HEALTH SCIENCES DIVISION

Programs in the Health Sciences Division

- Degree information for the Associate of Science in Core Curriculum with a Health Science Transfer Pathway (http://catalog.asurams.edu/undergraduate/degree-programs/)

C

- Computed Tomography Certificate (http://catalog.asurams.edu/undergraduate/darton-health-professions/health-sciences-division/computed-tomography-certificate/)

D

- Dental Hygiene, Career Associate of Science (http://catalog.asurams.edu/undergraduate/darton-health-professions/health-sciences-division/dental-hygiene-associate-science-degree-program/)
- Diagnostic Medical Sonography, Career Associate of Science (http://catalog.asurams.edu/undergraduate/darton-health-professions/health-sciences-division/diagnostic-medical-sonography-associate-science-career-degree-program/)

E

- Emergency Medical Services Program (http://catalog.asurams.edu/undergraduate/darton-health-professions/health-sciences-division/emergency-medical-services-certificate/)

H

- Health Information Technology, Career Associate of Science (http://catalog.asurams.edu/undergraduate/darton-health-professions/health-sciences-division/health-information-technology-career-associate-science-degree-program/)
- Histologic Technician Certificate (http://catalog.asurams.edu/undergraduate/darton-health-professions/health-sciences-division/histotechnician-certificate-program/)
- Histologic Technician, Associate of Applied Science (http://catalog.asurams.edu/undergraduate/darton-health-professions/health-sciences-division/histologic-technician-associate-applied-science-degree-program/)

M

- Medical Coding Certificate (http://catalog.asurams.edu/undergraduate/darton-health-professions/health-sciences-division/medical-coding-certificate-program/)
- Medical Laboratory Technology, Career Associate of Science (http://catalog.asurams.edu/undergraduate/darton-health-professions/health-sciences-division/medical-laboratory-technology-career-associate-science-degree-program-/)

O

- Occupational Therapy Assistant, Career Associate of Science (http://catalog.asurams.edu/undergraduate/darton-health-professions/health-sciences-division/occupational-therapy-assistant-career-associate-science-degree-program/)

P

- Phlebotomy Certificate (http://catalog.asurams.edu/undergraduate/darton-health-professions/health-sciences-division/phlebotomy-certificate-program/)
- Physical Therapist Assistant, Career Associate of Science (http://catalog.asurams.edu/undergraduate/darton-health-professions/health-sciences-division/physical-therapist-assistant-career-associate-science-degree-program/)

R

- Radiologic Science, Career Associate of Science (http://catalog.asurams.edu/undergraduate/darton-health-professions/health-sciences-division/radiologic-science-career-associate-science-degree-program/)
- Respiratory Therapy, Career Associate of Science (http://catalog.asurams.edu/undergraduate/darton-health-professions/health-sciences-division/respiratory-care-career-associate-science-degree-program/)

CTCP 2100 - Introduction to Computed Tomography (2 Credits)
This course serves as an introduction to computed tomography with an emphasis on basic patient care while in a Computed Tomography department, as well as the history of CT and the components of a CT scanner. Additional topics include patient history, vital signs, laboratory values, contrast agents (oral and intravenous), medical ethics, patient confidentiality, as well as research contributors in CT, historical events, scanner generations, characteristics of radiation, detectors and data acquisition system. Offered: Fall, Spring, Summer.

Lecture hours: 2

CTCP 2110 - Physical Principles, Instrumentation and Quality Control (3 Credits)
This course is an overview of the system operation, components and quality control. To be able to understand the different functions and capabilities and identify the components of the CT scanner to provide quality care during a CT examination. Topics include data acquisition, data processing, reconstruction, manipulation, image quality, console, high voltage generator, filter, detectors, and confolution, interpolation and pitch. Offered: Fall, Spring, Summer.

Prerequisites: CTCP 2100
Lecture hours: 3

CTCP 2120 - Sectional Anatomy I (Head, Spine, Chest) (4 Credits)
This is an overview of cross-sectional anatomy that is imaged during a Computed Tomography examination. The course will provide information about normal head, spine and chest anatomy. Students will be able to identify and recall normal anatomical structures on cross-sectional images in order to perform quality care for patients. Topics include the Circle of Willis, gray/white matter, pons, vetebral body, lamina, spinous process, spinal cord, heart (ventricle/atrium), lungs and ribs. Offered: Fall, Spring, Summer.

Lecture hours: 4

CTCP 2130 - Sectional Anatomy II (Abdomen, Pelvis, Neck, Extremity) (4 Credits)
This is an overview of cross-sectional anatomy that is imaged during a Computed Tomography examination. This course will provide basic information about normal neck, abdomen, pelvis and extremities anatomy. Students will be able to identify and recall normal anatomical structures on cross-sectional images in order to perform quality care for patients. Topics include the liver, aorta, spleen, pancreas, kidneys, ureters, pelvic girdle, sma celiac artery, femoral arteries, popliteal arteries and bony structures such as the ribs, femur, humerus, ankle, shoulder. Offered: Fall, Spring, Summer.

Prerequisites: CTCP 2120
Lecture hours: 4

CTCP 2140 - Clinical Application I (4 Credits)
This course introduces students to the clinical setting of a Computed Tomography (CT) department. It allows students to observe and gain knowledge of CT procedures as well as patient care while in the CT department. Introduces the student to the CT scanner, protocols, equipment used, contrast agents, as well as starting to work toward their clinical competencies needed for this course and the American Registry or Radiologic Technologists (ARRT). Offered: Fall, Spring, Summer.

Lab hours: 16

CTCP 2150 - Clinical Application II (5 Credits)
This course is a continuation of the hands-on training about the CT scanner, protocols, equipment, contrast agents, as well as post-processing that was introduced in the previous clinical course. It allows students to become more proficient as well as gain work experience needed to join the workforce as an entry-level technologist and towards the completion of their clinical competencies needed for this course, as well as the American Registry of Radiologic Technologists (ARRT). Offered: Fall, Spring, Summer.

Prerequisites: CTCP 2140
Lab hours: 20

DHYG 1101 - Orofacial Anatomy (4 Credits)
A study of the anatomical sciences of the orofacial region to include oral histology and embryology; head and neck anatomy, and dental anatomy. Offered: Fall.

Prerequisites: BIOL 112 or BIOL 2412K or BIOL 1100K
Corequisites: DHYG 1121, DHYG 1131
Lecture hours: 4

DHYG 1110 - Nutrition (1 Credit)
An overview of the major nutrient classifications, functions, sources and deficiencies. Emphasis on the well-balanced diet for maintenance of health. Offered: Spring.

Prerequisites: CHEM 1151K or CHEM 110
Corequisites: DHYG 1114, DHYG 1122, DHYG 1132
Lecture hours: 1

DHYG 1114 - Radiology (3 Credits)
Basic principles of roentgenographic techniques including exposing, processing, mounting and charting radiographs. Anatomical landmarks for interpretation and safety precautions for the patient and operator. Offered: Spring.

Prerequisites: DHYG 1101 and DHYG 1121 and DHYG 1131
Corequisites: DHYG 1110, DHYG 1122, DHYG 1132, DHYG 2100
Lecture hours: 2
Lab hours: 3

DHYG 1121 - Dental Hygiene Lecture I (3 Credits)
An introduction to fundamental concepts relating to the profession of dentistry, including terminology, history and organization. A study of asepsis, patient assessment, deposits and preventive services. Offered: Fall.

Corequisites: DHYG 1101, DHYG 1131
Lecture hours: 3

DHYG 1122 - Dental Hygiene Lecture II (2 Credits)
A continued study of patient management and education, and also dental hygiene treatment. Offered: Spring.

Prerequisites: DHYG 1121 and DHYG 1131 and DHYG 1101
Corequisites: DHYG 1110, DHYG 1114, DHYG 1132, DHYG 2100
Lecture hours: 2

DHYG 1131 - Dental Hygiene Clinic I (2 Credits)
An introduction to specific tasks required for delivery of dental hygiene services; infection control, patient assessment, scaling, and polishing and fluoride application procedures. Students acquire competencies through manikin and peer experiences under continuous supervision by clinical faculty. Offered: Fall.

Corequisites: DHYG 1101, DHYG 1121
Lab hours: 6

DHYG 1132 - Dental Hygiene Clinic II (3 Credits)
A continuation of DHYG 1131 with the addition of sharpening, plaque control instruction, and power scaling instrument. When safe techniques have been mastered, students deliver dental hygiene care to adult and child patients. An introduction to nutritional counseling. Offered: Spring.

Prerequisites: DHYG 1131 and DHYG 1101 and DHYG 1121
Corequisites: DHYG 1110, DHYG 1114, DHYG 1122
Lab hours: 9

DHYG 1133 - Dental Hygiene Clinic III (2 Credits)
A continuation of DHYG 1132 with the addition of radiographs and dietary counseling. Instruction will also be provided in the manipulation of dental materials and advanced periodontal instrumentation. Students will visit a limited number of dental specialty offices. Offered: Summer.

Prerequisites: DHYG 1110 and DHYG 1114 and DHYG 1122 and DHYG 1132 and DHYG 2100
Corequisites: DHYG 2550
Lab hours: 6

DHYG 2100 - Periodontics (2 Credits)
Principles of periodontology, etiology, and classification of periodontal disease with emphasis on prevention, scope of responsibility of the dental hygienist and treatment planning. Offered: Spring.

Prerequisites: (BIOL 2211K or BIOL 115 or BIOL 2115K)
Corequisites: DHYG 1110, DHYG 1114, DHYG 1122, DHYG 1132
Lecture hours: 2

DHYG 2150 - Pharmacology (2 Credits)
Drugs, their properties, dosage, method of administration and therapeutic use with attention given to those drugs most commonly used in dentistry. Offered: Fall.

Prerequisites: DHYG 1133 and DHYG 2550 and BIOL 2211K
Corequisites: DHYG 2210, DHYG 2250, DHYG 2310
Lecture hours: 2

DHYG 2210 - Dental Hygiene Lecture IV (1 Credit)
A seminar course with emphasis on special needs patients and advanced periodontal patients. Offered: Fall.

