Emergency Care Attendant (EMSP 1305)

Credit: 3 semester credit hours (3 hours lecture, 0 hours lab)

Prerequisite/Co-requisite: Must be at least 17 and be at least a senior in high school.

Course Description. Theory and Skills of immediate life saving care. Meets the requirements for certification as an Emergency Care Attendant (ECA).

Required Textbook and Materials


Course Objectives (with applicable SCANS skills after each)

Upon completion of this course, the student will be able to:

1. Demonstrate immediate life saving care to patients at the Emergency Care Attendant (ECA) level; (SCANS: F1.5, F2.3, F3.2, F4.1, F5.5, F6.5, F8.5, F9.5, F12.5, C1.4, C4.3)

2. Demonstrate the ability to complete perform all Emergency Care Attendant (ECA) skills. (SCANS: F5.5, C3.4, C5.5, C6.5, C7.5, C8.3, C10.4, C19.5, C20.5)


Curriculum based on Department of Transportation National Standard Curriculum.

SCANS Skills and Competencies

Beginning in the late 1980’s, the U.S. Department of Labor Secretary’s Commission on Achieving Necessary Skills (SCANS) conducted extensive research and interviews with business owners, union leaders, supervisors, and laborers in a wide variety of work settings to determine what knowledge workers needed in order to perform well on a job. In 1991 the Commission announced its findings in What Work Requires in Schools. In its research, the Commission determined that “workplace know-how” consists of two elements: foundation skills and workplace competencies. The three-part foundation skills and five-part workplace competences are further defined in the SCANS attachment.
Course Outline

A. Welcome to LIT EMS Program
   1. Introduction of EMS Staff, Instructors and students
   2. EMS program policies
   3. Familiarization to EMS Equipment

B. Introduction to EMS
   1. ECA roles and responsibilities to pre-hospital care
   2. Medical, Legal and Ethical Issues in EMS

C. The Human Body
   1. Major human body systems (anatomy and physiology)

D. Baseline Vital Signs and SAMPLE History
   1. Obtaining a Respiratory Rate
   2. Obtaining a Pulse
   3. Obtaining a Blood Pressure
   4. Interviewing the patient through the SAMPLE pneumonic

E. Lifting and Moving Patients
   1. Utilizing the patient moving devices (Gurney, Stair Chair, Backboard devices)
   2. Urgent vs. Non Urgent Moves.
   3. Lifting techniques.

F. Airway Management
   1. Respiratory emergency: signs, symptoms and treatment
   2. Administration of Oxygen through common EMS airway devices.
   3. Use of OPA, NPA and Suctioning devices.
   4. Signs, Symptoms and Treatment of a an obstructed airway.

G. Patient Assessment
   1. Conscious Medical Patient
   2. Unconscious Medical Patient
   3. Isolated Trauma Patient
   4. Serious Trauma Patient

H. Communication and Documentation
   1. Legal issues in patient care reports.
   2. Radio communications.
   3. Communication skills with patients and family.
   4. Communication skills with hospital staff.

I. Respiratory Emergencies
   1. Anatomy and Physiology of the Respiratory System
   2. Identification of different lung sounds
3. Signs, Symptoms and Treatment of different Respiratory emergencies.
4. Scenario practice with respiratory emergencies.

J. Cardiovascular Emergencies
1. Anatomy and Physiology of the Heart
2. Characteristics of arteries, veins, capillaries.
3. Signs and Symptoms and treatment of Angina vs. a Myocardial Infarction
4. Signs and Symptoms and Treatment of congestive heart failure
5. Administration of CPR and AED
6. Scenario practice with cardiac emergencies.

K. Neurologic Emergencies
1. Anatomy and Physiology of the Central Nervous System.
2. Signs, Symptoms and Treatment of a Cerebral Vascular Accident.
4. Signs, Symptoms and Treatment of a Transient Ischemic Attack.
5. Scenario practice with stroke emergencies.

L. Abdominal Emergencies
1. Anatomy of the Abdominal Cavity (solid organs vs. hollow organs)
2. Signs, Symptoms and Treatment of medical abdominal emergencies.

M. Diabetic Emergencies
1. Signs, Symptoms and Treatment of a hypoglycemic patient vs. a hyperglycemic patient.
2. Signs, Symptoms and Treatment of Diabetic Seizures.

N. Allergic Reactions, poison and environmental emergencies
2. Signs, Symptoms and Treatment of Drug Overdoses
3. Signs, Symptoms and Treatment of Poison Emergencies
4. Utilization of Texas Poison Control Network
5. Scenario Practice with allergic reaction and poison emergencies.

O. Behavioral Emergencies
6. Different types of Behavioral Emergencies
7. Managing a patient that has attempted suicide.
8. Safety considerations with a patient experiencing a behavioral emergency.

P. Obstetric and Gynecologic Emergencies.
1. Managing childbirth.
2. Signs, Symptoms and treatment of various complications during and post partum delivery
3. Managing the neonate.
4. Managing the post partum mother.
5. Scenario practice with child birth.

