

# EMERGENCY MEDICAL SERVICES PROGRAM

The Emergency Medical Services Program is designed to provide instruction at the certificate and associate degree level for the EMS professional. The program is based on the National EMS Education Standard for the EMT, Advanced EMT and Paramedic. Upon successful completion of the selected program, the student will be eligible to take the National Registry certification exam. After passing the National Registry certification exam, the candidate will then be eligible to apply with the Office of EMS & Trauma for licensure. Upon licensure, the EMS professional is allowed to perform life-saving skills under medical direction as defined by their scope of practice.

**ALL** students, irrespective of track, must be admitted to ASU before applying to the EMS Program. Students must also take the University System of Georgia Accuplacer Test or an equivalent.

## Additional Requirements

- Complete the EMS Application Packet
- Copy of Driver's license
- Copy of high school diploma or GED high school equivalency certificate
- Letter of recommendation (optional, but may be taken into consideration during the selection process) i.e. Fire Chief, Supervisor, EMS Director, Paramedic, or other healthcare professional
- Verification of EMS licensure. (Paramedic and AEMT candidates)
- Evaluation on an individual basis by the EMS faculty
- To comply with the requirements of clinical facilities, the Health Sciences Division requires students to submit a completed immunization and TB screening form. This form must be completed before classes begin. Flu shots must be deferred until October.
- All Health Science students are required to have personal health insurance in order to participate in clinical practicums.

An EMT, AEMT, or Paramedic, is a caregiver with the responsibility of providing life supporting assessments and interventions. Implied in this caregiving role are essential job functions that require the EMS Professional to demonstrate certain cognitive (knowledge), psychomotor (skill), and affective (behavior) mastery.

To satisfactorily complete all levels of certification, the student must have developed the necessary skills to become an entry level practitioner according to their level of training. The examples below are not all inclusive and additional disabilities that prove to prevent the performance of essential job functions may be considered on a case by case basis.

- **Visual Acuity** (with/without corrective vision) – Having the visual capacity to identify life-threatening signs of physical distress through objective patient assessment, identify details of a patient's medications, and with accuracy draw solutions into a syringe when required.
- **Auditory Acuity** (with/without aids) – Having the auditory capacity to accurately obtain a subjective medical history and to complete a patient assessment using an aneroid sphygmomanometer, stethoscope, and other equipment as necessary to detect sounds including but not limited to breath and bowel.

- **Physical Ability** – Having the physical capacity to safely lift patients and equipment weighting at least 180lbs. with a partner, and have the stamina to perform cardiopulmonary resuscitation.
- **Speaking Ability** – Having the capacity to acquire a medical history and other details regarding the subjective assessment from the patient, family members, and/or bystanders and communicate those findings in various manners to coordinate patient care.
- **Manual Dexterity** – Having the capacity to perform intravenous catheterization, fill syringes, and perform other task(s) often associated with effective hand-eye coordination.
- **Mental Stress** – Having the capacity to perform without hesitation and with coordinated control, the skills of an EMT during times of mental stress, display principles of patient care consistent with the community standard, and respond positively to correct and modify behavior as required.

## Additional Costs and Fees

- Professional liability insurance is required prior to clinical assignment. Fees are assessed as part of the student's tuition and fees.
- The student must assume responsibility for their own health in the event of an illness, an accident, or exposure to communicable disease. Associated expenses will be the responsibility of the student.
- Students are required to have approved uniforms and equipment as described in the program handbook. Associated expenses are not assessed in advance and will be the responsibility of the student.
- Students are required to have received all necessary immunizations as listed in the program handbook. Associated expenses are not assessed in advance and will be the responsibility of the student.
- Each student will be held accountable for participating in the required Life Support courses. Fees are assessed as part of the student's tuition and fees for the appropriate semester.
- Students are required to take a comprehensive self-assessment exam prior to graduation. Fees are assessed in the graduating semester as part of the student's tuition and fees.
- Upon completion of the required curriculum, those students with a minimum of 2.0 will be eligible to take the NREMT cognitive and practical examinations. Upon releasing the student for the registry examination, it is expected that the student will complete the exam process within 30 days. Fees associated with the National Registry psychomotor and cognitive examination (first attempt only) will be assessed during the appropriate semester. The student will be responsible for National Registry practical examination site fees.

