

COURSE OUTLINE

EMT 140 Emergency Medical Technician-Basic (EMT-B)

I. Catalog Statement

Emergency Medical Technician 140 is designed to prepare students for certification and employment as an Emergency Medical Technician-Basic (EMT-B) 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 ride-a-long component. Upon successful completion of EMT 139 (Introduction to Emergency Medical Services) and EMT 140, a record of completion is issued. Upon successful completion of EMT 139 and EMT 140, verification of successful coursework is issued to the student. This verification is required to apply for certification as an EMT-Basic.

Units – 8.0

Lecture Hours – 6.0

Total Laboratory Hours – 6.0

(Faculty Laboratory Hours 4.5 + Student Laboratory Hours 1.5 = 6 Total Laboratory Hours)

Prerequisites: (1) EMT 139 ; (2) Eligibility for English 101; and (3) Student must be eighteen years of age prior to the first day of instruction.

II. Course Entry Expectations

Skills Level Ranges: Reading 6; Writing 6; Listening/Speaking 6; Math 2

Prior to enrollment in the course, the student should be able to:

1. discuss the structure and significance of the Emergency Medical Service (EMS) system;
2. explain the ethical responsibilities of healthcare providers;
3. describe the structure and general functions of various body systems;
4. identify the signs and symptoms of common medical emergencies related to various body systems;
5. describe the signs and symptoms of common communicable diseases encountered in various emergency settings;
6. demonstrate the appropriate techniques for using personal protective equipment to reduce the risk for acquiring a communicable disease;
7. discuss the various emotional reactions an EMS provider may encounter during the care of sick or injured persons;

8. demonstrate the various techniques of resuscitation for the neonate, infant, child, and adult.

III. Course Exit Standards

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

1. demonstrate techniques for acquisition and interpretation of a patient's vital signs and medical history;
2. demonstrate various lifting and moving techniques which promote safety for the patient and other personnel;
3. demonstrate management of a patient's airway, providing pulmonary resuscitation, maintenance of various advanced airway access devices, and oxygen delivery systems;
4. demonstrate various patient assessment techniques and determining priorities in patient care;
5. discuss the rationale for serving as an advocate for patient rights within the healthcare system;
6. demonstrate age-appropriate physical examinations;
7. identify the components of various communication systems;
8. describe the components of a written and verbal report and associated legal aspects;
9. discuss various aspects related to general pharmacology and the administration of approved medications;
10. calculate and adjust the rate of flow to various transportable intravenous solutions and/or medications;
11. describe prioritization and management strategies for various medical emergencies;
12. describe the signs and symptoms associated with various obstetrical and gynecological emergencies;
13. demonstrate the management of imminent childbirth, management of the neonate, and the mother;
14. describe prioritization and management strategies for various traumatic injuries;
15. describe the developmental and physical attributes related to the assessment and management of infants and children;
16. manage specific patient populations, such as the elderly and those patients with special needs;
17. demonstrate the management of a multi-casualty incident;
18. describe the management of a chemical, biological, radiological, nuclear, or explosive terrorist incident;
19. describe the hazardous materials classification system, and its role in the emergency management of a hazardous materials incident;
20. demonstrate recognition and mitigation of a hazardous materials incident;
21. identify the aspects of ambulance operations as it pertains to the prehospital environment;
22. describe the aspects of gaining access to entrapped persons.

IV. Course Content

A. Obtaining and Interpretation of Vital Signs and Medical History	2 hours
<i>Lecture: 2 hours</i>	
B. Lifting and Moving Patients	4 hours
<i>Lab: 4 hours</i>	
C. Airway Management, Ventilation, and Oxygen Therapy	9 hours