Prerequisites: DHYG 1133 and DHYG 2550
Corequisites: DHYG 2150, DHYG 2250, DHYG 2310
Lecture hours: 1

DHYG 2220 - Dental Hygiene Lecture V (1 Credit)
A seminar course with emphasis on jurisprudence and office management for the dental hygienist. Offered: Spring.

Prerequisites: DHYG 2210 and DHYG 2310 and DHYG 2250 and DHYG 2150
Corequisites: DHYG 2320, DHYG 2400
Lecture hours: 1

DHYG 2250 - General and Oral Pathology (3 Credits)
Basic principles, causes and underlying mechanisms of disease phenomena with special emphasis on the oral cavity. Offered: Fall.

Prerequisites: (BIOL 1100K or BIOL 2411K) and DHYG 1133 and DHYG 2550
Corequisites: DHYG 2150, DHYG 2210, DHYG 2310
Lecture hours: 3

DHYG 2310 - Dental Hygiene Clinic IV (4 Credits)
A continuation of DHYG 1133 with the addition of study models, sealants, advanced periodontal patients and oral irrigation. Offered: Fall.

Prerequisites: DHYG 1133 and DHYG 2550
Corequisites: DHYG 2150, DHYG 2210, DHYG 2250
Lab hours: 12

DHYG 2320 - Dental Hygiene Clinic V (4 Credits)
A continuation of DHYG 2310. Offered: Spring.

Prerequisites: DHYG 2310 and DHYG 2150 and DHYG 2210 and DHYG 2250
Corequisites: DHYG 2220, DHYG 2400
Lab hours: 12

DHYG 2400 - Community Dental Health (4 Credits)
Principles of public health dentistry, educational concepts and strategies in dental health education. Emphasis on assessment of dental needs, developing and evaluating programs, and epidemiology and research. Offered: Spring.

Prerequisites: DHYG 2310 and DHYG 2210 and DHYG 2150 and DHYG 2250 and COMM 1000
Corequisites: DHYG 2220, DHYG 2320
Lecture hours: 3
Lab hours: 3

DHYG 2550 - Dental Specialties & Materials (2 Credits)
Introduction to the specialty areas of dental practice. A study of dental materials used in a general practice office. Offered: Summer.

Prerequisites: DHYG 1132 and DHYG 1114 and DHYG 1110 and DHYG 1122 and DHYG 2100
Corequisites: DHYG 1133
Lecture hours: 2

DMSP 1100 - Physics of Ultrasound (3 Credits)
This course defines the basic principles of ultrasound physics and introduces the student to their practical use in diagnostic ultrasound. Topics of discussion will include the definition of sound, propagation of sound in tissue, axial and lateral resolution, transducers, sound beams, display modes, and two-dimensional imaging. Offered: Fall, first year.

Corequisites: DMSP 1101
Lecture hours: 3

DMSP 1101 - Introduction to Diagnostic Medical Sonography (2 Credits)
This course is designed to introduce the student to the basic principles of Ultrasound. Professionalism, functions, and desirable attributes of a sonographer will be discussed along with patient care principles and techniques. The course presents the language of sonographers, educational opportunities for the occupation and introduces cross-sectional anatomy. Offered: Fall, first year.

Corequisites: DMSP 1100
Lecture hours: 1
Lab hours: 3

DMSP 1102 - Abdomen Ultrasound I (3 Credits)
This course is designed to introduce the ultrasound student to normal appearing abdominal anatomy, including organs, cavities, structures and vasculature. The sonographic appearance of normal anatomic structures, including anatomic variants and normal Doppler patterns will also be discussed. We will discuss emergent ultrasound procedures and interventional ultrasound procedures. The student develops the skills necessary to perform basic diagnostic ultrasound studies for presentation to the physician and/or radiologist for interpretation. Offered: Spring, first year.

Prerequisites: (DMSP 1101)
Corequisites: DMSP 1105, DMSP 1106, DMSP 1107
Lecture hours: 2
Lab hours: 3

DMSP 1105 - Clinical Observations (2 Credits)
This course is an initial introduction to the clinical environment. It allows the student to familiarize themselves with the operational process and exam protocols of the ultrasound department at their respected clinical affiliate. Offered: Spring, first year.

Prerequisites: (DMSP 1101)
Corequisites: DMSP 1102, DMSP 1106, DMSP 1107
Lab hours: 16

DMSP 1106 - Obstetrics and Gynecological Ultrasound I (3 Credits)
This course is designed to provide the student with an introduction to the accurate assessment and performance of obstetric and gynecologic ultrasound. Normal anatomy of the female pelvis and normal fetal development from conception through the third trimester will be discussed. Pathologic conditions of the female pelvis will be discussed along with hormonal changes that affect the reproductive cycle and laboratory values associated with normal and abnormal findings. Sonographic appearances and standard protocols of the female pelvis and normal fetus will be examined along with first trimester complications. Offered: Spring, first year.

Corequisites: DMSP 1102, DMSP 1105, DMSP 1107
Lecture hours: 2
Lab hours: 3

DMSP 1107 - Physics of Ultrasound II (3 Credits)
This course is a continuation of DMSP 1100. We will continue to discuss ultrasound physics and its use in the clinical environment. Doppler principles, hemodynamics, ultrasound safety and bio-effects will be discussed along with pulsed echo instrumentation. Offered: Spring, first year.

Corequisites: DMSP 1102, DMSP 1105, DMSP 1106
Lecture hours: 3

DMSP 2111 - Abdomen Ultrasound II (3 Credits)
This course is designed to introduce the ultrasound student to the abnormal sonographic and Doppler patterns of disease processes, pathology and pathophysiology of abdominal organs. Normal and abnormal lab values will also be discussed. Offered: Summer.

Prerequisites: (DMSP 1105)
Corequisites: DMSP 2112, DMSP 2113
Lecture hours: 2
Lab hours: 3

DMSP 2112 - Obstetrics and Gynecological Ultrasound II (3 Credits)
This course presents fetal abnormalities from the first trimester through the third trimester as well as the role of sonographers in performing interventional/invasive procedures. Multiple gestations, amniotic fluid index, congenital/genetic anomalies, viability, fetal monitoring, maternal factors, fetal therapy and the post-partum mother will also be discussed. Offered: Summer.

Prerequisites: (DMSP 1105)
Corequisites: DMSP 2111, DMSP 2113
Lecture hours: 3

DMSP 2113 - Clinical Obersvation and Practicum I (3 Credits)
This is an expansion of the clinical observations course, DMSP 1105. Students will begin their hands-on experience by entering patient data, recording patient history, selecting the appropriate transducer for the exam, positioning the patient for the exam and practicing the art of scanning. Offered: Summer. .

Prerequisites: (DMSP 1105)
Corequisites: DMSP 2111, DMSP 2112
Lab hours: 24

DMSP 2200 - Superficial Structures and Pediatric Ultrasound (3 Credits)
This course is designed to provide the student with an introduction to the assessment of superficial structures, neonatal brain, and pediatric ultrasound. The sonographic appearance of related pathology and their processes will be examined. Normal and abnormal lab values will be discussed as well as normal and abnormal Doppler signals of various organs. Offered: Fall, second year.

Prerequisites: DMSP 2112 and DMSP 2113 and DMSP 2111
Corequisites: DMSP 2201, DMSP 2205
Lecture hours: 2
Lab hours: 3

DMSP 2201 - Clinical Observation and Practicum II (3 Credits)
This is an expansion of DMSP 2113 with increasing responsibilities of the student sonographer. This course allows student observation and participation in the clinical setting with hands-on experience with patients and equipment. Offered: Fall, second year.

Prerequisites: DMSP 2113 and DMSP 2111 and DMSP 2112
Corequisites: DMSP 2200, DMSP 2205
Lab hours: 24

DMSP 2202 - Introduction to Vascular Ultrasound (3 Credits)
This course is designed to provide the student with a basic introduction to the assessment of the vascular system. The student develops the skills necessary to perform basic diagnostic ultrasound studies for presentation to the physician. The student will review the physics of Doppler ultrasound, become familiar with and perform all abdominal Doppler exams, including, but not limited to, transplant organs and intraoperative guidance, and become familiar with peripheral vascular studies. Offered: Spring, second year.

Prerequisites: (DMSP 2201 and DMSP 2200) or DMSP 2118
Corequisites: DMSP 2203, DMSP 2204
Lecture hours: 2
Lab hours: 3

DMSP 2203 - Ultrasound in Review (3 Credits)
This is a comprehensive review course to prepare the student for taking the ultrasound examination(s) appropriate for the abdomen and/or obstetrics and gynecology specialty exams offered through the American Registry for Diagnostic Medical Sonography (ARDMS). The course will also prepare students and provide guidance for obtaining employment in the field of Diagnostic Medical Sonography. Offered: Spring, second year.

Prerequisites: (DMSP 2200 and DMSP 2201) or DMSP 2116
Corequisites: DMSP 2202, DMSP 2204
Lecture hours: 3

DMSP 2204 - Clinical Observations and Practicum III (3 Credits)
This course is an expansion of DMSP 2201, allowing students to gain confidence in their skills and the knowledge gained throughout the DMS program. Students will complete ultrasound studies from start to finish for presentation to the physician or radiologist. Offered: Spring, second year.

Prerequisites: (DMSP 2201 and DMSP 2200) or DMSP 2116
Corequisites: DMSP 2202, DMSP 2203
Lab hours: 24

DMSP 2205 - Physics in Review (1 Credit)
This course is a comprehensive review course designed to prepare the student for the Sonographic Principles and Instrumentation (SPI) exam offered through the American Registry of Diagnostic Medical Sonographers (ARDMS). Offered: Fall, second year.

Corequisites: DMSP 2200, DMSP 2201
Lecture hours: 1

EMTP 1102 - Trauma (3 Credits)
This course includes and expands upon the material from the Trauma Module of the National EMS Education Standards. The course contains units on trauma systems, mechanism of injury, soft tissue trauma, head and facial injuries, spinal trauma, thoracic and abdominal injuries, and musculoskeletal trauma. Also included are units on hypothermia, hyperthermia, drowning, diving emergencies, and high altitude illness from the environmental emergencies section of the Trauma Module. Patient assessment and management in an organized, timely fashion using the ITLS approach to trauma care is emphasized. Students must successfully complete the ITLS class at the end of the course. Offered: Spring.