## Required Courses for Emergency Medical Services Certificate Program

The Paramedic is a Health Science professional whose primary focus is to provide advanced emergency medical care for ill and injured patients. The Paramedic's scope of practice includes invasive and pharmacological interventions to reduce the morbidity and mortality associated with acute out-of-hospital medical and traumatic emergencies. Paramedic education represents the highest level of out-of-hospital care. Graduates of the Emergency Medical Services Certificate Program are encouraged to take the additional prescribed college courses in order to complete the Associate of Science degree in Emergency Medical Services.

Course	Title	Semester Hours
<b>Freshman Year</b>		
<b>Fall</b>		
EMTP 1104	Medical Emergencies I	2
EMTP 1109	Practicum I	3
EMTP 1113	Pharmacology	3
EMTP 1117	Respiratory	3
EMTP 1126	Cardiovascular I	3
EMTP 1132	Pathophysiology	1
<b>Semester Hours</b>		<b>15</b>
<b>Spring</b>		
EMTP 1102	Trauma	3
EMTP 1120	Practicum II	3
EMTP 1123	Patient Assessment, Shock and Resuscitation	2
EMTP 1124	Medical Emergencies II	2
EMTP 1127	Cardiovascular II	3
EMTP 1134	Special Populations	3
<b>Semester Hours</b>		<b>16</b>
<b>Summer</b>		
EMTP 1122	Essentials & Operations	2
EMTP 1125	Summative Capstone	3
EMTP 1133	Practicum III	3
<b>Semester Hours</b>		<b>8</b>
<b>Total Semester Hours</b>		<b>39</b>

## Required Courses for EMT and AEMT Certificate Program

The ASU EMS Program also offers the Emergency Medical Technician (EMT) and Advanced Emergency Medical Technician (AEMT) Program during the day as a part-time as well as a full-time course. The class sequences are as follows:

### Part-time AEMT Curriculum

Code	Title	Semester Hours
<b>First Term</b>		
ALHE 1110	EMS Systems and Operations	3
ALHE 1025	Trauma for the AEMT	3
ALHE 1023	AEMT Practicum I	1
<b>Second Term</b>		
ALHE 1036	Medical Emergencies for the AEMT	3
ALHE 1039	Essential Skills for the AEMT	3
ALHE 1029	AEMT Practicum II <sup>1</sup>	1
<b>Third Term</b>		
ALHE 1032	Advanced Life Support for the AEMT	4
ALHE 1034	AEMT Practicum III <sup>2</sup>	1
BIOL 1100K	Human Anatomy and Physiology for the Health Care Professional	4
<b>Total Semester Hours</b>		<b>23</b>

<sup>1</sup> NREMT Boards for EMT are taken after successful completion of these courses.

<sup>2</sup> NREMT Boards for AEMT are taken after successful completion of these courses.

### Full-time AEMT Curriculum

Code	Title	Semester Hours
<b>First Term</b>		
ALHE 1110	EMS Systems and Operations	3
ALHE 1025	Trauma for the AEMT	3
ALHE 1036	Medical Emergencies for the AEMT	3
ALHE 1039	Essential Skills for the AEMT	3
ALHE 1023	AEMT Practicum I	1
ALHE 1029	AEMT Practicum II <sup>1</sup>	1
<b>A-Term or Summer</b>		
BIOL 1100K	Human Anatomy and Physiology for the Health Care Professional	4
ALHE 1032	Advanced Life Support for the AEMT	4
ALHE 1034	AEMT Practicum III <sup>2</sup>	1
<b>Total Semester Hours</b>		<b>23</b>

<sup>1</sup> NREMT Boards for EMT are taken after successful completion of these courses.

