

EMERGENCY MEDICAL SERVICES (EMS)

EMS 100. CPR for Healthcare Providers. (1 Credit)

Provides instruction in Cardiopulmonary Resuscitation that meets current Emergency Cardiac Care (ECC) guidelines for Cardiopulmonary Resuscitation education for Healthcare Providers. Equivalent to HLT 105. Lecture 1 hour per week. Total 1 hour per week.

EMS 111. Emergency Medical Technician. (7 Credits)

Prepares student for certification as a Virginia and National Registry EMT. Focuses on all aspects of pre-hospital basic life support as defined by the Virginia Office of Emergency Medical Services curriculum for Emergency Medicine Technician. Lecture 5 hours per week. Laboratory 4 hours per week. Total 9 hours per week. Prerequisite: EMS 100/equivalent Co-requisite: EMS 120.

EMS 120. Emergency Medical Technician - Clinical. (1 Credit)

Provides supervised direct patient contact introducing the student to the assessment and emergency care of sick and injured patients. This course is a co-requisite for either EMS 111 or EMS 113, depending upon the program in which the student is participating. Laboratory 2 hours per week. Total 2 hours per week.

EMS 121. Preparatory Foundations. (2 Credits)

Introduces fundamental concepts established by the National Emergency Medical Service Education Standards (NEMSES) for Advanced EMT and Paramedic curricula. Includes EMS systems, introduction to research, workforce safety and wellness, EMS system communications, introduction to public health, legal and ethical issues. Lecture 2 hours per week. Total 2 hours per week. Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS.

EMS 123. EMS Clinical Preparation. (1 Credit)

Introduces the student to local clinical agencies and prepares the student for clinical activities above the level of EMT. Includes prerequisites required by clinical affiliates, therapeutic communication, primary assessment, history taking, secondary assessment, reassessment, monitoring devices and documentation. Laboratory 2 hours per week. Total 2 hours per week. Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS.

EMS 125. Basic Pharmacology. (1 Credit)

Prepares students to demonstrate competency concerning basic principles of pharmacology, drug dosage calculations and medication administration. Introduces medications listed in the Advanced EMT (AEMT) scope of practice. Lecture 1 hour per week. Total 1 hour per week. Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS Corequisite: EMS 126.

EMS 126. Basic Pharmacology Lab. (1 Credit)

Focuses on the safe administration of medications in the emergency setting. Includes drug dose calculation and covers multiple routes of administration including oral, intramuscular, subcutaneous, intravenous, and intraosseous and other methods within the scope of practice for the emergency care provider. Laboratory 2 hours per week. Total 2 hours per week. Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS Corequisite: EMS 125.

EMS 127. Airway, Shock and Resuscitation. (1 Credit)

Introduces concepts associated with pre-hospital emergency care of the individual experiencing airway difficulty or in need of resuscitation or shock management. Lecture 1 hour per week. Total 1 hour per week. Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS Corequisite: EMS 128.

EMS 128. Airway, Shock and Resuscitation Lab. (1 Credit)

Focuses on specific skills related to airway, resuscitation and shock management. Laboratory 2 hours per week. Total 2 hours per week. Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS Corequisite: EMS 127.

EMS 135. Emergency Medical Care. (2 Credits)

Prepares the student to assess and manage patients with common medical emergencies. Lecture 2 hours per week. Total 2 hours per week. Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS. Corequisite: EMS 136.

EMS 136. Emergency Medical Care Lab. (1 Credit)

Focuses on specific skills related to the assessment and management of common medical emergencies. Laboratory 2 hours per week. Total 2 hours per week. Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS. Corequisite: EMS 135.

EMS 137. Trauma Care. (1 Credit)

Prepares the student to assess and manage injured patients, developing his/her problem-solving ability in the treatment of trauma involving various body systems. Lecture 1 hour per week. Total 1 hour per week. Corequisite: EMS 138.

EMS 138. Trauma Care Lab. (1 Credit)

Focuses on the skills required for the assessment and management of patients with traumatic injury. Laboratory 2 hours per week. Total 2 hours per week. Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS. Corequisite: EMS 137.

