Deep Tissue massage. Students will spend seven hours each week learning theory and principles of Deep Tissue massage as well as practical application of the techniques along with cautions and contraindications.

*Prerequisite: Successful completion of first semester Massage Therapy courses.*

#### 201 Legal and Ethical Topics in Massage Therapy 2 credit hours

Offered fall semester. Two hours lecture a week. Fee: \$50.00.

This is an introduction to the legal and ethical issues of the professional practice of massage therapy including the role of the practitioner, relationships with other health care providers, privacy and confidentiality. Other topics to be included are liability, malpractice, and negligence. This course is designed to provide information about legal and ethical research topics and new developments in Massage Therapy.

*Prerequisite: Successful completion of second semester Massage Therapy courses.*

**205 Pathology for Massage Therapy** **3 credit hours**  
Offered fall semester. Two hours lecture a week. Fee: \$50.00.

This course will cover etiology, signs, symptoms, and treatments of diseases, disorders, and injuries commonly requiring special considerations in a massage practice.

*Prerequisite:* Successful completion of second semester Massage Therapy courses.

**206 Integrating Massage Therapy and Business Topics** **2 credit hours**  
Offered spring semester. Two hours lecture a week. Fee: \$50.00.

This course is designed to provide an overview of operating a massage therapy business. Business structure, functions, and past business problems will be explored. Practical application for massage therapists is the focus. This course will also provide research on business topics within the field of Massage Therapy.

*Prerequisite:* Successful completion of third semester Massage Therapy courses.

**207 Principles of Massage Therapy III** **4 credit hours**  
Offered fall semester. Five hours lecture, discussion, and application a week. Fee: \$125.00.

This course will provide experiential learning for students in advanced massage therapy modalities such as lymphatic drainage technique.

*Prerequisite:* Students are required to have successfully completed the second semester of the massage therapy courses.

**209 Clinical Practice III** **1 credit hour**  
Offered fall semester. Three hours clinical a week. Pass-fail grading. Fee: \$150.00. Nurse Managed Wellness Clinic Fee: \$60.00.

This course will provide clinical experience for students in massage therapy and advanced massage techniques. Students will spend three hours each week in the clinical setting performing massage therapy with the client.

*Prerequisite:* Successful completion of third semester Massage Therapy courses.

**210 Clinical Practice IV** **2 credit hours**  
Offered spring semester. Six hours of clinical a week. Pass-fail grading. Fee: \$150.00. Nurse Managed Wellness Clinic Fee: \$60.00. FSMTB Mock Exam Fee: \$25.00.

This course will provide clinical experience for students in massage therapy, advanced deep tissue work, and medical massage. Students will spend six hours each week in the clinical setting performing massage therapy with a variety of techniques and manipulations on clients under professional supervision of a massage therapist.

*Prerequisite:* Successful completion of third semester Massage Therapy courses.

**218 Current Trends in Massage Therapy** **3 credit hours**  
Offered spring semester. Three hours lecture per week. Fee: \$100.00.

This course will examine current trends in massage therapy, and will include the exploration of published research into massage therapy, along with the introduction of hot stone massage, neuromuscular therapy, movement modalities, and self-care for massage therapists.

*Prerequisite:* Successful completion of third semester Massage Therapy courses.

**221 Internship I** **1 credit hour**  
Offered spring semester. One hour lecture a week. Forty-five hours practicum a semester.

This course is designed to offer students on-the-job experience in an accredited medical setting. Placement and supervision is coordinated by the College. The didactic portion will include topics of aging, and death and dying.

*Prerequisite:* Successful completion of third semester Massage Therapy Courses.

**222 Medical Massage** **2 credit hours**  
Offered spring semester. Two hours of lecture a week. Fee: \$50.00.

This course will examine the effects of illness, pain, and injury to the body. Evidence based practice is integrated into the class room, along with essential clinical reasoning skills and critical thinking.

*Prerequisite:* Successful completion of third semester Massage Therapy courses.

## MATHEMATICS (MATH)

**90 Beginning Algebra** **3 credit hours**  
Offered fall and spring semesters. Three hours of lecture and discussion a week. Inclusive Access Fee: \$95.00.

This course has four modules: evaluating algebraic expressions and solving linear and literal equations; graphing linear equations and inequalities, finding equations of lines, including parallel and perpendicular lines; performing operations with integer exponents, scientific notation, and multiplying polynomials; factoring polynomials and solving quadratic equations using factoring. Applications of all these topics will also be covered. Calculators will be used throughout this course. A scientific calculator with a fraction key is strongly recommended. This course does not meet associate degree graduation requirements.

**93 Intermediate Algebra** **3 credit hours**  
Offered fall and spring semesters. Three hours lecture and discussion a week. Inclusive Access Fee: \$95.00.

This course has four modules: rational expressions and equations; systems of equations; rational exponents, radicals and their graphs; quadratic, absolute value and piece-wise defined functions and their graphs. Applications of all these topics will also be covered. Some topics from Beginning Algebra will be reviewed before the specific module is covered. Calculators will be used throughout this course. A scientific calculator with a fraction key is strongly recommended. This course does not meet associate degree graduation requirements.

*Prerequisite:* Appropriate Placement Assessment score or grade of "C" or better in Mathematics 90, or students who have had a grade of "D" in Mathematics 96.

**96 Beginning and Intermediate Algebra** **6 credit hours**  
Six hours of lecture and discussion per week.

This course is designed for those students who wish to complete the Math 90 and Math 93 sequence of courses during a single semester. Calculators will be used throughout this course. A scientific calculator with a fraction key is strongly recommended. This course does not meet associate degree graduation requirements.

*Prerequisite:* Appropriate Placement Assessment score.

**102 College Algebra** **3 credit hours**  
Offered fall and spring semesters. Three hours lecture and discussion a week. Inclusive Access Fee: \$61.00.

This course includes the study and applications of functions including Polynomial, Rational, Exponential, Logarithmic, Logistic, Trigonometric, Parametric and Inverse functions. Applications of systems of equations, inequalities and matrices will also be covered. This course focuses on the importance of thinking, problem solving and application and requires that students engage in solving realistic problems using technological tools.

*Prerequisite: Appropriate Placement Assessment score or grade of "C" or better in Mathematics 93 or 96.*

### **105 Elements of Mathematics**

**3 credit hours**

Offered fall and spring semesters. Three hours of lecture and discussion a week.

Introduction to problem solving with emphasis on strategies applied to topics in algebra, probability and statistics.

*Prerequisite: Appropriate Placement Assessment score or grade of "C" or better in Mathematics 90.*

### **109 Probability and Statistics**

**3 credit hours**

Offered fall and spring semesters. Three hours lecture and discussion a week. Inclusive Access Fee: \$61.00.

The main topics are: probability, counting techniques, binomial distribution, charts and graphs, measures of central tendency and variability, normal distributions, sampling methods, z-scores, t-scores, confidence intervals and hypothesis tests. The following hypothesis tests will be covered in this course; one mean, one and two proportions, unpaired t-test, paired t-test, regression and correlation, multiple regression, chi square goodness of fit test, chi square test for independence and analysis of variance.

Significance levels, p-values, critical values, test statistics and summaries of hypothesis tests will be included. This course includes the use of Excel or other statistical software to analyze data.

*Prerequisite: Appropriate Placement Assessment score or grade of "C" or better in Mathematics 90.*

### **119 Pre-Calculus I**

**4 credit hours**

Offered fall and spring semesters. Four hours lecture and discussion a week. Inclusive Access Fee: \$95.00.

This course begins with a review of algebra. The course progresses through the study of operations with exponents and radicals; solutions of equations and inequalities; mathematical expressions, functions and solving and graphing linear, quadratic, polynomial, rational and exponential and logarithmic functions; and solutions to systems of equations and matrices. This course is designed as a first course in analysis for those planning to study mathematics 201 and a basic course for those planning to enroll in mathematics 200. A graphing calculator, such as a TI-83, may be required.

*Prerequisite: Appropriate Placement Assessment score or grade of "C" or better in Mathematics 93 or 96.*

### **120 Pre-Calculus II**

**4 credit hours**

Offered spring semester. Four hours lecture and discussion a week. Inclusive Access Fee: \$95.00.

This course is a continuation of Mathematics 119. It progresses through an analytical study of the trigonometric and reverse trigonometric functions, trigonometry equations, trigonometric identities, applications of trigonometry, mathematical induction, and conic sections. A graphing calculator, such as a TI-83, may be required.

*Prerequisite: Appropriate Placement Assessment score, Mathematics 119, or consent of instructor.*

### **200 Calculus for Applications**

**3 credit hours**

Offered spring semester. Three hours lecture and discussion a week. Inclusive Access Fee: \$95.00.

An introductory one-semester calculus course with emphasis on business, economics, and life science applications. Limits and continuity are treated intuitively. The major task of the course is an investigation of the derivative and integral for applications.

Students who have completed Mathematics 201 may not take 200 for credit.

*Prerequisite: Appropriate placement test score or Mathematics 102 or 119. Students who have completed Mathematics 201 may not take 200 for credit.*

### **201 Calculus I**

**4 credit hours**

Offered fall semester. Four hours lecture and discussion a week. Inclusive Access Fee: \$95.00.

Includes study of limits, continuity, and differentiation of algebraic and trigonometric functions; chain rules; maximum-minimum problems: curve plotting; Rolle's and mean value theorems; and definite and indefinite integration of these functions and applications. A graphing calculator, such as a TI-83, may be required.

*Prerequisite: Appropriate Placement Assessment score or successful completion of Mathematics 120.*

### **202 Calculus II**

**4 credit hours**

Offered spring semester. Four hours lecture and discussion a week. Inclusive Access Fee: \$95.00.

Includes a continuation of application of the definite and indefinite integral along with transcendental and hyperbolic functions, further techniques of integration, polar coordinates, parametric equations, and infinite series. A graphing calculator, such as a TI-83, may be required.

*Prerequisite: Mathematics 201.*

### **203 Calculus III**

**4 credit hours**

Four hours lecture and discussion a week.

This course includes a study of vectors in n-space and their applications, partial derivatives, multiple integrals and line integrals. A graphing calculator, such as a TI-83, may be required.

*Prerequisite: Mathematics 202.*

### **206 Differential Equations**

**4 credit hours**

Four hours lecture and discussion a week.

Includes solution of equations of order one with elementary applications; linear differential equations - homogeneous and nonhomogeneous equations; variation of parameters; inverse differential operators; and Laplace transforms. A graphing calculator, such as a TI-83, may be required.

*Prerequisite: Mathematics 202.*

### **216 Mathematics for Teacher Education I (Education 216)**

**3 credit hours**

Offered fall semester. Three hours lecture and discussion a week. Inclusive Access Fee \$95.00.

This course is a program requirement designed specifically for students majoring in Teacher Education. It is intended to enhance and broaden the students' mathematical knowledge. Cooperative learning and collaborative group investigations will be utilized to solve problems, conduct mathematical experiments, formulate mathematical models, make predictions, and other related learning activities. Topics in the course include problem solving and reasoning, set theory, functions, estimation, numeration and mathematical systems, the real number system and elementary number theory. Mastery of basic communication skills is required to successfully complete this course. Students will be required to make both oral and written reports as they communicate mathematics. Mathematics 216 does not meet the general education requirement for an Associate Degree.

*Prerequisite: Appropriate Placement Assessment score or grade of "C" or better in Mathematics 90.*

### **217 Mathematics for Teacher Education II (Education 217)**

**3 credit hours**

Offered spring semester. Three hours lecture and discussion a week. Inclusive Access Fee \$95.00.

Cooperative and collaborative group activities will be utilized in the investigation of topics in basic geometry, measurement techniques, introductory probability and elementary statistics. Communicating mathematics, utilizing technology as a tool for problem solving, basic experimentation and data collecting, and connections between mathematical concepts, patterns and models to real world applications are activities stressed in this course. This course may be used to meet General Education Requirements.

*Prerequisite: Appropriate Placement Assessment score or grade of "C" or better in Mathematics 90.*

## MEDICAL ADMINISTRATIVE ASSISTANT (MDAA)

**110 Medical Terminology** **3 credit hours**  
Offered fall and spring semesters. Three hours lecture a week. Fee: \$85.00.

This course provides students with the knowledge of medical language needed to communicate with members of the healthcare team. Emphasis is placed on word analysis of anatomic structures, diseases and surgical procedures.

**132 Elements of Human Disease** **3 credit hours**  
Offered fall and spring semesters. Three hours of lecture a week. Fee: \$85.00.

Students will study disease pathology and appropriate terminology and pharmacology. Emphasis will be on diseases that affect various organ systems and those that affect the whole body. The focus will be on definitions, signs and symptoms and appropriate drug therapy with emphasis on understanding medical terminology in the context of medical reports and coding.

*Prerequisite: Medical Administrative Assistant 110.*

**133 Basic Disease Coding** **3 credit hours**  
Offered fall and spring semesters. Three hours lecture a week. Fee: \$85.00. Inclusive Access Fee: \$125.00.

Students will study the basic coding guidelines and principles of disease coding. They will also understand the impact of correct coding on physician reimbursement. Ethical coding standards will be taught as students learn to code from clinical documentation.

*Corequisite or Prerequisite: Medical Administrative Assistant 110 and minimum high school GPA of 3.0 or appropriate assessment scores.*

**135 Basic Procedural Coding** **3 credit hours**  
Offered fall and spring semesters. Three lecture hours a week. Fee: \$85.00.

Students will study the basic coding guidelines and principles of both CPT and HCPCS Level II coding systems. They will learn the impact of correct coding on physician reimbursement. Students will learn to assign CPT and HCPCS Level II codes along with modifiers to accurately report the procedures and services that were provided. Ethical coding standards will be taught as students learn to code from clinical documentation.

*Corequisite or Prerequisite: Medical Administrative Assistant 110 and minimum high school GPA of 3.0 or appropriate assessment scores.*

**150 Computer Software for the Medical Office** **3 credit hours**  
Offered spring semester. Fee: \$85.00.

This course will provide a study of advanced computer applications specific to the medical office. Students will have hands-on experience preparing documents, reports, and presentations used in medical offices and hospitals.

*Prerequisite: Computer Technology 101.*

**212 Applications in Medical Coding** **6 credit hours**  
Offered fall and spring semesters. Six hours of lecture and application a week. Fee: \$85.00. AAPC Member Fee: \$140.00.

This course is designed to enhance diagnostic and procedural coding skills and provide students with a simulated professional practice experience in medical coding. Students will assign diagnostic and procedural codes to sample records from a variety of healthcare settings. Students will also become familiar with diagnostic and procedural-based payment systems and emerging technology in the medical coding profession.

*Prerequisite: Medical Administrative Assistant 133 and 135.*

*Corequisite or Prerequisite: Medical Administrative Assistant 132.*

**213 Principles of Medical Insurance** **3 credit hours**  
Offered fall semester and spring semesters. Three hours lecture a week. Fee: \$85.00. Inclusive Access Fee: \$94.00.

A study of managed healthcare and major medical insurance programs is the emphasis of this course. Topics discussed include insurance terminology, electronic and manual completion and processing of insurance claims, medicolegal issues and billing and collection procedures. Medical terminology and diagnostic and procedural coding will be reviewed.