Q. Kinematics of Trauma
   1. Evaluating the Mechanism of Injury
   2. The Golden Hour
   3. Motor Vehicle Impacts
   4. Ejection of patients
   5. Gunshot wounds (Cavitation)
   6. Explosions

R. Bleeding and Shock
   1. Recognition of signs, symptoms and treatment of internal bleeding.
   2. Recognition of signs, symptoms and treatment of severe external blood loss.
   3. Causes of different types of shock
   4. Signs and Symptoms and treatment of the three stages of hypovolemic shock
   5. Indications, contraindications and utilization of MAST Trousers

S. Soft Tissue Injuries
   1. Recognition of the various types of soft tissue injuries.
   2. Bandaging techniques

T. Head, Face and Neck Injuries
   6. Recognition of dangers of injuries to the head, face and neck.
   7. Utilization of the occlusive dressing.
   8. Treatments of various eye injuries

U. Chest Injuries
   9. Signs, Symptoms and Treatment of a Pneumothorax
   10. Signs, Symptoms and Treatment of a Hemothorax
   11. Signs, Symptoms and Treatment of Cardiac Tamponade
   12. Signs, Symptoms and Treatment of Traumatic Asphyxia

V. Abdominal and Genitalia Injuries

W. Chest Injuries
   15. Signs, Symptoms and Treatment of a Pneumothorax

X. Musculoskeletal Injuries
   17. Utilization of various splints for different fractures.
   18. Utilization of a Traction Splint

Y. Spinal Injuries
   19. Signs, Symptoms and Treatment of a spinal injury
   20. Utilization of Spinal Immobilization skills.

Z. Pediatric Emergencies
EMSP 1305 (2010)
Course Syllabi

21. Assessment of the pediatric patient in different age groups.
22. Assessment of pediatric medical emergencies
23. Assessment of pediatric patient response to traumatic injuries

AA. Geriatric Emergencies
24. Assessment of geriatric medical emergencies

BB. Ambulance Operations
26. Characteristics of driving the ambulance vs. automobile
27. Ambulance equipment inventory and maintenance.

CC. Hazardous Materials First Responder Training
29. EMS role in hazardous material emergencies.

DD. Rescue Operations and Gaining Access
30. EMS role in different types of rescue operations

EE. Multi-Casualty Incidents (MCI)
31. Triage
32. START system.
33. Practice triaging multiple patients with various injuries

Grade Scale
90 – 100 A
80 – 89 B
70 – 79 C
60 – 69 D
0 – 59 F

Course Evaluation
Final grades will be calculated according to the following criteria:
1. 3 – 4 Major Exams 40%
2. Comprehensive Final Exam 20%
3. Chapter Quizzes 20%
4. Professionalism 20%

Course Requirements
1. Accountability for all classroom hours
2. Pass all psychomotor skills.
3. Maintain 80% course average.
Course Policies

1. Beepers, telephones, headphones, and any other electronic devices must be turned off while in class.

2. Do not bring children to class.

3. No make up quizzes or major exams are accepted.

4. Attendance Policy. Texas Department of State Health Services Bureau of EMS makes the student accountable for all classroom hours. If you miss class then it is the student’s responsibility to contact the instructor to see what was missed and how the hours are to be made up. This may include extra homework or outlining of chapters that were discussed. The program only allows this option to be used 4 times per the semester. If the student exceeds the four absences the lead instructor notifies the program director and the student will be advised that they will not receive a course completion certificate due to excessive absenteeism.

5. Dropping the course, the student is responsible for initiating and completing the drop process. If the student does not attend class and fails to drop the course, the student will earn an ‘F’ for the final grade in the course.

6. Additional class policies as defined by the EMS Program Student handbook.

Disabilities Statement

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office in Student Services, Cecil Beeson Building.

Course Schedule

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<th>Week</th>
<th>Topic</th>
<th>Reference</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Course introduction and policies</td>
<td>Ch 1 - 3</td>
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<td>Introduction to EMS</td>
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<td>Week 2</td>
<td>The Human Body</td>
<td>Ch 4</td>
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<td>Week 3</td>
<td>Vital Signs and SAMPLE History</td>
<td>Ch 5</td>
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<td>Week 4</td>
<td>Lifting and Moving Patients, Airway</td>
<td>Ch 6 -7</td>
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<td>Week 5</td>
<td>Patient Assessment</td>
<td>Ch 8</td>
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<td>Week 6</td>
<td>Communication and Documentation</td>
<td>Ch 9</td>
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<td>Week 7</td>
<td>Major Exam 1, CPR Instruction</td>
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<td>Week 8</td>
<td>Skills Testing, Clinical Orientation</td>
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<td>Week 9</td>
<td>Cardiac Emergencies, Neurological</td>
<td>Ch 12-14</td>
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<td>Week 10</td>
<td>Diabetic Emergencies Major Exam 2</td>
<td>Ch 15-19</td>
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<td>Week 11</td>
<td>OB Emergencies, Skills Testing</td>
<td>Ch 20</td>
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<td>Week 12</td>
<td>Shock, Head, Face, Neck and Chest Trauma</td>
<td>Ch 21-27</td>
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<td>Week 13</td>
<td>Musculoskeletal, Spinal Trauma, Major Exam 3</td>
<td>Ch 28-30</td>
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<td>Week 14</td>
<td>Mass Casualty Incidents, Scenario day</td>
<td>Ch 31-37</td>
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<td>Week 15</td>
<td>All required paperwork due, Comprehensive Final Exam</td>
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Contact Information:

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E-mail:
Office Hours: 12pm – 1pm and 3pm – 6pm T, TH