

# EMT R069: EMERGENCY MEDICAL TECHNICIAN - REFRESHER

**Originator**

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**College**

Oxnard College

**Discipline (CB01A)**

EMT - Emergency Medical Technology

**Course Number (CB01B)**

R069

**Course Title (CB02)**

Emergency Medical Technician - Refresher

**Banner/Short Title**

EMT, Refresher

**Credit Type**

Credit

**Start Term**

Fall 2021

**Catalog Course Description**

This course is designed to meet the State requirements for maintaining EMT (Emergency Medical Technician) certification. This course provides both skills competency verification and a twenty-seven hour EMT refresher. Emergency medical care for the sick and injured will be reviewed, including basic life support and the use of emergency medical equipment. This class is repeatable if legally mandated. Limitation on Enrollment: EMT Certification within the past two years or valid EMT license; and American Heart Association (AHA) Healthcare Provider or American Red Cross CPR/AED for Professional Rescuers. Not applicable for degree credit.

**Taxonomy of Programs (TOP) Code (CB03)**

1250.00 - \*Emergency Medical Services

**Course Credit Status (CB04)**

C (Credit - Not Degree Applicable)

**Course Transfer Status (CB05) (select one only)**

C (Not transferable)

**Course Basic Skills Status (CB08)**

N - The Course is Not a Basic Skills Course

**SAM Priority Code (CB09)**

C - Clearly Occupational

**Course Cooperative Work Experience Education Status (CB10)**

N - Is Not Part of a Cooperative Work Experience Education Program

**Course Classification Status (CB11)**

Y - Credit Course

**Educational Assistance Class Instruction (Approved Special Class) (CB13)**

N - The Course is Not an Approved Special Class

**Course Prior to Transfer Level (CB21)**

Y - Not Applicable

**Course Noncredit Category (CB22)**

Y - Credit Course

**Funding Agency Category (CB23)**

Y - Not Applicable (Funding Not Used)

**Course Program Status (CB24)**

2 - Not Program Applicable

**General Education Status (CB25)**

Y - Not Applicable

**Support Course Status (CB26)**

N - Course is not a support course

**Field trips**

May be required

**Grading method**

Letter Graded

**Does this course require an instructional materials fee?**

No

**Repeatable for Credit**

No

**Is this course part of a family?**

No

**Units and Hours**

**Carnegie Unit Override**

No

**In-Class**

**Lecture**

**Minimum Contact/In-Class Lecture Hours**

26.25

**Maximum Contact/In-Class Lecture Hours**

26.25

**Activity**

**Laboratory**

**Minimum Contact/In-Class Laboratory Hours**

26.25

**Maximum Contact/In-Class Laboratory Hours**

26.25

**Total in-Class**

**Total in-Class**

**Total Minimum Contact/In-Class Hours**

52.5

**Total Maximum Contact/In-Class Hours**

52.5

**Outside-of-Class**

**Internship/Cooperative Work Experience**

**Paid**

**Unpaid**

**Total Outside-of-Class**

**Total Outside-of-Class**

**Minimum Outside-of-Class Hours**

52.5

**Maximum Outside-of-Class Hours**

52.5

**Total Student Learning**

**Total Student Learning**

**Total Minimum Student Learning Hours**

105

**Total Maximum Student Learning Hours**

105

**Minimum Units (CB07)**

1.5

**Maximum Units (CB06)**

1.5

**Limitations on Enrollment**

Current CPR certification for health care provider (American Heart Association) or professional rescuer (American Red Cross)  
Others (specify)

**Other Limitations on Enrollment**

EMT Certification within the past 2 years or valid EMT License

**Student Learning Outcomes (CSLOs)**

**Upon satisfactory completion of the course, students will be able to:**

- |   |  |
|---|--|
| 1 | Students will demonstrate safe procedures for lifting, moving and handling patients in order to minimize discomfort and prevent further injury.  |
| 2 | Students will demonstrate appropriate emergency medical care based on the assessment findings of an ill or injured patient as outlined in the National Registry Assessment skill sheets. |
| 3 | Students will demonstrate the appropriate emergency trauma care based on the assessment findings of an injured patient as outlined in the National Registry Assessment skill sheets.     |
| 4 | Students will recognize the need for cardio-pulmonary resuscitation (CPR) and demonstrate professional-level technique in performing both one and two-person CPR .                       |

**Course Objectives**

**Upon satisfactory completion of the course, students will be able to:**

- |   |   |
|---|---|
| 1 | Recognize the nature and seriousness of the patient's condition or extent of injuries to assess requirements for emergency medical care |
| 2 | Administer appropriate emergency medical care based on assessment findings of the patient's condition                                   |
| 3 | Lift, move, position and otherwise handle the patient to minimize discomfort and prevent further injury                                 |
| 4 | Perform safely and effectively the expectations of the job description of Emergency Medical Technician (EMT)                            |
| 5 | Function as an integral member of the health care team  |

- 6 Demonstrate proficiency in the basic skills expected of the Emergency Medical Technician (EMT)
- 7 Demonstrate the appropriate procedures for administering approved medications in the emergency setting.