Lecture hours: 2
Lab hours: 2

EMTP 1104 - Medical Emergencies I (2 Credits)
Medical Emergencies I. (2 Credits) This course includes material covered in the current National EMS Education Standards Medicine Module. Units covered include: medical overview, infectious diseases, endocrine disorders, hematology, psychiatric, and non-traumatic musculoskeletal disorders. This course is designed to teach students to integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint. Offered: Fall.

Lecture hours: 2

EMTP 1109 - Practicum I (3 Credits)
This course is the first of three practicums designed to provide the student with supervised clinical experiences in various settings to integrate component clinical skills and prerequisite knowledge into a plan for patient management. It provides student with the opportunity to enhance his or her learning through the practice of paramedicine in field and health care environment experiences with actual patients under the supervision of approved preceptors. Emphasis is on the development of critical thinking abilities, including the ability to develop a list of differential diagnoses through clinical reasoning to modify assessment procedures and formulate a treatment plan. Offered: Fall.

Lab hours: 22

EMTP 1113 - Pharmacology (3 Credits)
This course integrates comprehensive knowledge of pharmacology to formulate a treatment plan intended to mitigate emergencies and improve the overall health of the patient. It includes Principles of Pharmacology, Medication Administration, and Emergency Medications from the Pharmacology Module of the National EMS Education Standards. Offered: Fall.

Lecture hours: 2
Lab hours: 2

EMTP 1117 - Respiratory (3 Credits)
This course includes material from the Airway Management, Respiration, and Artificial Ventilation Module and Respiratory from Medicine Module of the National EMS Education Standards. Units covered include: anatomy and physiology of the respiratory system, acid-base and arterial blood gases, respiratory assessment, pulse oximetry, waveform capnography, oxygen therapy, basic airway management techniques, positive pressure ventilation, advanced airway techniques, endotracheal intubation, pathophysiology, assessment, and management of patients with acute and chronic respiratory problems. Offered: Fall.

Lecture hours: 2
Lab hours: 2

EMTP 1120 - Practicum II (5 Credits)
This course is the second of three practicums designed to provide the student with the opportunity to perform a comprehensive history and physical examination to identify factors affecting the health and health needs of a patient. Formulate a field impression based on an analysis of comprehensive assessment findings, anatomy, physiology, pathophysiology, and epidemiology. Relate assessment findings to underlying pathological and physiological changes in the patient's condition. Integrate and synthesize the multiple determinants of health and clinical care. Perform health screening and referrals. Effectively communicate in a manner that is culturally sensitive and intended to improve the patient outcome. Students will also have the opportunity to perform basic and advanced interventions as part of a treatment plan intended to mitigate the emergency, provide symptom relief, and improve the overall health of the patient in the clinical setting. Offered: Spring.

Prerequisites: EMTP 1109
Lab hours: 24

EMTP 1122 - Essentials & Operations (2 Credits)
This course includes material from the Preparatory, Public Health, and EMS Operations modules of the current National EMS Education Standards. It is designed to provide the student with comprehensive knowledge of EMS systems, safety/well-being of the paramedic, and medical/legal and ethical issues, which is intended to improve the health of EMS personnel, patients, and the community. It is also designed to teach the student how to apply fundamental knowledge of principles of public health and epidemiology including public health emergencies, health promotion, and illness and injury prevention as well as to provide knowledge of operational roles and responsibilities to ensure safe patient, public, and personnel safety. This course will be offered in an online format. Offered: Summer.

Lecture hours: 2

EMTP 1123 - Patient Assessment, Shock and Resuscitation (2 Credits)
This course includes material from the Patient Assessment and Shock and Resuscitation modules of the current National EMS Education Standards. It is designed to teach students to integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression, including developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan. It also integrates comprehensive knowledge of causes and pathophysiology into the management of cardiac arrest and peri-arrest states and into the management of shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest. This course will be offered in a hybrid format. Offered: Spring.

Lecture hours: 1
Lab hours: 2

EMTP 1124 - Medical Emergencies II (2 Credits)
This course includes material covered in the current National EMS Education Standards Medicine Module. Units covered include: immunology; diseases of the eyes, ears, nose, and throat; neurology; abdominal and gastrointestinal disorders; genitourinary/renal; gynecology; and toxicology. This course is designed to teach students to integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint. Offered: Spring.

Lecture hours: 2

EMTP 1125 - Summative Capstone (3 Credits)
This course includes material from all areas of the paramedic program. It is designed to provide a comprehensive overview and evaluation of the students Cognitive, Affective, and Psychomotor preparation for both the National Registry Examination and entry into the EMS profession. Offered: Summer.

Lecture hours: 1
Lab hours: 5

EMTP 1126 - Cardiovascular I (3 Credits)
Cardiovascular I. (3 Credits) This course includes material from the cardiovascular portion of the Medicine Module of the National EMS education Standards. Topics include units in anatomy and physiology of the cardiovascular system, cardiovascular emergencies, basic cardiac dysrhythmia interpretation, pacemaker rhythms, and introduction to current field monitor/defibrillator units. Offered: Fall.

Lecture hours: 2
Lab hours: 2

EMTP 1127 - Cardiovascular II (3 Credits)
This course includes the remaining material from the cardiovascular portion of the medicine module of the National EMS Education Standards. Topics include anatomy and physiology of the cardiovascular system, cardiovascular assessment, atherosclerosis, coronary artery disease, risk factor identification and reduction, acute coronary syndrome, heart failure, sudden arrhythmic death, hypertensive emergencies, cardiogenic shock, abdominal aortic aneurysm, arterial occlusion, venous thrombosis, aortic dissection, thromboembolism, infectious disease of the heart and congenital heart defects. Units on artificial pacemakers, defibrillation, cardioversion, 12- lead EKGs, circulatory adjuncts, and ACLS algorithms are also included. At the conclusion of the course, students must successfully complete the American Heart Association's Advance Cardiac Life Support Course. Offered: Spring.

Prerequisites: EMTP 1126
Lecture hours: 2
Lab hours: 2

EMTP 1132 - Pathophysiology (2 Credits)
This course includes the material from the Pathophysiology section of the National EMS Education Standards. It includes units on basic cellular functions, adaptation to disease and injury. Units on fluid and electrolytes, abnormal fluids states, electrolyte imbalance and acid-base imbalance are included. Additional units on the genetic and familial basis of disease, hypo perfusion, the immune response, inflammation and variances in immunity and inflammation are included. A unit on stress and its role in disease concludes the course. This course will be offered in a hybrid format. Offered: Fall.

Lecture hours: 2

EMTP 1133 - Practicum III (5 Credits)
This course is the third of three practicums designed to provide the student with the opportunity to perform a comprehensive history and physical examination to identify factors affecting the health and health needs of a patient. Formulate a field impression based on an analysis of comprehensive assessment findings, anatomy, physiology, pathophysiology, and epidemiology. Relate assessment findings to underlying pathological and physiological changes in the patient's condition. Integrate and synthesize the multiple determinants of health and clinical care. Perform health screening and referrals. Effectively communicate in a manner that is culturally sensitive and intended to improve the patient outcome. Students will also have the opportunity to perform basic and advanced interventions as part of a treatment plan intended to mitigate the emergency, provide symptom relief, and improve the overall health of the patient in the clinical setting. Students must successfully complete the pediatric ITLS course. Students will complete all clinical hours on a 911 ambulance under the supervision of a certified preceptor. Students must successfully complete 30 team lead calls, with no more than 10 calls at the BLS (basic life support) level and no less than 20 calls that require ALS (advanced life support) assessment and treatment. Offered: Summer.

Prerequisites: EMTP 1120
Lab hours: 24

EMTP 1134 - Special Populations (3 Credits)
This course includes material from the Medical and Special Considerations Modules of the current National EMS Education Standard. It includes the following topics: anatomy and physiology of the female reproductive system, abdominal pain, vaginal bleeding, rape, and physiology of pregnancy, fetology, normal and abnormal labor and delivery, and post-partum complications. The ITLS approach to trauma in pregnancy is emphasized. In addition, determination of the APGAR scoring and care of the high- risk neonates is included. Pediatric assessment, developmental stages, family assessment and management, respiratory emergencies, child safety, trauma, dehydration, shock, infant and child BLS and ALS, neurologic emergencies, SIDS, child abuse, and care of children with special needs. Offered: Spring.

Lecture hours: 2
Lab hours: 2

HITE 2100 - Health Record Content and Structure (3 Credits)
The basic concepts and techniques for managing and maintaining health record systems including storage and retrieval, the use and structure of healthcare data and data sets, quantitative and qualitative analysis of healthcare data, forms design, release of information, function of indexes and registers and the accreditation, certification and licensure standards applicable to healthcare data. Offered: Fall.

Prerequisites: ENGL 1101 and BIOL 2411K and BIOL 2412K
Lecture hours: 3

HITE 2110 - Organization and Supervision in Health Information Management (2 Credits)
Introduction to the principles of organization and supervision in order to develop effective skills in leadership, motivation, and team building techniques in the practice of health information management. Offered: Summer.

Prerequisites: HITE 2100
Lecture hours: 2

HITE 2137 - Fundamentals of Health Information Management (3 Credits)
This course introduces students to the field of Health Information Management (HIM) and its role within healthcare delivery systems. It emphasizes the HIM profession, hospital and medical staff organization, medical record structure and content, quantitative and qualitative analysis, release of patient information, legal aspects of medical records, ethical issues in HIM, healthcare statistics, indexes and registries, electronic medical records, payment and reimbursement systems, regulatory and accrediting agencies, and other profession-related topics. Offered: Fall.

Corequisites: HITE 2100, HITE 2400
Lecture hours: 3

HITE 2150 - Coding I (4 Credits)
Students will be introduced to the principles of ICD-10-CM coding used in the assignment of inpatient and outpatient diagnosis codes and ICD-10-PCS inpatient procedure codes. Offered: Spring.

Lecture hours: 3
Lab hours: 2

HITE 2160 - Coding II (2 Credits)
Students will be introduced to the principles of Current Procedural Terminology (CPT) coding, a critical system used for assigning standardized codes to medical procedures and services. Offered: Summer.

