

# EMERGENCY MEDICAL SERVICES (EMTP)

## 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 .