*Prerequisite: Medical Administrative Assistant 133 and 135.*

**214 Medical Administrative Assistant Practicum** **3 credit hours**  
Offered spring semester. Three hours of lecture a week and 150 practicum hours are required to be completed during the semester. Fee: \$85.00. Criminal Background Check Fee: \$65.00. CMAA Exam Fee: \$125.00. Clinical Edoc Fee: \$50.00. Nurse Managed Wellness Clinic Fee: \$60.00.

This course is designed to provide skills in job readiness including searching for jobs, preparing a resume and cover letter, interview techniques, and lifelong learning. In addition, students spend a minimum of ten hours each week in a hospital or other medical office receiving practical instruction and related experience in many phases of medical administrative work. Students will be assigned to offices where experience will be gained under professional supervision.

*Prerequisite: Medical Assistant 209.*

**299 Medical Administrative Assistant Special Topics** **1-3 credit hours**  
Offered fall semester. Fee: \$85.00.

This course is organized on an individual basis for the student who wishes to pursue advanced study in the medical administrative assistant skills. The student will be supervised by an instructor and required to attain a pre-determined competency level. Approval by the Medical Administrative Assistant Program Director to pursue independent Study is required. This course may be repeated for credit up to a maximum of 6 credits, based upon approval of the Medical Administrative Assistant Program Director.

*Prerequisite: Instructor consent required.*

## MEDICAL ASSISTANT (MDAS)

**101 Essential Skills for Health Professional** **3 credit hours**  
Offered fall and spring semesters. Three hours lecture a week. Fee: \$75.00.

This course introduces the dynamic structure and services of healthcare delivery systems including the role of professions and our role to serve patients as customers. Students will learn communication skills necessary for the healthcare professional, diversity in healthcare, professionalism, confidentiality, legal and ethical issues, and basic clinical skills.

**102 Introduction to Health Records** **3 credit hours**  
Offered fall and spring semesters. Three hours lecture a week. Fee: \$100.00. Inclusive Access Fee: \$94.00.

This course introduces the history, theory, and functional benefits of health records used by the industry. Students will learn the content and format of the basic health record, various healthcare delivery systems, and data quality control. Storage of health information, confidentiality, release of information, indices, and registers are also studied. Legal and ethical issues relating to confidentiality and release of information are emphasized.

*Prerequisite or Corequisite: Computer Technology 101.*

### **150 Medical Scribe I (Course Currently Suspended) 3 credit hours**

Offered fall semester. Three hours of lecture/lab a week. Fee: \$50.00.

This course is designed to provide information on the responsibilities of the Medical Scribe. Topics to be discussed are the roles and responsibilities of the medical scribe; keyboarding; the clinical environment and informational workflow of the hospital, emergency room, and physician's office; privacy practices; documentation; communication skills, professionalism, confidentiality, handwashing and aseptic techniques, and other basic clinical skills.

### **160 Medical Scribe II (Course Currently Suspended) 3 credit hours**

Offered spring semester. Three hours of lecture/lab a week. Fee: \$50.00.

This course prepares students to participate in a practicum experience by teaching them the practical skills of a medical scribe. Students will have hands-on experience documenting patient encounters. Topics covered include keyboarding, medical documentation, medical billing, legal guidelines, common diagnostic tests, and quality improvement outcomes.

*Prerequisite: Medical Assistant 150.*

### **170 Medical Scribe Practicum (Course Currently Suspended) 3 credit hours**

Offered summer session. Three hours of lecture/lab a week and 80 practice/practicum hours. Fee: \$50.00. Background Check Fee: \$65.00. Clinical Edoc Fee: \$50.00. Nurse Managed Wellness Clinic Fee: \$60.00.

This course is designed to empower students to become medical scribes trained in medical documentation assisting providers to be more efficient and productive with patient care. Students will need to complete an 80-hour practice/practicum in a hospital, medical office, or in a monitored lab receiving practical instruction and related experience in many phases of medical scribe practicum skills. Students will be assigned to offices where experience will be gained under professional supervision. This course is also designed to provide skills to assist students gain employment including searching for jobs, preparing a resume and cover letter, interview techniques, lifelong learning, and review for the certification exam.

*Prerequisite: Medical Assistant 160*

### **200 Medical Assistant Clinical I 2 credit hours**

Offered spring semester. Three hours of lecture and three hours of clinical lab a week. Fee: \$100.00. Simtics Software Fee: \$135.00

This course is designed to provide students with basic clinical medical assisting skills. Topics to be discussed are: performing age specific vital signs, obtaining and recording patient history, sterilizing and disinfecting equipment, preparing and maintaining treatment areas, measuring height and weight, documenting patient care, maintaining patient confidentiality, pharmacology math, drug categories and pharmacology law and regulations.

*Prerequisite: Medical Assistant 101 and admission in the clinical phase of the Medical Assistant program.*

### **209 Administrative Medical Assistant 3 credit hours**

Offered fall semester. Three hours lecture a week. Fee: \$100.00.

This course will introduce students to administrative medical assisting skills that are required in the medical office. Topics include scheduling, telephone skills, patient reception, written communications, accounting,

billing, banking and payroll. Students will learn to perform administrative medical assisting skills within the framework of the American Association of Medical Assistants Code of Ethics.

*Prerequisite: Medical Administrative Assistant 133 and 135.*

### **211 Medical Assistant Clinical II 3 credit hours**

Offered summer session. Three hours of lecture and three hours of clinical lab a week. Fee: \$100.00. Criminal Background Check Fee: \$65.00. Nurse Managed Wellness Clinic Fee: \$60.00.

This course is designed to refine basic clinical and patient care skills as well as develop more advanced skills to assist in the ambulatory care setting. Topics include demonstrating emergency procedures and emergency preparedness, performing mathematics and dosage calculations, administering non-parenteral and parenteral medications, and selecting parenteral equipment and supplies and performing electrocardiography and spirometry.

*Prerequisite: Medical Assistant 102, 208 and Medical Administrative Assistant 133 and 135.*

### **212 Medical Assistant Clinical III 3 credit hours**

Offered fall semester. Three hours of lecture and three hours of clinical lab a week. Fee: \$100.00. Clinical Edoc Fee: \$50.00. Nurse Managed Wellness Clinic Fee: \$60.00.

Students will learn to prepare patients for specialty exams including pediatrics and OB/GYN and assist in preparing patients for diagnostic imaging and colon procedures. In addition, students will assist with minor office surgery, instrument identification, immunization records maintenance, urinary catheterization, nutrition, applying physical agents that promote healing, and identifying community resources.

*Prerequisite: Medical Assistant 211.*

### **213 Medical Assistant Pharmacology 3 credit hours**

Offered fall semester. Three hours of lecture and application a week. Fee: \$100.00.

This course is designed to discuss medication according to their therapeutic application using a systems approach to the physiology and related diseases. Pathology and medications for specific body systems including cardiovascular, reproductive, endocrine, musculoskeletal, gastrointestinal, renal, respiratory nervous, immune, skin disorders, and psychotropic drugs will be discussed.

*Prerequisite: Medical Assistant 102 and 208*

### **214 Medical Assistant Practicum 3 credit hours**

Offered spring semester. Three hours of lecture a week and 160 practicum hours are required to be completed during the semester. Fee: \$75.00. CMA Exam Fee: \$125.00. Nurse Managed Wellness Clinic Fee: \$60.00. Inclusive Access Fee: \$57.00. Clinical Edoc Fee: \$50.00.

This course will provide students with 160 hours of unpaid administrative and patient care experience in an ambulatory care setting. The course will also provide information on employment preparations, patient education, and review for the certification examination.

*Prerequisite: Medical Assistant 209, 212, 213, 218, Medical Administrative Assistant 133 and 135, and Phlebotomy/Laboratory Assistant 111.*

### **218 Clinical Laboratory Procedures (Phlebotomy/Laboratory Assistant 218) 2 credit hours**

Offered spring semester. Two hours of lecture/discussion and two hours of lab/application a week. Fee: \$150.00.

This course is designed to provide instruction and performance opportunities for CLIA waived tests. Students will discuss the role of medical assistants and other professionals in performing clinical laboratory testing. Topics to be discussed are coordinating laboratory tests and results; understanding CLIA regulations and quality assurance; performing

CLIA waived testing for urinalysis, hematology, serology, basic chemistry, microbiology, and immunology; and screening results.

**299 Special Topics for Medical Assistants** **1-4 credit hours**  
Offered fall semester. Fee: \$25.00.

This course focuses on current topics in medical assisting and allows students to pursue advanced study on topics of interest within the medical assistant profession, as well as allowing students to meet new or updated competency requirements for the national certification examination. The student will be supervised by an instructor and required to attain a pre-determined competency level.

Approval by the Medical Assistant Program Director to pursue Special Topics is required.

This course may be repeated for credit up to a maximum of 4 credits, based upon approval of the Medical Assistant Program Director.

You must be accepted into the Medical Assistant program to take this class.

*Prerequisite: Instructor consent required.*

**MEDICAL LABORATORY TECHNOLOGY (MLT)**

**102 Hematology** **4 credit hours**  
Offered spring semester. Two hours lecture and four hours laboratory a week. Fee: \$115.00.

This course is designed to provide instruction on the theory in normal blood cell production, hematopoiesis, as well as blood and bone marrow disorders such as leukemia/anemia. In addition, the coagulation of blood, hemostasis, is also presented. Students will perform cell counts, differentials and coagulation tests.

*Prerequisite: Admission to the Medical Laboratory Technology program or consent of instructor.*

**104 Applied Immunology** **3 credit hours**  
Offered spring semester. Three hours lecture and application a week. Fee: \$130.00.

This course will include a study of the basic principles of human immunity system and the role of the immune system in health and disease. Students will study and be given the opportunity to perform and evaluate techniques and applications of immunochemistry which are used in medical diagnostics and biotechnology.

*Prerequisite: Admission into the Medical Laboratory Technology program or consent of instructor.*

**106 Clinical Laboratory Mathematics and Quality System Assessment** **1 credit hour**  
Offered summer session. One hour of lecture/laboratory per week. Fee: \$50.00.

This course provides a review of arithmetic, algebra, scientific notation, rounding and figure significance, measurement systems and conversions, solutions and concentrations, dilutions, titers and other mathematic calculations commonly used in the clinical laboratory setting. This course includes the principles and practices of quality control and quality assurance used in clinical laboratory science.

*Prerequisites or Co-requisites: Admission into the Medical Laboratory Technology Program, Mathematics 102 or 109, or consent of instructor.*

**110 Orientation to the Clinical Laboratory (Phlebotomy/Laboratory Assistant 110)** **1 credit hour**  
Offered fall and spring semesters. Fee: \$50.00.

This course will introduce students to laboratory medicine including an overview of each area within the laboratory and the types of patient testing performed in each area. Students will learn about the OSHA safety precautions and regulatory considerations applicable to clinical

laboratories in the US. Students will also identify the organizations representing the profession and the certification/licensure requirements and career opportunities in acute and ambulatory care laboratories. Students will be given instruction on basic laboratory techniques such as specimen processing and use of a centrifuge, microscope, and autoclave. Students will tour a clinical laboratory as part of the course experience.

*Prerequisite: Successful completion of English 92 or the appropriate corresponding score on the reading portion of the placement assessment.*

**206 Biotechnology** **4 credit hours**  
Offered fall semester. Three hours lecture and three hours laboratory a week. Fee: \$100.00.

Theory and techniques commonly used in biotechnology will be explored. Theory topics include structure, function, and synthesis of DNA, RNA, and protein and the conceptual bases of molecular biology techniques, including gel electrophoresis, plasmid preparation, transformation of cells, nucleic acid manipulation, blotting and probing techniques, polymerase chain reaction, and protein purification.

*Prerequisite: Medical Laboratory Technology 114, Biological Science 101, Chemistry 100 or 101, and Mathematics 102 or 119, or consent of instructor.*

**210 Clinical Practicum** **12 credit hours**  
Offered spring semester. 448 hours of clinic/practicum. Fee: \$420.00. Nurse Managed Wellness Clinic Fee: \$60.00. Clinical Edoc Fee: \$85.00.

Study and supervised practice in affiliated clinical laboratories. Pass-fail grading.

*Prerequisite: Admission to the Medical Laboratory Technology Program or consent of instructor.*

**220 Biotechnology Internship** **11 credit hours**  
Two internship sites of two hundred clock hours each and one internship site of one hundred twenty clock hours.

An internship of 450 clock hours in supervised scientific experiences in biotechnology production, manufacturing, environmental or research. The internship is customized to match the students' interests.

**221 Urinalysis and Body Fluids** **2 credit hours**  
Offered summer session. Three hours lecture and two hours laboratory a week for 5 weeks. Fee: \$100.00.

This course presents a study of kidney structure and function including the formation of urine as well as diseases of the kidney. Through lecture and laboratory sessions the student will gain experience in the detection of physical, chemical and microscopic properties of urine in normal and abnormal states. The course also includes the study of miscellaneous fluid analysis, cerebrospinal fluid analysis, and fecal analysis. Principles of safety, quality control and quality assurance as appropriate to urine and body fluid analysis are also included in the course.

*Prerequisite: Admission to the Medical Laboratory Technology Program or consent of instructor.*

**222 Blood Banking** **4 credit hours**  
Offered summer session. Nine hours lecture and six hours laboratory a week for five weeks. Fee: \$130.00.

This course provides instruction on the fundamentals of blood grouping and typing, compatibility testing, antibody screening, component preparation, donor selection, and transfusion reactions and investigation. Blood banking procedures, including ABO grouping, Rh typing, detection and identification of antibodies, ant globulin testing, and compatibility testing are performed.

*Prerequisite: Admission to the Medical Laboratory Technology Program or consent of instructor.*



## 223 Clinical Microbiology

**6 credit hours**

Offered fall semester. Four and a half hours lecture and five hours laboratory a week. Fee: \$250.00.

This course includes a study of the theory, methods, and pathological processes in medical microbiology. Instruction will include the setup of cultures, identification of organisms, susceptibility testing, automation, and reporting procedures. Principles of safety, quality control and quality assurance as appropriate to clinical microbiology analysis are also included in the course.

The agents most often implicated as causing disease in patients, such as the gram positive and negative cocci and gram negative rods, are included. Study of the medically important fungi and parasites, miscellaneous and unclassified bacteria, mycobacteria and viruses are also included in this course. Antimicrobial susceptibility testing, anaerobic bacteria studies and automated techniques utilized in microbiology are included.

*Prerequisite: Admission to the Medical Laboratory Technology program or consent of instructor.*

## 224 Clinical Chemistry

**4 credit hours**

Offered fall semester. Three hours lecture per week and two and a half hours of laboratory a week. Fee: \$130.00.

This course provides instruction in the concepts of Clinical Chemistry. Emphasis is on clinical tests which evaluate the function of body systems: protein metabolism and clinical enzymes, the renal system, liver function, carbohydrate and lipid metabolism, electrolytes and acid-base balance, the cardiac and respiratory systems, the endocrine system as well as testing for therapeutic and abusive drug levels. Analytes and lab results are correlated to normal homeostasis and disease. Laboratory work includes the theory, operation and maintenance of the specialized and semi-automated analytical instrumentation used to perform these tests.

*Prerequisite: Admission to the Medical Laboratory Technology program or consent of instructor.*

## 299 Independent Study in Medical Laboratory Technology

**1-4 credit hours**

This course is designed to allow the student to do independent research in the field of Medical Laboratory Technology under the guidance of a certified Medical Laboratory Scientist, Histologist, or Pathologist and supervised by an MLT faculty member. May be repeated for up to 4 credits.