Prerequisites: HITE 2150
Lecture hours: 1
Lab hours: 2

HITE 2170 - Advanced Coding and Reimbursement (4 Credits)
This course builds on the foundational knowledge and skills acquired in HITE 2150 and HITE 2160, enhancing students' competence through the use of clinical case studies. It emphasizes the impact of reimbursement, ethical coding practices, the use of encoders and groupers, and healthcare billing and payment topics. Offered: Fall.

Prerequisites: HITE 2150 and HITE 2160
Lecture hours: 3
Lab hours: 2

HITE 2200 - Healthcare Statistics (2 Credits)
Study of the methods/formulas used in computing and preparing statistical reports for healthcare services and vital records. Emphasis is placed on the effective use, collection, arrangement, presentation, and verification of healthcare data, and on the concepts of descriptive statistics, data validity, and reliability. Offered: Summer.

Prerequisites: MATH 1111 and HITE 2100 and (BUSA 2101 or MIST 2010) and HITE 2137
Lecture hours: 2

HITE 2250 - Legal & Ethical Issues in Health Information Technology (3 Credits)
Introduction to the legal and ethical issues regarding health information management with strong emphasis on legal and regulatory requirements; disclosure of PHI (protected health information) and ethical standards of practice. Offered: Spring.

Prerequisites: HITE 2100 and HITE 2400
Lecture hours: 2
Lab hours: 2

HITE 2400 - Pathophysiology and Pharmacology (3 Credits)
This course includes the management of health information as it relates to the nature and cause of the disease process of the human body; including the etiology, signs, symptoms, diagnostic evaluation, clinical treatment and pharmacologic management of disease processes to understand and abstract health information data for application of medical diagnostic and procedural codes and management of patient health information. Offered: Fall.

Prerequisites: BIOL 2412K
Corequisites: HITE 2100
Lecture hours: 3

HITE 2500 - Health Information System Applications (3 Credits)
Students will learn the concept of medical information management through an information system composed of people, hardware, software, communication networks, and data resources that collect, transform, and disseminate health information to healthcare users. The process of planning, designing, selecting, implementing, integrating, testing, evaluating, and supporting EHRs (electronic health records) is also introduced. Offered: Fall.

Prerequisites: HITE 2100 and HITE 2137 and (BUSA 2101 or MIST 2010)
Lecture hours: 2
Lab hours: 2

HITE 2550 - Quality Assessment (3 Credits)
Introduction to the components of quality assessment and improvement programs in health care facilities including quality assessment, utilization management, risk management, and peer review organizations. Students will learn to analyze clinical data to identify trends that demonstrate quality, safety, and effectiveness of health care. Offered: Spring.

Prerequisites: HITE 2200 and BUSA 2101
Lecture hours: 2
Lab hours: 2

HITE 2600 - Professional Practice I (2 Credits)
Professional practice experience using online simulation and activities that provide opportunities to apply and develop the skills learned throughout the course curriculum that are vital in the management of health information. Offered: Fall, Spring, Summer.

Prerequisites: HITE 2100 and HITE 2110 and HITE 2137 and HITE 2150 and HITE 2160 and HITE 2170 and HITE 2250 and HITE 2500
Lab hours: 4

HITE 2610 - Professional Practice II (2 Credits)
This course is a continuation of HITE 2600, providing additional professional practice experience as the student applies skills learned throughout the course curriculum. Students will have the opportunity to experience the workflow of the acute care setting from beginning to end. Offered: Fall, Spring, Summer.

Prerequisites: HITE 2100 and HITE 2110 and HITE 2137 and HITE 2150 and HITE 2160 and HITE 2170 and HITE 2250
Corequisites: HITE 2600, HITE 2650
Lab hours: 4

HITE 2650 - Seminar on Health Information Technology (1 Credit)
Exploration of current issues and trends in the health information profession and industry with emphasis on review for the RHIT exam. Offered: Fall, Spring, Summer.

Prerequisites: HITE 2100 and HITE 2110 and HITE 2137 and HITE 2150 and HITE 2160 and HITE 2170 and HITE 2250 and HITE 2400 and HITE 2500 and HITE 2550 and HITE 2600
Corequisites: HITE 2600, HITE 2610
Lecture hours: 1

MLTS 1160L - Medical Laboratory Technology I Lab (Hematology) (1 Credit)
The laboratory component of the course is utilized to develop skills and competencies required to perform laboratory analysis of blood and body fluids. Offered: Fall, online and traditional options.

Corequisites: MLTS 1160W
Lab hours: 3

MLTS 1160W - Medical Laboratory Technology I (Hematology) (3 Credits)
An in-depth study of the sciences of hematology and body fluids analysis. It deals with the morphology of blood and blood-forming tissues, the principles of blood sample collections, and the composition and function of multiple body fluids. Physiology and pathology are emphasized. Offered: Fall, online only.

Corequisites: MLTS 1160L
Restrictions:
Students with a semester level of Freshman may **not** enroll.

Lecture hours: 3

MLTS 1161L - Medical Laboratory Technology II Lab (Blood Bank) (1 Credit)
The laboratory component of the course is utilized to develop skills and competencies required to perform blood banking procedures and to maintain procedures for the efficient operation of a blood bank. Offered: Spring, online only.

Lab hours: 3

MLTS 1161W - Medical Laboratory Technology II (Blood Bank) (3 Credits)
This course provides an introduction to the principles of immunology and provides the student with a concise and thorough guide to transfusion practices and immunohematology. Offered: Spring or Fall if approved by program director, online only.

Lecture hours: 3

MLTS 1182 - Parasitology, Mycology, and Virology (3 Credits)
A course in clinical parasitology, mycology, and virology covers human fungal, parasitic and viral infections. The course presents mechanisms of infection, life cycles, and infectious states of the organisms as well as disease progression within the host and the practical application of laboratory procedures for detection and identification. Also included is safety, specimen collection, preservation, transport, methods of identification and therapy. Offered: Summer, online only.

Prerequisites: BIOL 2211K
Lecture hours: 3

MLTS 1300 - Introduction to Histology (3 Credits)
This course emphasizes the introductory study of basic histology. Structure and identification of tissue systems and organs is emphasized at the cellular level. The laboratory component is structured to enhance the student's knowledge of certain histological preparations of human and veterinary tissue. Identification of images is achieved through virtual microscopy. Offered: Fall, Spring.

Lecture hours: 2
Lab hours: 3

MLTS 1310L - Histology I Lab (1 Credit)
The course is a laboratory component complementary to MLTS 1310W. It is utilized to develop entry level skills required to perform non-staining histological procedures. Offered: Fall, Spring.

Corequisites: MLTS 1310W
Lab hours: 3

MLTS 1310W - Histology I (3 Credits)
This course emphasizes some of the competencies required to perform routine histological procedures. These would include tissue fixation, principles and application of microtomy, embedding techniques, laboratory operations, decalcification, solution preparation, and processing. Offered: Fall, Spring.

Corequisites: MLTS 1310L
Lecture hours: 3

MLTS 1320L - Histology II Lab (1 Credit)
The laboratory component of the course is utilized to develop skills required to perform routine and special stains. Students will identify and provide clinical correlation of routine and special stains. Offered: Fall, Spring.

Corequisites: MLTS 1320W
Lab hours: 3

MLTS 1320W - Histology II (2 Credits)
This course emphasizes the fundamentals and clinical significance of routine and special histological staining procedures. The student will differentiate between different classes of special stains performed in a histology laboratory. Offered: Fall and Spring.

Corequisites: MLTS 1320L
Lecture hours: 2

MLTS 1330 - Histology III (1 Credit)
Students practice histotechnology procedures in a supervised histology lab setting. The laboratory component of the course is utilized to develop skills and competencies required to perform routine and special histology procedures. Offered: Fall, Spring.

Lab hours: 3

MLTS 1340 - Clinical Histology Externship (5 Credits)
This course is the practicum designed to enhance and refine techniques taught in the first semester. Students are required to complete at least 300 clinical hours in an approved affiliate histology laboratory. Orientation to department and institutional policies and procedures is required. Offered: Spring, Fall.

Prerequisites: MLTS 1310L and MLTS 1320L
Lab hours: 30

MLTS 1350 - Histology V (2 Credits)
A study of immunohistochemistry procedures and interpretations. Offered: Spring, Summer.

Prerequisites: MLTS 1330 and MLTS 1300 and MLTS 1310W and MLTS 1320W and MLTS 1310L and MLTS 1320L
Lecture hours: 2

MLTS 1360 - Histology VI (1 Credit)
Various professional topics are presented for discussion including board exam reviews, professionalism, laboratory information systems, and management principles. Offered: Spring, Summer.

Prerequisites: MLTS 1310W and MLTS 1320W and MLTS 1330 and MLTS 1300
Lecture hours: 1

MLTS 2010L - Medical Laboratory Technology III Lab (Microbiology) (2 Credits)
The laboratory component of the course develops the skills and competencies required to perform the diagnostic procedures in clinical microbiology. Offered: Spring; online and traditional options.

Prerequisites: BIOL 2211K
Corequisites: MLTS 2010W
Lab hours: 6

MLTS 2010W - Medical Laboratory Technology III (Microbiology) (2 Credits)
This course presents a study of human clinical bacteriology including general bacteriology, aerobic gram-positive cocci, gram-negative bacilli, gram-negative cocci, gram-positive bacilli and anaerobes. Discussion is centered on the cultivation, methods of identification, antimicrobial susceptibility testing, serological diagnosis and correlation to disease states. Offered: Spring or Fall if approved by program director; online only.

Prerequisites: BIOL 2211K
Corequisites: MLTS 2010L
Lecture hours: 2

MLTS 2020L - Medical Lab Technology IV Lab (Chemistry) (1 Credit)
The laboratory component is used to develop the skills and competencies required to operate and standardize the instruments utilized in the performance of chemical tests. The use of quality control is emphasized. Offered: Summer; online and traditional options.

Prerequisites: CHEM 1212K
Corequisites: MLTS 2020W
Lab hours: 3

MLTS 2020W - Medical Laboratory Technology IV (Chemistry) (3 Credits)
An in-depth study of analytical techniques utilized to measure the biochemical entities of blood and various body fluids. The correlation of test results to human physiology and pathology is emphasized. Offered: Summer or Fall if approved by program director, online only.