EMS 139. Special Populations. (1 Credit)

Focuses on the pre-hospital assessment and management of patients in a specific population including pediatrics, geriatrics, obstetrics/gynecology (OB/GYN), bariatric, abuse, sexual assault and special needs. Lecture 1 hour per week. Total 1 hour per week. Prerequisites: Current Virginia EMT and CPR Certification as approved by the Virginia Office of EMS. Corequisite: EMS 140.

EMS 140. Special Populations Lab. (1 Credit)

Develops skills related to the assessment and management of patients in a specific population including pediatrics, geriatrics, obstetrics/gynecology (OB/GYN), bariatric, abuse, sexual assault and special needs. Laboratory 2 hour per week. Total 2 hours per week. Prerequisites: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS. Corequisite: EMS 139.

EMS 141. Cardiovascular Care. (2 Credits)

Focuses on assessment and management of cardiac-related emergencies. Covers basic dysrhythmia recognition and relates it to overall cardiac patient care. Lecture 2 hours per week. Total 2 hours per week. Prerequisites: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS. Corequisite: EMS 142.

EMS 142. Cardiovascular Care Lab. (1 Credit)

Focuses on skills involved in the assessment and management of cardiac-related. Laboratory 2 hours per week. Total 2 hour per week. Prerequisites: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS. Corequisite EMS 141.

EMS 163. Prehospital Trauma Life Support (PHTLS). (1 Credit)

Prepares for certification as a Prehospital Trauma Life Support provider as defined by the American College of Surgeons. Lecture 1 hour per week. Total 1 hour per week. Prerequisite(s): EMS 111 or equivalent.

EMS 164. Advanced Medical Life Support (AMLS). (1 Credit)

Covers current topics of care for adult patients suffering extensive medical conditions and emergencies, and offers certification as an Advanced Medical Life Support (AMLS) as defined by the National Association of Emergency Medical Technicians (NAEMT). Lecture 1 hour per week. Total 1 hour per week.

EMS 165. Advanced Cardiac Life Support (ACLS). (1 Credit)

Prepares for certification as an Advanced Cardiac Life provider. Follows course as defined by the American Heart Association. Lecture 1 hour per week. Total 1 hour per week. Prerequisites: EMS 100 or equivalent.

EMS 167. Emergency Pediatrics Course (EPC). (1 Credit)

Provides a unique approach to pediatric medical care, offering assessment techniques that can help EMS practitioners rapidly and accurately assess pediatric patients to determine which situations may be life threatening and require immediate intervention. Offers certification as defined by the National Association of Emergency Medical Technicians (NAEMT). Lecture 1 hour per week. Total 1 hour per week.

EMS 169. Pediatric Advanced Life Support. (1 Credit)

Prepares the student for certification as a pediatric advanced life support provider as defined by the American Heart Association. Covers primary assessment and emergency care of infants and children. Lecture 1 hour per week. 1 credits.

EMS 170. ALS Internship I. (1 Credit)

Begins the first in a series of clinical experiences providing supervised direct patient contact in appropriate patient care facilities in and out of hospitals. Includes but not limited to patient care units such as the Emergency Department, Critical Care units, Pediatric, Labor and Delivery, Operating Room, Trauma centers and various advanced life support units. Laboratory 3 hours per week. Total 3 hours per week.

EMS 175. Paramedic Clinical Experience I. (1 Credit)

Introduces students to live patient assessment and management in the clinical setting. Begins a continuum of learning involving live patients that leads to entry-level competence at the paramedic level. Laboratory 3 hours. Total 3 hours per week. Prerequisites: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS.

EMS 180. Advanced EMS Foundations. (1 Credit)

Introduces fundamental concepts established by the National Emergency Medical Service Education Standards (NEMSES) for the Advanced EMT curriculum. Includes EMS systems, introduction to research, workforce safety and wellness, EMS system communications, therapeutic communication, legal and ethical issues. Lecture 1 hour. Total 1 hour per week. 1 credit. Prerequisites: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS.

