

EMT-95: EMERGENCY MEDICAL TECHNICIAN (BASIC)

SECTION A - Course Data Elements

CB04 Credit Status

Credit - Degree Applicable

Discipline

Minimum Qualifications	And/Or
Emergency Medical Technologies (Any Degree and Professional Experience)	

Subject Code

EMT - Emergency Medical Technician

Course Number

95

Department

Emergency Medical Technician (EMT)

Division

Health Occupations (HEOC)

Full Course Title

Emergency Medical Technician (Basic)

Short Title

Emergency Medical Technician

CB03 TOP Code

1250.00 - *Emergency Medical Services

CB08 Basic Skills Status

NBS - Not Basic Skills

CB09 SAM Code

C - Clearly Occupational

Rationale

updated textbook

SECTION B - Course Description

Catalog Course Description

The Emergency Medical Technician Basic course is designed to prepare students for entry level work in the Emergency Medical Services (EMS) Sector with an ambulance or other specialized service. Students in the course will learn emergency medical care at the basic life support (BLS) level. This course will prepare students to sit for the National Registry of Emergency Medical Technicians (NREMT) exam. Letter grade only.

SECTION C - Conditions on Enrollment

Open Entry/Open Exit

No

Repeatability

Not Repeatable

Grading Options

Letter Grade Only

Allow Audit

Yes

Requisites

Prerequisite(s)

Completion of EMT-90 with a minimum grade of C and a current American Heart Association BLS Healthcare Provider Certification.

Requisite Justification

Requisite Description

Course in a Sequence

Subject

EMT

Course

90

Level of Scrutiny

Content Review

Upon entering this course, students should be able to:

Completion of EMT-90 with a minimum grade of C.

Requisite Description

Non-course Requisite

Level of Scrutiny

Content Review

Upon entering this course, students should be able to:

A current American Heart Association BLS Healthcare Provider Certification.

SECTION D - Course Standards

Is this course variable unit?

No

Units

7.00

Lecture Hours

99.00

Lab Hours

81.00

Outside of Class Hours

198

Total Contact Hours

180

Total Student Hours

378

Distance Education Approval

Is this course offered through Distance Education?

No

SECTION E - Course Content

Student Learning Outcomes

Upon satisfactory completion of the course, students will be able to:	
1.	Differentiate the roles and responsibilities of the EMT-Basic from other prehospital care providers.
2.	Recognize a patient with an emergent condition or injury which requires rapid assessment, treatment, and transfer to a higher level of care.
3.	Identify a medical or traumatic emergency through assessment and manage the patient within the EMT-Basic scope of practice.

Course Objectives

Upon satisfactory completion of the course, students will be able to:	
1.	Conduct a scene size-up, initial assessment, focused history and physical exam, and ongoing assessment in order to recognize the nature and seriousness of the patient's medical condition(s) and to make a determination about the priority of the patient for transport.
2.	Conduct a scene size-up, focused history and physical exam, detailed physical exam, and ongoing assessment in order to recognize the seriousness of the patient's traumatic injuries and to make a determination about the priority of the patient for transport.
3.	Formulate a treatment plan based on assessment data and utilize the appropriate manipulative skill set(s) in order to implement the plan.
4.	Revise a treatment plan based on on-going assessment data in order to provide the appropriate care for the patient's evolving medical or traumatic condition(s).
5.	Lift, move, and position the patient using the appropriate techniques (e.g., log roll, etc.) and equipment (e.g., ambulance gurney, stair chair, etc.) based on the scene size-up and patient assessment(s) in order to minimize patient discomfort and prevent further injury.
6.	Perform the assessments and manipulative skill set(s) expected within the EMT-Basic Scope of Practice per U.S. Department of Transportation mandated performance standards in order to deliver safe and effective services and be eligible to take the National Registry of Emergency Medical Technician exam for EMT-Basics.