<sup>2</sup> NREMT Boards for AEMT are taken after successful completion of these courses.

## Required Courses for Emergency Medical Services Career Associate Degree

The Paramedic is a Health Science professional whose primary focus is to provide advanced emergency medical care for ill and injured patients. The Paramedic's scope of practice includes invasive and pharmacological interventions to reduce the morbidity and mortality associated with acute out-of-hospital medical and traumatic emergencies. Paramedic education represents the highest level of out-of-hospital care. Graduates of the Emergency Medical Services Certificate Program are encouraged to take the additional prescribed college courses in order to complete the Associate of Science degree in Emergency Medical Services.

Course	Title	Semester Hours
<b>Freshman Year</b>		
<b>Fall</b>		
EMTP 1104	Medical Emergencies I	2
EMTP 1109	Practicum I	3
EMTP 1113	Pharmacology	3
EMTP 1117	Respiratory	3
EMTP 1126	Cardiovascular I	3
EMTP 1132	Pathophysiology	1
<b>Semester Hours</b>		<b>15</b>
<b>Spring</b>		
EMTP 1102	Trauma	3
EMTP 1127	Cardiovascular II	3
EMTP 1120	Practicum II	3
EMTP 1123	Patient Assessment, Shock and Resuscitation	2

EMTP 1124	Medical Emergencies II	2
EMTP 1134	Special Populations	3
<b>Semester Hours</b>		<b>16</b>
<b>Summer</b>		
EMTP 1122	Essentials & Operations	2
EMTP 1125	Summative Capstone	3
EMTP 1133	Practicum III	3
<b>Semester Hours</b>		<b>8</b>
<b>Sophomore Year</b>		
<b>Fall</b>		
ARTS 1100	Art Appreciation <sup>1</sup>	3
BIOL 1100K	Human Anatomy and Physiology for the Health Care Professional	4
ENGL 1101	English Composition I	3
MATH 1111	College Algebra	3
<b>Semester Hours</b>		<b>13</b>
<b>Spring</b>		
BUSA 2101	Survey of Computer Applications	3
POLS 1101	American Government	3
PSYC 1101	General Psychology	3
<b>Semester Hours</b>		<b>9</b>
<b>Total Semester Hours</b>		<b>61</b>

<sup>1</sup> Humanities requirement may be met by taking any Area C: Humanities/ Fine Arts courses listed on the Core Curriculum page (<http://catalog.asurams.edu/undergraduate/core-curriculum/#healthtext>).

**Depending on your enrollment status, you may be required to take ASU 1101, "First Year Experience".**

#### **ALHE 1023. AEMT Practicum I. (1 Credit)**

This course is the first of three practicums designed to provide the Advanced EMT student with the opportunity to perform a 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 assessment findings, anatomy, physiology, pathophysiology, and epidemiology. Relate assessment findings to underlying pathological and physiological changes in the patient's condition. 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. Prerequisite: Acceptance into the EMS program. Corequisites: None. Offered: On demand.

#### **ALHE 1025. Trauma for the AEMT. (3 Credits)**

This course includes material from the Trauma and Operations Modules of the current National EMS Education Standard. It is designed to provide the student with the fundamental knowledge to provide basic and selected advanced emergency care and transportation based on assessment findings for an acutely injured patient. Topics covered in this course are: Airway management, assessment and management of the trauma victim, bleeding, chest trauma, abdominal and genitourinary trauma, orthopedic trauma, soft tissue trauma, head, face, neck and spine trauma, nervous system trauma, special considerations in trauma, environmental emergencies and multisystem trauma, shock management, gaining access and vehicle extrication of the trauma victim, multiple casualty incident and International Trauma Life Support. Offered: Fall, Spring.

#### **ALHE 1029. AEMT Practicum II. (1 Credit)**

This course is the second of three practicums designed to provide the Advanced EMT student with the opportunity to perform a 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 assessment findings, anatomy, physiology, pathophysiology and epidemiology. Relate assessment findings to improve 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. Prerequisites: Successful completion of EMTP 1023, AEMT Practicum I Offered: Fall, Spring.