Prerequisites: CHEM 1212K
Corequisites: MLTS 2020L
Lecture hours: 3

MLTS 2630 - Medical Laboratory Technology Externship (15 Credits)
Students are introduced to the clinical laboratory in an affiliate clinical laboratory setting. The students receive an orientation to each department and an introduction to hospital policies and procedures. Each student rotates through appropriate departments and is allowed to demonstrate and develop their skills and competencies in blood bank, hematology, microbiology, chemistry, phlebotomy and body fluid analysis under the supervision of the laboratory staff instructor. Offered: Fall.

Prerequisites: (MLTS 1160 or MLTS 121 or MLTS 131 or MLTS 1160W) and (MLTS 1161 or MLTS 231 or MLTS 1161W) and (MLTS 2010 or MLTS 236 or MLTS 2010W) and (MLTS 2020 or MLTS 241 or MLTS 2020W)
Corequisites: MLTS 2670
Lab hours: 36

MLTS 2670 - Seminars in Medical Laboratory Science (1 Credit)
Seminar presentations on various topics related to medical laboratory science (topic reviews for board exams, professionalism, laboratory information systems, case presentations and/or other). Offered: Fall; online option only.

Prerequisites: MLTS 1160W and MLTS 1160L and MLTS 1161W and MLTS 1161L and MLTS 1182 and MLTS 2010W and MLTS 2010L and MLTS 2020W and MLTS 2020L
Corequisites: MLTS 2630
Lecture hours: 1

OTAS 1100 - Introduction to Occupational Therapy (2 Credits)
The following concepts will be presented: Functional definitions of occupational therapy; the history of occupational therapy, philosophy, and ethics; the roles of occupational therapy professionals; and differentiation of occupational therapist and occupational therapy assistant responsibilities, the reimbursement for O.T. services and professional credentialing. An overview of the particular patient populations which an occupational therapy assistant might interact with is given. Specific types of treatment settings are explored in detail, with the scope of OTA practice examined, including the research data gathering role. Awareness of local and national occupational therapy organizations is emphasized. Demonstrated professional behaviors are encouraged. Offered: Fall.

Corequisites: ALHE 1104, OTAS 1105, OTAS 1111
Lecture hours: 1
Lab hours: 3

OTAS 1105 - Patient Skills for the OTA (2 Credits)
Introduction to concepts and procedures of patient care in occupational therapy. Topics include patient positioning and draping, body mechanics, patient transfers, vital signs monitoring, infection control, aseptic techniques, therapeutic exercise, ADA awareness, confidentiality, adjustment and maintenance of assistive equipment and safety. Offered: Fall.

Corequisites: ALHE 1104, OTAS 1100, OTAS 1111
Lecture hours: 1
Lab hours: 3

OTAS 1111 - Functional Anatomy and Kinesiology (4 Credits)
Analysis of human movement and its impact on function through the integration of biomechanics, kinesiology and applied anatomy. Principles will be reinforced through a problem-solving approach for understanding movement. Goniometric measurements and manual muscle testing of the upper and lower extremities, trunk and head will be included. Offered: Fall.

Lecture hours: 2
Lab hours: 6

OTAS 1121 - Therapeutic Media (2 Credits)
Lecture and laboratory course emphasizing basic media and activities in a therapeutic setting. Focus is placed in lecture sessions on activity analysis. Laboratory focus is based on application of analysis to therapeutic intervention situations. Skill attainment in relation to the actual process of different media tasks will be encouraged. Offered: Spring.

Prerequisites: OTAS 1100 and ALHE 1104 and OTAS 1105 and OTAS 1111
Corequisites: OTAS 1131, OTAS 1140, OTAS 1145
Lecture hours: 1
Lab hours: 3

OTAS 1131 - Physical Function in Occupation I (4 Credits)
The role of the OTA in the evaluative process, treatment, documentation and reassessment is presented. Recognition of specific skills related to adaptive procedures and the grading of tasks for maximized patient gains is examined. Treatment techniques and considerations for specific patient populations with physical dysfunction related issues are presented. Level 1 fieldwork is a component part of this course offering. Offered: Spring.

Prerequisites: OTAS 1100 and OTAS 1111 and OTAS 1105 and ALHE 1104
Corequisites: OTAS 1121, OTAS 1140, OTAS 1145
Lecture hours: 2
Lab hours: 6

OTAS 1132 - Physical Function in Occupation II (4 Credits)
A continuation of the OTAS 1131 course. Emphasis is placed upon the OTA in the evaluative process, treatment role and documentation for the patient population related to physical dysfunction. The role of the OTA across the continuum of care is viewed. Systematic examination of the OTA in the treatment process and appropriate problem-solving is encouraged. Offered: Summer.

Prerequisites: OTAS 1140 and OTAS 1145 and OTAS 1131 and OTAS 1121
Corequisites: OTAS 2200, OTAS 2260
Lecture hours: 3
Lab hours: 3

OTAS 1140 - Psychosocial Function in Occupation (3 Credits)
Etiology, diagnosis and treatment of psychiatric conditions encountered in the clinical setting by Occupational Therapy Assistants. Occupational therapy treatment techniques for remediation and prevention across the life-span continuum are covered. Recognition of the use of psychotropic medications in psychiatric treatment and corresponding possible side effects are studied. Level 1 fieldwork observations and field trips will be part of this course. Offered: Spring.

Prerequisites: ALHE 1104 and OTAS 1111 and OTAS 1105 and OTAS 1100
Corequisites: OTAS 1121, OTAS 1131, OTAS 1145
Lecture hours: 2
Lab hours: 3
Other hours: 5

OTAS 1145 - Developmental Function in Occupation (3 Credits)
Examination of the process of evaluation, treatment and documentation for the OTA in settings working with a caseload involving development dysfunction. Emphasis is placed on developmental factors across ages and populations. Adaptive coping techniques and skills will be explored, with focus on practical problem solving. Level 1 fieldwork placement will be a component part of this course offering. Offered: Spring.

Prerequisites: OTAS 1105 and OTAS 1100 and ALHE 1104 and OTAS 1111
Corequisites: OTAS 1121, OTAS 1131, OTAS 1140
Lecture hours: 2
Lab hours: 3

OTAS 2200 - Assistive Techniques and Technologies (3 Credits)
The use and modification of adaptive devices and equipment is studied. Creative problem-solving regarding specific medical conditions is encouraged through the development of adaptive equipment. Proper patient positioning in the therapeutic and home environment is examined. Further development of static and dynamic splinting skill techniques for diverse patient treatment needs will be learned. The ability to analyze and problem-solve regarding overcoming environmental barriers is fostered. Issues related to increasing safety and functional mobility are explored. Offered: Summer.

Prerequisites: OTAS 1131 and OTAS 1140 and OTAS 1145 and OTAS 1121
Corequisites: OTAS 1132, OTAS 2260
Lecture hours: 2
Lab hours: 3

OTAS 2260 - Treatment Methods and Management for the OTA (4 Credits)
This course enables the student to apply specialized occupational theory, skills and concepts learned in the didactic coursework to the clinic. Topics include common diagnoses seen, treatment environments, and treatments for areas of occupation including ADL, IADL, education, work, play, leisure, and social participation. Students will be required to develop applications for enabling function for mental health and physical well-being through occupational therapy assessment/evaluation, intervention, and patient/client education. Techniques and applications used in traditional and non-traditional practice settings will be explored. Students will develop an awareness of activity demands, contexts, adapting, grading, and safe implementation of occupations or activities. Course will also create a discussion forum addressing events, skills, knowledge, and/or behaviors related to the practice environment. This will include legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation. Test-taking strategies for certification exams and the process for getting licensed will also be presented. Offered: Summer.

Prerequisites: OTAS 1121 and OTAS 1131 and OTAS 1140 and OTAS 1145
Corequisites: OTAS 1132, OTAS 2200
Lecture hours: 2
Lab hours: 6

OTAS 2410 - Fieldwork Experience Level II A (5 Credits)
Full-time fieldwork experience following the completion of all didactic course work. The fieldwork program involves students in experiences with clients, patients, therapists and others in the health care community. Participation in Level II fieldwork placements allows application of classroom theory and academic knowledge base. The fieldwork will be available in various settings providing opportunities for experience with diverse patient/client populations. The student fieldwork intern will experience various service delivery models reflective of current practice in the profession. Fieldwork internships are carried out in accordance with contractual agreements with health care facilities. Level II fieldwork internships are an integral part of the educational process and must be successfully completed within 18 months of the end of the didactic course work. Offered: Fall or at the discretion of the Program Director.

Prerequisites: ALHE 1104 and ALHE 1120 and OTAS 1100 and OTAS 1105 and OTAS 1111 and OTAS 1121 and OTAS 1131 and OTAS 1132 and OTAS 1140 and OTAS 1145 and OTAS 2200 and OTAS 2260
Corequisites: OTAS 2412, OTAS 2420
Lab hours: 40

OTAS 2412 - Occupational Therapy Seminar (2 Credits)
This course is designed to provide for the transition from the student role to the graduate role. Analysis of ethical, professional, and social issues affecting OTA practice will occur. Emphasis will be on preparation for national and state credentialing requirements and promotion of life-long learning. There will be ongoing learning of program evaluation, reimbursement mechanisms, healthcare legislation, federal and state regulations, the responsibility of the professional and consumer, and the professional rules and responsibilities of the OTA. The student will be expected to understand the role of health professionals in changing healthcare systems, administration, management, and research. Participation in a Web-based course covering review of national exam material will occur throughout the semester. Students will be required to complete case study assignments based on clinical experiences during Level II fieldwork. Students are also required to complete mock board exams in preparation for the national certification exam. Offered: Fall.