*Prerequisite: Instructor consent required.*

## MULTIMEDIA TECHNOLOGY (MMTC)

### 101 Introduction to Media

**3 credit hours**

Offered fall semester. Three hours lecture and discussion a week.

This course is a survey course in the use, effect, and construction of media. Topics included are theory of communication and learning, behavioral objectives, scriptwriting, and review of current media.

### 102 Introduction to Video Production

**3 credit hours**

Offered spring semester. Two hours lecture and three hours laboratory a week. Fee: \$80.00.

This course will introduce the student to the highly complex and technical aspects of television while developing skills to use this medium for worthwhile communication purposes. Hands-on experience will include single-camera production. Lighting, audio, scriptwriting, non-linear computer-based editing and application are also a part of this course.

### 103 Introduction to Photography

**3 credit hours**

Offered fall semester. Two hours lecture and three hours laboratory a week. Fee: \$70.00.

This is an introductory course in photography that includes digital camera and industry-standard photography editing software. Assignments will teach technical skills and aesthetics and will familiarize the student with

processes of capturing, editing, and sharing images in various forms. Lighting and studio portrait techniques are explored.

### 106 Audio Production

**3 credit hours**

Offered spring semester. Two hours lecture and three hours laboratory a week. Fee: \$80.00.

This course deals with the theoretical and practical aspects of audio recording and reproduction. Applications will include audio recording for analog technologies and focus more on digital sound recording and editing concepts. The course will include recording and editing techniques used in broadcasting, television, video and multimedia.

### 201 Multimedia Production

**3 credit hours**

Offered fall semester. Two hours lecture and three hours laboratory a week. Fee: \$80.00.

This course prepares students for the multimedia field by giving them hands-on experience in a multi-camera studio setting, live event setup, signal flow and multimedia projection. Continued instruction on non-linear editing software is a part of this course.

*Prerequisite: Multimedia Technology 102, 103, and 106.*

### 207 Graphics

**3 credit hours**

Offered fall semester. Two hours lecture and three hours laboratory a week. Fee: \$70.00.

After a brief introduction to computer system basics, the course will focus on computer production of graphics for presentations, video, multi-media, and print production. Software types covered will be paint, draw, page layout, presentation, and image editing. Familiarity with Windows and/or Macintosh operating environment will be helpful. **This course requires the use of software that students will either be required to purchase or the students will have to use the designated campus labs.**

### 208 Principles of Media Production

**3 credit hours**

Offered spring semester. Three hours lecture and discussion a week.

This is a survey course in the social implication of modern media. This course will center on programming decisions, program distribution, regulations and personnel. Additional topics include: script writing for radio and television, including scripting of documentaries, commercials, news programs, special features, talk programs, educational productions and informational programs.

*Prerequisite: Multimedia Technology 101.*

### 210 Practicum

**3 credit hours**

Offered spring semester. One hour per week lecture and a total 90 hours of practical field placement per semester. Fee: \$70.00.

This course is an organized work-study/internship experience in which individuals are placed in situations in the community to be responsible for the operation and/or production of media services. Local businesses and institutions, in addition to ACM, will be utilized for this course. Students will gain practical field experience in this course. Students will practice resume and cover letter writing, application submissions, and interview skills.

*Prerequisite: Student must have the consent of the instructor or meet the following criteria: Student must be enrolled in the Multimedia Technology program, have successfully completed no fewer than 18 Multimedia Technology credits, and have a 2.75 overall GPA.*

### 211 Advanced Photography

**3 credit hours**

Offered spring semester. Two hours lecture and three hours laboratory a week. Fee: \$70.00.

This course will explore further the study of aesthetic and technical theories and techniques of photography. Students will also explore advanced digital camera and image editing software techniques. Students will complete assignments that will advance the style of their images to the professional level. It is highly encouraged that students have their own digital camera for this course. Specialized photography, lighting,

composition, camera control and settings are learned in the course. **This course requires the use of software that students will either be required to purchase or the students will have to use the designated campus labs.**

*Prerequisite: Multimedia Technology 103 or consent of instructor.*

**212 Interactive Multimedia Design** **3 credit hours**  
Offered spring semester. Two hours lecture and three hours laboratory a week. Fee: \$70.00.

This is a course dealing with the emerging aspects of visual perception. The course links aspects of graphic design, photography, television, and interactive multimedia. The course is designed to explore the many ways visual information is produced and consumed in today's media-rich society. **This course requires the use of software that students will either be required to purchase or the students will have to use the designated campus labs.**

**216 Video Desktop Publishing** **3 credit hours**  
Offered spring semester. Two hours lecture and three hours laboratory a week. Fee: \$80.00.

This course will provide a comprehensive introduction to various software used in video editing for television and corporate video. The student will master the skills necessary to shoot video and produce a final edited product.

*Prerequisite: Multimedia Technology 201 or consent of Instructor.*

**217 Page Layout and Desktop Publishing** **3 credit hours**  
Offered spring semester. Two hours lecture and three hours laboratory a week. Fee: \$70.00.

This course will provide a comprehensive introduction to various software used in Desktop Publishing. Students will learn to apply basic layout skills in producing desktop published documents on a Macintosh computer. The course will cover main menus, file manipulation, document preparation, text manipulation, creating, importing and modifying graphic images. **This course requires the use of software that students will either be required to purchase or the students will have to use the designated campus labs.**

**220 Social Media Marketing** **3 credit hours**  
Offered spring semester. Three hours lecture and discussion a week. Fee: \$70.00

Explores the dynamic nature of social media as it transforms marketing communications from traditional mass media to individualized marketing. Using a variety of social media tools and platforms, this class identifies, explains and critiques the different methodologies used for social media marketing. Topics include creating social media, integrating social media into a marketing campaign, engaging in viral marketing, measuring social media success through analytics, and using social media marketing to maximize success in a variety of small and large organizations.

*Prerequisite: Business Administration 216.*

**299 Independent Study** **3 credit hours**  
Fee: \$70.00.

This is an independent study course designed to allow selected Multimedia Technology students to specialize in an area of the Multimedia Technology curriculum. Emphasis will be placed upon the development of new or practical skills in production.

*Prerequisite: Consent of advisor and demonstrated proficiency by the student.*

## MUSIC (MUS)

**112 Music Appreciation** **3 credit hours**  
Offered fall and spring semesters. Three hours lecture and discussion a week.

Principal music forms and historical development. Intensive listening experiences with commentary. A foundation course for an understanding of the cultural contribution of music as an art form. The attending of concerts is planned as field experience.

**250 Choir (Allegany College of Maryland Singers)** **1 credit hour**  
Two hours lecture and discussion a week.

The course may be taken without credit at the discretion of the student and/or instructor. Performance on and off campus of a wide range of choral music and material, with instruction in music fundamentals.

May be repeated for up to 4 credit hours.

**252 Music and Creative Interaction for the Elementary Teacher** **3 credit hours**  
Offered spring semester. Three hours lecture, discussion, and demonstration a week.

Classroom use of music for children from pre-school through sixth grade. Emphasizes the elements and skills of music and provides the opportunity to develop and apply teaching strategies to the teaching of music through moving, singing, listening, playing, reading, creating and creative interaction. Designed for elementary and early childhood education major.

Students will need to complete the fingerprint and background clearance process and be issued the appropriate identification prior to being scheduled for a field experience or school-site assignment.

## NANOTECHNOLOGY (NANO)

**211 Material Safety and Equipment Overview, Nanotechnology (NANO211)** **3 credit hours**  
Fee: \$2,500.00 (Penn State)

**212 Basic Nanotechnology Processes (NANO212)** **3 credit hours**

**213 Materials in Nanotechnology (NANO213)** **3 credit hours**

**214 Patterning for Nanotechnology (NANO214)** **3 credit hours**

**215 Nanotechnology Applications (NANO215)** **3 credit hours**

**216 Characterization and Testing of Nanotechnology Structures and Materials (NANO216)** **3 credit hours**

## NURSING (NURS)

**295W LPN-RN Online Adv. Transitions** **6 credit hours**  
Offered as a web course fall, spring, and summer semesters. Course Fee: \$75.00. Learning Harbor Fee: \$25.00. Testing/Software Fee: \$510.00. Proctoring Fee: \$200.00. Administrative/Clinical Placement Fee: \$250.00.

This 6-credit prerequisite course is for Licensed Practical Nurses who have met select admission criteria to enter the theory/clinical courses of the LPN-RN Online Program ONLY. This course is a restricted enrollment course designed to aid students in obtaining necessary knowledge and skills to effectively complete course requirements in the LPN-RN Online program. Students will begin the process to secure clinical agency sites and clinical preceptors in preparation for clinical nursing courses.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Pre-requisite: Biological Science 204, 207, and 208, Mathematics 102 or 109; English 101, Psychology 101 and 203.*

## 120 Nursing I 9 credit hours

Offered fall and spring semesters. On average, four hours lecture and fifteen hours seminar/campus laboratory/clinical laboratory a week. Fee: \$215.00. Test/Software Fee: \$510.00. Nurse Managed Wellness Clinic Fee: \$60.00. Simulation Fee: \$150.00. Equipment Kit Fee: \$165.00. Uniform Fee: \$160.00.

Nursing I is designed to assist the student with learning the fundamentals of nursing care of adults with special emphasis on the care of the elderly. This course is based on the two major concepts: the nursing process and man's eight basic needs. The nursing process is introduced as a basis for all nursing practice. Man's eight basic needs are introduced as part of the organizing framework. This course also introduces the core components of professional behaviors, communication, assessment, clinical decision making, caring interventions, teaching and learning, collaboration and managing care. Fundamental nursing skills common to the care of the adult client are developed through guided campus laboratory and clinical experiences in various health care settings. Nursing roles are defined.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Admission to the Nursing curriculum and Biological Science 207 with a grade of "C" or better.*

## 150 Nursing II 9 credit hours

Offered fall and spring semesters. On average, four hours lecture and fifteen hours seminar/ campus laboratory/clinical laboratory a week.

Face to Face Class: Fee: \$215; Test/Software Fee: \$215; Nurse Managed Wellness Clinic Fee: \$60; Simulation Fee: \$150; Proctoring Fee (Hybrid Section Only) \$200.

Online Class: Fee: \$190; Test/Software Fee: \$215; Administrative/Clinical Placement Fee: \$250; Proctoring Fee: \$200.

Nursing II considers the needs of adult clients across the health care continuum experiencing common medical/surgical and/or select mental health conditions. The nursing process, basic needs and core components are applied as a foundation of the course into classroom, campus laboratory, and planned clinical experiences in a variety of health care settings. Students are required to assimilate a broad base of knowledge, which enables them to begin to apply and analyze content related to the care of the client. The course prepares the student to begin to function in a variety of nursing roles. The course prepares students to promote personal and professional growth.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Students in the face to face program must complete Nursing 120 with a grade of "C" or better and Biological Science 208 with a grade of "C" or better. LPN's entering Nursing 150 in the face-to-face program must complete the Nursing Theory Assessment Exam and Nursing 294 with a grade of "C" or better.*

## 151 Nutrition in Health Care and Diet Therapy 1 credit hour

One-hour lecture and discussion a week. Fee: \$20.00.

This one-credit elective nutrition course is designed to provide the nursing student with a basic understanding of diet therapy; the role of therapeutic diets as part of the treatment regimen of common diseases or health problems; and the responsibilities of the nurse in teaching, supporting compliance with and evaluating outcomes of therapeutic diet therapy.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Nursing 120 or consent of the instructor.*

## 177 Introduction CMA to Nursing 6 credit hours

Offered Fall semester. Fee: \$190.00. Test/Software Fee: \$215.00. Proctoring Fee: \$200.00.

Introduction CMA-Nursing will explore the differences between a Certified Medical Assistant and a nurse (either LPN or RN). This course will build upon content from previous CMA courses and will explore physical assessment and the nursing process. The skills taught and evaluated will be NG tube insertion, medication administration via NG tube or PEG tube. Foley catheter insertion and basic Intravenous (IV) skills. The basic IV skills will include spiking an IV bag, priming the IV tubing, assessing an IV site, connecting an IV to a patient and discontinuing an intravenous catheter. It does NOT cover IV insertion.

## 204 Nursing in Society 1 credit hour

Offered fall and spring semesters. Two hours seminar a week. Fee: \$60.00.

This course reviews the relationship of nursing history to present day nursing practice. Current trends are considered in terms of their impact on roles and practices. Problems, roles, and responsibilities of graduate nurses are discussed. Consideration is given to the ethical and legal responsibilities of nurses in today's world. The changing health care system, current issues, and future trends are discussed. Management/ leadership concepts are discussed and concurrent selected clinical experiences are provided in Nursing 215.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Requisite: Must be taken in the last semester of the Nursing Program.*

## 205 Nursing III 6 credit hours

Offered fall and spring semesters. This course is taught concurrently with Nursing 206. On average, for both courses, four hours lecture and fifteen hours seminar/campus laboratory/clinical laboratory a week.

Face to Face Class: Fee: \$140; Test/Software Fee: \$110; Nurse Managed Wellness Clinic Fee: \$30; Simulation Fee: \$150.

Online Class: Fee: \$120; Test/Software Fee: \$110; Administrative/Clinical Placement Fee: \$250; Proctoring Fee: \$100.

Nursing III is designed to provide the student with the opportunity to learn basic principles in caring for the childbearing and child rearing family according to eight basic needs. Needs are considered in terms of the organizing framework as introduced in previous nursing courses. The nursing process is the tool used to provide care as the student addresses the needs of the family. Specialized fundamental skills, legal aspects, pharmacology, human growth and development, management-organizations skills and self-evaluation are included in the course. The core components of nursing practice are emphasized. Clinical and campus laboratory experiences are selected to provide opportunities for students to increase assessment skills and make appropriate nursing decisions using the nursing process in caring for the childbearing and child rearing family.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Students in the face to face nursing program must complete Nursing 150 with a grade of "C" or better. LPN's entering Nursing 205 in the face to face program must complete the Nursing Theory Assessment Exam and Nursing 294 with a grade of "C" or better. Prerequisite for students in the Online LPN-RN Program is Nursing 295 with a grade of "C" or better.*

*Nursing 205 and Nursing 206 will be combined and all exam scores, clinical grades, evaluations will be combined to earn a single grade. A combination of 539 points is needed to pass Nursing 205/206.*

## 206 Nursing IV 3 credit hours

Offered fall and spring semesters. This course is taught concurrently with Nursing 205. On average, for both courses, four hours lecture and fifteen hours seminar/campus laboratory/clinical laboratory a week.

Face to Face Class: Fee: \$75; Test/Software Fee: \$105; Nurse Managed Wellness Clinic Fee: \$30.

Online Class: Fee: \$70; Test/Software Fee: \$105; Administrative/Clinical Placement Fee: \$250; Proctoring Fee: \$100.

