

# EMS 401: EMERGENCY MEDICAL TECHNICIAN: BASIC PART A NONCREDIT

## Foothill College Course Outline of Record

Heading	Value
<b>Effective Term:</b>	Summer 2024
<b>Units:</b>	0
<b>Hours:</b>	4 lecture, 4 laboratory per week (96 total per quarter)
<b>Prerequisite:</b>	EMS 50 or 400.
<b>Advisory:</b>	EMS 401 and 402 may not be taken concurrently.
<b>Degree &amp; Credit Status:</b>	Non-Degree-Applicable Non-Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	None
<b>Grade Type:</b>	Non-Credit Course (Receives no Grade)
<b>Repeatability:</b>	Unlimited Repeatability
<b>Formerly:</b>	EMT 401

## Description

Intended to instruct a student to the level of Emergency Medical Technician (EMT) who serves as a vital link in the chain of the health care team. It is recognized that the majority of prehospital emergency medical care will be provided by the EMT. Students will participate in hands-on application of skills necessary to work as a competent EMT. Students will also perform patient assessment scenarios focused on medical and trauma complaints and treatments of various diseases and injuries, to build competence and prepare them to sit for the national certification exam. Includes all knowledge and skills training necessary for the individual to provide emergency medical care at a basic life support level with a fire department or other prehospital emergency service.

## Course Objectives

The student will be able to:

1. Demonstrate an understanding of the Emergency Medical System and the roles and responsibilities of the EMT.
2. Exhibit knowledge, understanding, and application of the human anatomy.
3. Demonstrate an understanding of good history taking and clinical decision making, and develop a working diagnosis to treat the patient.
4. Apply knowledge and understanding of the required medications in the scope of practice for EMT in accordance to Title 22.
5. Exhibit knowledge of airway management and ventilation of the patient.
6. Explore trauma systems and develop an understanding of mechanism of injury.
7. Demonstrate knowledge of the cardiac system and emergencies.
8. Demonstrate knowledge of pulmonary emergencies.

9. Demonstrate knowledge of pediatric emergencies.
10. Exhibit understanding of ambulance operations.
11. Demonstrate and have an understanding of other medical issues.

## Course Content

1. Emergency medical system; the roles and responsibilities of the EMT
  - a. Well-being of the paramedic
  - b. Injury prevention
  - c. Medical/legal issues
  - d. Ethics
2. Human anatomy
  - a. General principles of pathophysiology
  - b. Lifespan development
3. History taking and clinical decision making, to develop a working diagnosis
  - a. History taking
  - b. Patient assessment
  - c. Clinical decision making
  - d. Communications
  - e. Documentation
4. Required medications within the scope of practice for paramedics in accordance to Title 22
  - a. Venous access and medication
  - b. Mechanism of drug action
5. Airway management and ventilation of the patient
  - a. Respiratory physiology
  - b. Airway adjuncts
  - c. Respiratory emergencies
6. Trauma systems and develop an understanding of mechanism of injury
  - a. Kinematics
  - b. Shock
  - c. Soft tissue injuries
  - d. Multisystem trauma
7. Cardiac system and emergencies
  - a. ECG interpretation
8. Pulmonary system and respiratory emergencies
  - a. COPD
  - b. Asthma
9. Pediatric emergencies
  - a. Development of children
  - b. Pediatric assessment
10. Ambulance operations
  - a. Triage
  - b. ICS
  - c. Crime scene awareness
  - d. Bioterrorism
  - e. Hazardous material incidents
11. Other medical issues
  - a. GI and GU medical concerns
  - b. Environmental emergencies
  - c. Infectious and communicable diseases
  - d. OB and GYN emergencies

## Lab Content

Skills practice to become competent for NREMT (National Register EMT) testing. Skills include, but are not limited to:

1. Medical patient assessment
2. Trauma patient assessment
3. Airway management - CPAP
4. IV set-up
5. Childbirth deliveries
6. Traction splints
7. Spinal immobilization
  - a. Seating
  - b. Supine
8. Helmet removal
9. CPR/FBAO
10. Glucometer
11. Chest seal
12. Epi-auto-injector

## Special Facilities and/or Equipment

1. Standard classroom for lecture, an area for skills practice.
2. Includes CPR and FBAO, the use of AED, airway management and O2 therapy, patient survey - both primary and secondary, bandages, and vital signs.
3. When portions of the course offered online, students need on-going access to computer with email and internet access.

## Method(s) of Evaluation

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

Written quizzes

Final written exam

Complete a minimum 10 hours clinical experience with 5 patient write-ups

Must achieve a 75% or better for a course completion certificate

Demonstrate a professional attitude to instructors and other students and maintain a professional appearance, including wearing the program uniform, name tag, and a watch with second hand throughout program and clinical rotation

Skills test

## Method(s) of Instruction

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

Lecture

Discussion

Cooperative learning exercises

## Representative Text(s) and Other Materials

Pollack, Andrew. Emergency Care and Transportation of the Sick and Injured, 12th ed. Digital Advantage Package (ISBN: 9781284243796). 2022.

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

Weekly reading assignments per class schedule from the text, for example: Session 1, read chapters 1 & 2 for the first week.

## Discipline(s)

Emergency Medical Technologies