Prerequisites: OTAS 1100 and ALHE 1104 and OTAS 1105 and OTAS 1111 and ALHE 1120 and OTAS 1131 and OTAS 1140 and OTAS 1145 and OTAS 1132 and OTAS 2200 and OTAS 2260
Corequisites: OTAS 2410, OTAS 2420
Lecture hours: 2

OTAS 2420 - Fieldwork Experience Level II B (5 Credits)
Full-time fieldwork experience following the completion of all didactic course work. The fieldwork program involves students in experiences with clients, patients, therapists and others in the health care community. Participation in Level II fieldwork placements allows application of classroom theory and academic knowledge base. The fieldwork will be available in various settings providing opportunities for experience with diverse patient/client populations. The student fieldwork intern will experience various service delivery models reflective of current practice in the profession. Fieldwork internships are carried out in accordance with contractual agreements with health care facilities. Level II fieldwork internships are an integral part of the educational process and must be successfully completed within 18 months of the end of the didactic course work. Offered: Fall or at the discretion of the Program Director.

Prerequisites: ALHE 1104 and ALHE 1120 and OTAS 1100 and OTAS 1105 and OTAS 1111 and OTAS 1121 and OTAS 1131 and OTAS 1132 and OTAS 1140 and OTAS 1145 and OTAS 2200 and OTAS 2260
Corequisites: OTAS 2410, OTAS 2412
Lab hours: 40

PHLE 1101 - Phlebotomy I (2 Credits)
Introduction to Phlebotomy: liability, safety, equipment and techniques for blood sample collection. Offered: Fall.

Lecture hours: 2
Lab hours: 1

PHLE 1102 - Clinical Phlebotomy II (4 Credits)
Clinical practice in an affiliate clinical laboratory. The clinical experience enables the student to practice skills and develop competence under the supervision of the laboratory staff. Offered: Spring, A and B Term.

Prerequisites: PHLE 1101
Lab hours: 32

PTAS 1100 - Intro to Physical Therapy (1 Credit)
Explanation of the philosophy and history of the physical therapy profession and its relationship to other health care agencies and providers. Topics include: introduction to the structure and function of the American Physical Therapy Association, the development of the Physical Therapy Association, medical-legal aspects and professional ethics, critical thinking/problem solving and an introduction to documentation. Offered: Fall.

Corequisites: PTAS 1110, PTAS 1115, PTAS 1125
Lecture hours: 1

PTAS 1105 - Orientation to Patient Care Skills (3 Credits)
Orientation of basic concepts and procedures of patient care in physical therapy. Topics include documentation and chart review, basic administrative skills, teaching and learning principles, patient positioning and draping, body mechanics, vital sign monitoring, transfers, assistive devices and gait training, infection control, aseptic techniques, architectural barriers and accessibility, special patient care equipment and environment and basic soft tissue techniques. Offered: Spring.

Prerequisites: PTAS 1100 and PTAS 1110 and PTAS 1115 and PTAS 1125
Corequisites: PTAS 1121, PTAS 1130, PTAS 2010
Lecture hours: 2
Lab hours: 3

PTAS 1110 - Functional Anatomy & Kinesiology (4 Credits)
Understanding of human movement and its impact on function through the integration of biomechanics, kinesiology, and applied anatomy. Principles will be reinforced through a problem-solving approach. Goniometric measurements, manual muscle testing, and palpation skills of the upper extremity, lower extremity, trunk, and head will be included. Offered: Fall.

Corequisites: PTAS 1100, PTAS 1115, PTAS 1125
Lecture hours: 2
Lab hours: 6

PTAS 1115 - Clinical Pathology (3 Credits)
The pathophysiology of selected disorders commonly encountered in physical therapy. Etiology, signs and symptoms, diagnostics, treatment, and prognosis of disease and injury will be included. This is an on-line course. Offered: Fall.

Corequisites: PTAS 1100, PTAS 1110, PTAS 1125
Lecture hours: 3

PTAS 1121 - Therapeutic Exercise I (3 Credits)
Emphasizes demonstration and practice of common therapeutic exercise utilized in physical therapy that include active, active assistive, and passive range of motion. Data collection and performance of manual muscle testing and special tests will be explored along with treatment interventions for common musculoskeletal disease, dysfunction, and injury for treatment of neck, shoulder, arm, hand, postural abnormalities, and body mechanics with an emphasis on ergonomics. Principles of patient care will be developed utilizing critical thinking and problem-solving skills in the selection and application of treatment interventions based on the plan of care. Offered: Spring.

Prerequisites: PTAS 1100 and PTAS 1110 and PTAS 1115 and PTAS 1125
Corequisites: PTAS 1105, PTAS 1130, PTAS 2010
Lecture hours: 2
Lab hours: 3

PTAS 1122 - Therapeutic Exercise/Spec Pop (4 Credits)
Advanced therapeutic exercise techniques used in specialty areas of physical therapy, including, but not limited to: arthritis, wound care, burns, cardiopulmonary, peripheral vascular disease, geriatrics, amputation, women's health, cancer and chronic pain. Offered: Summer.

Prerequisites: (PTAS 1110) and (PTAS 1115) and (PTAS 1100) and (PTAS 1130 and PTAS 1121 and PTAS 2010 and PTAS 1105 and PTAS 1125)
Corequisites: PTAS 1135, PTAS 2050, PTAS 2100
Lecture hours: 3
Lab hours: 3

PTAS 1125 - Physical Agents (4 Credits)
Therapeutic properties and application of physical agents used in the delivery of physical therapy services. Electromyography will be included. Emphasis is on problem-solving skills necessary to provide an integrated approach to patient care. Students must demonstrate basic skill acquisition in using equipment and the ability to choose appropriate physical agents based on the physical therapist's plan of care. This course is web-enhanced. Offered: Fall.

Corequisites: PTAS 1100, PTAS 1110, PTAS 1115
Lecture hours: 3
Lab hours: 3

PTAS 1130 - Appl Neurology & Gait Analysis (4 Credits)
Basic neurophysiological concepts used as a foundation for understanding normal and abnormal function. Theory and application of fundamental neuro-anatomy and physical data collection techniques will be introduced. Normal and abnormal gait concepts are covered. Part-time clinical experience will be included. Offered: Spring.

Prerequisites: PTAS 1100 and PTAS 1110 and PTAS 1115 and PTAS 1125
Corequisites: PTAS 1105, PTAS 1121, PTAS 2010
Lecture hours: 2
Lab hours: 6

PTAS 1135 - Seminar/Phy Ther Assistant I (2 Credits)
Adaptation of psychosocial principles in the development of self-understanding and communication with patients, families, the public and other health care teams. Develops basic administrative skills in scheduling patients, patient charges, explanation of reimbursement, important of incidence report, risk management and continuous quality improvement. The Rules and Laws of the Georgia State Board of Physical Therapy will be explored. Clinical professionalism is also emphasized along with time management and professional development. Offered: Summer.

Prerequisites: PTAS 1100 and PTAS 1105 and PTAS 1110 and PTAS 1115 and PTAS 1121 and PTAS 1130 and PTAS 1125 and PTAS 2010
Corequisites: PTAS 1122, PTAS 2050, PTAS 2100
Lecture hours: 2

PTAS 2010 - Clinical Practicum I (2 Credits)
First full-time clinical experience in which students integrate component clinical skills and prerequisite knowledge into a patient management framework. Emphasis is on the development of critical thinking abilities, professional and ethical behaviors, responsibility, and effective management of time and resources. This practicum is 40 hours per week for 3 weeks. Offered: Spring.

Prerequisites: PTAS 1100 and PTAS 1110 and PTAS 1115 and PTAS 1125
Corequisites: PTAS 1105, PTAS 1121, PTAS 1130
Lab hours: 8

PTAS 2020 - Clinical Practicum II (5 Credits)
Second full-time clinical rotation in which the student gains additional experience in a health care facility observing and practicing skills under the supervision of a clinical instructor. The student will implement patient care utilizing knowledge from all didactic coursework for critical thinking and problem-solving in the selection and application of treatment interventions based on the physical therapist's plan of care. This practicum is 40 hours per week for 6 weeks. Offered: Fall.

Prerequisites: PTAS 1100 and PTAS 1105 and PTAS 1110 and PTAS 1115 and PTAS 1121 and PTAS 1122 and PTAS 1125 and PTAS 1130 and PTAS 1135 and PTAS 2010 and PTAS 2050 and PTAS 2100
Corequisites: PTAS 2025, PTAS 2200
Other hours: 40

PTAS 2025 - Clinical Practicum III (5 Credits)
Final clinical experience in which students achieve refinement of all competencies from Clinical Practicums I & II, as well as expansion into other areas of physical therapy care while under the supervision of a clinical instructor. Upon successful completion, the student will demonstrate entry-level competency as a physical therapist assistant. The student will demonstrate strong cognitive, motor, and organizational skills. He/she will handle the responsibilities and possess the sound judgment required of a physical therapist assistant. The practicum is 40 hours per week for 6 weeks. Offered: Fall.

Prerequisites: PTAS 1100 and PTAS 1105 and PTAS 1110 and PTAS 1115 and PTAS 1121 and PTAS 1122 and PTAS 1125 and PTAS 1130 and PTAS 1135 and PTAS 2010 and PTAS 2050 and PTAS 2100
Corequisites: PTAS 2020, PTAS 2200
Lab hours: 40

PTAS 2050 - Therapeutic Exercise II (3 Credits)
Continues education from Therapeutic Exercise I for data collection and performance of manual muscle testing and special tests along with treatment interventions for common musculoskeletal disease, dysfunction, and injury for treatment of the spine, hip, knee, ankle, foot, and gait abnormalities. Principles of patient care will continue to be utilized, along with critical thinking and problem-solving skills in the selection and application of treatment interventions based on the plan of care. Offered: Summer.

Prerequisites: PTAS 1100 and PTAS 1105 and PTAS 1110 and PTAS 1115 and PTAS 1121 and PTAS 1130 and PTAS 1125 and PTAS 2010
Corequisites: PTAS 1122, PTAS 1135, PTAS 2100
Lecture hours: 2
Lab hours: 3

PTAS 2100 - Neurological Rehabilitation (3 Credits)
Principles of patient management of adults and children with central nervous system disorders utilizing neurophysiological data collection methods and treatment interventions. General topics will include cerebrovascular accidents, pediatrics, spinal cord injury, head injury, and other selected disorders commonly referred for physical therapy. This class meets 7.5 hours per week for 10 weeks. Offered: Summer.

