

Medical Emergencies (EMSP 2434)

CREDIT

4 Semester Credit Hours (4 hours lecture, 0 hours lab)

MODE OF INSTRUCTION

Face to Face, Online or Hybrid

PREREQUISITES:

EMT-Basic or Advanced

BIOL 2404 – Anatomy and Physiology

EMSP 1338 – Intro to Advanced Practice

EMSP 1356 – Patient Assessment, Airway

EMSP 2237 – Emergency Procedures II

EMSP 2206 – Emergency Pharmacology

EMSP 1455 – Trauma Management

EMSP 2262 – Clinical – Emergency Medical Technician-Paramedic

EMSP 2444 – Cardiology



**LAMAR INSTITUTE
OF TECHNOLOGY**

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.

COURSE OBJECTIVES

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

- Integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint.
- Complex depth, comprehensive breadth of pathophysiology, assessment, and management of medical complaints to include;
 - Transport mode
 - Destination decisions
- Complex depth, comprehensive breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of neurological disorders to include;
 - Stroke/intracranial hemorrhage/transient ischemic attack
 - Seizure
 - Status epilepticus
 - Headache

Approved: Initials/date

- Fundamental depth, foundational breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of neurological disorders to include;
 - Dementia
 - Neoplasms
 - Demyelinating disorders
 - Parkinson's disease
 - Cranial nerve disorders
 - Movement disorders
 - Neurologic inflammation/infection
 - Spinal cord compression
 - Hydrocephalus
 - Wernicke's encephalopathy
- Complex depth, comprehensive breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of abdominal and gastrointestinal disorders to include;
 - Acute and chronic gastrointestinal hemorrhage
 - Liver disorders
 - Peritonitis
 - Ulcerative disease
- Fundamental depth, foundational breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of abdominal and gastrointestinal disorders to include:
 - Irritable bowel syndrome
 - Inflammatory disorders
 - Pancreatitis
 - Bowel obstructions
 - Hernias
 - Infectious disorders
 - Gall bladder and biliary tract disorders
- Simple depth, simple breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of abdominal and gastrointestinal disorders to include;
 - Rectal abscess
 - Rectal foreign body obstructions
 - Mesenteric ischemia
- Complex depth, comprehensive breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of immunology to include;
 - Hypersensitivity
 - Allergic and anaphylactic reactions
 - Anaphylactic reaction

- Fundamental depth, foundational breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of immunology to include;
 - Collagen vascular disease
 - Transplant related problems
- Complex depth, comprehensive breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of infectious diseases to include;
 - HIV-related diseases
 - Hepatitis
 - Pneumonia
 - Meningococcal meningitis
- Fundamental depth, foundational breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of infectious diseases to include;
 - Tuberculosis
 - Tetanus
 - Viral diseases
 - Sexually transmitted diseases
 - Gastroenteritis
 - Fungal infections
 - Rabies
 - Scabies and lice
 - Lyme disease
 - Rocky Mountain Spotted Fever
 - Antibiotic resistant infections
- Complex depth, comprehensive breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of endocrine disorders to include;
 - Acute diabetic emergencies
 - Diabetes
- Fundamental depth, foundational breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of endocrine disorders to include;
 - Adrenal disease
 - Pituitary and thyroid disorders
- Complex depth, comprehensive breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of psychiatric disorders to include;
 - Acute psychosis
 - Agitated delirium

- Fundamental depth, foundational breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of psychiatric disorders to include;
 - Cognitive disorders
 - Thought disorders
 - Mood disorders
 - Neurotic disorders
 - Substance-related disorders/addictive behavior
 - Somatoform disorders
 - Factitious disorders
 - Personality disorders
 - Patterns of violence/abuse/neglect
 - Organic psychoses
- Complex depth, comprehensive breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of cardiovascular diseases to include;
 - Acute coronary syndromes
 - Angina pectoris
 - Myocardial infarction
 - Heart failure
 - Non-traumatic cardiac tamponade
 - Hypertensive emergencies
 - Cardiogenic shock
 - Vascular disorders
 - Abdominal aortic aneurysm
 - Arterial occlusions
 - Venous thrombosis
 - Aortic aneurysm/dissection
 - Thromboembolism
 - Cardiac rhythm disturbances
- Fundamental depth, foundational breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of cardiovascular disease to include;
 - Infectious diseases of the heart
 - Endocarditis
 - Pericarditis
 - Congenital abnormalities
- Complex depth, comprehensive breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of toxicology to include;
 - Cholinergic
 - Anticholinergics
 - Sympathomimetic
 - Sedative/hypnotics

- Opiates
- Alcohol intoxication and withdrawal
- Over-the counter and prescription medications
- Carbon monoxide
- Illegal drugs
- Herbal preparations
- Complex depth, comprehensive breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of respiratory disorders to include;
 - Acute upper airway infections
 - Spontaneous pneumothorax
 - Obstructive/restrictive lung diseases
 - Pulmonary infections
- Fundamental depth, foundational breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of respiratory disorders to include;
 - Neoplasms
 - Pertussis
 - Cystic fibrosis
- Complex depth, comprehensive breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of hematology disorders to include;
 - Sickle cell disease
- Fundamental depth, foundational breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of hematology disorders to include;
 - Blood transfusion complications
 - Hemostatic disorders
 - Lymphomas
 - Red blood cell disorders
 - White blood cell disorders
 - Coagulopathies
- Complex depth, comprehensive breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of genitourinary/renal disorders to include;
 - Complications of
 - Acute renal failure
 - Chronic renal failure
 - Dialysis
- Fundamental depth, foundational breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of genitourinary/renal disorders to include;
 - Acid base disturbances

