

College of San Mateo
Official Course Outline

1. **COURSE ID:** FIRE 797 **TITLE:** Emergency Medical Technician: Basic
Units: 11.0 units **Hours/Semester:** 160.0-180.0 Lecture hours; 48.0-54.0 Lab hours; 320.0-360.0 Homework hours; 528.0-594.0 Total Student Learning hours
Method of Grading: Pass/No Pass Only
Prerequisite: Must be at least 18 years old prior to the end of the course. Current certification in Basic Life Support (BLS) for the healthcare provider/professional rescuer through the American Heart Association. Admission into the Emergency Medical Technician (EMT) course. **Corequisite:** Vaccinations for healthcare workers per California Code of Regulations, Title 8, Section 5199 Aerosol Transmissible Diseases; Appendix E. Plus, additional vaccinations as listed on the Vaccination Recommendations for Healthcare Workers list, which can be found at <http://collegeofsanmateo.edu/emt>.
2. **COURSE DESIGNATION:**
Degree Credit
Transfer credit: CSU
3. **COURSE DESCRIPTIONS:**
Catalog Description:
This course provides instruction in basic life support/pre-hospital care using the National Registry curriculum. A materials fee as shown in the Schedule of Classes is payable upon registration.
4. **STUDENT LEARNING OUTCOME(S) (SLO'S):**
Upon successful completion of this course, a student will meet the following outcomes:
 1. Explain the concepts required to effectively and safely perform within the scope of practice of an Emergency Medical Technician (EMT).
 2. Apply the knowledge and skills required to effectively and safely perform within the scope of practice of an Emergency Medical Technician (EMT).
5. **SPECIFIC INSTRUCTIONAL OBJECTIVES:**
Upon successful completion of this course, a student will be able to:
 1. Explain the concepts required to effectively and safely perform within the scope of practice of an Emergency Medical Technician (EMT).
 2. Apply the knowledge and skills required to effectively and safely perform within the scope of practice of an Emergency Medical Technician (EMT).
6. **COURSE CONTENT:**
Lecture Content:
 1. Preparatory
 2. Public Health
 - A. Emergency Medical Care Systems, Research, and Public Health
 - B. Workforce Safety and Wellness of the EMT
 - C. Medical, Legal and Ethical Issues
 - D. Documentation
 - E. Communication
 - F. Lifting and Moving Patients
 3. Anatomy, Physiology and Medical Terminology
 - A. Anatomy
 - B. Physiology
 - C. Medical Terminology
 4. Pathophysiology
 - A. Pathophysiology
 5. Life Span Development
 - A. Life Span Development
 6. Airway Management, Respiration and Artificial Ventilation
 - A. Airway Management
 - B. Artificial Ventilation
 - C. Oxygenation

7. Assessment
 - A. Vital Signs, Monitoring Devices and History Taking
 - B. Scene Size-Up
 - C. Patient Assessment
8. Pharmacology
 - A. General Pharmacology
 - B. Medication Administration
9. Shock and Resuscitation
 - A. Stages of Shock
 - B. Sepsis
 - C. Resuscitation
10. Medicine
 - A. Respiratory Emergencies
 - B. Cardiovascular Emergencies
 - C. Altered Mental Status, Stroke and Headache
 - D. Seizures and Syncope
 - E. Acute Diabetic Emergencies
 - F. Allergic and Anaphylactic Reactions
 - G. Toxicological Emergencies
 - H. Abdominal, Hematologic, Gynecologic, Genitourinary and Renal Emergencies
 - I. Environmental Emergencies
 - J. Submersion Incidents: Drowning and Diving Emergencies
 - K. Psychiatric Emergencies
11. Trauma
 - A. Trauma Overview: The Trauma Patient and the Trauma System
 - B. Bleeding and Soft Tissue Trauma
 - C. Burns
 - D. Musculoskeletal Trauma and Non-Traumatic Fractures
 - E. Head Trauma
 - F. Spinal Trauma and Spine Motion Restriction
 - G. Eye, Face, and Neck Trauma
 - H. Chest Trauma
 - I. Abdominal and Genitourinary Trauma
 - J. Multisystem Trauma and Trauma in Special Patient Populations
12. Special Patient Populations
 - A. Obstetrics and Care of the Newborn
 - B. Pediatrics
 - C. Geriatrics
 - D. Patients with Special Challenges
 - E. The Combat Veteran
13. EMS Operations
 - A. Ambulance Operations and Air Medical Response
 - B. Gaining Access and Patient Extrication
 - C. Hazardous Materials
 - D. Multiple-Casualty Incidents and Incident Management
 - E. EMS Response to Terrorist Incidents
 - F. ALS-Assist Skills
 - G. Advanced Airway Management

Lab Content:

1. Trauma Assessment
2. Medical Assessment
3. Bag-Valve-Mask Ventilation
4. Oxygen Administration
5. Cardiac Arrest Management with AED
6. Hemorrhage Control
7. Shock Management

8. Spinal Motion Restriction (Seated)
9. Spinal Motion Restriction (Supine)
10. Penetrating Chest Injury
11. Epinephrine Administration
12. Naloxone Administration
13. Childbirth Resuscitation
14. Neonatal Resuscitation
15. Moving and Lifting
16. Bandaging
17. Splinting
18. Extrication
19. Patient Loading and Hand-off
20. Multi-Casualty Incidents
21. Tactical Emergency Medical Support

7. REPRESENTATIVE METHODS OF INSTRUCTION:

Typical methods of instruction may include:

- A. Lecture
- B. Lab
- C. Observation and Demonstration

8. REPRESENTATIVE ASSIGNMENTS

Representative assignments in this course may include, but are not limited to the following:

Writing Assignments:

Students turn in descriptions of patient contacts from the ride-along assignments. Forms used will be similar to those used for report write-ups in the field.

Additional assignments may be assigned as needed to support learning and skill development.

For example, for a cardiac emergency, a student may be asked to read the scenario and write out their answer in class to explain their knowledge of how nitroglycerin works on the human body. You are treating a forty-nine-year-old male patient complaining of pain in his "stomach." He states the pain is below his diaphragm and radiates to the left side. He has taken one nitroglycerin spray without relief. The patient states this pain is not like his heart attack. His vital signs are pulse 68, strong and regular; respirations 18 and adequate; blood pressure 112/68; and skin warm and dry.

Reading Assignments:

Students will be expected to read the text materials pertaining to the next lecture prior to that class session.

Other Outside Assignments:

Students will be required to accomplish a minimum of 10 patient contacts during scheduled ride-alongs. A minimum of 24 hours of ride-alongs is required.

9. REPRESENTATIVE METHODS OF EVALUATION

Representative methods of evaluation may include:

- A. Class Performance
- B. Exams/Tests
- C. Final Class Performance
- D. Quizzes
- E. Written examination

10. REPRESENTATIVE TEXT(S):

Possible textbooks include:

- A. Mistovich, J, J. *Prehospital Emergency Care*, 12th Edition ed. Pearson/Prentice Hall, 2024

Other:

- A. Supplemental handouts for topics and skills developed by the instructor

Effective Term: Fall 2024
Course Originator: Christine Baird