COURSE OUTLINE
Advanced Emergency Medical Technician (AEMT)

Course Description
FS 255. Advanced Emergency Medical Technician (AEMT). 10 hours credit. Prerequisite: Current certification as a Kansas Emergency Medical Technician (EMT), current immunizations, and passage of a criminal background check. This course will enable the student to provide assessment and pre-hospital emergency care to patients experiencing trauma or medical emergencies by utilizing National Standard Guidelines Scope of Practice (NSGSP) and the Kansas Authorized Activities for the AEMT, with the focus on achieving the terminal competencies needed to function as an AEMT. The student will be required to perform a practicum experience in a hospital and/or Emergency Medical Services (EMS) setting. Successful completion of the AEMT and AEMT Field Internship will allow the student to challenge the exams to become a Kansas and National Registered AEMT.

Required Materials
For complete material(s) information, refer to https://bookstore.butlercc.edu

Butler-assessed Outcomes
The intention is for the student to be able to:
1. Demonstrate a working knowledge of human anatomy, physiology, pathophysiology, and medical terminology.
2. Apply legal and ethical principles pertaining to emergency medical technology, ambulance operations, and basic triage.
3. Demonstrate critical thinking in order to provide advanced life support for sick or injured patients.
4. Verbalize the appropriate scene size-up
5. Demonstrate a proper primary assessment and verbalize an appropriate priority and transport decision.
6. Perform the appropriate patient assessment, then verbalize and perform the appropriate treatment.
7. Verbalize the appropriate indications, contraindications, administration techniques, documentation, and reassessment of AEMT level medications.

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
- Critical thinking - By performing a scene size-up following appropriate steps and applying legal and ethical principles to emergency medical practice, the student will develop critical thinking skills.
• Problem solving - By performing proper patient assessment with appropriate steps and applying legal and ethical principles to emergency medical practice, the student will develop problem solving and critical thinking skills.

**Technology Skills**
• Discipline-specific technology - Through the use of specific medical equipment and practice of 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 Butler-assessed Learning Outcome(s) and Learning PACT skill(s) will be demonstrated by:
1. Completing a series of skills and competency-based assessments in order to be eligible to take the state and national exams.
2. Performing a scene size-up and initial assessment, a focused history and physical exam, a detailed physical exam, a treatment plan, and an ongoing assessment as needed.

**Skills or Competencies**
These actions are essential to achieve the course outcomes:
1. Participate in a variety of medical and trauma situations.
2. Demonstrate patient assessment, and assessment of vital signs.
3. Demonstrate the proper use of airway adjuncts, oxygen therapy, and ventilation devices.
4. Apply splints and wound care appropriately to affected sites.
5. Demonstrate Cardiopulmonary Resuscitation (CPR), use of an Automated External Defibrillator (AED), and administration of medications.
6. Demonstrate the proper initiation and use of intravenous cannulation.
7. Demonstrate the proper initiation and use of intraosseous cannulation.
8. Demonstrate the ability to apply and interpret EKGs.
9. Demonstrate the ability to devise and execute appropriate treatment plans for medical and trauma patients.
10. Demonstrate component skills.
11. Assess and manage patient scenarios.
12. Use field technologies.

**Learning Units**
I. Introduction
   A. Emergency medical care
   B. Well-being of the AEMT
   C. Medical-legal and ethical issues
   D. Anatomy and physiology of the human body
   E. Baseline vital signs sample history
   F. Documentation and communication
G. Medical terminology
H. Pathophysiology
I. Patient packaging, lifting, and moving

II. Pharmacology
   A. Medications
   B. Pathophysiology
   C. Indications and contraindications
   D. Vascular access and medication administration

III. Airway
   A. Manual methods of opening the airway
   B. Airway maintenance
   C. Ventilation devices and techniques
   D. Acid-base balance
   E. 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. Cardiology
   A. Anatomy of the heart
   B. Electrical system of the heart
   C. EKGs
   D. Heart rhythms
   E. Cardiovascular medications
   F. Cardiovascular emergencies

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. These activities may be delivered either face-to-face or online.

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 Kansas State Law for successful course completion. Students must maintain a C or better to be eligible to take the National Registry AEMT Certification Exam.