Nursing IV considers the needs of clients across the healthcare continuum experiencing mental health conditions. The nursing process, basic needs and core components are applied as a foundation of the course in the classroom, campus laboratory and planned clinical experiences in a variety of healthcare settings. The students are required to assimilate a broad base of knowledge, which enables them to apply and analyze content related to the care of clients with specialized mental health care needs. The course prepares the student to function in a variety of nursing roles. The course prepares students to promote personal and professional growth.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Students in the face to face nursing program must complete Nursing 150 with a grade of "C" or better. LPN's entering Nursing 205 in the face to face program must complete the Nursing Theory Assessment Exam and Nursing 298 with a grade of "C" or better. Prerequisite for students in the Online LPN-RN Program is Nursing 296 with a grade of "C" or better.*

*Nursing 205 and Nursing 206 will be combined and all exam scores, clinical grades, evaluations will be combined to earn a single grade. A combination of 539 points is needed to pass Nursing 205/206.*

#### **215 Nursing V 9 credit hours**

Offered fall and spring semesters. On average, five hours lecture a week for twelve weeks and on average fifteen hours seminar/campus laboratory/clinical laboratory a week for fifteen weeks.

Face to Face Class: Fee: \$215; Test/Software Fee: \$215; Nurse Managed Wellness Clinic Fee: \$60; Simulation Fee: \$150; Proctoring Fee (Hybrid Section Only) \$200.

Online Class: Fee: \$190; Test/Software Fee: \$215; Administrative/Clinical Placement Fee: \$500; Proctoring Fee: \$200.

Nursing V considers the needs of adult clients across the healthcare continuum with complex medical-surgical healthcare conditions. The nursing process, basic needs and core components are applied as a foundation of the course in the classroom, campus, laboratory and planned clinical experiences in a variety of health care settings. Students are required to integrate higher learning and new knowledge, which enables them to apply and analyze content related to the care of clients with complex health care needs. The course prepares the student to function in a variety of nursing roles. The course prepares students to promote personal and professional growth.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Nursing 205 and 206 with a grade of "C" or better and Biological Science 204 with a grade of "C" or better.*

#### **220 Applied Pharmacology for Nurses 1 credit hour**

One-hour lecture a week. Fee: \$55.00.

This one-credit elective pharmacology course is designed to provide the nursing student with a basic understanding of pharmacology and its role as part of the treatment regimen of common diseases or health problems. The nursing process is the tool used as the student addresses study of the classes of pharmacological agents learned throughout the program. They are applied to specific clinical situations.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

#### **294 Nursing Bridge Course 6 credit hours**

Course Fee: \$215.00, Testing/Software Fee: \$510.00, Simulation Fee: \$150.00, Uniform Fee: \$160.00, Equipment Kit Fee: \$165.00.

This 6-credit prerequisite course is designed for students considering a career in nursing from a Licensed Practical Nursing path, students transferring with advanced standing who have met select admission criteria to enter the Face to Face or Hybrid theory/clinical courses ONLY. Consent of the Nursing Program Director required to take this course. This course is a restricted enrollment course designed to aid students in obtaining necessary knowledge and skills to effectively complete course requirements for the Face to Face or Hybrid Nursing programs. The Nursing Bridge Course will have clinical time in the Allegany College of Maryland Nursing Simulation Labs so the students are familiar with the Allegany College of Maryland Campus, Simulation Labs and procedures for completing Face to Face/Hybrid Individual Skills Evaluations and Comprehensive End of Course Skills Evaluations. Course completion requires the student achieve a satisfactory in the lab/clinical component of the course. Students need to demonstrate proficiency in course outcomes.

*Requisites: BIO-204 with a grade of C or better - Must be completed prior to taking this course. BIO-207 and BIO-208 with a grade of C or better - Must be completed prior to taking this course. MATH-102 or MATH-109 - Must be completed prior to taking this course. ENG-101 with a grade of C or better - Must be completed prior to taking this course. EDUC-203 or PSYC-203 - Must be completed prior to taking this course.*

#### **299 Special Topics in Nursing 1-4 credit hours**

Fee: \$40.00.

This course is designed to allow students in the clinical phase of the nursing program the opportunity to pursue advanced study/research on topics of individual interest in the field of nursing. May be repeated for credit.

Must be enrolled in the clinical phase of nursing to register for the course.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Must be enrolled in the clinical phase of nursing to register for the course.*

### **NURSING ASSISTANT/GERIATRIC AIDE (NAGA)**

#### **101 Introduction to Health and Wellness 3 credit hours**

Three hours of lecture and discussion a week. Fee: \$20.00. Learning Harbor Fee: \$25.00.

This course includes curriculum goals and objectives, basic concepts needed in health care, and wellness issues for patients and the health care workers. An overview on medical ethics, professional conduct, infection control, communicating with the patients, body mechanics, working as a team, and other health profession concerns will be discussed. The dimensions of wellness, proper eating habits, principles of fitness, stress and time management, and teaching patient awareness of healthy life style options to enhance recovery and their everyday life will also be discussed.

*In order to successfully pass this course, students must achieve a grade of "C" or better, along with meeting the academic standards of the college.*

#### **102 Nursing Assistant/Geriatric Aide 7 credit hours**

Six hours lecture, one-hour laboratory, and three hours clinic/practicum a week. Fee: \$100.00. Test Fee: \$130.00. CNA Registration Fee: \$20.00. Criminal Background Check Fee: \$62.00. Nurse Managed Wellness Clinic Fee: \$40.00.

This course is designed to provide students with the classroom theory and clinical skills essential in assisting nurses in delivering proper basic bedside care of patients across their life span. This program offers a broad foundation of knowledge and skills for the Certified Nursing Assistant and the Geriatric Nursing Assistant. Successful completion of the course qualifies the student to apply for state certification and sit for the National Nurse Aide Assessment Program exam. Students will be able to seek employment in a variety of health care settings. Course work emphasizes growth and development throughout the life span, basic personal care, vital signs, communication and interpersonal skills, nutrition, medical

asepsis, legal and ethical responsibilities, safe and efficient work practices, and medical terminology.

*In order to successfully pass this course, students must achieve a grade of "C" or better, along with meeting the academic standards of the college.*

*Prerequisite: Minimum high school GPA of 3.0 or appropriate assessment scores. Instructor consent required.*

*Prerequisite or Corequisite: Nursing Assistant 101 and Physical Education 153.*

## OCCUPATIONAL THERAPY ASSISTANT (OTA)

### 101 Introduction to Occupational Therapy 3 credit hours

Offered fall and spring semesters. Three hours lecture a week.

Through study, discussion, and field observation/participation, the student will: 1) investigate a career choice in Occupational Therapy; 2) describe the need for self-care, productivity and leisure; 3) compare and contrast community health-care services for pediatric, adult, and geriatric populations; 4) describe the history and philosophy of Occupational Therapy; and 5) explore topics related to integrative health and wellness.

### 102 Dynamics of Human Motion 4 credit hours

Offered fall semester. Two and a half hours lecture and four hours laboratory a week. Fee: \$50.00.

Through study, discussion, and field observation/participation, the student will: 1) identify major muscle groups and their effect on movement; 2) analyze movement activities according to joint movements, muscle groups involved, and type of contraction elicited; 3) be introduced to range of motion, body mechanics, and kinetic principles; and 4) perform standardized assessments of the skeletal and muscular system as they relate to occupational performance.

*Prerequisite: Admission to the OTA Program and completion of all the first semester courses of OTA Phase II.*

### 103 Intervention Techniques I 2 credit hours

Offered summer session. One-hour lecture and two and a half hours laboratory a week. Fee: \$100.00. Learning Harbor Fee: \$25.00.

Through study, discussion, and participation, the student will explore and apply intervention methods and techniques within defined occupational therapy treatment approaches. The student will focus on factors of occupational engagement, activity analysis, and application of clinical skills. Concepts of grading, adapting, and remediation will be explored through clinical application and case study analysis.

*Prerequisite: Completion of Phase I courses and admission to the OTA program.*

### 104 Diversity and Health Determinants 3 credit hours

Offered fall and spring semesters. Three hours lecture a week.

Through study and discussion, the student will explore diverse social factors as they relate to delivering effective treatment plans in Occupational Therapy. Introduction to occupations, basic values, cultural customs, and sociological factors related to healthcare services are viewed from the Occupational Therapy lens. The student will complete a final project illustrating the complex factors that influence roles and values unique to a client to demonstrate the importance of individualized healthcare service delivery.

### 106 Intervention in Physical Rehabilitation 4 credit hours

Offered summer session. Three hours lecture and four hours laboratory a week. Eight (eight-hour) days of fieldwork a semester with four days of fieldwork to be completed in laboratory simulation. Fee: \$100.00. Criminal Background Check Fee: \$39.00. Nurse Managed Wellness Clinic Fee: \$40.00. Online Simulation Fee: \$100.00. EHR Go Fee: \$90.00

Through study and discussion the student will: 1) identify commonly seen medical diseases, disorders, and conditions in the adult population and

2) identify Occupational Therapy evaluation techniques and methods of intervention for these medical conditions. Through lab application, the student will: 1) apply assessments and intervention skills within the context of facilitating occupational engagement and 2) develop clinical skills and reasoning to guide intervention planning and implementation. Through fieldwork observation/participation, the student will identify commonly seen physical disabilities, evaluation techniques, and methods of intervention for these conditions, including complementary and alternative methods.

*Prerequisite: Completion of Phase I courses and admission to the OTA program.*

### 107 Domain of Occupational Therapy 2 credit hours

Offered summer session. Two hours lecture and 1 hour laboratory per week.

Through study, discussion, and participation, the student will explore the intricacies of the Occupational Therapy Practice Framework and its use in defining the scope of Occupational Therapy. The topic of Domain – the components that build a holistic view of a client will be examined and conceptualized into clinical practice through a bottom-up approach. The student will utilize the Person-Environment-Occupation Model to understand client domain and identify supporting and limiting factors of occupational engagement.

*Prerequisite: Completion of Phase I courses and admission to the OTA program.*

### 203 Intervention Techniques II 2 credit hours

Offered fall semester. One-hour lecture and three hours laboratory a week. Fee: \$100.00.

Through study, discussion, and participation, the student will explore intervention methods and techniques focusing on compensation and adaptation principles. Topics of adaptive equipment, environmental modifications, advocacy, specialty certifications, professional organizations, interdisciplinary roles, and specialized procedures of interventions such as prosthetics and orthotics will be applied through various clinical applications and case analysis.

*Prerequisite: Admission to OTA Program and completion of all the first semester courses of OTA Phase II.*

### 204 Physical Agent Modalities 2 credit hours

Meets thirty hours a semester. Meeting times vary. Fee: \$100.00.

Through study, discussion, and skills training, the student will apply interventions of therapeutic modalities including electrical stimulation and ultrasound. The student will learn the physics and basic principles of therapeutic modalities including definitions, terminology, and clinical applications. The student will develop entry-level competence in selecting appropriate modalities, applying correct parameters, and demonstrating safety methods to assist in the achievement of client-centered treatment goals.

*Prerequisite: Admission to the OTA Program and completion of all the first and second semester courses of OTA Phase II.*

### 207 Intervention with Children and Adolescents 4 credit hours

Offered fall semester. Two and a half hours lecture and four hours laboratory a week. Five (eight-hour) days of fieldwork a semester with two days of fieldwork to be completed in laboratory simulation. Fee: \$100.00. Nurse Managed Wellness Clinic Fee: \$40.00.

Through study, discussion, and participation, the student will: 1) identify common injuries, diseases and difficulties encountered in individuals from birth through adolescence 2) correlate occupational therapy evaluation techniques and intervention methods in relation to occupational engagement. The student will apply the Occupational Therapy Process as within the context of age, diagnostic categories, and functional performance. Through fieldwork observation/ participation, the student will identify commonly seen pediatric disabilities, evaluation techniques, and methods of intervention for these conditions, including complementary and alternative methods.

*Prerequisite: Admission to OTA Program and completion of all the first semester courses of OTA Phase II.*

**209 Clinical Internship I 4 credit hours**

Offered spring semester. Three hundred and twenty hours (320) hours of Level II fieldwork obtained in an eight to twelve, forty-hour week session. Pass-fail grading. Nurse Managed Wellness Clinic Fee: \$40.00.

Through participation, the student will complete a supervised clinical fieldwork experience in an appropriate occupational therapy practice area.

*Prerequisite: Admission to the OTA Program and completion of all OTA Phase II courses in the first and second semester. Successful completion of all didactic courses of Phase II is required.*

**210 Clinical Internship II 4 credit hours**

Offered summer session. 320 hours of Level II fieldwork obtained in an eight to twelve, forty-hour week session. Pass-fail grading. Exam Prep Fee: \$140.00. Nurse Managed Wellness Clinic Fee: \$40.00.

Through participation, the student will complete a supervised clinical fieldwork experience in an appropriate occupational therapy practice area.

*Prerequisite: Admission to the OTA Program and completion of all OTA Phase II courses in the first, second, and third semester and OTA 209 Clinical Internship-I.*

**212 Specialty Skills Development 3 credit hours**

Offered spring semester. Two hours lecture and two and a half hours lab a week. Fee: \$100.00.

Occupational Therapy Assistant Capstone course. Through study, discussion, and participation, the student is guided through a self-assessment of skills as they relate to specialty areas of interest. Through collaboration with the instructor and community mentors, the student will obtain fieldwork experiences, explore library research, attend continuing education courses, and participate in professional networking to deepen their knowledge and skills of a chosen specialty area. Goal setting and measurement are integral components of the course. Additionally, the student will be guided through the exploration of specialty practice areas and related skills to foster well-rounded entry-level clinicians.

*Prerequisite: Admission to the OTA Program and completion of all the first and second semester courses of OTA Phase II.*

**215 Mental Health Concepts and Techniques 4 credit hours**

Offered fall semester. Two and a half hours lecture and four hours laboratory a week. Seven (eight-hour) days of fieldwork a semester with two days of fieldwork to be completed in laboratory simulation. Fee: \$100.00.

Through study, discussion, and participation, the student will 1) identify common psychosocial conditions using Occupational Therapy evaluation techniques, 2) identify methods of intervention in psychosocial settings, 3) practice observing, assessing, and reporting group behaviors, 4) practice planning and implementing therapeutic groups, 5) develop therapeutic use of self, and 6) identify roles of group leader and follower. Through fieldwork observation/participation, the student will identify commonly seen psychosocial conditions, evaluation techniques, and methods of intervention for these conditions, including complementary and alternative methods.

*Prerequisite: Admission to the OTA Program and completion of all the first semester courses of OTA Phase II.*

**217 Interventions with the Geriatric Population 4 credit hours**

Offered Spring semester. Two-and-a-half-hours lecture and four hours of laboratory a week. Five (eight-hour) days of traditional fieldwork a semester. Fee: \$100.00.

Through study, discussion, and participation, the student will develop entry-level knowledge and skills in occupational therapy's geriatric practice areas. The student will learn, apply, and integrate concepts related to aging adults to appropriately address occupational engagement within

their role of an OTA. Various theories of aging, physical and psychosocial changes associated with aging, strategies of health and wellness in the later years, holistic intervention planning with the geriatric population, and intervention techniques addressing all components of occupational therapy domain will be explored. Through fieldwork and observation/participation, the student will identify commonly seen conditions of the older adult, evaluation techniques, and intervention methods for these conditions.

*Prerequisite: Admission to the OTA Program and completion of all the first and second semester courses of OTA Phase II.*

**220 OT Program Development 2 credit hours**

Offered spring semester. Two hours lecture a week.

Through study, discussion, and application, the student will develop a program within a chosen area of interest which provides occupation-based services to individuals, groups, or populations in need of services. The student will explore management and leadership styles, human resources issues, budgeting, supervision, organization, interdisciplinary roles, non-traditional roles of an OTA, and planning as they relate to the provision of occupational therapy.