EMS 181. Advanced Airway and Shock Management. (1 Credit)

Introduces core principles of airway, shock, and resuscitation as outlined by the National Emergency Medical Service Education Standards (NEMSES) within the Advanced EMT curriculum. Provides students with a fundamental knowledge of the Cardiopulmonary system, including its assessment and management of shock. Covers cardiac arrest and post-arrest management. Lecture 1 hour. Total 1 hour per week. 1 credit Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS Co-requisite: EMS 182: Advanced Airway & Shock Management Lab.

EMS 182. Advanced Airway and Shock Management Lab. (1 Credit)

Examines assessment and management of trauma emergencies as outlined by the National Emergency Medical Service Education Standards (NEMSES) within the Advanced EMT curriculum. Provides students with specific skills related to airway, resuscitation and shock management. Laboratory 2 hours. 2 hours per week. 1 credit. Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS. Co-requisite: EMS 181: Advanced Airway and Shock Management.

EMS 183. Advanced Medical Care. (2 Credits)

Examines the assessment and management of medical emergencies as outlined by the National Emergency Medical Service Education Standards (NEMSES) within the Advanced EMT curriculum. Lecture 2 hours. Total 2 hours per week. 2 credits Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS. Corequisite: EMS 184: Advanced Medical Care Lab.

EMS 184. Advanced Medical Care Lab. (1 Credit)

Focuses on specific skills related to the assessment and management of common medical emergencies as outlined by the National Emergency Medical Service Education Standards (NEMSES) within the Advanced EMT curriculum. Laboratory 2 hours. Total 2 hours per week. 1 credit
Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS. Corequisite: EMS 183: Advanced Medical Care.

EMS 185. Advanced Trauma Care. (2 Credits)

Examines the assessment and management of trauma emergencies as outlined by the National Emergency Medical Service Education Standards (NEMSES) within the Advanced EMT curriculum. Lecture 2 hours. Total 2 hours per week. 2 credits
Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS. Co-requisite: EMS 186: Advanced Trauma Care Lab.

EMS 186. Advanced Trauma Care Lab. (1 Credit)

Focuses on specific skills related to the assessment and management of trauma emergencies as outlined by the National Emergency Medical Service Education Standards (NEMSES) within the Advanced EMT curriculum. Laboratory 2 hours. Total 2 hours per week. 1 credit
Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS. Corequisite: EMS 185: Advanced Trauma Care Lab.

EMS 199. Supervised Study. (3 Credits)

Assigns problems for independent study incorporating previous instruction and supervised by the instructor. May be repeated for credit.

EMS 202. Paramedic Pharmacology. (2 Credits)

Focuses on advanced pharmacological interventions, medications and their effects. Lecture 2 hours per week. Total 2 hours per week.

EMS 203. Advanced Patient Care. (2 Credits)

Focuses on the comprehensive assessment and management of patients in out-of-hospital and inter-facility scenarios. Content is centered on problem-solving through integration of didactic, psychomotor and affective curricula. Lecture 2 hours per week. Total 2 hours per week. Prerequisites: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS. Corequisite: EMS 204.

EMS 204. Advanced Patient Care Lab. (2 Credits)

Focuses on the comprehensive assessment and management of out-of-hospital and inter-facility patients using scenario-based learning. Laboratory 4 hours per week. Total 4 hours per week. Co-requisite: EMS 203.

EMS 206. Pathophysiology for the Health Professions. (3 Credits)

Focuses on the pathological processes of disease with emphasis on the anatomical and physiological alterations of the human body systems. Includes diagnosis and management appropriate to the advanced health care provider in and out of the hospital environment. Lecture 3 hours per week. Total 3 hours per week.

EMS 210. EMS Operations. (1 Credit)

Focuses on matters related to Emergency Medical Services (EMS) operations, incident and scene safety and awareness, triage, multiple and mass casualty incident operations and medical incident management (command and control of EMS incidents). Laboratory 2 hours per week. Total 2 hours per week. Prerequisites: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS.

