

## COURSE OUTLINE

### **EMT 140 Emergency Medical Technician (EMT)**

#### **I. Catalog Statement**

EMT 140 is designed to prepare students for certification and employment as an Emergency Medical Technician (EMT) in the state of California. Course material proceeds from introductory theory and practice of emergency medical care through increasingly complex concepts and management of immediate life-threatening situations and emergencies. Critical thinking and decision-making skills are stressed throughout the course. Coursework also includes a Clinical/ride-along component. Upon successful completion of EMT 139 and EMT 140, a course completion certificate is awarded to students who successfully complete the didactic portion of the class with 75% or better and pass the certifying skills exam. Successful completion of the EMT courses provides eligibility to sit for the National Registry EMT exam and apply for certification in the state of California.

Total Lecture Units: 6.0  
Total Laboratory Units: 2.0  
**Total Course Units: 8.0**

Total Lecture Hours: 96.0  
Total Laboratory Hours: 80.0  
Total Ride-along Hours To Be Arranged: 16.0  
**Total Faculty Contact Hours: 192.0**

Prerequisite: EMT 139

Note: Student must be eighteen years of age prior to the last day of class. In addition to the scheduled hours, twenty-four hours of ride along must be completed in order to be eligible to pass the class.

#### **II. Course Entry Expectations**

Prior to enrolling in the course, the student must have completed the following:

- discuss the structure and significance of the Emergency Medical Services (EMS) system;
- explain the ethical responsibilities of healthcare providers;
- describe the structure and general functions of various body systems;

- describe the signs and symptoms of common communicable diseases encountered in various emergency settings;
- demonstrate the appropriate techniques for using personal protective equipment to reduce the risk for acquiring a communicable disease;
- discuss the various emotional reactions an EMS provider may encounter during the care of sick or injured persons;
- describe the use of evidence based research in emergency medical care;
- demonstrate the various techniques of resuscitation for the neonate, infant, child, and adult.
- hold a current CPR for Healthcare Provider card or equivalent that will be current through the duration of the class.
- will be 18 years old before completion of the class.

### **III. Course Exit Standards**

- demonstrate techniques for acquisition and interpretation of a patient's vital signs and medical history;
- demonstrate various lifting and moving techniques which promote safety for the patient and other personnel;
- demonstrate management of a patient's airway, providing pulmonary resuscitation, maintenance of various advanced airway access devices, and oxygen delivery systems;
- demonstrate various patient assessment techniques and determining priorities in patient care;
- discuss the rationale for serving as an advocate for patient rights within the healthcare system;
- demonstrate age-appropriate physical examinations;
- identify the components of various communication systems;
- describe the components of a written and verbal report and associated legal aspects;
- discuss various aspects related to general pharmacology and the administration of approved medications;
- calculate and adjust the rate of flow to various transportable intravenous solutions and/or medications;
- describe prioritization and management strategies for various medical emergencies;
- describe the signs and symptoms associated with various obstetrical and gynecological emergencies;
- demonstrate the management of imminent childbirth, management of the neonate, and the mother;
- describe prioritization and management strategies for various traumatic injuries;
- describe the developmental and physical attributes related to the assessment and management of infants and children;
- manage specific patient populations, such as the elderly and those patients with special needs;
- demonstrate the management of a multi-casualty incident;
- describe the management of a chemical, biological, radiological,

- nuclear, or explosive terrorist incident;
- describe the hazardous materials classification system, and its role in the emergency management of a hazardous materials incident;
- demonstrate recognition and mitigation of a hazardous materials incident;
- identify the aspects of ambulance operations as it pertains to the prehospital environment;
- describe the aspects of gaining access to entrapped persons;
- demonstrate knowledge of Los Angeles County Advanced scope of practice.