*Prerequisite: Admission to the OTA Program and completion of all the first and second semester courses of OTA Phase II.*

**229 Special Topics in Occupational Therapy 1-3 credit hours**

This course is designed to allow the student to do individual research in the field of Occupational Therapy under the guidance of an OTA faculty member. The student may choose to pursue special interests beyond those available in course offerings. The course may be repeated for up to 3 credits.

*Prerequisite: Instructor consent required.*

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**PHARMACY TECHNICIAN (PHAR)**

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**101 Pharmacy Technician 6 credit hours**

Six hours lecture and one-hour clinical laboratory a week. Fee: \$100.00.

This course will cover knowledge areas and skills required and tested on the registry exam for the state of Maryland. Students will learn about drug classifications, generic and name brands, dosage calculations, and state and federal laws regarding working in a pharmacy. The student will work with analytical balances and compounding equipment that will prepare them for clinical application. A variety of measurement systems will be covered in the course, as the student will need to be able to apply conversions properly.

*In order to successfully pass this course, students must achieve a grade of "C" or better, along with meeting the academic standards of the college.*

*Prerequisite: Minimum high school GPA of 3.0 or appropriate assessment scores in Reading and Mathematics. Instructor consent required.*

*Prerequisite or Corequisite: Nursing Assistant 101 and Physical Education 153.*

**102 Pharmacy Tech Internship 5 credit hours**

One-hour lecture and twelve hours clinical practicum a week. Fee: \$100.00. Criminal Background Check Fee: \$62.00. Nurse Managed Wellness Clinic Fee: \$40.00.

Student will spend approximately twelve hours each week in a retail pharmacy, a hospital pharmacy, or an institutional pharmaceutical setting receiving practice as a Pharmacy Technician, under the supervision of a registered pharmacist.

*In order to successfully pass this course, students must achieve a grade of "C" or better, along with meeting the academic standards of the college.*

*Prerequisite: Instructor consent required.*

*Prerequisite or Corequisite: Nursing Assistant 101, Physical Education 153, and Pharmacy Technician 101.*

**PHILOSOPHY (PHIL)****199 Thanatos - A Humanities Approach to Death and Dying (Psychology 199) 3 credit hours**

Offered fall and spring semesters. Three hours lecture and discussion a week.

This course is intended to provide a historical and contemporary examination of the biological, psychological, cultural, philosophical, and sociological perspectives of death, the process of dying, grief, and coping after loss. Topics include death in the lives of children and adults, cultural values and ethical issues, as well as an examination of death systems through works of literature, art, music, and media in contemporary societies.

**201 Introduction to Philosophy 3 credit hours**

Offered fall and spring semesters. Three hours lecture and discussion a week.

The meaning and scope of philosophy, its typical problems and theories, its relations to sciences, morality, and religion. Essentials of representative types of philosophy, including naturalism, pragmatism, dualism, idealism, and mysticism.

**202 Ethics 3 credit hours**

Offered spring semester. Three hours lecture and discussion a week.

An introduction to the meaning and method of ethics, with special emphasis on the problems of personal and social ethics. A special section of the course will deal with types of proposed solutions to ethical problems from the past. Emphasis will be placed on the ethics of both religion and humanism.

**204 Comparative Religions 3 credit hours**

Three hours lecture and discussion a week.

This course is an introduction to the study of religions. The course will begin with a study of ancient religions, including those of Greece and Rome. The course will examine Hinduism, Buddhism, Taoism, Confucianism, Shintoism, Judaism, Christianity and Islam. An effort will be made to stress the ethical systems, which form an essential part of a religion.

**PHLEBOTOMY/LABORATORY ASSISTANT (PBLA)****110 Orientation to the Clinical Laboratory (Medical Laboratory Technology 110) 1 credit hour**

Offered fall and spring semesters. Fee: \$50.00.

This course will introduce students to laboratory medicine including an overview of each area within the laboratory and the types of patient testing performed in each area. Students will learn about the OSHA safety precautions and regulatory considerations applicable to clinical laboratories in the US. Students will also identify the organizations representing the profession and the certification/licensure requirements within the laboratory profession. Students will be given instruction on basic laboratory techniques such as specimen processing and use of a centrifuge, microscope, and autoclave. Students will tour a clinical laboratory as part of the course experience.

*Prerequisite: Successful completion of English 92 or the appropriate corresponding score on the reading portion of the placement assessment.*

**111 Basic Phlebotomy Procedures 1 credit hour**

Offered fall and spring semesters. Offered in the first half of a semester. Fee: \$80.00.

This course is designed to train allied health students and practicing professionals in the skills necessary to ensure proper blood specimen collection. Participants will learn the techniques necessary to obtain a quality specimen for use in a laboratory setting or point of care testing environment.

*Prerequisite: Minimum high school GPA of 3.0 or appropriate assessment scores. Students should be enrolled in a healthcare program or be an experienced healthcare professional.*

**112 Advanced Phlebotomy Procedures 2 credit hours**

Offered fall semester. Offered in the second half of a semester. Fee: \$80.00.

This course is designed to expand the initial training of allied health students and practicing professionals in the skills necessary to ensure proper blood specimen collection. Participants will perform the techniques necessary to obtain a quality specimen for use in a laboratory setting or point of care testing environment. This course will concentrate on the management of difficult collection situations and on the collection of specialized situations/tests. In order to successfully pass this course, student must achieve a grade of "C" or better, along with meeting the academic standards of the college.

Should be enrolled in a healthcare program or be an experienced healthcare professional.

*Prerequisite or Corequisite: Phlebotomy/Laboratory Assistant 110, 111, or consent of instructor. Should be enrolled in a healthcare program or be an experienced healthcare professional.*

**113 Neonatal and Pediatric Phlebotomy Procedures 1 credit hour**

Offered fall semester. Offered in the second half of a semester. Fee: \$80.00.

This course is designed to expand the initial training of allied health students and practicing professionals in the skills necessary to ensure proper blood specimen collection from neonatal and pediatric populations. Participants will learn the age specific collection techniques necessary to obtain a quality specimen for use in a laboratory setting or point of care testing environment. This course will concentrate on the management of difficult pediatric collection situations and on the collection of specialized pediatric situations/tests.

*Prerequisite or Corequisite: Phlebotomy/Laboratory Assistant 110, 111 or consent of instructor. Should be enrolled in a healthcare program or be an experienced healthcare professional.*

**114 Phlebotomy Practicum 2 credit hours**

Offered spring semester. Fee: \$80.00. Clinical Edoc Fee: \$85.00. Nurse Managed Wellness Clinic Fee: \$60.00.

This course is designed to provide the clinical training of those students completing the Phlebotomy/Laboratory Assistant curriculum. Participants will perform the techniques necessary to obtain a quality specimen for use in a laboratory setting or point of care testing environment. This course will provide a minimum of 100 clock hours in the clinical setting. In order to pass this course, students must complete the required number of successful specimen collections and students must achieve a grade of "C" or better, along with meeting the academic standards of the college.

*Prerequisite: Phlebotomy/Laboratory Assistant 111, 112, 113, or consent of instructor.*

**115 Laboratory Assistant Practicum 1 credit hour**

Offered spring semester. Fee: \$80.00.

This course is designed to provide the clinical training of those students completing the Phlebotomy/Laboratory Assistant curriculum. In this practicum students will spend a minimum of 25 hours performing waived testing in an acute care laboratory setting or ambulatory care/point of care testing environment.

*Prerequisite: Phlebotomy/Laboratory Assistant 111, 112, 113, or consent of instructor.*

*Prerequisite or Corequisite: Medical Assistant 218 / Phlebotomy/Laboratory Assistant 218.*

**218 Clinical Laboratory Procedures (Medical Assistant 218) 2 credit hours**

Fee: \$150.00. This course is designed to provide instruction and performance opportunities for CLIA waived tests. Students will discuss the role of medical assistants and other professionals in performing clinical laboratory testing. Topics to be discussed are coordinating laboratory tests and results; understating CLIA regulations and quality assurance; performing CLIA waived testing for urinalysis, hematology, serology, basic chemistry, microbiology, and immunology; and screening results.

In order to successfully pass this course, a student must achieve a grade of "C" or better in this course.

*Prerequisite or Co-requisite: Phlebotomy/Laboratory Assistant 110, 111, or consent of instructor.*

**PHYSICAL EDUCATION (PHED)**

**104 Swimming (Beginning and Intermediate) 1 credit hour**

Offered fall and spring semesters. Fee: \$30.00.

This course is designed for both beginning and intermediate swimmers. Emphasis is placed upon teaching correct techniques in basic swim strokes, reviewing stroke fundamentals and water safety.

**109 Basketball and Volleyball (Co-Ed) 1 credit hour**

Offered fall semester. Two meetings a week.

Instruction and competition in basketball and volleyball. Experience in team play is emphasized and the rules and history of the games are investigated.

**113 Beginning Weight Training (Co-Ed) 1 credit hour**

Offered fall semester. Two meetings a week. Fee: \$15.00.

Practice in performing basic skills in weightlifting through use of a Universal Gym Machine. Emphasis is placed on safety, techniques, beginning training procedures, and body conditioning.

*Prerequisite: Instructor consent required.*

**122 Fitness Center 1 credit hour**

Offered fall and spring semesters. Fee: \$40.00.

This course is organized on an individual basis with a primary focus on the physical dimension of wellness using a variety of physical activities to give the student practical experiences. Students will use the Fitness Center which includes Nautilus machines, automated treadmills, exercise bikes, rowing machines, ellipticals, and free weights, with the ultimate goal of a self-directed healthier lifestyle. May be repeated for up to six credits.

**123 Individualized Conditioning for Adults 1 credit hour**

Offered fall and spring semesters. Fee: \$10.00.

This course is organized on an individual basis and is based upon general aerobic principles. Theory and facts of weight control, dieting, fads, cardiovascular fitness, and conditioning, equipment selection and exercise techniques, are discussed. Practice sessions comprise most of the class sessions and will include preconditioning testing, followed by a conditioning program. A physical examination and/or a doctor's clearance is strongly recommended. May be repeated for up to four credit hours.

**126 Yoga for Wellness I (Integrative Health 126) 1 credit hour**

Offered spring semester. Two hours a week. Fee: \$10.00.

This course includes the history, basic skills, principles, and Yoga postures to develop a personal routine for mental, physical, and spiritual training. Students will develop an understanding of how Yoga can improve physical flexibility and control relaxation to harmonize the body, mind, and spirit.

**127 Yoga for Wellness II (Integrative Health 127) 1 credit hour**

Offered spring semester. Two hours a week. Fee: \$10.00.

This class will build on the skills learned in Physical Education 126 and will also focus on the healing benefits of Asana (posture), Pranayama (breathwork), and Meditation. More advanced asanas will also be explored, including inversions.

*Prerequisite: Physical Education 126.*

**128 Physical Education for Criminal Justice (Criminal Justice 128) 1 credit hour**

As demand warrants. One hour a week. Fee: \$15.00.

This course is organized with a primary focus on the physical dimension of wellness using a variety of physical activities to give the student practical experiences toward taking a physical fitness examination required by criminal justice agencies. Students will train in a variety of methods with the ultimate goal of a healthier lifestyle and the ability to pass an academy physical fitness test.

**130 Intermediate Weight Training (Co-Ed) 1 credit hour**

Offered spring semester. Two meetings a week. Fee: \$15.00.

Practice and competition in performing skills in weight training for students with previous experience in weight training. Emphasis is placed on safety, techniques, advanced training procedures, and body conditioning.

*Prerequisite: Instructor consent required.*

**145 Personal Wellness 2 credit hours**

Offered fall and spring semesters. Two meetings a week. Fee: \$10.00.

This course will provide each student the opportunity to plan and implement personal fitness and wellness plan. This plan will include warm-up techniques, flexibility, muscular strength, cardiorespiratory health, weight control, stress management and nutrition components. Additional topics include dieting, body composition, lifetime activities, emotional health. The student's fitness/wellness will be assessed at the beginning and at the end of the course.

**148 Cardiopulmonary Resuscitation 1 credit hour**

Offered fall and spring semesters. One-hour lecture and discussion a week. Fee: \$30.00.

Instruction of cardiopulmonary resuscitation, as outlined by American Heart Association. This course is designed to provide training and certification in Cardiopulmonary Resuscitation. Certification is not required to complete this course. However, upon successful completion, the student will receive American Heart Association BLS for Healthcare Providers (CPR and AED) certification.

**151 First Aid and Safety 2 credit hours**

Offered fall and spring semesters. Two hours lecture and demonstration a week. Fee: \$10.00.

The First Aid portion of this course will be Standard First Aid and Personal Safety, as designed by the National Safety Council. The safety portion of this course is designed to cover the various situations that will be faced in the field. The areas to be specifically covered are those on safety policy, public safety, travel, forest activities, equipment, hand tools, machine tools, and personal equipment. Certification is not required to complete this course. However, upon successful completion the student will receive National Safety Council Standard First Aid and Personal Safety certification.

**152 Industrial Safety 2 credit hours**

Offered spring semester. Two hours lecture and discussion a week.

This course is designed for the student who will work in an industrial setting. In addition to discussions on OSHA laws, standards, and regulations, the student will gain understanding of specific safety practices concerning tools, machine guarding, toxic chemicals, radiation, and asbestos. Treatment of specific injuries (bleeding, burns, toxic inhalation, traumatic shock, and heart stoppage) will be covered according to American Red Cross Standards. Physical Education 152 is required of all



Automotive Technology Associate Degree students. The major areas of the Occupational Safety and Health Act (OSHA) will be dealt with throughout the course.

**153 Cardiopulmonary Resuscitation and First Aid 2 credit hours**  
Offered fall and spring semesters. Two hours lecture and discussion a week. Fee: \$30.00.

Instruction of cardiopulmonary resuscitation, as outlined by American Heart Association accompanies this course. The First Aid portion of this course will be Standard First Aid and Personal Safety, as designed by the National Safety Council. Certification is not required to complete this course. However, upon successful completion, the student will receive National Safety Council Standard First Aid and American Heart Association BLS for Healthcare Providers (CPR and AED) certification.

**154 Integrated Health and Physical Education 3 credit hours**  
Offered fall and spring semesters. Three hours lecture a week. Fee: \$10.00.

This course focuses on those aspects of health and physical education that are critical to personal wellness and professional practice. Course elements include: health information, physical activity, self-assessment, health action planning, and disease prevention all with application to learning environments. This course meets the outcomes and requirements for the Associate of Arts in Teaching degree.

**155 Mind-Body Movement Stress Reduction Techniques 1 credit hour**  
Offered fall and spring semesters. Two hours a week.

This course is designed as a sampler class that will give the student an introduction to many stress reduction techniques such as: relaxation and breath work, tai chi, yoga, water aerobics, and drumming. Emphasis will be on the practice and exploration of each technique. Students will develop self-awareness about their unique response to stress and relaxation and about the connection between this response and wellness.

**173 Introduction to Exercise and Sport Science 3 credit hours**  
Offered fall semester. Three meetings per week. Fee: \$35.00.

Students will explore the various opportunities that are available in the exercise and sport science field. Students will also discover the history of exercise science and explore the philosophies that the field is based upon. An emphasis will be placed on the sub-disciplines of kinesiology.

**174 Foundations of Resistance Training 1 credit hour**  
Offered fall semester. One meeting per week. Fee: \$35.00.

This course will provide students with the foundational principles of resistance training. Students will learn various resistance training techniques, identify bone structures and muscle groups, and demonstrate proper form and spotting technique.

