

COURSE OUTLINE **Emergency Medical Technician (EMT)**

Course Description

AH 110. Emergency Medical Technician (EMT). 9 hours credit. Prerequisite: A score at a predetermined level in reading, writing and math on a placement exam, and concurrent enrollment in AH 212. This course will enable the student to provide assessment and pre-hospital emergency care to patients experiencing trauma or medical emergencies utilizing National Standard Guidelines Scope of Practice (NSGSP) and the Kansas Authorized Activities for the EMT. The student is required to perform a practicum experience in a hospital and Emergency Medical Services (EMS) setting.

Course Relevance

Recognizing the signs and symptoms of common medical emergencies is useful in daily life whether the student is employed in health care or not. Successful completion of the EMT and EMT Skills will allow the student to challenge the exams to become a Kansas and National Registered EMT. Learning activities will be geared toward the ultimate goal of achieving the terminal competencies needed to function as an EMT.

Required Materials

American Academy of Orthopedic Surgeons (2010). *Emergency care and transportation of the sick and injured* (10th ed.). Sudbury, MA: Jones and Bartlett Publishers

Stapleton, E., Aufderheide, 1. Hazinski, M., Cummins, R. (2010). *BLS for healthcare providers*. (6th ed.). Dallas, TX: American Heart Association

Learning Outcomes

The intention is for the student to be able to:

1. Demonstrate a knowledge base of human anatomy, physiology and medical terminology.
2. Apply legal and ethical principles pertaining to emergency medical technology, ambulance operations and basic triage.
3. Provide basic life support for sick or injured patients.

Learning PACT Skills that will be developed and documented in this course

Through involvement in this course, the student will develop ability in the following PACT skill area(s):

Analytical Thinking Skills

1. Critical thinking
 - Through performing a scene size-up following appropriate steps and applying legal and ethical principles in emergency medical practice, the student will develop critical thinking skills.

Technology Skills

1. Discipline-specific technology
 - Through the use of specific medical equipment and practical medical skills according to the NSGSP and the regulations set forth by the State of Kansas the student will develop discipline-specific technology skills.

Major Summative Assessment Task(s)

These learning outcome(s) and the Learning PACT skill(s) will be demonstrated by:

1. Completing a series of skills and competency-based assessments in preparation to challenge the state and national exams.
2. Performing a scene size-up and initial assessment, a focused history and physical exam, a detailed physical exam and ongoing assessment as needed.

Course Content

- I. Skills or Competencies – Actions that are essential to achieve the course outcomes:
 - A. Participate in a variety of medical and trauma situations
 - B. Demonstrate patient assessment, assessment of vital signs, the proper use of airway adjuncts, oxygen therapy, ventilation devices, and application of splints, wound care, Cardiopulmonary Resuscitation (CPR), use of an Automated External Defibrillator (AED), and medications.

Learning Units

- I. Introduction
 - A. Emergency medical care
 - B. Well-being of the EMT-basic
 - C. Medical/Legal and ethical issues
 - D. The human body
 - E. Baseline vital signs sample history
 - F. Documentation and communication
 - G. Medical terminology
 - H. Pathophysiology
 - I. Lifting and moving patients
- II. Pharmacology
 - A. Medications
 - B. Pathophysiology
 - C. Indications and contra-Indications
- III. Airway
 - A. Manual methods of opening the airway
 - B. Maintaining an airway
 - C. Ventilation devices and techniques
 - D. Kansas Enrichment advanced airway techniques and equipment
- IV. Patient assessment
 - A. Scene size-up
 - B. Primary assessment

- C. History taking
 - D. Secondary assessment
 - E. Reassessment
 - F. Communications
 - G. Documentation
- V. Medicine
- A. Neurology
 - B. Abdominal and gastrointestinal disorders
 - C. Infectious disease
 - D. Endocrine disorders
 - E. Psychiatric
 - F. Respiratory emergencies
 - G. Cardiovascular emergencies
 - H. Toxicology
 - I. Genitourinary/Renal
 - J. Gynecology
- VI. Trauma
- A. Shock and resuscitation
 - B. Bleeding
 - C. Chest trauma
 - D. Abdominal and genitourinary trauma
 - E. Orthopedic trauma
 - F. Soft tissue trauma
 - G. Multi-Systems trauma
 - H. Environmental emergencies
- VII. EMS Operations
- A. Ground ambulance
 - B. Incident management
 - C. Mass Casualty Incident (MCI)
 - D. Air medical
 - E. Vehicle extrication
 - F. Hazardous materials
 - G. MCI due to terrorism and disaster
- VIII. Kansas Enrichments
- A. Airway enrichment module
 - B. Epi-Pen
 - C. Blood glucose monitoring
 - D. Pulse oximetry
 - E. Portable ventilators
 - F. Nebulized breathing treatments
 - G. IV monitoring
 - H. Electrocardiogram (ECG) application
 - I. Aspirin

J. Nitro
K. Glucagon pen

Learning Activities

Learning activities will be assigned to assist the student to achieve the intended learning outcomes through lecture, instructor-led class discussion, independent and collaborative group activities, and other activities at the discretion of the instructor.

Grade Determination

The student will be graded on learning activities and assessment tasks. Grade determinants may include the following: daily work, quizzes, unit tests, class participation, and other methods of evaluation at the discretion of the instructor. A 90% attendance is also required by State Law for successful course completion.