Course Content

1. Preparatory
 - a. Introduction to Emergency Medical Care
 - i. Familiarizes the EMT-Basic candidate with the introductory aspects of emergency medical care.
 - ii. Topics covered include the Emergency Medical Services system, roles and responsibilities of the EMT-Basic, quality improvement, and medical direction.
 - b. Well-Being of the EMT-Basic
 - i. emotional aspects of emergency care and stress management,
 - ii. introduction to Critical Incident Stress Debriefing (CISD)
 - iii. scene safety
 - iv. body substance isolation (BSI)
 - v. personal protection equipment (PPE)
 - vi. safety precautions
 - c. Medical/Legal and Ethical Issues
 - i. scope of practice
 - ii. ethical responsibilities
 - iii. advance directives
 - iv. consent
 - v. refusals
 - vi. abandonment
 - vii. negligence
 - viii. duty to act
 - ix. confidentiality
 - x. special situations such as organ donors and crime scenes.
 - d. The Human Body
 - i. knowledge of the human body.
 - ii. brief overview of body systems, anatomy, physiology and topographic anatomy
 - e. Lifting and Moving Patients

- i. knowledge of body mechanics
 - ii. lifting and carrying techniques
 - iii. principles of moving patients
 - iv. overview of equipment
 - v. practical skills of lifting and moving
 - f. Evaluation: Preparatory Module
 - i. written and skills evaluation to determine the student's level of achievement of the cognitive, psychomotor and affective objectives from this module of instruction.
- 2. Airway
 - a. Airway Anatomy and Physiology
 - i. how to maintain an open airway
 - ii. pulmonary resuscitation
 - iii. variations for infants and children and patients with laryngectomies
 - iv. use of airways, suction equipment, oxygen equipment and delivery systems, and resuscitation devices
 - b. Practical Skills Lab: Airway
 - i. supervised practice for students to develop the psychomotor skills of airway care.
 - ii. use of airways, suction equipment, oxygen equipment and delivery systems, and resuscitation devices
 - c. Evaluation: Airway Module
 - i. written and skills evaluation to determine the student's level of achievement of the cognitive, psychomotor and affective objectives
- 3. Patient Assessment
 - a. Scene Size-Up
 - i. enhance the EMT-Basic's ability to evaluate a scene for potential hazards
 - ii. determine by the number of patients if additional help is necessary
 - iii. evaluate mechanism of injury or nature of illness.
 - b. Initial Assessment
 - i. knowledge and skills to properly perform the initial assessment
 - ii. forming a general impression, determining responsiveness, assessment of the airway, breathing and circulation
 - iii. determine priorities of patient care.
 - c. Focused History and Physical Exam - Trauma Patients
 - i. Describe and demonstrate the method of assessing patient's traumatic injuries
 - ii. A rapid approach to the trauma patient
 - d. Focused History and Physical Exam - Medical Patients
 - i. describe and demonstrate the method of assessing patients with medical complaints or signs and symptoms
 - ii. introduction to the care of the medical patient
 - e. Detailed Physical Exam
 - i. knowledge and skills required to continue the assessment and treatment of the patient
 - f. On-Going Assessment
 - i. importance of trending, recording changes in the patient's condition
 - ii. reassessment of interventions to ensure appropriate care
 - g. Communications
 - i. radio communications
 - ii. communication with medical direction
 - iii. verbal communication, interpersonal communication, and quality improvement.
 - h. Documentation
 - i. components of the written report
 - ii. special considerations regarding patient refusal
 - iii. the legal implications of the report, and special reporting situations
 - i. Practical Skills Lab: Patient Assessment
 - i. integration of skills learned thus far
 - ii. determination that the student has the knowledge and skills of assessment necessary to continue with the management of patients with medical complaints and traumatic injuries
 - j. Evaluation: Patient Assessment Module
 - i. written and skills evaluation to determine the student's level of achievement of the cognitive, psychomotor and affective objectives
- 4. Medical/ Behavioral Emergencies and Obstetrics/ Gynecology
 - a. General Pharmacology
 - i. basic knowledge of pharmacology
 - ii. administration of medications given by the EMT-Basic and those used to assist a patient with self-administration
 - b. Respiratory Emergencies

