



# Medical Emergencies (EMSP 2434)

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## **Credit**

- 4 semester credit hours (3 hours lecture, 2 hours lab)

## **Prerequisite**

- EMT-Basic certification

## **Co-requisite**

- EMSP 2206
- EMSP 2264

## **Course Description**

- Knowledge and skills in the assessment and management of patients with medical emergencies, including medical overview, neurology, gastroenterology, immunology, pulmonology, urology, hematology, endocrinology, toxicology, and other related topics.

## **Required Textbooks and Materials**

- EMS Program Student Handbook
- Paramedic Care Principles & Practice Volume 4 ISBN 13: 97-0-13-210903-1
- ECG's Made Easy 5<sup>th</sup> Edition
- Stethoscope
- Pen light
- BP cuff

## **Course Objectives<sup>1</sup>**

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

- Integrate pathophysiological principles and findings to formulate a field impression and implement a treatment plan for the patient with respiratory problems.
- Integrate pathophysiological principles and findings to formulate a field impression and implement a treatment plan for the patient with a neurological problem.
- Integrate pathophysiological principles and findings to formulate a field impression and implement a treatment plan for the patient with an endocrine problem.
- Integrate pathophysiological principles and findings to formulate a field impression and implement a treatment plan for the patient with an allergic or anaphylactic reaction.

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- Integrate pathophysiological principles and findings to formulate a field impression and implement a treatment plan for the patient with a gastroenterological problem.
- Integrate pathophysiological principles and findings to formulate a field impression and implement a treatment plan for the patient with a renal or urologic problem.
- Integrate pathophysiological principles and findings to formulate a field impression and implement a treatment plan for the patient with a toxic exposure.
- Integrate the principles of rescue awareness and operations to safely rescue a patient from water, hazardous atmospheres, trenches, highways, and hazardous terrain.
- Evaluate hazardous materials emergencies, call for appropriate resources, and work in the cold zone.
- Integrate pathophysiological principles and findings to formulate a field impression and implement a treatment plan for the patient with an environmentally induced or exacerbated medical or traumatic condition.
- Integrate pathophysiological principles and findings to formulate a field impression and implement a treatment plan for the patient with infectious and communicable diseases.
- Describe and demonstrate safe, empathetic competence in caring for patients with behavioral emergencies.
- Integrate pathophysiological principles of the hematopoietic system to formulate a field impression and implement a treatment plan.

<sup>1</sup>Curriculum based on National Highway Traffic Safety Administration: National EMS Education Standards

**Course Outline**

- A. Welcome to LIT EMS Program
  - 1. Introduction of EMS Staff, Instructors and students
  - 2. 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 neurological disease
  - 2. Management of strokes
  - 3. Scenario training involving neurological emergencies
- D. Endocrine Emergencies
  - 1. Study of different neurological diseases
  - 2. Management of Strokes.
  - 3. Scenario training involving neurological 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
  - 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.

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**Grade Scale**

90 – 100	A
84 – 89	B
75 – 83	C
70 – 74	D
0 – 69	F

**Course Evaluation**

Final grades will be calculated according to the following criteria:

Major Exam	30%
Assignments	30%
Quizzes and Homework	30%
Comprehensive Final Exam	10%

**Course Requirements**

- All class hours must be attended or made up hours documented, as required by the Texas Department of State Health Services.
- Maintain an 80% grade average in all EMSP courses.

**Course Policies**

- See EMS Program Student handbook for specific course policies.

### Technical Requirements

For an online/hybrid course we recommend the following minimum technical requirements:

<b>Operating System</b>	Windows XP or Vista, MAC OS 10.4 or higher	
<b>Processor</b>	1 GHz or higher	
<b>Memory</b>	256 MB of RAM. If running Vista: 512 MB of RAM	
<b>Hard Drive Space</b>	500 MB free disk space	
<b>Browsers</b>	<b><u>Windows:</u></b> Supported: <ul style="list-style-type: none"><li>• Internet Explorer 6.0</li><li>• Internet Explorer 7.0</li><li>• Firefox 2.0</li></ul> Unsupported Browsers: <ul style="list-style-type: none"><li>• Internet Explorer 8</li><li>• Firefox 3.0</li></ul>	<b><u>MAC OS 10.4, 10.5:</u></b> Supported: <ul style="list-style-type: none"><li>• Safari 3.0</li><li>• Safari 3.1</li><li>• Firefox 2.0</li></ul> Unsupported Browsers: <ul style="list-style-type: none"><li>• Safari 3.2</li><li>• Firefox 3.0</li></ul>
	NOTE: Cookies, Java, and JavaScript must be enabled. Pop-up blockers should be configured to permit new windows from LIT <a href="#">Click here to check your browser.</a>	
<b>Browser Plug-ins</b>	In addition to the minimum system requirements needed to access Blackboard, you may also need additional browser plug-ins to view some of the content. Common plug-ins include: <ul style="list-style-type: none"><li>• <a href="#">Adobe Acrobat</a></li><li>• <a href="#">Adobe Flash Player</a></li><li>• <a href="#">Quicktime</a></li><li>• <a href="#">Windows Media Player</a></li></ul>	
<b>Internet Connection</b>	Broadband (cable or DSL) connection required	
<b>Additional Software</b>	You should be running <a href="#">the most recent version of Java.</a>	

### 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.