Medical Emergencies (EMSP 2434)

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

Prerequisite
- EMT-Basic certification

Co-requisite
- EMSP 1173
- EMSP 2137
- EMSP 2243
- EMSP 2330
- EMSP 2265

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 Textbook
- EMS Program Student Handbook
- Nancy Caroline’s Emergency Care in the Streets 8th
  - ISBN 13: 9781284137187

Course Objectives
Upon completion of this course, the student will be able to:
- Demonstrate the process of history taking for a patient with dyspnea.
- Demonstrate the application of a CPAP/BPAP unit.
- Assess a patient’s level of consciousness
- Demonstrate the use of several commonly used screening tools to screen a patient suspected of having a stroke.
- Demonstrate the use of an ophthalmoscope to examine a patient’s eyes.
- Demonstrate the use of an otoscope to examine a patient’s ears.
- Demonstrate how to auscultate the abdomen to assess for diminished, absent, or abnormal bowel sounds.
- Demonstrate how to palpate the abdomen to assess for pain, rebound tenderness, and masses.
- Demonstrate how to palpate the upper quadrant to assess for Murphy sign, indicating cholecystitis.
- Demonstrate the assessment and care of a patient with hypoglycemia and a decreased level of consciousness
- Demonstrate how to administer glucose to a patient with altered mental status.
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- Demonstrate how to administer dextrose to a patient with hypoglycemia.
- Demonstrate how to administer glucagon to a patient with hypoglycemia.
- Demonstrate how to clean and disinfect the ambulance interior and equipment.
- Demonstrate the steps in assessment and management of the patient with suspected poisoning.
- Demonstrate the steps in assessment and management of the patient with suspected overdose.
- Demonstrate the technique used to perform four-point physical restraint of a patient.

Course Outline

A. Respiratory Emergencies
   1. Management of Obstructive Upper Airway Diseases
   2. Management of Obstructive Lower Airway Diseases
   3. Management of Common Respiratory Conditions
   4. Management of Conditions Outside the Lung Parenchyma

B. Neurological Emergencies
   1. Management of Common Neurologic Emergencies
   2. Management of Demyelinating, Degenerating, and Motor Neuron Disorders

C. Diseases of the Eyes, Ears, Nose, and Throat
   1. Assessment of the Eye
   2. Assessment of the Ear

D. Abdominal and Gastrointestinal Emergencies
   1. Management of Specific Abdominal and Gastrointestinal Emergencies
   2. Management of Gastrointestinal Bleeding
   3. Management of Esophageal Pathologies
   4. Management of Acute Inflammatory Conditions
   5. Management of Chronic Inflammatory Conditions
   6. Management of Acute Infectious Conditions
   7. Management of Obstructive Conditions
   8. Management of Ischemic and Neoplastic Disorders

E. Genitourinary and Renal Emergencies
   1. Management of Specific Emergencies

F. Gynecologic Emergencies
   1. Management of Gynecologic Trauma
   2. Management of Specific Emergencies

G. Endocrine Emergencies
   1. Management of Glucose Metabolic Derangements
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2. Management of Other Disorders of the Pancreas
3. Management of Adrenal Insufficiency
4. Management of Other Adrenal Emergencies
5. Management of Thyroid, Parathyroid, and Pituitary Gland Disorders

H. Hematologic Emergencies
1. Management of Specific Emergencies

I. Immunologic Emergencies
1. Management of Specific Emergencies

J. Infectious Disease
1. Management of Droplet-Transmitted Diseases
2. Management of Airborne-Transmitted Disease
3. Management of Sexually Transmitted Diseases
4. Management of Common Bloodborne Diseases
5. Management of Enteric Diseases
6. Management of Non-Bloodborne Hepatitis Viruses
7. Management of Vector-borne and Zoonotic Diseases
8. Management of Infection with Antibiotic-Resistant Organisms
9. Management of Newly Recognized Diseases

K. Toxicology
1. Management of Abuse of and Overdose with Specific Substances

L. Psychiatric Emergencies
1. Management of Specific Emergencies
2. Medications for Psychiatric Disorders

Grade Scale

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
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<tbody>
<tr>
<td>90 – 100</td>
<td>A</td>
</tr>
<tr>
<td>84 – 89</td>
<td>B</td>
</tr>
<tr>
<td>75 – 83</td>
<td>C</td>
</tr>
<tr>
<td>70 – 74</td>
<td>D</td>
</tr>
<tr>
<td>0 – 69</td>
<td>F</td>
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Course Evaluation
Final grades will be calculated according to the following criteria:

1. Skills Performance Sheet 80%
2. Affective Evaluation 20%

Course Policies
1. No food, drinks, or use of tobacco products in class.
2. Computers, telephones, headphones, and any other electronic devices must be turned off while in class or used only with permission of the instructor.
3. Do not bring children to class.
4. No late assignments will be accepted.
5. Attendance Policy. Three absences are allowed. If a student is tardy to class or departs early three (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 EMS Program Student Handbook.
8. Lab Skill Sheets
   a. Each specific lab skill sheet will be assigned a minimal points required to pass the specific skill.
   b. Each specific lab skill sheet will be assigned “Critical Criteria” which must be met in order to pass the skill.
   c. Each specific lab skill sheet must have a letter score of “C” or better and all critical criteria must be met in order for that lab skill to be accepted.
9. All lab skills are required to be passed the number of times assigned to each specific lab skill.

**Lab Skills Required**

<table>
<thead>
<tr>
<th>Skill</th>
<th>Peer to Peer Required</th>
<th>Instructor Required</th>
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<tbody>
<tr>
<td>CPAP and PEEP</td>
<td>3</td>
<td>2</td>
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<tr>
<td>Glucometer</td>
<td>3</td>
<td>2</td>
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<tr>
<td>Intravenous Bolus Medication Administation</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Medical and Cardiac Physical Assessment</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

**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-us/Learn/9.1_2014_04/Student/015_Browser_Support/015_Browser_Support_Policy](https://help.blackboard.com/en-us/Learn/9.1_2014_04/Student/015_Browser_Support/015_Browser_Support_Policy) 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 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. You may also visit the online resource at http://www.lit.edu/depts/stuserv/special/defaults.aspx

**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.