#### **ALHE 1032. Advanced Life Support for the AEMT. (4 Credits)**

This course includes material from the current National EMS Education Standard to provide increased knowledge and skills in specific aspects of advanced life support. Topics covered in this course are: patient assessment, advanced airway management, pharmacology, respiratory and cardiovascular assessment and management, Advanced Cardiac Life Support for the AEMT, pathophysiology, shock/trauma, acid-base disturbances, obstetrics, neonatal care, pediatrics, geriatrics, patients with special challenges and pediatric life support. This course concludes with a comprehensive program review and preparation for the National Registry of EMT's exam. Prerequisites: EMTP 1025, EMTP 1036, EMTP 1039, EMTP 1110 Offered: Spring, Summer.

#### **ALHE 1034. AEMT Practicum III. (1 Credit)**

This course is the third of three practicums designed to provide the Advanced EMT student with the opportunity to perform a 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 assessment findings, anatomy, physiology, pathophysiology and epidemiology. Relate assessment findings to underlying pathological and physiological changes in the patient's condition. Effectively communicate in a manner that is culturally sensitive and intended to improve 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. Prerequisite: Successful completion of EMTP 1029, AEMT Practicum I. Corequisite: EMTP 1032, Advanced Life Support for the AEMT. Offered: Spring, Summer.

**ALHE 1036. Medical Emergencies for the AEMT. (3 Credits)**

This course includes material from the Preparatory and Medical Modules of the current National EMS Education Standard. It is designed to provide the student with fundamental knowledge to provide basic and selected advanced emergency care and transportation based on assessment findings for an acutely ill patient. Topics covered in this course are: Airway management, respiration and artificial ventilation, patient assessment, neurology, abdominal and gastrointestinal disorders, immunology, infectious diseases, endocrine disorders, psychiatric emergencies, cardiovascular emergencies, toxicology, respiratory emergencies, hematology, genitourinary/renal disorders, gynecology, non-traumatic musculoskeletal disorders, and diseases of the eyes, ears, nose, and throat. Credits: 3.00 Credit Hours (2.00 Lecture - 3.00 Lab) Prerequisites: Acceptance into the EMS program Offered: Fall, Spring .

**ALHE 1039. Essential Skills for the AEMT. (3 Credits)**

This course includes material from the Anatomy/Physiology, Pathophysiology and Pharmacology of the current National EMS Education Standard. It is designed to provide the student with the fundamental knowledge and foundational skills needed to provide advanced level care to the sick or injured patient. Topics covered in this course are: key components of cellular physiology and pathophysiology, patient assessment; gynecological and obstetrical emergencies; neonatal care; pediatrics; geriatrics; patients with special challenges; and toxicological emergencies. Credits: 3 (Lecture 2; Lab 3) Offered: Fall, Spring.

**ALHE 1104. Intro to Disease Conditions. (2 Credits)**

The basic pathophysiology of common disease conditions will be examined. The effect of disease on each body system is studied with emphasis on etiology, diagnosis, prognosis, prevention, and Occupational Therapy therapeutic treatment indications and contraindications. The effects of pathology across the lifespan are presented. Learner In-depth research on a particular topic is required. Prerequisite: Admission into the OTA program Corequisites: ALHE 1120, OTAS 1100, OTAS 1105, OTAS 1111 Offered: Fall .

**ALHE 1110. EMS Systems and Operations. (3 Credits)****ALHE 1120. Medical Terminology. (2 Credits)**

Medical terminology approached through roots, prefixes, and suffixes of medical terms. Definition and spelling of anatomical, diagnostic, symptomatic and operative medical terms are covered. Offered: Fall, Spring, Summer.

**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. Credits: 3.00 Credit Hours (3.00 Lecture - 0.00 Lab). Prerequisites: Acceptance into the EMS program. Corequisites: None. Offered: Spring.

