

# 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

1. Complete the EMS Application Packet
2. Copy of Driver's license
3. Copy of high school diploma or GED high school equivalency certificate
4. 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
5. Verification of EMS licensure. (Paramedic and AEMT candidates)
6. Evaluation on an individual basis by the EMS faculty
7. 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.
8. 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

1. Professional liability insurance is required prior to clinical assignment. Fees are assessed as part of the student's tuition and fees.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.
7. 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. Prerequisite: None. Corequisite: None. Offered: Spring and Summer.

#### **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. Corequisites: None. Offered: On demand.

#### **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. Corequisite: None. Offered: On demand.

#### **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: 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. Prerequisites: Acceptance into the EMS program. Corequisites: None. Offered: Spring. Credits: 3.00 Credit Hours (2.00 Lecture - 3.00 Lab).

**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. Prerequisite: None. Corequisites: None. Offered: Spring. Credits: 3 (Lecture 2; Lab 3)

**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.

**ALHE 2050. Health Care Delivery System. (1 Credit)**

Introduces students to the historical development, structure, operation, current and future directions of the major components of the American Healthcare Delivery system. It examines the ways in which the healthcare services are organized and delivered, the influences that impact healthcare public policy and factors that determine the allocation of healthcare resources. Prerequisites: READ 0099. Offered: Summer and on demand.

**ALHE 2137. Fundamentals of Health Inf. Mg. (3 Credits)**

This course introduces the student to the field of Health Information Management (HIM) and its role in healthcare delivery systems. Emphasis is placed on the health information management profession, hospital and medical staff organization, structure and content of medical records, quantitative and qualitative analysis, release of patient information, legal aspects of medical records, ethical issues in HIM, healthcare statistics, indexes and registers, electronic medical records, payment and reimbursement systems, and regulatory and accrediting agencies. Prerequisites: Acceptance in the Health Information Technology Program. Corequisites: None. Offered: On request.

**EMTP 1000. EMT Basics. (6 Credits)**

This course is the initial course for the certification of the emergency medical technician-basic level as defined by the U.S. Department of Transportation EMT-Basic National Standard curriculum. Along with successful completion of EMTP 1025, the student will be able to take the national Registry of EMT's certifying exam for the EMT-B level, which is the minimum level required to be employed with an ambulance service in the State of Georgia. Topics include: Introduction to Emergency Medical Care, the human body, airway evaluation and management, patient assessment, medical emergencies, pediatric and geriatric emergencies, ambulance operations, and CPR. This course also requires hospital emergency center and ambulance clinical rotations. Prerequisites: None. Corequisite: EMTP 1025. Offered: On demand.

**EMTP 1021. Intro/Emergency Med Services. (6 Credits)**

This course introduces the student to the emergency Medical Technician profession. This course covers information found in the U.S. Department of Transportation Basic and Intermediate/85 curricula. Topics include: introduction to emergency care, EMS systems, well-being of the EMT, medical-legal aspects of emergency care, roles and responsibilities, medical terminology, blood and airborne pathogens, infectious diseases, ambulance and emergency vehicle operations, the human body, patient assessment, communications and documentation, lifting and moving patients, gaining access, airway assessment and management, basic life support (CPR) and automatic external defibrillation. Corequisite: None. Prerequisite: None. Offered: Fall, 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. Prerequisites: Acceptance into the EMS program. Corequisites: None. Offered: Spring. Credits: 3.00 Credit Hours (3.00 Lecture - 0.00 Lab).

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

**EMTP 1108. IntraAmbulance Op & Med Emerg. (4 Credits)**

This course includes the material from the Medical Emergencies and EMS Operations section of the current National EMS Education Standard. It includes units on respiratory, cardiac, diabetic, allergic, poisoning and overdoses, neurological, abdominal, and environmental emergencies in the adult patient as well as the geriatric patient. In addition, EMTP 1108 includes basic information on ambulance operations. Students will practice safe vehicle operations, stretcher safety, patient movement, intermediate level patient assessment and management. Actual field application and clinical decision making will be required. Prerequisites: Limited to Fast-Track Paramedic students admitted to EMS Program. Corequisite: None. 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. Prerequisites: Admission to paramedic program. Corequisites: EMTP (Essentials), EMTP 1132, EMTP 1117, EMTP 1113, EMTP 1104, EMTP 1126.. Offered: Fall. Credits: 3.00 Credit Hours (0.00 Lecture - 22.00 Clinical).

**EMTP 1111. Essentials of EMS. (2 Credits)**

This course includes material from the Preparatory and Assessment Modules of the current National EMS Education Standard. It is designed to provide the student with comprehensive knowledge patient assessment techniques. Topics covered in this course are: Therapeutic communications, history taking, and a body systems approach to the physical exam. Other topics included are: IV therapy, individual health risk assessment, and unique aspects of pediatric, geriatric, and psychiatric evaluation are discussed. Prerequisites: Acceptance into the EMS program. Corequisites: None. Offered: Fall. Credits: 2.00 Credit Hours (1.00 Lecture - 3.00 Lab).

**EMTP 1112. Psychiatric Emergencies. (2 Credits)**

This course includes materials from the Medical Module of the current National EMS Education standard. Topics include mental health and illness, psychiatric terminology and medications, mental status examination, suicide and homicide assessment, substance abuse assessment, domestic violence, spouse and child abuse, rape, death and dying, interview techniques and effective listening and communication skills. Prerequisites: Acceptance into the EMS program. Corequisites: None. Offered: Fall. Credits: 2.00 Credit Hours (2.00 Lecture - 0.00 Lab).

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

**EMTP 1115. OB/GYN/Neonatal Emrg/Paramedic. (2 Credits)**

This course includes material from the Medical and Special Considerations Modules of the current National EMS Education Standards. It includes the following topics: anatomy and physiology of the female reproductive system, abdominal pain, vaginal bleeding, rape, 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 neonate are included. A unit on resuscitation of the neonate concludes this course. Prerequisite: None. Corequisite: None. Offered: Summer.

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

**EMTP 1118. Pediatric Emrg Paramedic. (2 Credits)**

This course includes material from the Special Considerations Modules of the current National EMS Education Standards. The following topics are included; pediatric assessment, developmental stages, family assessment and management, respiratory emergencies, child safety, trauma, dehydration, shock, infant and child BLS and ACLS, neurologic emergencies, SIDS, child abuse, and care of children with special needs. After the pediatric emergencies labs and clinical practicum, have been completed, students must successfully complete the emergency Pediatric Care Course for Advanced Providers. Prerequisite: None. Corequisite: None. Offered: Fall and Summer.

**EMTP 1119. Ped. Emrg. Clinical Practicum. (1 Credit)**

In this course students will perform patient assessment and management techniques on infants and children in the hospital setting. Students will assess developmental stages, communicate with patients and family members, and treat pediatric patients with respiratory infections, gastroenteritis, sickle cell crises and a variety of medical and traumatic emergencies. Lab sessions will include pediatric oxygen therapy and airway adjuncts, management of pediatric shock including IV and intraosseous therapy, child and infant BLS and ACLS, pediatric ITLS, and miscellaneous medical emergencies scenarios. After the pediatric emergencies labs and clinical practicum have been completed, students must successfully complete the Emergency Pediatric Care Course. Prerequisite: None. Corequisite: None. Offered: Spring and 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. Prerequisites: Acceptance into the EMS program. Corequisites: None. Offered: Spring. Credits: 2.00 Credit Hours (0.00 Lecture - 9.00 Lab).

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

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

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

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

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

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

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