

Office of Curriculum

MIDS-5403/MIDS-6403: Pre-Hospital Emergency Medicine Elective

Course Director: James Ko, MD; James.Ko@ttuhsc.edu

Course Coordinator: Jonathan Tipo, MS2; jonathan.tipo@ttuhsc.edu

Description: This elective will educate first and second year medical students about one of the major routes in which patients enter the healthcare field, namely the emergency room. Students will gain knowledge about what the patient encounters, beginning with first responders, through each subsequent step prior to hospital admission, and thus have a better understanding of the comprehensive care that a patient receives before they present to the ED physician. This educational goal is invaluable to those who are interested in a future career as Emergency Medicine physicians.

Number of students: About 40 MS1/MS2 students.

Goals and Objectives

- 1. Present an overview of the history, current status, and future outlook of Emergency Medicine.
- 2. Train students in Advanced Cardiovascular Life Support (ACLS) techniques, including but not limited to: managing the patient's airway, initiating IV access, interpreting ECGs, and understanding emergency pharmacology.
- 3. Train students in spinal injury and fracture management, including immobilization and safe transport.

4. Review important anatomical structures and understand locations for various types of injections.

Required Reading

There are no required texts for this elective.

Course Format

The elective will be structured around twelve (12) lectures with nine (9) corresponding skills labs. The first lecture will be an introduction to the elective. All other lectures will provide an overview of the relevant anatomy, physiology, pathology, and possible complications of various emergency techniques utilized in the field. There will be nine (9) lectures and five (5) skills labs in the fall semester, and three (3) lectures and four (4) skills labs in the spring semester. There will be a final extra credit lab available that will be able to be used to make up any lab or lecture credit if needed.

^{1.} **Lectures:** The lectures will be held in HSC or ACB classrooms during the lunch hour from 12pm – 1pm. Locations may be TBD and will be announced as the rooms become finalized. The lecture series will be presented by various Emergency Medicine physicians.

^{2.} **Skills labs:** The skills labs will either be held in the SimLife Center, the University Center (UC) or ACB 200 at TTUHSC or at Lubbock EMS (located on 4314 S. Loop 289, Suite 102, Lubbock, TX 79413). Each skills lab will last between two to three hours. The skills labs will be overseen and taught by a mixture of physicians, nurses, and paramedics.

Grading

The course will be graded Pass/Fail, with attendance at lectures and skills lab used to determine students' participation. Attendance at a minimum of six (6) out of twelve (12) lectures (including the introductory meeting, which DOES count as one of the twelve) and four (4) out of nine (9) skills labs is required for a passing grade. There will be no makeup lectures or skills labs, it is the student's responsibility to meet the requirements to the best of their ability. While not a requirement, it is highly suggested that students attend the lecture and skills lab groupings together instead of attending only one of the two. Attendance at one half of a grouping will still count towards a completion grade (i.e. attending lecture 2 but missing skills lab 2 will count towards lecture attendance only).

Application: Interested students should complete the application at the link emailed out by the course coordinator.

(Detailed schedule on next page)

EMIG Lecture/SIM Series

Date	Description	Lecturer (Name/Email)
Aug 27th 12:00 - 1:00p	Lecture 1: Elective Introduction: Overview of the history, current status, and future outlook of Emergency Medicine	Dr. Ko
Sept 3rd 12:00 - 1:00p	Lecture 2: ER Thinking/MDM. How ER Physicians Think. Critical vs Probable	
Sept 17th 12:00-1:00p	Lecture 3: ER Basics: BLS (Compressions/BVM, Ventilations, Airway Adjuncts, Basic Airway), Vascular Access	
Sept 17th 6:30 - 8:00p	Skills 1 (SIMLife): ER Basics: BLS/CPR, IV, IO Practice	
Sept 24th 12:00 - 1:00p	Lecture 4: Trauma Lecture	
Sep 24th 6:30 - 8:00p	Skills 2 (SIMLife): Backboards, C-Spine, Fracture Immobilization, Real Life IV Workshop	
Oct 1st 12:00 - 1:00p	Lecture: The Undifferentiated Patient (Headache/Chest Pain/ Abdominal Pain)	
Oct 15th 12:00 - 1:00p	Lecture 6: Airway Management: RSI, Intubation, Airway Management	
Oct 15th 6:30 - 8:00p	Skills 3 (SIMLife): Airway Management: Intubation, Cricothyrotomy	
Oct 22nd 12:00 - 1:00p	Lecture 7: US Techniques	
Oct 22nd 6:30 - 8:00p	Skills 4 (2D101): US Techniques: FAST, Cardiac Exams, Transducers, IVC	
Nov 5th 12:00 - 1:00p	Lecture 8: Suture Clinic: Thread Types, Rongeur, Techniques	
Oct 22nd 6:30 - 8:00p	Skills 5 (SIMLife): Suture Clinic:	
Nov 26th 12:00 - 1:00p	Lecture 9: Pedi ER	Dr. Payne

Tentative Spring Schedule			
Date	Description	Lecturer	
PENDING 12:00 - 1:00p	Lecture 10: Emergency Childbirth	Dr. Thompson, OBGYN	
PENDING 1 - 3:30pm	Skills (UC) 6: Emergency Childbirth	Dr. Thompson OBGYN residents	
PENDING 12:00 - 1:00p	Lecture 11: Cardiac Monitoring and Reading EKGs	Dr. Piel	
PENDING 6:30 - 8:00p	Skills 8 (SIMLife): EKG Monitoring: Lead Placement and Rhythm Interpretation		
PENDING 6:30 - 9:30pm	Skills 9 (SIMLife): Emergency Medicine/Trauma Simulations (SIM Wars)		
March TBD	Lecture 12 (Zoom): EM Residency Match Panel	TBD, MS4	
PENDING 8:30 - 1pm	Skills 10 (Extra credit): Mass Casualty Scenario / Disaster Day	TTUHSC IPE Event	

^{*}Dates and locations subject to change **Mandatory Event

President: Madison Barr Vice President: Jace Skalicky

Secretary: Zane Pena Treasurer: Caden Sullivan

Elective/Preceptorship Coordinator: Jonathan Tipo Wilderness Weekend Coordinator: Brenna Bunch

TCEP Liaison: Saad Habbal