- i. review of respiratory anatomy and physiology
 - ii. assessment of respiratory difficulty and emergency
 - iii. medical care of respiratory problems
 - iv. administration of prescribed inhalers
 - c. Cardiovascular Emergencies
 - i. review of the cardiovascular system
 - ii. introduction to the signs and symptoms of cardiovascular disease
 - iii. administration of a patient's prescribed nitroglycerin
 - iv. use of the automated external defibrillator
 - d. Diabetes/Altered Mental Status
 - i. review of the signs and symptoms of altered level of consciousness
 - ii. emergency medical care of a patient with signs and symptoms of altered mental status
 - iii. history of diabetes
 - iv. administration of oral glucose
 - e. Allergies
 - i. teaches the student to recognize the signs and symptoms of an allergic reaction
 - ii. assist the patient with a prescribed epinephrine auto-injector
 - f. Poisoning/Overdose
 - i. signs and symptoms of poisoning and overdose.
 - ii. information on the administration of activated charcoal
 - g. Environmental Emergencies
 - i. recognizing the signs and symptoms of heat and cold exposure
 - ii. emergency medical care of these conditions
 - iii. aquatic emergencies
 - iv. bites and stings
 - h. Behavioral Emergencies
 - i. develops the student's awareness of behavioral emergencies
 - ii. management of the disturbed patient
 - iii. restraining the combative patient will also be taught in this lesson
 - i. Obstetrics/Gynecology
 - i. anatomical and physiological changes that occur during pregnancy
 - ii. demonstrate normal and abnormal deliveries
 - iii. summarize signs and symptoms of common gynecological emergencies
 - iv. neonatal resuscitation
 - j. Practical Skills Lab: Medical/Behavioral Emergencies and Obstetrics/Gynecology
 - i. integrates knowledge and skills learned thus far in this practical lab
 - ii. student assessment and treatment of a variety of patients with various medical complaints
 - k. Evaluation: Medical/Behavioral Emergencies and Obstetrics/Gynecology
 - i. written and skills evaluation to determine the student's level of achievement of the cognitive, psychomotor and affective objectives
5. Trauma
- a. Bleeding and Shock
 - i. review of the cardiovascular system
 - ii. care of the patient with internal and external bleeding
 - iii. signs and symptoms of shock (hypoperfusion)
 - iv. the emergency medical care of shock (hypoperfusion).
 - b. Soft Tissue Injuries
 - i. anatomy of the skin and the management of soft tissue injuries
 - ii. management of burns
 - iii. techniques of dressing and bandaging wounds
 - c. Musculoskeletal Care
 - i. review of the musculoskeletal system
 - ii. recognition of signs and symptoms of a painful, swollen, deformed extremity
 - iii. splinting
 - d. Injuries to the Head and Spine
 - i. anatomy of the nervous system
 - ii. anatomy the skeletal system.
 - iii. injuries to the spine and head, including mechanism of injury
 - iv. signs and symptoms of injury

- v. assessment of injury
- vi. emergency medical care
- vii. use of cervical immobilization devices and short and long back boards demonstrated by the instructor and students
- viii. helmet removal and infant and child considerations.
- e. Practical Skills Lab: Trauma
 - i. practice of the assessment
 - ii. management of patients with traumatic injuries.
- f. Evaluation: Trauma Module
 - i. written and skills evaluation to determine the student's level of achievement of the cognitive, psychomotor and affective objectives
- 6. Infants and Children
 - a. Basics
 - i. the developmental and anatomical differences in infants and children
 - ii. common medical and trauma situations
 - iii. infants and children dependent on special technology
 - iv. challenges for EMS providers in dealing with an ill or injured infant or child
 - b. Practical Skills Lab: Infants and Children
 - i. interaction with infants and children
 - ii. practice knowledge and skills learned concerning this special population
 - c. Evaluation: Infants and Children
 - i. written and skills evaluation to determine the student's level of achievement of the cognitive, psychomotor and affective objectives from this module of instruction.
- 7. Operations
 - a. Ambulance Operations
 - i. overview of the knowledge needed to function in the prehospital environment
 - ii. responding to a call
 - iii. emergency vehicle operations
 - iv. transferring patients
 - v. phases of an ambulance call
 - b. Gaining Access
 - i. overview of rescue operations
 - ii. roles and responsibilities at a crash scene
 - iii. equipment
 - iv. gaining access
 - v. removing the patient
 - c. Overviews
 - i. hazardous materials
 - ii. incident management system
 - iii. mass casualty situations
 - iv. basic triage
 - d. Evaluation: Operations
 - i. written and skills evaluation to determine the student's level of achievement of the cognitive, psychomotor and affective objectives

Methods of Instruction

Methods of Instruction

Types	Examples of learning activities
Activity	
Discussion	Case Studies
Field Experience	Ride-along for 12 hours in a EMS clinical setting, ER Observation for 12 hours. With an overall total of 10 patient assessment contacts.
Lab	Title 22 EMT skills, patient assessments, and manipulative EMT skills
Lecture	
Observation and Demonstration	