**175 Group Methods of Exercise 3 credit hours**  
Offered spring semester. Three meetings per week. Fee: \$35.00.

Students will learn the foundational skills and knowledge necessary to lead a group in a fitness class. Students will explore and learn the dispositions, leadership, and technical skills for safe and effective group exercise programs.

*Prerequisite: Physical Education 174.*

**203 Intramural and Sports Officiating (Course Currently Suspended) 3 credit hours**  
Offered fall semester. Three hours lecture a week.

The philosophy, history, organization, and administration of intramural activities will be presented. The technique of officiating, rules of various activities, and in-service training will be included as part of the sports officiating.

**204 Introduction to Physical Education (Course Currently Suspended) 3 credit hours**

Offered fall semester. Three hours lecture and discussion a week.

The course is a background course for all students who are going to major in physical education in a four-year college. The content will cover the cultural foundations, outstanding leaders, and changing aims and objectives of physical education through the ages. The contributions physical education has made to society, both past and present, are discussed.

**209 Foundations of Training I (Course Currently Suspended) 3 credit hours**

Offered fall semester. Fee: \$35.00.

This course will provide you with the opportunity to learn the foundational principles of personal training. The focus will be on your development of the functional knowledge of exercise science: structure and function of the muscular, nervous, and skeletal and cardiorespiratory systems, bioenergetics and biomechanics, and the body's physiological response to exercise. Initial consultation and evaluation, and exercise techniques are also explored and discussed.

*Prerequisite: Physical Education 145.*

**210 Foundations of Training II (Course Currently Suspended) 3 credit hours**

Offered spring semester. Fee: \$35.00.

This course will provide you with the opportunity to learn the foundational principles of personal training and build upon your previous knowledge from Foundations of Training I. The focus will be on program design, meeting the needs of the client (health issues, injuries, and various other issues), safety, maintaining equipment, and legal issues.

*Prerequisite: Physical Education 209.*

**212 Fundamentals of Health and Physical Education (Course Currently Suspended) 3 credit hours**

Offered spring semester.

The purpose of this course is to build a solid base of knowledge and understanding in teaching Health and Physical Education. This starts with the foundational principles of learning and teaching, followed by the application of knowledge via writing lesson plans, and teaching mock lessons. Content is explored at a greater depth, while pedagogical models are discussed and started to be developed.

*Prerequisite: Physical Education 204.*

**232 Lifespan Health and Fitness 3 credit hours**

Offered fall semester. Three meetings per week. Fee: \$35.00.

Students will learn the advanced science and application of nutrition for both the general population as well as the physically active. Explore the varying needs of nutrition and exercise across the lifespan and the impact it has on human health.

*Prerequisite: Biological Science 114.*

**233 Exercise Science Administration 3 credit hours**

Offered fall semester. Three meetings per week. Fee: \$35.00.

Students will learn about effective administration and management strategies in health and fitness. This class will address various human resource management, financial management, facility design and planning, client management issues, and legal liability issues. Emphasis is put on health fitness and personal training management.

**235 Biomechanics of Exercise Science 3 credit hours**

Offered spring semester. Three meetings per week. Fee: \$35.00.

Students will learn the mechanics of human motion; muscles and joints. Application of mechanical principles to the study of human movement in

exercise and daily life. Biomechanical relationships in the upper and lower extremities, and the vertebral column.

*Prerequisite: Biological Science 207.*

### **298 Special Topics for Physical Education 1-3 credit hours**

Special Topics will address physical activities and skills not typically offered within the physical education department. The format of the activity courses offered will vary as a function of course topic.

Course may be repeated up to three times for credit.

## **PHYSICAL THERAPIST ASSISTANT (PTA)**

### **101 Introduction to Physical Therapist Assistant 2 credit hours**

Offered fall semester. Two-hour lecture web course. Fee: \$100.00.

The student will learn: 1) the profession of physical therapy including its history, professional organization, and structure in the healthcare setting; 2) Physical Therapy practice including settings, interventions, and the roles of the physical therapist (PT) and the physical therapist assistant (PTA); 3) ethical and legal issues; 4) professionalism and cultural awareness; 5) verbal communication including teaching and learning; 6) nonverbal communication including basic documentation and medical record reviews; 7) reimbursement and research; and 8) strategies for success in the program and the profession.

In order to successfully pass this course, student must achieve a grade of "C" or better

### **202 Procedures 5 credit hours**

Offered fall semester. Two hours lecture and on average nine hours of seminar/campus laboratory/clinical lab a week. Fee: \$100.00.

This course includes: 1) introduction to patient care; 2) handwashing, asepsis, and sterile field techniques; 3) proper body mechanics and lifting; 4) obtaining vitals; 5) positioning, and draping; 6) manual techniques including passive joint range of motion and therapeutic massage; 7) joint measurements including goniometry; 8) application of assistive/adaptive equipment; 9) wheelchair maintenance and mobility; 10) functional training in self-care and domestic, education, work, community, social, and civic life; and 11) motor function training (i.e. transfers, gait training, balance) with emphasis on proper body mechanics. Skill checks and/or practical examinations on all appropriate clinical topics will be conducted.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Acceptance into Phase II of the PTA Program.*

### **203 Pathology I 2 credit hours**

Offered fall semester. Four hours lecture and on average one hour of seminar a week. Fee: \$100.00.

This course describes the etiology, signs, symptoms and treatments of diseases, disorders, and injuries commonly requiring physical rehabilitation in a system approach.

In order to successfully pass this course, student must achieve a grade of "C" or better.

*Prerequisite: Acceptance into Phase II of the PTA Program.*

### **204 Pathology II 2 credit hours**

Offered spring semester. Four hours lecture and on average one hour of seminar a week. Fee: \$100.00.

This course describes the etiology, signs, symptoms and treatments of diseases, disorders, and injuries commonly requiring physical rehabilitation in a system approach.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Successful completion of all PTA third semester courses.*

### **205 Modalities I**

**3 credit hours**

Offered fall semester. Two hours lecture and on average two hours of seminar/campus laboratory/clinical lab a week. Fee: \$100.00.

This course provides an introduction to patient treatment including preparation of the patient and related equipment. Patient issues such as inflammation and repair, pain, tone, and movement restrictions will be explored. The student will learn the physics, physiology, application, indications, and contraindications behind various biophysical agents including superficial and deep thermal agents, cryotherapy, electromagnetic agents, compression therapies, hydrotherapy, and light therapy. Paraffin bath, ultrasound, phonophoresis, ultraviolet, and diathermy will also be covered. In addition, students will have an introduction to electrotherapeutic modalities such as transcutaneous electrical stimulation (TENS). Related medical terminology and SOAP format documentation are utilized. Skill checks and/or practical examinations on all appropriate clinical topics will be conducted.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Acceptance into Phase II of the PTA Program.*

### **206 Modalities II**

**3 credit hours**

Offered spring semester. Two hours lecture and on average two hours of seminar/campus laboratory/clinical lab a week. Fee: \$100.00.

The student will learn the physics, physiology, application, indications, and contraindications behind various biophysical agents including electrotherapeutic physical agents for pain, tissue healing, muscle strengthening, and muscle reeducation including direct, alternating, and pulsed current. The student will also learn both cervical and lumbar mechanical traction, hydrotherapy including pool therapy, and related documentation for all of the above. Skill checks and/or practical examinations on all appropriate clinical topics will be conducted.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Successful completion of all PTA third semester courses.*

### **208 Principles of Rehabilitation**

**4 credit hours**

Offered spring semester. Two hours lecture and on average seven hours of seminar/campus laboratory/clinical lab a week. Fee: \$100.00.

The course includes an understanding of advanced anatomy and physiology, documentation including medical terminology, and treatment of the following: 1) pediatric nervous system disorders and neurodevelopmental sequencing; 2) adult nervous system disorders including, but not limited to, cerebral vascular accidents, traumatic brain injury, and spinal cord injuries; 3) individuals with amputations; 4) orthotic and prosthetic considerations; 5) cardiopulmonary rehabilitation; and 6) integumentary concerns such as wounds and burns. Skill checks and/or practical examinations on all appropriate clinical topics will be conducted.

In order to successfully pass this course, student must achieve a grade of "C" or better.

*Prerequisite: Successful completion of all PTA third semester courses.*

### **209 Clinical Kinesiology**

**4 credit hours**

Offered fall semester. Three hours lecture and on average five hours of seminar/campus laboratory/clinical lab a week. Fee: \$100.00.

The student will learn: 1) advanced anatomy of the musculoskeletal system with special considerations of joints of the body; 2) movement analysis of the body with emphasis on osteokinematics and arthrokinematics; 3) gait analysis in the normal and involved patient; 4) gross muscle testing, basic understanding of manual muscle testing; 5) related medical and SOAP format documentation; and 6) palpation of bony and soft tissue structures. Skill checks and/or practical examinations on all appropriate clinical topics will be conducted.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Acceptance into Phase II of the PTA Program.*

## 210 Therapeutic Exercise 4 credit hours

Offered spring semester. Two hours lecture and on average eight hours of seminar/campus laboratory/clinical lab a week. Fee: \$100.00.

This course provides an in depth study of therapeutic exercise with development of understanding in basic exercise physiology. The student will learn: 1) theory and practice of therapeutic exercise in a treatment and preventative role; 2) proper use of exercise equipment, mat activities etc. to address flexibility, strengthening, endurance, etc.; 3) measurement of endurance, flexibility and ROM including goniometric measurement; and 4) related medical terminology and SOAP format documentation. Skill checks and/or practical examinations on all appropriate clinical topics will be conducted.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Successful completion of all PTA third semester courses.*

## 213 Clinical I 2 credit hours

Offered fall semester. Two hours lecture, and, on average, two hours of seminar/campus laboratory/clinical lab a week, plus ninety-six hours of clinical fieldwork throughout the semester. Fee: \$100.00. Learning Harbor Fee: \$25.00. Criminal Background Check Fee: \$39.00. Nurse Managed Wellness Clinic Fee: \$40.00. Uniform Fee: \$30.00.

This course will consist of weekly lecture/lab/seminar on topics pertinent to the field of physical therapy including information needed for successful orientation into the clinical setting (e.g., professionalism, psychosocial issues, documentation, ethics, laws and regulations, reimbursement, as well as, orientation to applicable clinical equipment and techniques.) The clinical hours involve observation and utilization of skills assessed thus far in the curriculum as per Academic Coordinator of Clinical Education (ACCE) and Clinical Instructor (CI) discretion. Skill checks and/or practical examinations will be conducted as needed including a cumulative practical examination.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Acceptance into Phase II of the PTA Program.*

## 214 Clinical II 2 credit hours

Offered spring semester. Two hours lecture, and, on average, two hours of seminar/campus laboratory/clinical lab a week, plus 120 hours of clinical fieldwork throughout the semester. Fee: \$100.00. Testing Fee: \$99.00. Exam Prep Fee: \$275.00. Nurse Managed Wellness Clinic Fee: \$40.00.

The student will rotate to a different type of facility for each of the week sessions. Clinical sites are located in the region, which may require some travel. The student will participate in patient treatment skills mastered in the fall PTA coursework as well as clinical applications of the theory and techniques in the spring PTA coursework as per lab skill check-off sheet, Academic Coordinator of Clinical Education (ACCE) and Clinical Instructor (CI) discretion. All clinical competencies will be scored as per format in the PTA Student Handbook using the clinical assessment instruments. Weekly seminar on topics pertinent to the field of physical therapy including professionalism, ethics, reimbursement, etc. will also be covered. Skill checks and/or practical examinations on all appropriate clinical topics will be conducted.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Successful completion of all PTA third semester courses.*

## 216 Trends 1 credit hour

Offered summer session. Fifteen hours of lecture. Fee: \$100.00.

This course is intertwined with Practicum I and II in which various aspects of physical therapy encountered clinically by the students are explored for

relevancy and future professional implications. The course also includes a licensing exam preparation among other assignments.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Successful completion of all PTA fourth semester courses*

## 218 Practicum I 5 credit hours

Offered summer session. Forty clinical hours and three online lecture hours a week for five weeks. Fee: \$100.00. Nurse Managed Wellness Clinic Fee: \$40.00.

The course consists of a five-week long, forty hours per week clinical rotation at one clinical site area. Experience will be assessed in relation to clinical skills check-off found in the clinical assessment instrument. Several experiences may be available in one area (i.e. several weeks at a hospital followed by several weeks at a clinical associated with the same clinical site). Student must be willing to commute for extended distances within the greater region during this time. Clinical competencies will be continued, oral presentation will be presented to the staff on a topic other than the topics presented in previous clinical rotations.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Successful completion of all PTA fourth semester courses.*

## 219 Practicum II 5 credit hours

Offered summer session. Forty clinical hours and three online lecture hours a week for five weeks. Fee: \$100.00. Nurse Managed Wellness Clinic Fee: \$40.00.

The course consists of a five-week long, forty hours per week clinical rotation at one clinical site area. Every effort will be made to accommodate site with the student clinical skills check-off needs and/or desires. All critical clinical skills must be completed at the end of this rotation. Several experiences may be available in one area (i.e. several weeks at a hospital followed by several weeks at a clinical associated with the same clinical site). Student must be willing to commute for extended distances within the greater region during this time. Clinical competencies will be completed, oral presentation will be presented to the staff on a topic other than the topics presented in previous clinical rotations.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Successful completion of all PTA fourth semester courses.*

## 299 Special Topics in Physical Therapy 1 credit hour

This course is designed to allow students in the clinical phase of the Physical Therapist Assistant Program the opportunity to pursue individual research in the field of Physical Therapy, as well as allowing students to meet new or updated competency requirements for success in the field. The student will be supervised by a PTA faculty member and be required to attain a predetermined competency level.

This course may be repeated for credit up to a maximum of 5 credits based upon approval of the Physical Therapist Assistant Program Director.

The student must be accepted into Phase II of the PTA program to take this class.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

## PHYSICS (PHYS)

### 101 Introductory Physics I 4 credit hours

Offered fall semester. Three hours lecture and three hours laboratory a week. Fee: \$75.00.

This course is the first of a two-semester sequence that is a non-calculus introduction to physics. The topics covered include the fundamentals of kinematics and dynamics, work and energy, momentum, equilibrium,

fluids, vibrations and sound, heat, and thermodynamics. This course is recommended for liberal arts, pre-professional, and general studies students.

*Prerequisite: Minimum high school GPA of 3.0 or appropriate assessment scores and Mathematics 119.*

### **102 Introductory Physics II** **4 credit hours**

Offered spring semester using alternative instructional delivery methods. Three hours lecture and three hours laboratory a week. Fee: \$75.00.

This course is a continuation of Physics 101. The topics covered include electricity and magnetism, electromagnetic waves and optics, topics from modern physics, and nuclear physics. This course is recommended for liberal arts, pre-professional and general studies students.

*Prerequisite: Physics 101.*

### **103 Meteorology** **4 credit hours**

Offered spring semester. Three hours lecture and three hours laboratory a week.

This course presents a broad survey of the state of knowledge and problems of atmospheric science. Origin and structure of the atmosphere, meteorological observations, weather maps, forecasting, satellites, energetics, wind, general circulation, storms, severe weather, climate change, and air pollution are studied.

