

EMS Operations (EMSP 2338)



Credit: 3 semester credit hours (3 hours lecture)

Prerequisite/Co-requisite: Texas EMT-Intermediate certification or EMSP 2444, EMS 2348, EMSP 2260, EMSP 2135 Co-requisite: EMSP 2430, EMSP 2434, EMSP 2261, EMSP 1147

Course Description

A detailed study of the knowledge and skills to safely manage the scene of an emergency.

Required Textbook and Materials

1. EMS Program Student Handbook.
2. Nancy Caroline's Emergency Care in the Streets, 6th edition, ISBN: 9780763764692
3. Program uniform T-shirt.
4. EMT / Paramedic Pants (dark blue or black)
5. Conservative Black leather belt (no designs)
6. Black leather shoes or boots (not tennis shoes)
7. Stethoscope, pen light, blood pressure cuff, trauma shears

Course Objectives

1. At the completion of this module, the student will understand the guidelines that help ensure safe and effective ground and air medical transport. (SCANS: F1.5, F2.5, F3.5, F4.5, F5.5, F6.5, F7.5, F8.5, F9.5, F10.5, F11.5, F12.5, F13.5, F15.5, F16.5, F17.5 C1.5, C3.5, C4.5, C5.5, C6.5, C7.5, C9.5, C10.5, C11.5, C12.5, C13.5, C14.5, C15.5, C16.5, C17.5, C18.5, C19.5)5, C12.5, C13.5, C14.5, C15.5, C16.5, C17.5, C18.5, C19.5, C20.5.5, C12.5, C13.5, C14.5, C15.5, C16.5, C17.5, C18.5, C19.5, C20.5)
2. Integrate the principles of general incident management and multiple casualty incident management techniques in order to function effectively at major incidents. (SCANS: F1.5, F2.5, F3.5, F4.5, F5.5, F6.5, F7.5, F8.5, F9.5, F10.5, F11.5, F12.5, F13.5, F14.5, F15.5, F16.5, F17.5 C1.5, C2.5, C3.5, C4.5, C5.5, C6.5, C7.5, C8.5, C9.5, C10.5, C11.5, C12.5, C13.5, C14.5, C15.5, C16.5, C17.5, C18.5, C19.5, C20.5)
3. Integrate the principles of rescue awareness and operations to safely rescue a patient from water, hazardous atmospheres, trenches, highways, and hazardous terrain. (SCANS: F1.5, F2.5, F3.5, F4.5, F5.5, F6.5, F7.5, F8.5, F9.5, F10.5, F11.5, F12.5, F13.5, F14.5, F15.5, F16.5, F17.5 C1.5, C2.5, C3.5, C4.5, C5.5, C6.5, C7.5, C8.5, C9.5, C10.5, C11.5, C12.5, C13.5, C14.5, C15.5, C16.5, C17.5, C18.5, C19.5, C20.5)

EMSP 2338

Course Syllabi

4. Evaluate hazardous materials emergencies, call for appropriate resources, and work in the cold zone. (SCANS: F1.5, F2.5, F3.5, F4.5, F5.5, F6.5, F7.5, F8.5, F9.5, F10.5, F11.5, F12.5, F13.5, F14.5, F15.5, F16.5, F17.5 C1.5, C2.5, C3.5, C4.5, C5.5, C6.5, C7.5, C8.5, C9.5, C10.5, C11.5, C12.5, C13.5, C14.5, C15.5, C16.5, C17.5, C18.5, C19.5, C20.5)
5. Maintain an awareness of the human hazard of crime and violence and the safe operation at crime scenes and other emergencies. (SCANS: F1.5, F2.5, F3.5, F4.5, F5.5, F6.5, F7.5, F8.5, F9.5, F10.5, F11.5, F12.5, F13.5, F14.5, F15.5, F16.5, F17.5 C1.5, C3.5, C4.5, C5.5, C6.5, C7.5, C8.5, C9.5, C10.5, C11.5, C12.5, C13.5, C14.5, C15.5, C16.5, C17.5, C18.5, 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.

