

COURSE OUTLINE

Emergency Medical Technician-Basic

Course Description

AH 110. Emergency Medical Technician-Basic. 9 hours credit. Prerequisite: 17 years of age, becoming current on immunizations and concurrent enrollment in AH 212 Emergency Medical Technician-Skills Evaluation. This course will enable the student to provide assessment and pre-hospital emergency care to patients experiencing trauma or medical emergencies utilizing guidelines from the National Standard Curriculum and the Kansas Authorized Activities for the EMT. The student will receive training in areas such as Kansas Enrichments for EMT-B, Multi-Casualty Incident (MCI), Extrication, Hazardous Materials, Basic Fire Fighting, Weather Spotting, Weapons of Mass Destruction, and Pediatric Education for the Prehospital Professional (PEPP), are included. A practicum experience in a hospital and EMS setting is required.

Course Relevance

The principles learned in this course are intended to enable the student to recognize the signs and symptoms of common medical emergencies and the EMT level management of these sick or injured people which is useful in daily life whether the student is employed in health care or not. Successful completion of the EMT-Basic and EMT-Skills course will allow the student to challenge the exams to become a Kansas and National Registered EMT.

Required Materials

American Academy of Orthopedic Surgeons (2005). *Emergency care and transportation of the sick and injured* (9th ed.). Sudbury, MA: Jones and Bartlett Publishers

Stapleton, E., Aufderheide, T., Hazinski, M., Cummins, R. (2001). *BLS for healthcare providers*. (5th ed.). Dallas, TX: American Heart Association

Learning Outcomes

The intention is for the student to be able to

1. Use 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. Perform a scene size-up and initial assessment, a focused history and physical exam, a detailed physical exam and ongoing assessment as needed
4. Provide basic life support for sick or injured patients

Primary Learning PACT Skills that will be DEVELOPED and/or documented in this course

Through the student's involvement in this course, he/she will develop his/her ability in the following PACT skills:

1. Field-Related Technology

- The student will be evaluated on his/her practical skills according to the National Curriculum and the regulations set forth by the State of Kansas. The same skills evaluation tools (check sheets) will be utilized.

Secondary Skills developed but not documented:

Leadership
Teamwork
Critical Thinking
Ethical Conduct
Speaking
Nonverbal Communication
Problem Solving

Major Summative Assessment Task(s)

These learning outcomes and the primary Learning PACT skills will be demonstrated by:

1. Pass a series of assignments using principles covered that demonstrate knowledge of patient assessment and care
2. Completion of a series of skills and competency-based assessments in preparation to challenge the state and national exams

Course Content

- I. Themes – Key recurring concepts that run throughout this course:
 - A. Recognition and treatment of life threatening and non-life threatening emergencies
 - B. Role of the EMT in the health care setting
- II. Issues – Key areas of conflict that must be understood in order to achieve the intended outcome:
 - A. Evaluation of the transport needs of a patient
 - B. Type of assessment and emergency care needed for each emergency situation
 - C. Legal and ethical obligations to patient care
 - D. Personal and scene safety issues
- III. Concepts – Key concepts that must be understood to address the issues:
 - A. Benefits of patient care at the scene compared with the potential harm to the patient with delayed hospital transport
 - B. Gathering information to describe the situation to the receiving hospital staff
 - C. Being a patient advocate
 - D. Personal safety vs. patient care
- IV. Skills/Competencies – Actions that are essential to achieve the course outcomes:
 - A. Participation in a variety of medical and trauma situations
 - B. Demonstrates patient assessment, assessment of vital signs, the proper use of airway adjuncts, oxygen therapy, ventilation devices, and application of splints, wound care, CPR, use of an AED, and allowed patient assisted medications
 - C. Verbally and in writing communicate a description of the scene, patient assessment and interventions taken

Learning Units

- I. Preparatory
 - A. Introduction to emergency medical care
 - B. Well-being of the EMT-Basic
 - C. Medical/Legal and ethical issues
 - D. The human body
 - E. Baseline vital signs and sample history
 - F. Lifting and moving patients

- II. Airway
 - A. Manual methods of opening the airway and airway adjunctive equipment
 - B. Ventilation devices and techniques
 - C. Kansas Enrichment advanced airway techniques

- III. Patient assessment
 - A. Scene size-up
 - B. Initial assessment
 - C. Focused history and physical exam – trauma patients
 - D. Focused history and physical exam – medical patients
 - E. Detailed physical exam
 - F. On-going assessment
 - G. Communications
 - H. Documentation

- IV. Medical/Behavioral emergencies and Obstetrics/Gynecology
 - A. General pharmacology
 - B. Respiratory emergencies
 - C. Cardiovascular emergencies
 - D. Diabetes/Altered mental status
 - E. Allergies
 - F. Poisoning/Overdose
 - G. Environmental emergencies
 - H. Behavioral emergencies
 - I. Obstetrics/Gynecology

- V. Trauma
 - A. Bleeding and shock
 - B. Soft tissue injuries
 - C. Musculoskeletal care
 - D. Injuries to the head and spine
 - E. Injuries to the chest, abdomen and genitalia

- VI. Infants and children

- VII. Operations

- A. Ambulance operations
- B. Gaining access

VIII. Kansas Enrichments

- A. PASG
- B. Airway enrichment module, ie. Combi-tube, EOA, and PTL
- C. Epi-Pen
- D. Blood glucose monitoring
- E. Pulse oximetry
- F. Nebulized breathing treatments
- G. Aspirin

Learning Activities

Learning activities will be geared toward the ultimate goal of achieving the terminal competencies needed to function as an EMT. A variety of independent and collaborative learning activities will be provided as well as many graded evaluation tools to give the student every opportunity to challenge and successfully complete the class and certification process. Clinical experience in an ER and on an ambulance is also provided and required in this class.

Grade Determination

The student will be graded on completion of assigned tasks which includes class participation, quizzes, unit tests and a comprehensive final examination.