*Prerequisite: Mathematics 90 and minimum high school GPA of 3.0 or appropriate assessment scores.*

### **105 Physical Geology** **4 credit hours**

Three hours lecture and discussion and three hours laboratory a week. Fee: \$95.00.

A study of the principles of dynamical and structural geology. Provides a general survey of the rocks and minerals composing the earth, the movement within the earth, and the surface features of the earth and the agents that form them. The laboratory provides practical exercises stressing familiarization with rocks and minerals, the use of geologic maps, and field experience.

*Prerequisite: A grade of "C" or better in Mathematics 90 and minimum high school GPA of 3.0 or appropriate assessment scores.*

### **106 Introductory Astronomy** **4 credit hours**

Three hours lecture and three hours laboratory a week.

A descriptive course intended to familiarize students with various celestial bodies and to provide an understanding of the structure and the operating principles of the universe. As part of the laboratory sessions, students will be taught to distinguish planets and stars, identify the constellations, and use a star map. The course is designed for students who need a laboratory science to complete their curriculum as well as for students who wish a science elective.

*Prerequisite: Mathematics 90 and minimum high school GPA of 3.0 or appropriate assessment scores.*

### **109 Geography of Environmental Systems** **4 credit hours**

Three hours lecture and three hours laboratory a week. Fee: \$75.00.

This course provides an introduction to physical geography, a natural science allied with sciences such as geology, climatology, meteorology, oceanography, hydrology botany and agronomy. The geographic perspective is unique in that it integrates not only the individual systems that have commonly been associated with a single discipline, but also the interaction of these systems within a framework we call Earth System Science. The major goal of this class is to provide a fundamental understanding of the physical environment we live in. In doing so, the course will provide the basis for comprehending modern environmental issues, including those affected by human activities.

*Prerequisite: Mathematics 90 and English 92*

### **130 Inquiries in Physical Science I** **4 credit hours**

Offered fall and spring semesters. Three hours lecture and three hours laboratory a week. Fee: \$75.00.

This course provides an introduction to the fundamental concepts and basic scientific reasoning skills essential to the sciences. Laboratory experiments and observations help provide the basis on which students construct knowledge and increase their abilities in scientific reasoning. The topics to be included are the fundamentals of physics and chemistry.

*Prerequisite: Mathematics 90 and minimum high school GPA of 3.0 or appropriate assessment scores.*

### **132 Inquiries in Physical Science II** **4 credit hours**

Offered spring semester. Three hours lecture and three hours laboratory a week. Fee: \$75.00.

This course provides an introduction to the fundamental concepts and basic scientific reasoning skills essential to the sciences. Laboratory experiments and observations help provide the basis on which students construct knowledge and increase their abilities in scientific reasoning. The topics to be included are the fundamentals of earth science and space science and their relationships to living systems.

*Prerequisite: Physics 130.*

### **201 General Physics I** **4 credit hours**

Offered fall semester. Three hours lecture and three hours laboratory a week. Fee: \$75.00.

The first of a two-semester sequence that is a calculus based introduction to physics. The course is designed primarily for science and engineering majors. The topics to be studied include mechanics, work and energy, vibration and wave motion, and heat and thermodynamics.

*Prerequisite: Minimum high school GPA of 3.0 or appropriate assessment scores and Mathematics 201.*

### **202 General Physics II** **4 credit hours**

Offered spring semester using alternative instructional delivery methods. Three hours lecture and three hours laboratory a week. Fee: \$75.00.

A continuation of Physics 201 covering electricity, magnetism, electromagnetic waves, semiconductor theory, and optics. A necessary course for engineers and science students.

*Prerequisite: Physics 201.*

*Prerequisite or Corequisite: Mathematics 202.*

### **297 Field Studies in Biology and Geology (Biological Science 297)** **4 credit hours**

Consult with instructor prior to registration. Fee: To be established based on location of field studies.

An interdisciplinary study of ecosystems in their natural settings. Emphasis will be placed on plant communities and key animal populations, geology, climate, and the influence of humans as they are related to one another. Studies, which will include lectures and laboratories, will be conducted in the field where specimens will be collected and catalogued. Course may be repeated one time for credit. Course may be taken again as audit status, but all fees and tuition will apply.

*Prerequisite: Biological Science 101 or 103 or 107 or Physics 105. Instructor consent required.*

### **299 Special Problems in Physical Science** **1-4 credit hours**

Fee: \$75.00.

Study projects under the direct supervision of the instructor. Library and laboratory research on selected problems. May be repeated for credit.

*Prerequisite: Physics 101, 201, 211, or consent of instructor.*

## POLITICAL SCIENCE (POSC)

### 101 American National Government 3 credit hours

Offered fall and spring semesters. Three hours lecture and discussion a week.

The structure and functions of American national government. The elements of the executive, legislative, and judicial processes, with emphasis upon the role of the voter. Particular attention to problems of civil liberties, responsible government, and efficient administration.

### 102 State and Local Governments 3 credit hours

Offered spring semester. Three hours lecture and discussion a week.

A study of American state and local governments, with special emphasis on the office of governor, the state legislatures, forms of city governments, state and local finance, voting and elections, and the judicial systems in the states.

### 205 Introduction to American Constitutional Law (Criminal Justice 205) 3 credit hours

Offered fall semester. Three hours lecture and discussion a week.

A topical study of the development of the U.S. Constitution through the interpretation by the Supreme Court. Subjects include judicial review, federalism, Congressional and Presidential authority, the First Amendment, criminal rights, due process, and equal protection of the law.

### 298 Special Topics in Political Science 3 credit hours

This course is designed to address a range of topics and emerging issues within the field of Political Science, beyond the scope of those Political Science courses already offered. The format of the courses offered will vary depending on the course content. This course is repeatable for up to 6 credits.

*Prerequisite: Political Science 101 or consent of the instructor.*

### 299 Independent Study 1-6 credit hours

This course includes study projects related to political science.

*Prerequisite: Instructor consent required.*

## PRACTICAL NURSING (PNUR)

### 106 Mental Health Concepts in Nursing 1 credit hour

Offered summer session. Two hours lecture/seminar a week. Fee: \$21.00.

Introduces the practical nursing student to the basic knowledge and skills needed to function in the psychiatric setting. Mental health concepts are related to the care of persons in various clinical settings. Simulated experiences provide practice in communication skills.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Nursing II with a grade of "C" or better or consent of the instructor.*

### 108 Nursing in Society 1 credit hour

Offered summer session. Seminar totaling sixteen hours.

Focuses on the history of practical nursing, ethics, legal aspects, and the responsibilities of the licensed practical nurse as a member of the health team.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Nursing 150 with a grade of "C" or better.*

### 110 Concepts in Maternal-Child Nursing 5 credit hours

Offered summer session. Nine hours lecture and sixteen hours laboratory a week. Fee: \$61.00.

Focuses primarily on normal aspects of maternal and newborn care. Emphasis on normal patterns of growth and development. Common deviation from the normal are discussed. Clinical focus is on selected skills related to the care of mother, baby, children, and family in structured settings.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Nursing 150 with a grade of "C" or better.*

## PSYCHOLOGY (PSYC)

### 101 General Psychology 3 credit hours

Offered fall and spring semesters and summer session. Three hours lecture and discussion a week.

A foundation course in psychology. Review of the nature and purpose of psychology, the dynamics of adjustment, sensory development, psychometry, and the application of psychological knowledge to practical problems.

### 110 Introduction to Peace and Conflict Studies 3 credit hours

Offered fall semester. Three hours lecture and discussion a week.

This interdisciplinary course will provide an introduction and a foundation to the study of Peace and Conflict. Participants of this course will analyze the cultural, ethnic, historical, and religious roots of conflict and examine the types of war, types of violence-including economic and environmental violence, environmental instability, social injustice, gender inequity, positive and negative peace, and how to build a sustainable peace. Participants will understand and practice the principles of conflict resolution and will be required to perform a community service-learning project.

### 199 Thanatos - A Humanities Approach to Death and Dying (Philosophy 199) 3 credit hours

Offered fall and spring semesters. Three hours lecture and discussion a week.

This course is intended to provide a historical and contemporary examination of the biological, psychological, cultural, philosophical, and sociological perspectives of death, the process of dying, grief, and coping after loss. Topics include death in the lives of children and adults, cultural values and ethical issues, as well as an examination of death systems through works of literature, art, music, and media in contemporary societies.

### 202 Psychology of Human Adjustment 3 credit hours

Three hours lecture and discussion a week.

A review of the dynamics of personal and social behavior, with emphasis on factors that favor prevention and resolution of behavior difficulties. Attention will be given to the problems and adjustment patterns of the normal personality in contemporary American society.

*Prerequisite: Psychology 101.*

### 203 Human Growth and Development (Education 203) 3 credit hours

Offered fall and spring semesters. Three hours lecture and discussion a week.

The processes affecting and effecting human development, with implications for educational practices used by and in the family, school, and community. Attention given to measurements and evaluative techniques for assessing total growth. The case method will be used, with direct and recorded observation being required.

*Prerequisite: Psychology 101 or consent of instructor.*

### 204 Psychology of Learning and Teaching (Education 204) 3 credit hours

Offered fall and spring semesters. Three hours lecture and discussion a week.

A study of human development and its relationship to the theories and principles of learning and teaching. Topics investigated will include self-development, group functioning, individual learning alternatives, and teacher evaluative techniques as they affect learning.

Students will need to complete the fingerprint and background clearance process and be issued the appropriate identification prior to being scheduled for a field experience or school-site assignment.

*Prerequisite: Psychology 101 and Education 201.*

**205 Introduction to Abnormal Psychology 3 credit hours**

Offered fall and spring semesters. Three hours lecture and discussion a week.

This course provides an introduction to and an understanding of behavior disorders and insight into the personality of the disturbed person. Historical perspective of changing attitudes and treatment of psychopathy and techniques of diagnosis, classification, and therapy are studied.

*Prerequisite: Psychology 101.*

**207 Child Psychology 3 credit hours**

Offered fall semester. Three hours lecture and discussion a week.

This course studies child development from birth to 11 years. The physical, cognitive, emotional, social, inner processes, and the abnormal aspects of development are covered. The child in relationship to the family, school, and the community is also investigated.

*Prerequisite: Psychology 101.*

**208 Adolescent Psychology 3 credit hours**

Three hours lecture and discussion a week.

This course studies adolescent development from 12 to 19 years. Consideration is given to the physical, cognitive, moral, and social development as well as the hazards to adolescents. The family society, schools, and careers as they relate to the adolescent are also studied.

*Prerequisite: Psychology 101.*

**230 Introduction to Health Psychology (Integrative Health 230) 3 credit hours**

Three hours lecture and discussion a week

This course provides an introduction to the field of health psychology. Course content includes an overview of scientific principles and current research findings; applications to specific diseases, stress management, and to health promotion; demonstration of the most widely used and effective intervention strategies; and the role of health psychology and mind/body medicine in health care practice. Experiential learning, lecture, and a case-based approach are the primary teaching learning approaches.

*Prerequisite: Psychology 101 or consent of instructor.*

**286 Drugs and Human Behavior 3 credit hours**

Offered fall and spring semester and summer session. 100% online.

This course will focus on psychoactive drugs and their use/abuse in social and historical contexts. In addition to surveying the pharmacology of alcohol, tobacco and other drugs, we will study the process of addiction. The physical, sociocultural, cognitive, emotional and spiritual aspects of drug use and abuse will be explored. Prevention education will be briefly surveyed.

*Prerequisite: Psychology 101.*

**287 Addictions Treatment Delivery 3 credit hours**

Offered spring semester. Three hours lecture a week.

This course will include the eight-practice dimensions, identified in a collaborative effort, necessary for an addiction counselor (also described as the 12 core functions). Such dimensions include clinical evaluation,

treatment planning, referral, service coordination, counseling, education, documentation, and ethical/professional responsibilities. Within each practice dimension, the student will be introduced to the knowledge, skills, and attitudes conducive to appropriate addiction service delivery. This course addresses the practice dimensions necessary for addiction counselors. Within each dimension, the student will be introduced to the knowledge, skills, and attitudes conducive to appropriate addiction service delivery. Required course for Maryland Addictions Counselor certification.

*Recommendation: Psychology 101.*

**288 Treatment Issues and Theory in Addictions 3 credit hours**

Three hours lecture a week.

Application of a variety of treatment approaches which have been demonstrated to be effective. Survey of treatment-related issues including multicultural counseling issues and assessment and diagnosis of addiction and dual disorders. A holistic approach will be employed in so far as the biological, social, cognitive, emotional and spiritual aspects of addiction treatment will be explored. Practical application of research and theory to addiction counseling. Overview of treatment related issues, including assessment and diagnosis. Required course for Maryland Addictions Counselor certification.

*Prerequisite: Psychology 286.*

*Recommendation: Psychology 101.*

**289 Ethics for the Addiction Counselor 3 credit hours**

Offered fall and spring semesters and summer session. Online.

Students are introduced to legal and ethical issues involved in the treatment of alcohol and other drug problems. Issues such as licensing, relationships, confidentiality, and crisis intervention will be addressed. The ethical standards of the National Association of Alcoholism and Drug Abuse Counselors (NAADAC) are reviewed and similarities among addiction and other helping professionals discussed. Required course for Maryland Addictions Counselor certification.

*Recommendation: Psychology 101.*

**READING (READ)**

**97 Critical Reading 1 credit hour**

Reading 97 is designed to provide a condensed review for making students more efficient, systematic readers and thinkers. Emphasis will be placed on improving vocabulary and building advanced levels of comprehension and inferential reading, including the ability to analyze, evaluate, and integrate information. Required of all students whose placement assessment scores indicate the need. (Exceptions can be made for students not pursuing a degree or certificate.) This course does not meet associate degree graduation requirements.

*This course is limited to two attempts. A grade of A, B, C, D, F, W, R, or X is considered an attempt. Students in their second attempt are required to meet for one hour each week with their instructor to improve success.*

*Prerequisite: Appropriate placement assessment scores.*

**RESPIRATORY THERAPIST (RESP)**

**101 Intro Respiratory Therapy 3 credit hours**

Offered fall semester. Three hours lecture and demonstration. Two, three-hour hospital orientation tours. Clinical time will total at least six hours. Fee: \$80.00. Learning Harbor Fee: \$25.00.

This course orients the student to the hospital environment and to the respiratory therapist practitioner's role on the health care team. Specific topics include the holistic concept of patient care; psychosocial, medico-legal, and ethical considerations in respiratory therapy; and professional interpersonal relations. Instruction is given in medical terminology, medical-surgical aseptic techniques, and physical assessment (inspection, palpation, percussion, and auscultation).

During the semester the student will be evaluated through interview, examination, and GPA to determine acceptance to the clinical component of respiratory care.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

### **102 Pharmacology**

**3 credit hours**

Offered spring semester. Three hours lecture and demonstration a week.

This course will familiarize the student with the basic concepts of pharmacology, emphasizing those drugs utilized in the treatment of pulmonary diseases. Topics include drug development, indications, contraindications, administration, mechanism of action, side effects, metabolism, and excretion. Emphasis is placed on drug safety and dosage calculation.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

Acceptance into the Respiratory Therapist program is required to take this course.

*Prerequisite: Mathematics 102 or 109 or concurrent registration, Chemistry 100 or 101 or concurrent registration, and Biological Science 116 or concurrent registration.*

### **104 Respiratory Pathogens**

**1 credit hour**

Offered spring semester. One hour of lecture per week.