**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. Credits: 2.00 Credit Hours (2.00 Lecture - 0.00 Lab). Prerequisites: Admission to Paramedic program. Corequisites: EMTP (Essentials), EMTP 1132, EMTP 1117, EMTP 1113, EMTP 1126, EMTP 1109. Offered: Fall.

**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. Credits: 3.00 Credit Hours (0.00 Lecture - 22.00 Clinical). Prerequisites: Admission to paramedic program. Corequisites: EMTP (Essentials), EMTP 1132, EMTP 1117, EMTP 1113, EMTP 1104, EMTP 1126.. Offered: Fall.

**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. Credits: 3.00 Credit Hours (2.00 Lecture – 2.00 Lab). Prerequisites: Admission to paramedic program. Corequisites: EMTP (Essentials), EMTP 1132, EMTP 1117, EMTP 1104, EMTP 1126, EMTP 1109. Offered: Fall.

**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. Credits: 3.00 Credit Hours (2.00 Lecture - 2.00 Lab). Prerequisites: Admission to paramedic program. Corequisites: EMTP (Essentials), EMTP 1132, EMTP 1113, EMTP 1104, EMTP 1126, EMTP 1109. Offered: Fall.



**EMTP 1120. Practicum II. (3 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. Credits: 2.00 Credit Hours (0.00 Lecture - 9.00 Lab). Prerequisites: Acceptance into the EMS program. Corequisites: None. Offered: Spring.

**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. Credits: 2.00 Credit Hours (2.00 Lecture - 0.00 Lab). Prerequisite: Admission to Paramedic program. Corequisite: EMTP 1132, EMTP 1117, EMTP 1113, EMTP 1104, EMTP 1126, EMTP 1109. Offered: Fall.

**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. Prerequisites: EMTP (Essentials), EMTP 1132, EMTP 1117, EMTP 1113, EMTP 1104, EMTP 1126, EMTP 1109. Corequisites: EMTP (Med II), EMTP 1102, EMTP 1134, EMTP 1127, EMTP 1120. Offered: Spring.

**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. Prerequisites: EMTP (Essentials), EMTP 1132, EMTP 1117, EMTP 1113, EMTP 1104, EMTP 1126, EMTP 1109. Corequisites: EMTP (Pt Assess), EMTP 1102, EMTP 1134, EMTP 1127, EMTP 1120. Offered: Spring.

**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. Credits: 2.00 Credit Hours (1.00 Lecture - 4.00 Lab). Prerequisites: Acceptance into the EMS program. Corequisites: None. Offered: Summer.

**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. Credits: 3.00 Credit Hours (2.00 Lecture - 2.00 Lab). Prerequisites: Admission to Paramedic program. Corequisites: EMTP (Essentials), EMTP 1132, EMTP 1117, EMTP 1113, EMTP 1104, EMTP 1109. Offered: Fall.

**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. Credits: 3.00 Credit Hours (3.00 Lecture - 0.00 Lab). Prerequisites: Acceptance into the EMS program. Corequisites: None. Offered: Spring.

**EMTP 1132. Pathophysiology. (1 Credit)**

Pathophysiology. (1 Credit) 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. Credits: 1.00 Credit Hour (1.00 Lecture - 0.00 Lab). Prerequisites: Admission to Paramedic program. Corequisites: EMTP (Essentials), EMTP 1117, EMTP 1113, EMTP 1104, EMTP 1126, EMTP 1109. Offered: Fall.

**EMTP 1133. Practicum III. (3 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. Credits: 2.00 Credit Hours (0.00 Lecture - 9.00 Lab). Prerequisites: Acceptance into the EMS program. Corequisites: None. Offered: Summer.

**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. Students must complete the Emergency Pediatric Care (EPC) course as well as the geriatric education for EMS (GEMS) course. Credits: 3.00 Credit Hours (3.00 Lecture - 0.00 Lab). Prerequisites: Acceptance into the EMS program. Corequisites: None. Offered: Spring .