## Course Content

### Lecture/Course Content

#### Section 1 – Foundations

1. Introduction to Emergency Medical Services and the Health Care System
2. The Well-being of the EMT
  - a. Personal Protection
  - b. Diseases of Concern
  - c. Stress
  - d. Scene Safety
3. Lifting and Moving Patients
4. Medical, Legal, and Ethical Issues
  - a. Scope of Practice
  - b. Consent and Refusal
  - c. Other Legal Issues
5. Medical Terminology
6. Anatomy and Physiology
  - a. Organs
  - b. Structures
  - c. Body Systems
7. Principles of Pathophysiology
  - a. The Cell
  - b. The Cardiopulmonary System
  - c. Shock
8. Life Span Development

#### Section 2 – Airway Management, Respiration, and Artificial Ventilation

1. Airway Management
  - a. Airway Physiology
  - b. Airway Pathophysiology
  - c. Opening the Airway
  - d. Airway Adjuncts
  - e. Suctioning
2. Respiration and Artificial Ventilation
  - a. Physiology
  - b. Pathophysiology
  - c. Respiration
  - d. Oxygen Therapy
  - e. Assisting with Advanced Airway Devices

#### Section 3 – Patient Assessment

1. Scene Size-up
  - a. Scene Safety
  - b. Nature of Call
  - c. Number of Patients and Additional Resources
2. The Primary Assessment
  - a. Goal of Primary Assessment
  - b. General Impression
  - c. Assessing ABC's
  - d. Determining Patient Priority
3. Vital Signs and Monitoring Devices
4. Secondary Assessment
  - a. Components and Techniques
  - b. Body Systems Examinations
  - c. Assessment of the Medical Patient
  - d. Assessment of the Trauma Patient

- e. Rapid Trauma vs. Focused Exam
  - f. Reassessment
5. Communication and Documentation
    - a. Communication Systems and Radio Equipment
    - b. Interpersonal Communication
    - c. Prehospital Care Report
    - d. Special Documentation Issues

#### **Section 4 – Medical Emergencies**

1. General Pharmacology
  - a. EMT Scope Medications
  - b. Medication Classifications
  - c. Medication Administration
  - d. Common Patient Prescriptions
  - e. Assisting with IV Therapy
2. Respiratory Emergencies
  - a. Respiration
  - b. Breathing Difficulty
  - c. Respiratory Conditions
3. Cardiac Emergencies
  - a. Cardiac Anatomy and Physiology
  - b. Acute Coronary Syndrome
  - c. Causes of Cardiac Conditions
  - d. Cardiac Arrest
4. Diabetic Emergencies and Altered Mental Status
  - a. Pathophysiology and Causes of Altered Mental Status
  - b. Assessment of Altered Mental Status
  - c. Diabetes
  - d. Sepsis
  - e. Seizures
  - f. Stroke
  - g. Syncope
5. Allergic Reaction
  - a. Allergic Reactions vs. Anaphylaxis
  - b. Epinephrine Auto-injector
6. Poisoning and Overdose Emergencies
  - a. Poisons and Toxins
  - b. Routes of Poisoning
  - c. Alcohol and Substance Abuse
7. Abdominal Emergencies
  - a. Anatomy and Physiology
  - b. Abdominal Pain - Causes and Assessment
  - c. Abdominal Conditions
8. Behavioral and Psychiatric Emergencies and Suicide
  - a. What is a Behavioral Crisis
  - b. Psychiatric Conditions
  - c. Situational Stress Reactions
  - d. Suicide
  - e. Hostile Patients
  - f. Safety and Reasonable Force/Restraint
  - g. Assessment of the Psychiatric Patient
  - h. Medical/Legal Considerations
9. Hematologic and Renal Emergencies
  - a. The Hematologic System
  - b. The Renal System
  - c. Renal Failure and Dialysis