EMS 212. Leadership and Professional Development. (1 Credit)

Focuses on the development of leadership within the field of Emergency Medical Services (EMS), topics include civic engagement, personal wellness, resource management, ethical considerations in leadership and research. Lecture 1 hour per week. Total 1 hour per week.

EMS 216. Paramedic Review. (1 Credit)

Provides the student with intensive review for the practical and written portions of the National Registry Paramedic exam. May be repeated once, for credit. Laboratory 2 hours per week. Total 2 hours per week.

EMS 221. Paramedic Cardiovascular Care. (3 Credits)

Covers in-depth assessment and management of cardiovascular conditions as outlined by the National Emergency Medical Service Education Standards (NEMSES) for Paramedics. Lecture 3 hours. Total 3 hours per week. 3 credits
Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS. Corequisite: EMS 222: Paramedic Cardiovascular Care Lab.

EMS 222. Paramedic Cardiovascular Care Lab. (1 Credit)

Focuses on skills involved in the assessment and management of cardiac-related emergencies as outlined by the National Emergency Medical Service Education Standards (NEMSES) for Paramedics. Develops competency in basic dysrhythmia recognition and overall cardiac patient care. 2 laboratory hours. 2 hours per week. 1 credit. Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS. Corequisite: EMS 221: Paramedic Cardiovascular Care.

EMS 223. Paramedic Patient Care I. (3 Credits)

Covers the breadth of medical and trauma conditions as outlined by the National Emergency Medical Service Education Standards (NEMSES) for Paramedics. Part I of II. Lecture 3 hours. Total 3 hours per week. 3 credits
Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS. Corequisite: EMS 224: Paramedic Patient Care I Lab.

EMS 224. Paramedic Patient Care I Lab. (1 Credit)

Covers the skills related to the breadth of medical and trauma conditions as outlined by the National Emergency Medical Service Education Standards (NEMSES) for Paramedics. Part I of II. Laboratory 2 hours. Total 2 hours per week. 1 credit
Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS. Corequisite: EMS 223: Paramedic Patient Care I.

EMS 225. Paramedic Patient Care II. (5 Credits)

Covers the depth of medical and trauma conditions as outlined by the National Emergency Medical Service Education Standards (NEMSES) for Paramedics. Examines critical analysis, accurate diagnosis, and effective treatment of sick or injured patients. Part II of II. Lecture 5 hours. Total 5 hours per week. 5 credits Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS. Corequisite: EMS 226: Paramedic Patient Care II Lab.

EMS 226. Paramedic Patient Care II Lab. (2 Credits)

Covers the skills related to the depth of medical and trauma conditions as outlined by the National Emergency Medical Service Education Standards (NEMSES) for Paramedics. Part II of II. Laboratory 4 hours. Total 4 hours per week. 2 credits Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS. Corequisite: EMS 225: Paramedic Patient Care II.

EMS 241. Paramedic Internship I. (2 Credits)

Introduces students to live patient assessment and management in the clinical and field setting. Begins a continuum of learning involving live patients that leads to entry-level competence at the paramedic level. Laboratory 6 hours. Total 6 hours per week. 2 credits Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS.

EMS 246. Paramedic Internship II. (2 Credits)

Introduces students to live patient assessment and management in the clinical and field set. Continues the learning experience with live patients that leads to entry-level competence at the paramedic level. Part II of II. Laboratory 6 hours. Total 6 hours per week. 2 credits. Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS.

EMS 247. Paramedic Clinical Experience II. (1 Credit)

Continues the student experience with live patient assessment and management in the clinical setting. It is the second step in a continuum of learning involving live patients that leads to entry-level competence at the paramedic level. Laboratory 3 hours per week. Total 3 hours per week.

EMS 248. Paramedic Comprehensive Field Experience. (2 Credits)

Expands the student experience with live patient assessment and management into the field setting. It is the third step in a continuum of learning involving live patients that leads to entry-level competence at the paramedic level. Laboratory 6 hours per week. Total 6 hours per week.

EMS 249. Paramedic Capstone Internship. (2 Credits)

Provides summative evaluation of the Paramedic student in the cognitive, psychomotor, and affective domains. Laboratory 6 hours per week. Total 6 hours per week.