- Fluid and electrolytes
 - Infection
 - Male genital tract conditions
- Complex depth, comprehensive breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of gynecology disorders to include;
 - Vaginal bleeding
 - Sexual assault
- Fundamental depth, foundational breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of gynecology disorders to include;
 - Infections
 - Pelvic inflammatory disease
 - Ovarian cysts
 - Dysfunctional uterine bleeding
 - Vaginal foreign body
- Fundamental depth, foundational breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of non-traumatic musculoskeletal disorders to include;
 - Disorders of the spine
 - Joint abnormalities
 - Muscle abnormalities
 - Overuse syndrome
- Fundamental depth, foundational breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of diseases of the eyes, ears, nose, and throat to include;
 - Common or major diseases of the eyes, ears, nose and throat including nose bleed.

INSTRUCTOR CONTACT INFORMATION

Instructor:	Dustin Sites
Email:	dsites@lit.edu
Office Phone:	409-247-4833
Office Location:	MPC 243
Office Hours:	By Appointment

REQUIRED TEXTBOOK AND MATERIALS

EMS Program Student Handbook

Nancy Caroline's Emergency Care in the Streets 9th

ISBN: 9781284274004

Platinum Planner

EMS Testing

Supplemental: Limmer Education Paramedic Pharmacology Review

www.lc-ready.com

ATTENDANCE POLICY

Attendance is mandatory. If a student is tardy (2) times it constitutes (1) absence. Greater than (3) absences throughout the semester may result in a deduction in (3) points or greater to your final grade and will be determined at the time of occurrence(s). Any anticipated absences must be reported to the instructor as soon as possible via email. An excused absence should be arranged prior to absence, when possible. When it is not possible to give prior notification, an unexcused absence will be recorded. To change classification of an unexcused absence to excused it will be on a case-by-case basis.

Documentation for any excused absence will be required. **Additionally, students with perfect attendance will have (10) additional points added to lowest Mid Term or Final test grade. Students with (1) absence will be eligible for (9) points added to their lowest Mid Term or Final test grade.**

DROP POLICY

If you wish to drop a course, you are 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.

COURSE CALENDAR

DATE	TOPIC	READINGS (Due on this Date)	ASSIGNMENTS (Due on this Date)
Week 1	ACLS		8/25
Week 1	PALS		8/27
Week 2	Respiratory Emergencies		9/1, 9/3 Lec 9/6 Quiz WkBk
Week 3	Neurologic Emergencies		9/8, 9/10 Lec 9/13 Quiz WkBk
Week 4	Diseases of Eyes, Ears, Nose & Throat; Non-traumatic Musculoskeletal Disorders		9/15, 9/17 Lec 9/20 Quiz WkBk
Week 5	Abdominal & Gastrointestinal Emergencies		9/22, 9/24 Lec 9/27 Quiz WkBk
Week 6	Genitourinary and Renal Emergencies		9/29, 10/1 Lec 10/4 Quiz WkBk
Week 7	Gynecologic Emergencies / Mid Term		10/6, 10/8 Lec / Review 10/11 exam
Week 8	Endocrine Emergencies		10/13, 10/15 Lec 10/18 Quiz
Week 9	Hematologic Emergencies		10/20, 10/22 Lec 10/25 Quiz
Week 10	Immunologic Emergencies		10/27, 10/29 Lec 11/01 Quiz
Week 11	Infectious Diseases		11/3, 11/5 Lec 11/8 Quiz
Week 12	Toxicology		11/10, 11/12 Lec 11/15 Quiz
Week 13	Psychiatric Emergencies		11/17, 11/29 Lec 11/22 Quiz
Week 14	Affective Evaluation		11/24/2025, 11/26/2025
Week 15	Final Review		12/1 Final Review
Week 15	**FINAL**		12/1

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

Affective Evaluation	20%
Chapter Quiz	50%
Mid-Term Exam	15%
Final Exam	15%

GRADE SCALE

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

TECHNICAL REQUIREMENTS

For the latest technical requirements, including hardware, compatible browsers, operating systems, etc., review the Minimum Computer and Equipment Requirements on the [LIT Online Experience](#) page. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of 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 Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at [Special Populations - Lamar Institute of Technology \(lit.edu\)](#).

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. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

ARTIFICIAL INTELLIGENCE STATEMENT

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare students for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own

original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI/ChatGPT in their courses.

STARFISH

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

ADDITIONAL COURSE POLICIES/INFORMATION

1. No food, drinks, or use of tobacco products in class. Do not order from a food delivery service and have food and drink delivered to class outside of lunchtime hours.
2. Computers, telephones, headphones, and any other electronic devices may not be utilized while in class or used only with permission of the instructor. If a call is received and needs to be taken, please step out of the classroom and return promptly.
3. Do not bring children to class.
4. No late assignments will be accepted. If an assignment is late, please contact the instructor immediately.
5. Students that miss a test are not allowed to make up for the test. Students that miss a test will receive a grade of '0'. Mid Term and Final exams are proctored and will begin promptly at the time assigned. Unless prior arranged students will not be allowed to enter late and begin a Mid Term or Final and a grade of '0' will be received.
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. Uniforms including authorized pants with black belt, black boots and a red polo tucked in, and void of logos will be always worn while in class and attending a clinical. Refusal to comply with this policy may result in a reduction of grade points and or removal from class or clinical.