	<i>Lecture: 3 hours</i>	
	<i>Lab: 6 hours</i>	
D. Patient Assessment		28 hours
	<i>Lecture: 11 hours</i>	
	<i>Lab: 17 hours</i>	
E. General Pharmacology		6 hours
	<i>Lecture: 4 hours</i>	
	<i>Lab: 2 hours</i>	
F. County of Los Angeles Pharmacology		3 hours
	<i>Lecture: 3 hours</i>	
G. Respiratory Emergencies		3 hours
	<i>Lecture: 3 hours</i>	
H. Cardiovascular Emergencies		8 hours
	<i>Lecture: 3 hours</i>	
	<i>Lab: 5 hours</i>	
I. Altered Mental Status and Diabetes Mellitus		4 hours
	<i>Lecture: 4 hours</i>	
J. Allergic Reaction and Anaphylaxis		3 hours
	<i>Lecture: 3 hours</i>	
K. Poisoning and Overdose		4 hours
	<i>Lecture: 3 hours</i>	
	<i>Lab: 1 hour</i>	
L. Acute Abdominal Pain		3 hours
	<i>Lecture: 3 hours</i>	
M. Environmental Emergencies		3 hours
	<i>Lecture: 3 hours</i>	
N. Submersion Emergencies		3 hours
	<i>Lecture: 3 hours</i>	
O. Envenomations		2 hours
	<i>Lecture: 2 hours</i>	
P. Psychiatric Emergencies		3 hours
	<i>Lecture: 2 hours</i>	
	<i>Lab: 1 hour</i>	
Q. Obstetric and Gynecological Emergencies		11 hours
	<i>Lecture: 3 hours</i>	
	<i>Lab: 8 hours</i>	
R. Pediatric Emergencies		8 hours
	<i>Lecture: 4 hours</i>	
	<i>Lab: 4 hours</i>	
S. Geriatric Emergencies		8 hours
	<i>Lecture: 5 hours</i>	
	<i>Lab: 3 hours</i>	
T. Bleeding and Shock		2 hours
	<i>Lecture: 2 hours</i>	
U. Soft Tissue Injuries		4 hours
	<i>Lecture: 2 hours</i>	
	<i>Lab: 2 hours</i>	
V. Musculoskeletal Injuries		6 hours
	<i>Lecture: 3 hours</i>	
	<i>Lab: 3 hours</i>	

W. Burns	2 hours
<i>Lecture: 1 hour</i>	
<i>Lab: 1 hour</i>	
X. Injuries to the Head and Spine	9 hours
<i>Lecture: 3 hours</i>	
<i>Lab: 6 hours</i>	
Y. Multi-casualty Incidents	4 hours
<i>Lecture: 2 hours</i>	
<i>Lab: 2 hours</i>	
Z. Response to Weapons of Mass Destruction	4 hours
<i>Lecture: 4 hours</i>	
AA.Hazardous Materials	4 hours
<i>Lecture: 4 hours</i>	
BB.Gaining Access to Entrapped Persons	6 hours
<i>Lecture: 3 hours</i>	
<i>Lab: 3 hours</i>	
CC.Ambulance Operations	2 hours
<i>Lecture: 2 hours</i>	
DD.County of Los Angeles Scope of Practice	10 hrs
<i>Lecture: 6 hours</i>	
<i>Lab: 4 hours</i>	
EE.Required Field Ride-a-long Experience	24 hours

V. Methods of Presentation

The following instructional methodologies may be used in the course:

1. Web-based computer/tutorial programs;
2. lecture/collaborative learning activities;
3. multimedia presentations;
4. public agency collaboration during skill-based sessions;
5. scenario-based skill demonstration and applications.

VI. Assignments and Methods of Evaluation

1. Daily quizzes, weekly examinations, and practical skill assessments
2. Final written and practical examinations;
3. Class participation and assessment of communication skills.
4. Satisfactory completion of ambulance ride-a-longs

VII. Textbooks

Mistovich, J., et al, Prehospital Emergency Care. Current Edition.
Upper Saddle River, NJ: Pearson/Prentice Hall, 2004.
11th Grade Textbook Reading Level. ISBN: 0-13-049288-4.

Mistovich, J., et al, Workbook Prehospital Emergency Care. Current Edition
Upper Saddle River, NJ: Pearson/Prentace Hall, 2008. ISBN: 0-13-174159-4

Mistovich, J., Kuvlesky. E., SUCCESS! for the EMT-Basic, Current Edition
Upper Saddle River, NJ: Pearson/Prentace Hall, 2008 ISBN-10: 0132253968

American Heart Association, BLS for Healthcare Providers. Current Edition
Channing Bete Company, One Community Place, South Deerfield, MA ,
ISBN 0-87493-461-3

VIII. Student Learning Outcomes

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