

EMS 60C: EMERGENCY MEDICINE SEMINAR I

Foothill College Course Outline of Record

Heading	Value
Effective Term:	Summer 2025
Units:	1.5
Hours:	1.5 lecture per week (18 total per quarter)
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade Only
Repeatability:	Not Repeatable

Student Learning Outcomes

- Demonstrate proficiency in airway management techniques by utilizing appropriate adjuncts, interpreting patient presentations, and applying critical thinking in respiratory emergencies.
- Analyze and interpret 12-lead electrocardiograms (ECG) to differentiate between normal and abnormal rhythms, including ischemic changes, and apply findings to clinical decision-making in cardiovascular emergencies.

Description

This course enriches the core curriculum of respiratory and cardiovascular emergencies in emergency medicine, emphasizing principles of equity and inclusivity. Through a combination of lectures, practical applications, and assessments, students will gain comprehensive insights into advanced emergency medicine. This includes enhancing their skills in patient evaluation and management across diverse populations in the prehospital and hospital settings. Intended for students in the Paramedic Program; enrollment is limited to students accepted in the program.

Course Objectives

The student will be able to:

1. Demonstrate an understanding of the history and evolution of diverse aspects of emergency medicine
2. Analyze and discuss various aspects of airway management
3. Demonstrate an understanding of critical respiratory emergencies found in the emergency setting
4. Distinguish the four types of shock
5. Identify and analyze the diverse etiologies of chest pain
6. Demonstrate an understanding of cardiovascular emergencies found in the prehospital setting
7. Analyze and interpret 12-lead electrocardiogram rhythms

Course Content

1. History of emergency medicine
 - a. Overview of emergency medicine
 - b. Prehospital to emergency department patient transfer of care
 - c. Patient evaluation

2. Airway management
 - a. Airway adjuncts including oropharyngeal and nasopharyngeal adjuncts
 - b. Continuous positive airway pressure ventilation (CPAP)
 - c. Endotracheal intubation
3. Respiratory emergencies
 - a. Acute congestive heart failure (CHF)
 - b. Chronic obstructive pulmonary disease (COPD)
 - c. Anaphylaxis
 - d. Pneumonia
 - e. Asthma exacerbation
 - f. Acute pulmonary embolism
4. Shock
 - a. Hypovolemic
 - b. Cardiogenic
 - c. Distributive
 - d. Obstructive
5. Chest pain
 - a. Cardiac
 - b. Pulmonary
 - c. Gastrointestinal
 - d. Musculoskeletal
 - e. Psychogenic
6. Cardiovascular emergencies
 - a. Acute coronary syndrome
 - i. Unstable angina
 - ii. Non-ST-elevation acute coronary syndrome (NSTEMI)
 - iii. ST-elevation myocardial infarction (STEMI)
 - b. Narrow and wide complex electrocardiogram (ECG) rhythms
 - c. Heart blocks, including first degree, second degree, and complete
7. 12-lead electrocardiogram
 - a. Electrode placement
 - b. Anatomical views of each lead
 - c. Components of the ECG waveform
 - d. Myocardial ischemia and arrhythmias

Lab Content

Not applicable.

Special Facilities and/or Equipment

1. Smart classroom with audio visual equipment
2. Emergency medical equipment

Method(s) of Evaluation

Methods of Evaluation may include but are not limited to the following:

Written tests
Case studies
Class participation

Method(s) of Instruction

Methods of Instruction may include but are not limited to the following:

Interactive lecture/presentations

In-class reading assignments, including but not limited to handout material relative to class lecture

In-class projects, e.g., scenarios for critical thinking

Representative Text(s) and Other Materials

No required textbook. Handout materials and online resources (documents, presentation slides, web links, images, videos) will be provided by the instructor and/or presenter(s).

Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

1. Reading assignments from online sources, class handouts, and other various sources, ranging from 5-15 pages per week.
2. Written short answer essay questions and take home assignments.

Discipline(s)

Emergency Medical Technologies