Prerequisites: PTAS 1100 and PTAS 1110 and PTAS 1115 and PTAS 1130 and PTAS 1105 and PTAS 1121 and PTAS 1125 and PTAS 2010
Corequisites: PTAS 1122, PTAS 1135, PTAS 2050
Lecture hours: 2
Lab hours: 3

PTAS 2200 - Seminar for Physical Therapy Assistants II (2 Credits)
An exploration of the clinical experience through the presentation of a case study (both written and orally.) Topics will include interview skills, resume skills, and preparation/review for state board examinations. Offered: Fall.

Prerequisites: PTAS 1100 and PTAS 1105 and PTAS 1110 and PTAS 1115 and PTAS 1121 and PTAS 1122 and PTAS 1125 and PTAS 1130 and PTAS 1135 and PTAS 2010 and PTAS 2050 and PTAS 2100
Corequisites: PTAS 2020, PTAS 2025
Lecture hours: 2

RADS 1000 - Introduction to Radiography and Patient Care (3 Credits)
Provides the student with an overview of radiography and patient care. Students will be oriented to the radiographic profession as a whole. Emphasis will be placed on patient care with consideration of both physical and psychological conditions. Introduces a grouping of fundamental principles, practices, and issues common to many specializations in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: ethics, medical and legal considerations, Right to Know Law, professionalism, basic principles of radiation protection and exposure, equipment introduction, health care delivery systems, hospital and departmental organization, medical emergencies, pharmacology/contrast agents, media, OR and mobile procedures patient preparation, death and dying, body mechanics/transportation, basic life support/CPR, and patient care in radiologic sciences. Offered: Spring.

Lecture hours: 2
Lab hours: 3

RADS 1020 - Radiographic Procedures I (2 Credits)
Introduces the knowledge required to perform radiologic procedures applicable to the human anatomy. Emphasis will be placed on the production of quality radiographs, and laboratory experience will demonstrate the application of theoretical principles and concepts. Topics include: introduction to radiographic imaging procedures; positioning terminology; positioning consideration; procedures, anatomy, and topographical anatomy related to body cavities, bony thorax, and abdomen. Offered: Summer.

Prerequisites: ALHE 1120 and ENGL 1101 and (BIOL 1100K or BIOL 2412K) and RADS 1000
Corequisites: RADS 1220
Lecture hours: 1
Lab hours: 2

RADS 1040 - Radiographic Procedures II (3 Credits)
Continues to develop the knowledge required to perform radiographic procedures. Topics include: anatomy and routine projections of the upper extremities and shoulder girdle; lower extremities; pelvic girdle; anatomy and routine projections of the spine, ribs and sternum. Offered: Fall.

Prerequisites: (RADS 1020 and RADS 1220)
Corequisites: RADS 1230
Lecture hours: 2
Lab hours: 3

RADS 1100 - Principles of Radiation Biology and Protection (3 Credits)
Provides instruction on the principles of cell radiation interaction. Radiation effects on cells and factors affecting cell response are presented. Acute and chronic effects of radiation are discussed. Topics include: radiation detection and measurement; patient protection, personnel protection, absorbed dose equivalencies, agencies and regulations, introduction to radiation biology, cell anatomy, radiation/cell interaction and effects of radiation. Offered: Summer.

Prerequisites: RADS 1000
Lecture hours: 3

RADS 1120 - Imaging Science I (4 Credits)
Content is designed to establish a basic knowledge of atomic structure and terminology. Also presented are the nature and characteristics of radiation, x-ray production and the fundamentals of photon interactions with matter. Factors that govern the image production process, film imaging with related accessories, and a basis for analyzing radiographic images. Included is the importance of minimum imaging standards, discussion of a problem-solving technique for image evaluation and the factors that can affect image quality. Actual images will be included for analysis. Offered: Fall.

Prerequisites: (MATH 1111) and (RADS 1000)
Lecture hours: 3
Lab hours: 2

RADS 1210 - Clinical Imaging I (2 Credits)
Introduces students to the hospital clinical setting and provides an opportunity for students to participate in and/or observe radiographic procedures. Topics include: orientation to hospital areas and procedures, orientation to mobile/surgery, orientation to radiography and fluoroscopy, participation in and/or observation of procedures related to the thoracic and abdominal body cavities. Activities of students are under direct supervision. Offered: Spring.

Corequisites: RADS 1000
Lab hours: 8

RADS 1220 - Clinical Imaging II (2 Credits)
Continues introductory student learning experiences in the hospital setting. Topics include: patient care, radiation safety practices, equipment utilization, exposure techniques, attend to and/or observation of routine projections of the thoracic and abdominal cavities in general and fluoroscopic procedures, observation of routine projections of the upper extremities and the shoulder girdle and lower extremities, pelvic girdle, and spine, observation of procedures related to the gastrointestinal (GI), genitourinary (GU), and biliary systems and observation of procedure related to minor radiologic procedures. Execution of radiographic procedures will be conducted under direct and indirect supervision. Initial competencies will be obtained. Offered: Summer.

Prerequisites: (RADS 1210 and RADS 1000)
Corequisites: RADS 1020
Lab hours: 8

RADS 1230 - Clinical Imaging III (4 Credits)
Intermediate student learning experiences in the hospital/clinical setting. Topics include: patient care; radiation safety practices, equipment utilization, exposure techniques, attend to and/or observation of routine projections of the thoracic and abdominal cavities, upper and lower extremities, pelvic girdle, and spine, attend to and/or observation of procedures related to the gastrointestinal (GI), genitourinary (GU), and biliary systems, and attend to and/or observation of procedure related to minor radiologic procedures. Execution of radiographic procedures will be conducted under direct and indirect supervision. Additional competencies and evidence of continued competencies will be obtained. Offered: Fall.

Prerequisites: RADS 1220
Corequisites: RADS 1040
Lab hours: 16

RADS 2060 - Radiographic Procedures III (3 Credits)
Continues to develop the knowledge required to perform radiographic procedures. Topics include: gastrointestinal (GI) procedures, genitourinary (GU) procedures, biliary system procedures and special procedures, anatomy and routine projections of the cranium, facial bones, and sinuses, sectional anatomy of the head, neck, thorax and abdomen. Offered: Spring.

Prerequisites: (RADS 1040 and RADS 1230)
Corequisites: RADS 2240
Lecture hours: 2
Lab hours: 2

RADS 2130 - Imaging Science II (4 Credits)
Content is designed to impart an understanding of the components, principles and operation of digital imaging systems found in diagnostic radiology. Factors that impact image acquisition, display, archiving and retrieval are discussed. Guidelines for selecting exposure factors and evaluating images within a digital system assist students to bridge between film-based and digital imaging systems, with a knowledge base in radiographic, fluoroscopic, mobile and tomographic equipment requirements and design. This content also provides a basic knowledge of quality control, principles of digital system, quality assurance and maintenance. Content is designed to provide entry-level radiography students with principles related to computed tomography (CT) imaging and other imaging modalities (i.e., MRI, US, NM, Mammography) in terms of purpose, principles, equipment/material and procedure. Topics include: imaging equipment, digital image acquisition and display, and basic principles of CT and other imaging modalities. Topics include: imaging equipment, digital image acquisition and display, basic principles of CT and other imaging modalities. Offered: Fall.

Prerequisites: (CISM 2201) and (RADS 1120)
Lecture hours: 4

RADS 2140 - Pathology for the Imaging Professional (2 Credits)
Content is designed to introduce the student to concepts related to disease and etiological considerations. Pathology and disease as they relate to various radiographic procedures are discussed with emphasis on radiographic appearance of disease and impact on exposure factor selection. Topics include: fundamentals of pathology, trauma/physical injury and systematic classification of disease. Offered: Summer.

Prerequisites: (RADS 1000) and (ALHE 1120) and (BIOL 1100K or BIOL 2412K)
Lecture hours: 2

RADS 2150 - Radiologic Science Review (3 Credits)
Provides a review of basic knowledge from previous courses and helps the student prepare for national certification examinations for radiographers. Topics include: image production and evaluation, radiographic procedures, anatomy, physiology, pathology and terminology; equipment operation and quality control, radiation protection, and patient care and education. Offered: Fall.

Prerequisites: RADS 1100 and RADS 2130 and RADS 2140 and RADS 2250 and RADS 2060
Lecture hours: 3

RADS 2240 - Clinical Imaging IV (6 Credits)
Continues to provide students with intermediate learning experience in hospital/clinical setting. Students continue to develop proficiency in executing procedures introduced in Radiographic Procedures. Topics include: patient care, radiation safety practices, behavioral and social competencies, performance and/or observation of minor special procedures, special equipment use and participation in and/or observation of cranial and facial radiography. Execution of radiographic procedures will be conducted under direct and indirect supervision. Competencies and evidence of continued competencies will continue to be obtained. Offered: Spring.

Prerequisites: RADS 1230
Corequisites: RADS 2060
Lab hours: 24

RADS 2250 - Clinical Imaging V (3 Credits)
Advanced clinical learning experiences are obtained as students continue to develop proficiency in executing procedures introduced in Radiographic Procedures. Topics include: sterile techniques, participation in and/or observation of minor special procedures, special equipment use and genitourinary system procedures, participation in and/or observation of cranial and facial radiography and competency completion evaluation. Execution of radiographic procedures will be conducted under direct and indirect supervision. Competencies and evidence of continued competencies will continue to be obtained. Offered: Summer.

Prerequisites: RADS 2240
Lab hours: 12

RADS 2260 - Clinical Imaging VI (6 Credits)
Provides students with continued hospital setting experience. Students demonstrate increased proficiency levels in skills introduced in all of the imaging procedures courses and practiced in previous clinical imaging courses. Topics include: patient care, behavioral and social competency, advanced radiographic anatomy, equipment utilization, exposure techniques, sterile techniques, integration of procedures and/or observation of angiographic, interventional, minor special procedures, integration of procedures and/or observation of special equipment use, integration of procedures and/or observation of routine and special radiographic procedures and final completion of all required clinical competencies. Execution of imaging procedures will be conducted under direct and indirect supervision. Offered: Fall.