#### **IV. Course Content**

**Total Faculty Contact Hours: 192.0**

First Night of Class Orientation, Expectations, Standards (2 hour)  
Obtaining and Interpreting Vital Signs and Medical History (2 hours)  
Life Span Development (1.5 hours)  
Basic Pharmacology (1.5. hours)  
Pharmacology and Medication Administration (3 hours)  
Airway Management, Respiration, and Ventilation, Advanced Airway Management (4 hours)  
Pathophysiology, Shock and Resuscitation (3 hours)  
Respiratory Emergencies (4 hours)  
Cardiovascular Emergencies (4 hours)  
Altered Mental Status, Stroke, Headache (4 hours)  
Seizures, Syncope, Diabetic Emergencies (3 hours)  
Anaphylactic Reactions, Toxicology (3 hours)  
Abdominal, gynecologic, Genitourinary and Renal Emergencies (3 hours)  
Environmental, submersion Incidents (3 hours)  
Behavioral Emergencies (4 hours)  
Bleeding Control, Soft Tissue, and Burns (3 hours)  
Musculoskeletal Trauma (3 hours)  
Head, and Spinal Trauma (3 hours)  
Eye, Face, and Soft Tissue Neck Trauma (3 hours)  
Chest Trauma (3 hours)  
Abdominal and Genitourinary Trauma (3 hours)  
Multisystem Trauma and Trauma in Special Patients (3 hours)  
National Trauma Triage Protocols (3 hours)  
Obstetrics and Care of the Newborn (4 hours)  
Delivery of Newborn Normal and Complex (3 hours)  
Pediatrics, Geriatrics (4 hours)  
Patients with Special Challenges (3 hours)  
Multiple-casualty Incidents and Incident Management, Hazmat (4 hours)  
EMS Response to Terrorism Involving Weapons of Mass Destruction (4 hours)  
LA County Expanded Scope of Practice (4 hours)

### **Laboratory Content**

Assessment, Moving and Lifting, Vital Signs (**10 hours**)  
Airway Management, Respiration, and Ventilation, Advanced Airway Management, Assessment, Vital Signs (**10 hours**)  
Ambulance Operations and Air Medical Response, Cardiac and Respiratory Emergencies, Nitroglycerin, Metered Dose Inhalers (**10 hours**)  
Diabetic, Altered Mental Status, Syncope, Stroke, seizures and Oral Glucose Administration (**10 hours**)  
Bleeding Control, Bandaging and Splinting (**10 hours**)  
Gaining Access and Patient Extrication (**10 hours**)  
Delivery of Newborn (**10 hours**)  
Patient Care Scenarios, Team Management (**10 hours**)

**Ambulance/Clinical To Be Arranged Hours (16.0)**

**This course also requires a minimum of 10 documented patient contacts. Therefore, this may require additional hours over the minimum required.**

### **Methods of Instruction**

The following instructional methodologies may be used in the course:

- web-based computer/tutorial programs;
- use of clicker device for quizzes, test, class participation, data gathering and student participation;
- lecture/collaborative learning activities;
- multimedia presentations;
- public agency collaboration during skill-based sessions;
- scenario-based skill demonstration and applications.

### **Out of Class Assignments**

The following out of class assignments may be used in the course:

- successful completion of the National Registry Emergency Medical Technician Exam;
- satisfactory completion of ambulance ride-a-longs.

### **Methods of Evaluation**

The following methods of evaluation may be used in the course:

- quizzes;
- examinations;
- practical skill assessments;
- MYBradyLab online homework and testing;
- final written and practical examinations;

- class participation and assessment of communication skills.

**VII. Textbooks**

Mistovich, Joseph, et al. *Prehospital Emergency Care*, 10<sup>th</sup> Edition. With MyBradyLab and E-text bundled. Upper Saddle River, NJ: Pearson/Prentice Hall, 2014. Print.  
11<sup>th</sup> Grade Textbook Reading Level. ISBN: 13: 978-0-13-336913-7

Hazinski, Mary F. ed. *BLS for Healthcare Providers (Student Manual)*. 1<sup>st</sup> ed. South Deerfield: American Heart Association, 2010. Print.  
12<sup>th</sup> Grade Textbook Reading Level. ISBN 0874934613

**VIII. Student Learning Outcomes**

Upon successful completion of the required coursework, the student will be able to:

- Recognize the nature and seriousness of the patient's condition or extent of injuries, of adults, children, infants, and newborns to assess requirements for emergency medical care and transport.
- Administer appropriate emergency medical care based on assessment findings of the patient's condition.
- Demonstrate lifting, moving, positioning, and otherwise handling the patient to minimize discomfort and prevent further injury and complication to patient's medical or traumatic problem.
- Perform safely and effectively the expectations of the EMT-Basic job description.
- Pass the National Registry Emergency Medical Technician Examination.