# EMS 203: EMERGENCY MEDICAL TECHNICIAN: BASIC CONTINUING EDUCATION

#### **Foothill College Course Outline of Record**

Heading	Value
Effective Term:	Summer 2022
Units:	2.5
Hours:	2 lecture, 1.5 laboratory per week (42 total per quarter)
Advisory:	Students must possess either a current EMT certificate or a certification which has been expired for no more than 24 months (must complete before the end of that month); students who have not fulfilled NREMT requirements within one year of EMT course completion may enroll; students must also possess current certification in American Red Cross CPR-BLS for the Professional Rescuer or American Heart Association CPR for the Healthcare Provider; students may repeat this course without petition when necessary to meet a legally mandated training requirement as a condition of volunteer or paid employment.
Degree & Credit Status:	Non-Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	None
Grade Type:	Letter Grade (Request for Pass/No Pass)
Repeatability:	Unlimited Repeatability
Formerly:	EMT 203, 303

#### **Description**

This course meets the education requirements as specified by the California Emergency Medical Services Authority, the Emergency Medical Authority of Santa Clara County and the National Registry of EMT (NREMT) of 40 hours. Intended for both pre-employed personnel and those persons currently employed by a fire department or ambulance service within the County of Santa Clara. Review and update the knowledge and skills required for basic certification. Students maintaining their National Registry of Emergency Technicians (NREMT) certification will meet the NREMT transition requirements with this course.

#### **Course Objectives**

The student will be able to:

 Demonstrate understanding and application of the skills necessary to perform a patient examination, trauma patient

- Demonstrate understanding and application of the skills necessary to perform a patient examination, medical patient
- Demonstrate understanding and application of the skills necessary to perform bag valve mask ventilation
- Demonstrate understanding and application of the skills necessary to perform oxygen administration
- Demonstrate understanding and application of the skills necessary to perform cardiac arrest management with AED
- Demonstrate understanding and application of the skills necessary to perform hemorrhage control and shock management
- Demonstrate understanding and application of the skills necessary to perform spinal motion restriction—supine and seated
- 8. Demonstrate understanding and application of the skills necessary to perform penetrating chest injury
- 9. Demonstrate understanding and application of the skills necessary to perform epinephrine and naloxone administration
- Demonstrate understanding and application of the skills necessary to perform childbirth and neonatal resuscitation
- Demonstrate understanding and application of the skills necessary to perform glucometer and blood sugar testing

#### **Course Content**

- 1. Patient examination, trauma patient
  - a. The active participant will learn to integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan
- 2. Patient examination, medical patient
  - a. The active participant will learn to integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan
- 3. Bag valve mask ventilation
  - a. Open the airway
  - b. Clear the airway
  - c. Assess breathing
  - d. Provide appropriate intervention(s)
- 4. Oxygen administration
  - a. Identification and use of oxygen tanks
  - b. Identify and safely utilize various oxygen delivery devices
- 5. Cardiac arrest management with AED
  - a. How to perform one and two-rescuer adult/child and infant CPR
  - b. Proper use of AED
- 6. Hemorrhage control and shock management
  - a. Recognition and management of bleeding and shock
  - Pathophysiology, assessment, and management of bleeding and shock
- 7. Spinal motion restriction—supine and seated
  - a. Recognition and management of spinal trauma
  - b. Pathophysiology, assessment, and management of spine trauma
- 8. Penetrating chest injury

- 2
- a. Recognition and management of penetrating chest injury
- b. Pathophysiology, assessment, and management of chest injury
- 9. Epinephrine and naloxone administration
  - a. Recognition and management of anaphylaxis
  - b. Pathophysiology, assessment, and management of anaphylaxis
  - c. Recognition and management of narcotic overdose
  - d. Pathophysiology, assessment, and management of narcotic overdose
  - e. Pharmacology indications, contraindications, dose, route for narcan and epinephrine
- 10. Childbirth and neonatal resuscitation
  - a. Recognition and management of normal delivery
  - b. Anatomy and physiology of normal pregnancy
  - c. Pathophysiology of complications of pregnancy
  - d. Assessment of the pregnant patient
  - e. Psychosocial impact, presentations, prognosis, and management of normal delivery and abnormal delivery
  - f. Assessment of the newborn
  - g. Presentation and management of the newborn and neonatal resuscitation
- 11. Glucometer and blood sugar testing
  - Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of acute diabetic emergencies, diabetes
  - b. Proper use of various glucometers

#### **Lab Content**

Student will attend scheduled lab days to practice skills for final testing. Examples of skills include, but are not limited to:

- 1. Patient examination, trauma patient
- 2. Patient examination, medical patient
- 3. Bag valve mask ventilation
- 4. Oxygen administration
- 5. Cardiac arrest management with AED
- 6. Hemorrhage control and shock management
- 7. Spinal motion restriction—supine and seated
- 8. Penetrating chest injury
- 9. Epinephrine and naloxone administration
- 10. Childbirth and neonatal resuscitation
- 11. Glucometer and blood sugar testing

#### **Special Facilities and/or Equipment**

- 1. Classroom should be available to serve as a practice area (one instructor for every ten students) for lab sessions
- 2. Practice area should be carpeted and large enough to accommodate ten students, one instructor for lab time, and the necessary equipment and medical supplies
- 3. Tables should be available for practice areas, with appropriate and sufficient equipment with medical supplies
- 4. When taught via Foothill Global Access, on-going access to computer with email software and hardware; email address

#### **Method(s) of Evaluation**

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

Final exam

Participation in all required sessions

Skills proficiency is evaluated on a pass/fail basis according to the skills standards from the skills to be tested (include, but limited to): patient examination, trauma patient; patient examination, medical patient; bag valve mask ventilation; oxygen administration; cardiac arrest management with AED; hemorrhage control and shock management; spinal motion restriction—supine and seated; penetrating chest injury; epinephrine and naloxone administration; childbirth and neonatal resuscitation; glucometer and blood sugar testing

#### **Method(s) of Instruction**

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

Lecture
Demonstration
Lab activities
Case based scenarios

### Representative Text(s) and Other Materials

American Academy of Orthopaedic Surgeons (AAOS). <u>Emergency Care</u> and Transportation of the Sick and Injured, 12th ed., 2021.

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

- Weekly reading assignments, students will read 1-5 chapters per week:
  - a. Textbook
  - b. Web-based resources
  - c. Audio book
- 2. Chapter quizzes
- 3. Study of instructor-created PowerPoints
- 4. Test preparation resources
- 5. Develop clinical cases that will be presented in class

#### Discipline(s)

**Emergency Medical Technologies**