This course is designed to provide students in the respiratory therapy program the essential knowledge of respiratory pathogens that are the etiological factors for many respiratory diseases located in the upper and lower respiratory tracts. Different types of pathogens (bacteria, virus, and fungus) will be presented. Diagnostic measures and drug therapy will also be discussed.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Mathematics 102 or 109 or concurrent registration, Chemistry 100 or 101 or concurrent registration, and Biological Science 116 or concurrent registration.*

*Corequisite: Respiratory Therapy 102, 190, and 206.*

### **190 Clinical Practice I**

**5 credit hours**

Offered spring semester. Three hours of lecture, on average two hours of campus laboratory, and on average four hours of clinical per week. Clinical/lab time will total 90 hours. Fee: \$125.00. Criminal Background Check Fee: \$65.00. Nurse Managed Wellness Clinic Fee: \$60.00. Simulation Fee: \$35.00.

This course covers oxygen and special gas therapy, principles of humidity and aerosol therapy and will acquaint students with techniques of chest physiotherapy, incentive spirometry, breathing exercises and pulmonary rehabilitation. The emphasis is on clinical application.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Mathematics 102 or 109 or concurrent registration, Chemistry 100 or 101 or concurrent registration, and Biological Science 116 or concurrent registration.*

*Corequisite: Respiratory Therapy 102, 104, and 206.*

### **206 Cardiopulmonary Anatomy and Physiology**

**3 credit hours**

Offered spring semester. Three hours of lecture a week.

This course provides an in-depth examination of the normal structure and function of the pulmonary and cardiovascular systems. A discussion of the renal system and its effect on cardiopulmonary function is included. This course provides a physiological basis for the assessment, diagnosis, and treatment of the cardiopulmonary system.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Mathematics 102 or 109 or concurrent registration, Chemistry 100 or 101 or concurrent registration, and Biological Science 116 or concurrent registration.*

*Corequisite: Respiratory Therapy 102, 104, and 190.*

### **207 Community Health Education**

**2 credit hours**

Offered spring semester. Three hours lecture a week. Fee: \$80.00.

This course is designed for the last semester respiratory therapy student who is about to become a member of a respiratory care department. This course will cover knowledge area and skills required and tested on the registry exams. This class will also deal with wellness, health development, and awareness in the community. Furthermore, the student will understand the importance of resume writing and interviewing.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

### **210 Clinical Practice II**

**6 credit hours**

Offered summer session. Five hours of lecture and, on average, 32 clinical hours a week. Clinical/lab hours will total 192. Fee: \$125.00. Nurse Managed Wellness Clinic Fee: \$60.00. Clinical Edoc Fee: \$112.00. Uniform Fee: \$30.00.

The student will utilize and perfect skills developed in Respiratory Therapy 190. The emphasis is on clinical application. This course will introduce principles of positive pressure breathing, airway management, pulmonary rehabilitation and modes of mechanical ventilation.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Respiratory Therapy 101, 102, 104, 190, and 206.*

### **212 Cardiopulmonary Pathophysiology**

**3 credit hours**

Offered fall semester. Three hours of lecture a week.

This course will familiarize the student with commonly encountered diseases of the heart and lungs. Emphasis will be on deviations from normal functioning. Specific pathologies will include obstructive, restrictive, infectious pulmonary diseases, and respiratory failure. The pathophysiology of coronary artery disease, acute myocardial infarction, and post-infarction complications will be examined. Discussions will include disease etiology, pathology, diagnosis, prognosis, and treatment.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Respiratory Therapy 101, 102, 104, 206, and 210, or consent of instructor.*

*Corequisite: Respiratory Therapy 213, 225, and 231.*

### **213 Cardiopulmonary Assessment and Diagnostics**

**3 credit hours**

Offered fall semester. Three hours of lecture a week. Fee: \$85.00.

This course will cover a variety of diagnostic testing procedures performed on respiratory care patients. The student will learn a systematic approach towards problem solving, analysis, and application of clinical data. There will be an emphasis on refining test taking skills, in order to prepare the students for NBRC examinations. Computer simulations, along with lab practicals will be utilized. ACLS guidelines and procedures will also be covered in the labs.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Biological Science 116, Mathematics 102 or 109, Respiratory Therapy 101, 102, 104, and 206.*

*Corequisite: Respiratory Therapy 212, 225, and 231, or consent of instructor.*

**225 Clinical Practice III** **5 credit hours**  
Offered fall semester. Five hours of lecture a week and, on average, 24 hours of clinical/lab a week. Clinical/lab time will total 360 hours. Fee: \$125.00. Nurse Managed Wellness Clinic Fee: \$60.00. Hesi Exam Fee: \$90.00.

This course focuses on airway management, intermittent positive pressure breathing (IPPB), continuous positive pressure ventilation (CPPV), positive end expiratory pressure (PEEP), continuous positive airway pressure (CPAP), and basic and advanced modes of ventilation. The student will be oriented to critical care units as well as the operating room. Instruction and clinical experience in arterial blood collection and pulmonary function testing will also be provided. Students must pass a secure CRT exam before moving into next sequence of coursework.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Respiratory Therapy 101, 102, 190, 206, and 210.*

*Corequisite: Respiratory Therapy 212, 213, and 231.*

**231 Research Methods** **1 credit hour**  
Offered fall semester. One hour of lecture per week.

This course is designed to provide students in the respiratory therapy program with an understanding of research methods through a critical review of the literature. Both qualitative and quantitative methods of research methodology will be analyzed and discussed. Students will perform a critical review of a current therapy/practice as it relates to cardiopulmonary respiratory care and present findings in a research presentation.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Respiratory Therapy 101, 102, 104, 190, 206, and 210.*

*Corequisite: Respiratory Therapy 212, 213 and 225.*

**232 Advanced Respiratory Concepts** **2 credit hours**  
This course is offered in the spring semester. Exam Prep Fee: \$375.00.

This course is designed to prepare the students to take the credentialing exams. It will include current trends in the field of Respiratory Care. The Kettering Review Seminar is part of this course.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Respiratory Therapy 101, 102, 104, 190, 206, 210, 212, 213, 225, and 231.*

*Corequisite: Respiratory Therapy 207, 232, 240, and 250.*

**240 Pediatrics and Neonatology** **3 credit hours**  
Offered spring semester. Three hours of lecture, demonstration, and campus laboratory a week. Clinical experiences will occur in Respiratory Therapy 250. Fee: \$125.00.

This course will provide the student with information on neonatal and pediatric care. The student will acquire a clinical knowledge of specialized perinatal equipment such as mechanical ventilators, medical gas administration devices, and transcutaneous oxygen monitors. The course will provide a working knowledge of the development of the prenatal to pediatric cardiopulmonary system and knowledge of neonatal and pediatric cardiopulmonary diseases, with the appropriate treatment regimen.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Respiratory Therapy 101, 102, 104, 190, 206, 210, 212, 213, 225, and 231.*

*Corequisite: Respiratory Therapy 207, 232, and 250.*

**250 Clinical Practice IV** **5 credit hours**  
Offered spring semester. Four hours of lecture per week and, on average, 24 hours of clinical/lab time per week. Clinical/lab time will total 360 hours. Fee: \$125.00. Nurse Managed Wellness Clinic Fee: \$60.00. Online Testing Fee: \$128.00. Simulation Fee: \$35.00.

This course will expose the student to all areas of clinical practice in a respiratory care facility. Clinical rotations in neonatal and pediatric intensive care units will be provided. The course will focus on the concepts of hemodynamic monitoring, advanced modes of mechanical ventilation, and preparation for successful completion of the NBRC RRT exam. Students will be required to obtain a minimum score on a secure RRT exam in order to successfully complete the course.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Respiratory Therapy 101, 102, 104, 190, 206, 210, 212, 213, 225, and 231.*

*Corequisite: Respiratory Therapy 207, 232, and 240.*

**299 Special Topics in Respiratory Therapy** **1-4 credit hours**  
Offered fall and spring semesters. Fee: \$30.00.

This course is designed to allow students in the clinical component of the respiratory therapist program the opportunity to pursue advanced study or research on topics of individual interest within the field of respiratory therapy. Approval by the respiratory therapist program director is required.

*In order to successfully pass this course, student must achieve a grade of "C" or better.*

*Prerequisite: Instructor consent required.*

## SOCIOLOGY (SOC)

**101 Introduction to Sociology** **3 credit hours**  
Offered fall and spring semesters. Three hours lecture and discussion a week.

A basic course in sociology. Overview of principles of sociology using empirical knowledge and the application of the scientific method. Review of basic principles of social interaction, social roles, organization, processes, stratification, social change, group dynamics, and valuation.

**102 Introduction to Anthropology** **3 credit hours**  
Three hours lecture and discussion a week.

Review of basic principles of anthropology, with special consideration given to the application of social laws and principles as they have affected the development of different cultures. Selected representative cultures are studied with a view to analyzing and contrasting their differences. An examination of the dynamics of simple and complex cultures.

*Prerequisite: Sociology 101 or consent of instructor.*

**104 Interdisciplinary Studies In Human Society** **3 credit hours**  
Offered fall and spring semesters and summer session. 100% online.

An introductory course which examines human society from an interdisciplinary and experiential perspective, utilizing concepts from psychology, sociology, social work, human services, criminal justice, and political science. It is intended for students interested in pursuing further studies in the social and behavioral science disciplines. Topics include: personal self-assessment, human relationships, group interaction, cultural diversity, value clarification, workforce trends, and historical and contemporary forces that shape human society. Basic interpersonal teamwork skills are studied and practiced and opportunities for workplace observation provided.



**203 Social Problems**
**3 credit hours**

Offered fall semester. Three hours lecture and discussion a week.

The analysis of problems growing out of group conflicts, population growth and distribution, ecological structure, the impact of changing technologies, and the impact of these matters on social and cultural patterns. Emphasis is placed upon possible solutions.

*Prerequisite: Sociology 101 or consent of instructor.*

**205 Marriage and the Family**
**3 credit hours**

Offered fall and spring semesters. Three hours lecture and discussion a week.

The family as a biological, psychological, and cultural unit. A review of the problems associated with courtship and marriage, the changing function of the parent-child relationship, divorce, and second marriage. Family interaction, adjustment, and stability, with emphasis on the contemporary and historical setting.

*Prerequisite: Sociology 101 or consent of the instructor.*

**207 The Sociology of Gender Roles**
**3 credit hours**

Offered spring semester. Three hours lecture and discussion a week.

This course explores sex-roles from a sociological perspective in order to improve our awareness and understanding of this important area of human existence. It will examine such topics as the origins of sex-roles, male and female scripts, romantic love, socialization of males and females, social class and role expectations, and other related topics.

*Prerequisite: Sociology 101.*

**211 Introduction to Gerontology**
**3 credit hours**

Offered spring semester. Three hours lecture and discussion a week.

A general course, which provides an overall perspective of the field of gerontology. In addition to examining population trends and demographic information, the course examines the process of aging from psychological and sociological points of view. A first course in the study of the elderly in our social system.

**215 Crime and Delinquency**
**3 credit hours**

Offered spring semester. Three hours lecture and discussion a week.

An introduction to the sociology of criminal and delinquent behavior. Emphasis will be placed on the theories of the causes of such behavior, the legal differences between them, and the responses of the criminal justice system to them.

*Prerequisite: Sociology 101.*

**250 Introduction to Social Work**
**3 credit hours**

Offered spring semester. Three hours lecture and discussion a week.

A study of the history, philosophy, objectives, and social work methods in the United States. A beginning study of social welfare and social work policy and services, and the activities and perceptions of social workers and others in the human services. This is the first course in social work, which is intended as an introduction to the field. The role of the social work professional in the development and delivery of services, and the structure of the personal social services in the community will be examined.

**298 Special Topics in Sociology**
**3 credit hours**

This course is designed to address a range of topics and emerging issues within the field of Sociology. This course will cover topics beyond the scope of those already offered in other Sociology courses. The format of the courses offered will vary depending on the course content. This course is repeatable for up to 6 credits.

*Prerequisite: Sociology 101 or consent of instructor.*

**SPANISH (SPAN)**
**103 Introductory Spanish I**
**3 credit hours**

Offered fall semester. Three hours lecture.

Develops speaking and understanding skills through a conversational approach.

**104 Introductory Spanish II**
**3 credit hours**

Offered spring semester. Three hours lecture.

Further develops aural-oral skills; elementary reading and writing exercises. This course will acquaint the student with various aspects of Spanish culture. Students with prior knowledge of conversational Spanish and/or one or two years of high school Spanish will find this course an appropriate level.

**126 Spanish for Health Occupations (Allied Health 126)**
**3 credit hours**

Students will be introduced to the workplace concepts of cultural competence and current demographics of the Latino population in an effort to understand the complexity of their life and their beliefs, and how this affects the way conversation should be approached with the patient/client. Students will learn to facilitate communication with Latino patients/clients and their families. Students will practice phrases for a variety of situations that could occur in the clinical setting. Students will be presented with the tools needed to develop a good command for speaking and understanding Spanish phrases at the end of the course. No previous Spanish is required.

*Prerequisite: Minimum high school GPA of 3.0 or appropriate assessment scores.*

**203 Intermediate Spanish I**
**3 credit hours**

Offered fall semester. Three hours lecture, discussion and drill a week.

Advanced conversational practice and an introduction to reading modern Spanish prose (short stories, news reports, magazine articles). Students with prior knowledge of conversational Spanish and beginning reading level of Spanish, and/or two to three years of high school Spanish will find this course an appropriate level.

**204 Intermediate Spanish II**
**3 credit hours**

Offered spring semester. Three hours lecture, discussion, and drill a week.

A continuation of Spanish 203, involving the writing of short papers. Students with prior knowledge of conversational Spanish and beginning reading level of Spanish, and/or three to four years of high school Spanish will find this course an appropriate level.

**299 Independent Study**
**3 credit hours**

This independent study course allows students to pursue their particular foreign language interest. Among the possibilities are business Spanish, practical Spanish, and Spanish literature.

*Prerequisite: Consent of instructor.*

**SPEECH (SPCH)**
**101 Speech Communication**
**3 credit hours**

Offered fall and spring semesters and summer session. Three hours lecture a week.

A survey course incorporating intrapersonal, interpersonal, and public speaking. A student will acquire theory and develop skills in interviewing, small group discussion, and informative/persuasive speaking.

**STUDENT DEVELOPMENT (SDEV)**
**103 Habits for Success**
**1 credit hour**

This course is designed to equip students with the skills and strategies needed for success in college. Topics include college expectations, study strategies, managing time, communication skills, and

using campus resources. Coursework includes the application of various academic skills to improve student success, such as note-taking and test-taking strategies, goal setting, stress management, and developing self-awareness. Open to all students as an elective.

*PRE-REQUISITE: ENG 092 with a grade of C or better, appropriate test scores, or equivalent measure must be completed prior to taking this course.*

**106 Connections: On Course for Success**                      **3 credit hours**

Offered fall and spring semesters. Three hours lecture and discussion a week.

To do well in college or on the job, individuals must understand their own strengths, interests, and priorities, and be able to adjust to academic or job demands. This course is designed to help students create greater success in college and in life by using proven strategies to develop a better understanding of themselves and their choices. Coursework includes guided journal writing, small group discussion, and career exploration. Topics will include self-motivation, personal responsibility, study skills, and emotional intelligence. Open to all students as an elective.