#### **Section 5 – Trauma Emergencies**

1. Bleeding and Shock
  - a. The Circulatory System
  - b. Bleeding and Bleeding Control
  - c. Shock and Shock Management
2. Soft-Tissue Trauma
  - a. Closed Wounds
  - b. Open Wounds
  - c. Treatment of Specific Open Wounds
  - d. Burns
  - e. Electrical Injuries
  - f. Dressings and Bandages
3. Chest and Abdominal Trauma
  - a. Blunt vs. Penetrating Trauma
  - b. Closed Chest Injuries
  - c. Open Chest Injuries
  - d. Management of Chest Trauma
  - e. Abdominal injuries
4. Musculoskeletal Trauma
  - a. Musculoskeletal System
  - b. Mechanisms of Musculoskeletal Injuries
  - c. Assessment of Musculoskeletal Injuries
  - d. Splinting and Management of Musculoskeletal Injuries
5. Trauma to the Head, Neck, and Spine
  - a. Nervous and Skeletal Systems
  - b. Injuries to the Skull and Brain
  - c. Wounds to the Neck
  - d. Spinal Injuries and Dysfunction
  - e. Patient Management and Packaging
6. Multisystem Trauma
7. Environmental Emergencies
  - a. Exposure to Cold
  - b. Exposure to Heat
  - c. Water-Related Emergencies
  - d. Bites and Stings

## **Section 6 – Special Populations**

1. Obstetric and Gynecologic Emergencies
  - a. Female Anatomy and Physiology
  - b. Physiologic Changes in Pregnancy
  - c. Labor and Delivery
  - d. Assessment of the Woman in Labor
  - e. Normal Childbirth
  - f. The Neonate
  - g. Care after Delivery
  - h. Childbirth Complications
  - i. Gynecological Emergencies
2. Pediatric Emergencies
  - a. Developmental Characteristics of Infants and Children
  - b. Assessing the Pediatric Patient
  - c. Special Concerns in Pediatric Care
  - d. Pediatric Medical Emergencies
  - e. Pediatric Respiratory Distress and Failure
  - f. Pediatric Trauma
  - g. Child Abuse and Neglect
  - h. Infants and Children with Special Needs
3. Geriatric Emergencies

- a. Age-Related Changes
  - b. Communication with Older Patients
  - c. Assessment of Older Patients
4. Emergencies for Patients with Special Challenges

### Section 7 – Operations

- 1. EMS Operations
  - a. Preparation
  - b. Responding to a Call
  - c. Patient Packaging and Transport
  - d. Transfer of Care to the ER
  - e. Call Completion
  - f. Air Rescue Considerations
- 2. Hazardous Materials, Multiple-Casualty Incidents, and Incident Management
  - a. ICS System
  - b. Triage
  - c. Hazmat Awareness and Safety
- 3. Highway Safety and Vehicle Extrication
- 4. EMS Response to Terrorism
  - a. Defining Terrorism
  - b. Terrorism and EMS
  - c. Time/Distance/Shielding
  - d. Responses to Terrorism
  - e. Dissemination and Weaponization
  - f. Characteristics of CBRNE Agents
  - g. Strategy and Tactics
  - h. Self-Protection
- 5. APPENDIX B Chapter- Basic Cardiac Life Support

### Laboratory or Activity Content

- 1. Patient Lifting and Moving Techniques
- 2. Patient Packaging and Carrying Devices
- 3. Vital Signs Skills
- 4. Oxygenation Devices and Airway Adjuncts
- 5. Airway Management and Suctioning
- 6. BVM Ventilation Skills
- 7. Medication Administration
- 8. Assessment Practice- Medical Scenarios
- 9. Assessment Practice- Trauma Scenarios
- 10. Bandaging and Splinting Skills
- 11. Bleeding Control and Shock Management Techniques
- 12. Childbirth Skills
- 13. Triage Drill
- 14. Cardiac Arrest Management/CPR Review
- 15. ALS Assist Skills
- 16. Practice for National Registry EMT Skills Testing
- 17. Psychomotor skills practice using emergency medical equipment, supplies and manikins

### Methods of Evaluation

Which of these methods will students use to demonstrate proficiency in the subject matter of this course? (Check all that apply):

- Problem solving exercises
- Skills demonstrations
- Written expression

Methods of Evaluation may include, but are not limited to, the following typical classroom assessment techniques/required assignments (check as many as are deemed appropriate):

- Essay exams
- Group projects

Individual projects  
Objective exams  
Oral presentations  
Projects  
Problem-solving exams  
Quizzes  
Role playing  
Reports/papers  
Research papers  
Skills demonstrations  
Skill tests  
Simulations

## **Instructional Methodology**

### **Specify the methods of instruction that may be employed in this course**

Audio-visual presentations  
Computer-aided presentations  
Clinical demonstrations  
Class activities  
Class discussions  
Distance Education  
Demonstrations  
Group discussions  
Instructor-guided interpretation and analysis  
Instructor-guided use of technology  
Internet research  
Lecture  
Role-playing  
Small group activities

### **Describe specific examples of the methods the instructor will use:**

Methods may include, but are not limited to:

- a) In-Class reading of text followed by instructor guided discussion
- b) Reading assignments using current events
- c) Medical and trauma case presentation using role playing
- d) Video and DVD viewing using scenarios and subject matter experts
- e) Section quizzes to review and reinforce key points
- f) Small group participation

## **Representative Course Assignments**

### **Writing Assignments**

1. Anatomical or Physiological diagram labeling

### **Critical Thinking Assignments**

Students will demonstrate proficiency during scenarios that require skills taught during EMT Primary.