Course Outline

- A. Orientation
 1. Review of EMS program policies
- B. Respiratory Emergencies
 1. Study of different types of respiratory diseases
 2. Management of the COPD patient
 3. Respiratory scenario training.
- C. Neurological Emergencies
 1. Study of different neurological diseases.
 2. Management of Strokes.
 3. Scenario training involving neurological emergencies.
- D. Endocrine Emergencies
 1. Study of different endocrine diseases
 2. Management of diabetic emergencies
 3. Scenario training involving endocrine emergencies
- E. Allergic Reactions
 1. Study of the body's immune response system.
 2. Anaphylaxis shock
 3. Scenario training involving allergic reactions
- F. Gastrointestinal Emergencies
 1. Study of different diseases of the gastrointestinal system
 2. Scenario training involving gastrointestinal emergencies.
- G. Renal Emergencies
 1. Study of full renal failure
- H. Toxicology
 1. Overdose emergencies
 2. Management of Delirium Tremens

EMSP 2338

Course Syllabi

3. Scenario Training for managing overdose patients.
- I. Hematologic Emergencies
 1. Study of anemia, platelet disorders, and post reactions to blood transfusions.
 2. Scenario Training
- J. Environmental Emergencies
 1. Study of the body's response to extreme temperatures.
 2. Treatment of hot and cold emergencies and severe dehydration.
- K. Behavioral Emergencies
 1. Study of different types of psychosis disorders
 2. Managing the violent patient
 3. Managing the suicidal patient
- L. OB/GYN Emergencies
 1. Pre-hospital childbirth delivery
 2. High risk pregnancies
 3. Complications during childbirth
 4. Post-partum emergencies
- M. Neonatology
 1. Review of neonate resuscitation
 2. APGAR scoring
 3. Intubation techniques
 4. Cardiac medications for the neonate.
- N. Pediatrics
 1. Communication techniques with the pediatric
 2. Fluid resuscitation considerations
 3. Use of the Braslow tape
- O. Pediatric Advanced Life Support (PALS)
 1. Respiratory Arrest scenarios
 2. Cardiac Arrest scenarios
 3. Graded Scenarios
- P. Geriatrics
 1. Body's reaction to aging
 2. Communication techniques with the geriatric
 3. Managing the patient with dementia
- Q. Patients with special needs
 1. Managing the handicap patient
 2. Special airway considerations
- R. EMS Operations
 1. Managing the Mass Casualty Incident
- S. Preparation for the National Registry Exam
 1. Cognitive exam and skills preparation

Grade Scale

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

Course Evaluation

EMSP 2338

Course Syllabi

Final grades will be calculated according to the following criteria:

1. Major Exam 40%
2. Professionalism 20%
3. Quizzes and Homework 20%
4. Comprehensive Final Exam 20%

Students must maintain a 75% average in all EMSP courses.

Course Requirements

1. Four major exams.
2. Complete a comprehensive final exam.

Course Policies

1. Attendance Policy. Texas Department of State Health Services Bureau of EMS requires the student accountable for all rotation requirements. If a student must miss a rotation then it is the student's responsibility to contact the clinical coordinator to have the rotation rescheduled.
2. If a student wishes to drop a course, the student is responsible for initiating and completing the drop process. If a student stops coming to class and fails to drop the course, they will earn an 'F' in the course.
3. 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

Week	Topic	Reference
Week 1	Clinical Orientation Respiratory Emergencies	Program Student Handbook, Textbook
Week 2	Neurological Emergencies	
Week 3	Endocrine Emergencies, Allergic Reactions	
Week 4	Gastrointestinal Emergencies Major Exam 1	
Week 5	Toxicology	

EMSP 2338
Course Syllabi

Week	Topic	Reference
	Major Exam 2	
Week 6	Environmental Emergencies	
Week 7	Behavioral Emergencies	
Week 8	Infectious disease, Major Exam 3	
Week 9	OB/GYN Emergencies	
Week 10	Neonate emergencies	
Week 11	Pediatrics	
Week 12	PALS	
Week 13	PALS	
Week 14	Geriatrics, Major Exam 4	
Week 15	Preparation for National Registry Certification Exam	
Week 16	Finals Week	