Prerequisites: RADS 2250
Corequisites: RADS 2150
Lab hours: 24

RESP 1100 - Introduction to Respiratory Care (1 Credit)
This course introduces students to the Respiratory Care profession and the skills needed to become a Respiratory Therapist. Topics will include the history of the Respiratory Care profession, and a discussion of the future of Respiratory Care. A description of the organization of a hospital Respiratory Care department and an overview of common modalities and specialized areas of Respiratory Care including an introduction to Therapist driven protocols and clinical practice guidelines. A discussion of job opportunities and areas for advancement within the profession. An overview of legal and ethical issues impacting health care, and particularly Respiratory Care, in today's Health Care environment. Universal precautions and OSHA blood and body fluids precautions will be presented. The functions of the NBRC, AARC, CoARC and the Georgia Medical Board will be examined and the credentialing and licensing processes outlined. Offered: Summer.

Corequisites: RESP 1111
Lecture hours: 1

RESP 1111 - Fundamentals of Respiratory Care (3 Credits)
This course introduces the principles and practices of Non Critical Respiratory Care. The course will emphasize the use of Therapist Driven Protocols and Clinical Practice Guidelines. Basic Respiratory Care skills in modalities such as oxygen, humidity, bland aerosol, medicated aerosol, passive hyperinflation, chest physiotherapy, postural drainage, airway clearance therapies, arterial blood gases and bedside pulmonary function studies will be developed. Emphasis will be placed on setting up, using and troubleshooting equipment, and on the physical and physiologic principles of gas exchange, ventilation, acid/base balance and gas laws. To progress to RESP 2201, each student will be required to successfully complete and pass a Lab competency exam. Basic math competency is required. Students may be required to demonstrate proficiency in basic math skills for progression in the program, A passing score of "C" or better is required for progression in the program. The American Heart Association Basic Life Support course will be included in this course. Offered: Summer.

Corequisites: RESP 1100
Lecture hours: 2
Lab hours: 3

RESP 1131 - Patient Assessment & Protocols (4 Credits)
This course introduces the concepts and techniques of patient assessment through inspection, palpation, percussion, and auscultation. The student will demonstrate proficiency in patient physical examination, and taking a complete patient medical history. Principles of barrier protection for blood and body fluid exposures, and isolation precautions will be emphasized. Basic chest x-ray interpretation, basic ECG monitoring, basic laboratory values such as CBC, electrolytes, and basic microbiology are presented. Assessment of critically ill patients is introduced. Each student will be required to successfully complete a Lab competency examination. Offered: Fall. .

Prerequisites: RESP 1100 and RESP 1111
Corequisites: RESP 1132, RESP 1133, RESP 1134
Lecture hours: 3
Lab hours: 3

RESP 1132 - Cardiopulmonary Pharmacology (2 Credits)
A general pharmacology course for the respiratory care professional caring for the acute and subacute patient. Emphasis will be placed on the indications, contraindication, hazards, and routes of administration for the drugs discussed. The pharmacology of the major therapeutic classes of drugs important to respiratory care will be presented. Offered: Fall Semester.

Prerequisites: RESP 1100 and RESP 1111
Corequisites: RESP 1131, RESP 1133, RESP 1134
Lecture hours: 2

RESP 1133 - Cardiopulmonary Anatomy & Physiology (3 Credits)
A study of normal and abnormal anatomy and pathophysiology of the cardiac, pulmonary, and renal systems. The mechanisms of homeostatic control for acid/base balance, ventilation, gas transport and circulation will be addressed. Hemodynamic monitoring will be emphasized. Offered: Fall.

Prerequisites: RESP 1100 and RESP 1111
Corequisites: RESP 1131, RESP 1132, RESP 1134
Lecture hours: 3

RESP 1134 - Cardiopulmonary Diseases & TRM (2 Credits)
A survey course of the clinical pathophysiology of selected cardiopulmonary diseases. The emphasis will be placed on the description of the etiology, clinical manifestation, diagnosis, therapeutics and prognosis of acute and chronic diseases of the cardiopulmonary patient. Offered: Fall.

Corequisites: RESP 1131, RESP 1132, RESP 1133, RESP 2201
Lecture hours: 2

RESP 1135 - Mechanical Ventilation and Critical Care (5 Credits)
This course introduces the critical care modalities of airway management including tracheal suctioning and endotracheal intubation, tracheostomy care, concepts of mechanical ventilation are presented. Other critical care skills such as arterial lines, hemodynamic monitoring, advanced patient monitoring, bronchoscopy, and tracheostomy are presented. Basic math skills are required for this course. Each students may be required to pass a math competency exam to demonstrate proficiency. East student will be required to successfully pass a lab competency exam in order to progress to RESP 2201. Offered: Spring Semester.

Prerequisites: RESP 1100 and RESP 1111 and RESP 1131 and RESP 1134 and RESP 1133
Corequisites: RESP 1138
Lecture hours: 3
Lab hours: 6

RESP 1136 - Pediatric and Neonatal Respiratory Care (3 Credits)
This course presents the physiological and clinical concepts of mechanical ventilation and critical care monitoring of the pediatric and neonatal patient. The course focuses on respiratory care modaliaites and concepts specifically related to the pediatric and neonatal patient. Some topics include: ventilator design & function, assessment & monitoring of pediatric/neonatal patients, techniques for improving ventilation & oxygenation, weaning strategies, and labor & delivery. Critical thinking skills will be emphasized to support the application of neonatal/pediatric physician and therapist driven protocols. Offered: Summer. .

Prerequisites: RESP 1100 and RESP 1111 and RESP 1131 and RESP 1134 and RESP 1133
Corequisites: RESP 1137
Lecture hours: 2
Lab hours: 3

RESP 1137 - Specialized Areas of Resp Care (2 Credits)
This course surveys the important principles and practices of Respiratory Care in the following specialty areas: Pulmonary Function Testing, Polysomnography and Sleep Disorders, Pulmonary Rehabilitation, Geriatric Care, and Home Care. Students will apply the knowledge learned in this course in Practicum III. Offered: Summer.

Prerequisites: RESP 1100 and RESP 1111 and RESP 1131 and RESP 1134 and RESP 1133
Corequisites: RESP 1136
Lecture hours: 2

RESP 1138 - Advanced Cardiac Life Support (3 Credits)
This course will prepare the student to take and pass the American Heart Association Advanced Cardiac Life Saving Course (ACLS.) Students will take the official AHA ACLE course at the end of this course. Students must pass the ACLS course to pass this course. Offered: Spring Semester.

Prerequisites: RESP 1100 and RESP 1111 and RESP 1131 and RESP 1134 and RESP 1133
Corequisites: RESP 1135
Lecture hours: 2
Lab hours: 3

RESP 2201 - Clinical Practicum I (1 Credit)
This course will provide the student with comprehensive evidence-based respiratory care protocols to be used in providing the highest level of care to adults in settings across the continuum. An emphasis will be placed on departmental protocols, practice guidelines, patient identification, and communication skills. An overview of legal and ethical issues impacting healthcare, and particularly respiratory care, in today's health care environment. Offered: Fall.

Prerequisites: RESP 1100 and RESP 1111
Lab hours: 3

RESP 2202 - Clinical Practicum II (1 Credit)
This course includes the processes, techniques, and skills of health assessment, building on basic and experiential knowledge of assessment. It is intended to provide the basis for individual student development of expertise in assessing health and illness states. Focus is on didactic and clinical content that the practicing respiratory therapist utilizes when assessing clients. The processes of systematic assessment, which include communication, planning, and cultural variations are emphasized. Clinical judgment, diagnostic & monitoring skills, and teaching are integrated as components of assessment. Offered: Spring.

Prerequisites: RESP 1100 and RESP 1111 and RESP 1131 and RESP 1132 and RESP 1133 and RESP 1134
Lab hours: 8

RESP 2203 - Clinical Practicum III (1 Credit)
This course provides a clinical application for the student to master the modalities used by the practicing respiratory therapist. These skills include: oxygen therapy, humidity therapy, bland continuous aerosol therapy, medicated nebulizer therapy, passive hyperinflation, chest physiotherapy and postural drainage, arterial blood gas draws and analysis, equipment cleaning and environmental therapy. Equipment therapy will be reinforced. Offered: Summer.

Prerequisites: RESP 1100 and RESP 1111 and RESP 1131 and RESP 1132 and RESP 1133 and RESP 1134 and RESP 1135 and RESP 1138
Lab hours: 8

RESP 2210 - Clinical Practicum IV (4 Credits)
This course provides a continuation of RESP 2203. Emphasis will be placed on departmental protocols and clinical practice guidelines. Students are introduced to the care of adult critically ill patients in the Intensive Care Unit. Mastery of active hyperinflation therapies, chest physiotherapy, arterial blood punctures analysis, and continued concepts of airway management. The ethical practice of respiratory care and the application of patient driven protocols will be emphasized. Offered: Fall, A-Term.

Prerequisites: RESP 1100 and RESP 1111 and RESP 1131 and RESP 1132 and RESP 1133 and RESP 1134 and RESP 1135 and RESP 1136 and RESP 1137
Lab hours: 30

RESP 2220 - Clinical Practicum V (4 Credits)
Practicum to support content presented in RESP 1136 and RESP 1137. Practical experiences will occur in proportion to emphasis placed on the cognitive content in the companion course. This course may also provide an opportunity for accelerated or advanced students to explore additional clinical experiences outside the usual program scope. Emphasis will be placed on the neonatal/pediatric intensive care patient. Students will be required to attend and pass the NRP course. Offered: Fall, B-Term.

Prerequisites: RESP 1100 and RESP 1111 and RESP 1131 and RESP 1132 and RESP 1133 and RESP 1134 and RESP 1135 and RESP 1136 and RESP 1137 and RESP 1138
Corequisites: RESP 2210, RESP 2330
Lab hours: 30

RESP 2330 - Credential Preparation (1 Credit)
The course will focus on a review of essential concepts of Respiratory Care with emphasis on content examined by the NBRC entry level and advanced level examinations. Critical thinking skills will be reinforced through presentation and discussion of case studies. Surveys of clinical research literature and journal articles will be examined. Each student must take and successfully pass the NBRC Self Assessment Exam as a requirement for passing the course and for graduation from the program. Offered: Fall, Sophomore Year.

Prerequisites: RESP 2201
Corequisites: RESP 2210
Lecture hours: 1
Other hours: 1