Emergency Procedures II (EMSP 2237) Credit

• 1 semester credit hours (0 hours lecture, 4 hour lab)

Prerequisite

• EMT-Basic certification



Co-requisite

- EMSP 2243
- EMSP 2462
- EMSP 2465

Course Description

Application of emergency medical procedures.

Required Textbook and Materials

- EMS Program Student Handbook
- AHA Advanced Cardiac Life Support ISBN-13: 978-1616690106
- AHA Pediatric Advanced Life Support ISBN-13: 978-1616691127
- Stethoscope
- Pen light
- BP cuff

Course Objectives¹

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

- Integrate theory and skills mastered in other courses; and demonstrate comprehensive problem-solving techniques.
- Safely and effectively perform all psychomotor skills within the National EMS Scope of Practice Model and state scope of practice at the Paramedic level
- Manage a cardiovascular patient according to the American Heart Association (AHA) guidelines.
- Manage a pediatric and a neonatal patient according to the American Heart Association (AHA) guidelines.
- Demonstrate a working knowledge of clinical information and related topics relevant to pediatric emergencies.
- Demonstrate the ability to completely and proficiently perform all applicable skills;
- Demonstrate attitudes and behavior consistent with the ethics and professionalism expected in pediatric specialties.

¹ Curriculum based on the National EMS Education Standards set by the United States Department of Transportation (DOT).

Course Outline

- A. Welcome to LIT EMS Program
 - 1. Introduction of EMS Staff, Instructors and students
 - 2. EMS program policies
- B. Advanced Level Psychomotor Examinations
 - 1. The psychomotor section of the examination process consists of six (6) separate skills presented in a scenario-type format to approximate the abilities of the Paramedic (NRP) to function in the out-of-hospital setting. All skills have been developed in accordance with the 2009 National EMS Education Standards and Instructional Guidelines for EMT and Paramedic, and current AHA guidelines.
 - a. Dynamic Cardiology
 - b. Integrated Out-Of-Hospital Scenario
 - c. Oral Station A
 - d. Oral Station B
 - e. Patient Assessment Trauma
 - f. Static Cardiology
- C. Pediatric Advanced Life Support (PALS)
 - 1. Introduction to PALS
 - a. PALS course Overview
 - b. Overview of PALS science
 - 2. Start initial competency practice and testing
 - a. CPR/AED practice and competency testing
 - b. Rhythm Disturbances/Electrical Therapy Skills
 - 3. Core Case Simulations (Cardiac)
 - a. Cardiac Cases 1 and 2
 - 4. Overview of Pediatric Assessment
 - a. Overview of Core Case Discussions and Simulations
 - 5. Core Case Simulations (Cardiac continued)
 - a. Cardiac cases 3 and 4
 - 6. Core Case Simulations (Respiratory)
 - a. Core Case Simulations Respiratory Cases 1 and 2
 - 7. Core Case Simulations (Respiratory Continued)
 - a. Core Case Simulations Respiratory Cases 3 and 4
 - 8. Core Case Simulations (Shock)
 - a. Core Case Simulations Shock Cases 1 and 2
 - 9. Core Case Simulations (Shock continued)
 - Core Case Simulations Shock Cases 3 and 4
 - 10. Putting it all together
 - a. Course summary and testing details
 - 11. PALS Written Test
 - a. Remediation (for those that score less than 84%).

D. Advanced Cardiac Life Support

- 1. Essentials of ACLS
 - a. Managing a cardiac arrest
 - b. Teamwork
- 2. Adjuncts for Airway Control, Ventilation, and Oxygenation
 - a. Airway Management
 - b. Proper Ventilation techniques
 - c. Proper use of airway adjuncts
- 3. Defibrillation
 - a. The defibrillation function
 - a) Indications
 - b) Contraindications
 - c) Power settings
 - d) Different Defibrillation Devices
 - e) Safety in defibrillation
 - b. Cardiac Pacing
 - a) Indications
 - b) Contraindications
 - c) Power Settings
 - d) Rhythm Capture
 - e) Precautions
 - c. Cardiovascular Pharmacology
 - a) The heart's reaction to the actions of medications
- 4. Myocardial Infarction
 - a. Signs, Symptoms, and Treatment
 - b. Scenario Training for managing Cardiac Arrest
- 5. Special Resuscitation Situations
 - a. Resuscitation of the Pregnant patient
 - b. DNR Orders
- 6. Adjuncts for Artificial Circulation
- 7. Invasive Monitoring Techniques
- 8. Invasive Therapeutic Techniques
- 9. Cerebral Resuscitation: Treatment of the Brain after Cardiac Arrest
- 10. Ethical Aspects of CPR
- 11. ACLS Written Test
 - a. Remediation (for those that score less than 84%).

Grade Scale

90 - 100	A
84 - 89	В
75 - 83	C
70 - 74	D
0 - 69	F

Course Evaluation

Final grades will be calculated according to the following criteria:

Psychomotor Examinations 40% PALS Examination 30% ACLS Examination 30%

Course Policies

- 1. Computers, telephones, headphones, and any other electronic devices must be turned off while in class or used only with permission of the instructor.
- 2. Do not bring children to class.
- 3. Late assignments will be accepted on a case by case basis.
- 4. Tests. Students that miss a test are not allowed to make up the test. Students that miss a test will receive a grade of '0'.
- 5. Attendance Policy. Three absences are allowed. If a student is tardy to class or departs early two (2) times, it will be equal to one (1) absence. Each absence beyond three absences will result in a 5 point deduction from your final grade.
- 6. If you wish to drop a course, the student is responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an 'F' in the course.
- 7. Additional class policies as defined by the EMS Program Student Handbook.

Technical Requirements (for courses using Blackboard)

The latest technical requirements, including hardware, compatible browsers, operating systems, software, Java, etc. can be found online at:

https://help.blackboard.com/en-

<u>us/Learn/9.1 2014 04/Student/015 Browser Support/015 Browser Support Policy</u> A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of the online technology and resources.

Disabilities Statement

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations

EMSP 2237 Course Syllabi

Coordinator at (409)839-2018. You may also visit the online resource at <u>Special Populations - Lamar Institute of Technology (lit.edu)</u>

Student Code of Conduct Statement

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at www.lit.edu or obtained in print upon request at the Student Services Office. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document