### **Reading Assignments**

1. Assigned reading from the selected textbook

### **Skills Demonstrations**

Student will demonstrate proficiency at all skills taught during Primary EMT.

## **Outside Assignments**

### **Representative Outside Assignments**

Outside Assignments

- 1) Students must complete weekly reading chapter assignments.
- 2) Student will label structures on anatomical charts
- 3) Students will complete written papers on blood flow thru the body



4) Students will identify part of the human body on Physiological diagrams

**Articulation**

**Comparable Courses within the VCCCD**  
 EMT V10 - EMT Recertification

**Textbooks and Lab Manuals**

**Resource Type**  
 Textbook

**Description**  
 Limmer, D. and O'Keefe, M.F. (2015). *Emergency Care* (13th). Prentice Hall.

**Resource Type**  
 Other Instructional Materials

**Description**  
 Mannequins, bandaging, spine boards, assessment supplies/equipment and all other materials and equipment needs for an emergency medical response course..

**Distance Education Addendum**

**Definitions**

**Distance Education Modalities**  
 Hybrid (51%–99% online)  
 Hybrid (1%–50% online)  
 100% online

**Faculty Certifications**

**Faculty assigned to teach Hybrid or Fully Online sections of this course will receive training in how to satisfy the Federal and state regulations governing regular effective/substantive contact for distance education. The training will include common elements in the district-supported learning management system (LMS), online teaching methods, regular effective/substantive contact, and best practices.**

Yes

**Faculty assigned to teach Hybrid or Fully Online sections of this course will meet with the EAC Alternate Media Specialist to ensure that the course content meets the required Federal and state accessibility standards for access by students with disabilities. Common areas for discussion include accessibility of PDF files, images, captioning of videos, Power Point presentations, math and scientific notation, and ensuring the use of style mark-up in Word documents.**

Yes

**Regular Effective/Substantive Contact**

**Hybrid (1%–50% online) Modality:**

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	Student will watch Instructor recorded videos and take quizzes and tests.

**Hybrid (51%–99% online) Modality:**

Method of Instruction	Document typical activities or assignments for each method of instruction
Synchronous Dialog (e.g., online chat)	Student will attend live zoom sessions, take chapter/discussion notes and take quizzes and test.

Synchronous Dialog (e.g., online chat)	Students will participate in Discussion Boards with topics such as perfusion, signs and symptoms of chest pain etc.
<b>100% online Modality:</b>	
<b>Method of Instruction</b>	<b>Document typical activities or assignments for each method of instruction</b>
Other DE (e.g., recorded lectures)	Students will watch recorded lectures and practice skills from lectures.

## Examinations

### Hybrid (1%–50% online) Modality

Online  
On campus

### Hybrid (51%–99% online) Modality

Online  
On campus

## Primary Minimum Qualification

EMERGENCY MEDICAL TECHNOLOGIES

## Additional local certifications required

Principal instructors must be a physician, registered nurse, physician assistant or paramedic currently licensed in California or be an EMT currently certified in California and have at least two years of academic or clinical experience in the practice of emergency medicine or pre-hospital care in the last five years. Principal instructors must be “qualified by education and experience in methods, materials, and evaluation of instruction, which shall be documented by at least forty hours in teaching methodology. The courses include but are not limited to the following examples: 1. State Fire Marshal Instructor 1A and 1B2. National Fire Academy’s Instructional Methodology 3. Training programs that meet the United States Department of Transportation/National Highway Traffic Safety Administration 2002 Guidelines for Educating EMS Instructors such as the National Association of EMS Educators Course.” The Program must be approved by the Ventura County Emergency Medical Services Agency

## Review and Approval Dates

### Department Chair

08/20/20

### Dean

08/20/20

### Technical Review

08/26/20

### Curriculum Committee

08/26/20

### Curriculum Committee

12/09/2020

### CCCCO

MM/DD/YYYY

### Control Number

CCC000313117

### DOE/accreditation approval date

MM/DD/YYYY