Methods of Evaluation

Methods of Evaluation

Types	Examples of classroom assessments
Exams/Tests	May include both objective and essay style questions as well as a Manipulative Skills Exam. Final Exam - Multiple Choice, True/ False, Matching, Essay, and Manipulative Skills Exam Mid Term - Multiple Choice, True/ False, Matching, Essay, and Manipulative Skills Exam
Quizzes	After each unit of study, may include objective, essay, and manipulative skills.
Oral Presentations	Group Poster Presentations
Simulation	Scenario based simulation evaluations using the EMT Rubric
Work Assessments	Group Tactile Learning Projects
Lab Activities	Manipulative Skills Assessments as outlined by California Title 22. Please see attached Skills Evaluation Sheet
Other	Attendance: Students are allowed to miss no more than two class sessions. Manipulative Skills Assessments: There are 14 skill sets the student must perform proficiently per CA Title 22 and U.S. DOT established standards to pass this course. The sets will include but may not be limited to (based upon possible changes to U.S. DOT or CA Title 22 regulations): Clinical All students must participate in at least 12-hours of ride-along with an ambulance crew or transporting agency and 12 hours within an Emergency Department and provide a written report on the patient contacts (minimum of 10).

Assignments

Reading Assignments

Selected reading of textbook, peer reviewed journals, and hand-outs related to Emergency Medical Care.

For Example:

1. Read pages 100-147 in Emergency Care in the Streets covering the laws and regulations governing the EMT.
2. Choose a peer reviewed EMS journal article which focuses on cardiopulmonary arrest in pediatric patients.

Writing Assignments

1. Ride-Along Report

Participate in a 12-hour ride-along with a fire district or private ambulance company as well as a 12-hour Emergency Room Observation. You should provide a written chronological report of all patient contacts encountered during the ride-along and ER observation that includes the age of the patient, gender, chief complaint, assessment, and treatment plan administered.

2. Example of a question that could be asked on the mid-term or final are: Which of the following MOST accurately defines an allergic reaction?

- A. An exaggerated immune system response to any substance
- B. Destruction of the immune system by an external substance
- C. A release of erythrocytes in response to a foreign substance
- D. A direct negative effect on the body by an external substance

Other Assignments

Problem Solving/Performance Assignments:

1. Skill Sets:

There are 14 skill sets the student must perform proficiently per CA Title 22 and U.S. DOT established standards to pass this course. The sets will include but may not be limited to (based upon possible changes to U.S. DOT or CA Title 22 regulations):

- A. Patient Assessment/Management - Trauma
- B. Patient Assessment/Management - Medical
- C. Airway, Oxygen, and Ventilation Skills/Upper Airway Adjuncts and Suction
- D. Oxygen Administration
- E. Bag-Valve-Mask/Apneic Patient

F. Mouth to Mask with Supplemental Oxygen

G. Bleeding Control/Shock Management

H. Spinal Immobilization/Supine Patient

I. Spinal Immobilization/Seated Patient

J. Immobilization Skills/Traction Splinting

K. Cardiac Arrest/AED

L. Immobilization Skills/Joint Injury

M. Immobilization Skills/Long Bone Injury

N. Ventilatory Management

2. Simulation Exercises: Simulation exercises are designed to test the student's ability to integrate the course's didactic and kinesthetic components in order to deliver appropriate out-of-the-hospital patient care at the EMT-Basic level. Examples of the scenarios a student may be asked to address are:

A. Medical:

Respond code 3 to the local high school for shortness of breath. Upon arrival you find a 15-year-old female complaining of difficulty breathing. The patient presents in the tripod position and is speaking in 2-word sentences. You should conduct an assessment, formulate a treatment plan, organize the responders, transport the patient to the hospital, reassess the treatment plan, and present the treatment plan and assessment findings to the staff at the Emergency Department. At the end of the simulation, you will give an oral report to the proctor explaining the logic and rationale behind the assessment you made, and the treatment plan you developed and administered.

B. Trauma:

Respond code 3 to a vehicle accident Hwy 29 at Yountville Crossroads for a 2-vehicle accident with 3 patients. One person has an open head injury, another has a tension pneumothorax, and the third has a fractured mid-shaft femur. Triage and prioritize the treatment plan for these three individuals, organize the first responders, conduct the treatment, reassess and evaluate the treatment, and provide an oral report on the patients' condition to the Emergency Department. At the end of the simulation, you will give an oral report to the proctor explaining the logic and rationale behind the assessment you made, and the treatment plan you developed and administered.

SECTION F - Textbooks and Instructional Materials

Material Type

Textbook

Author

Joseph J. Mistovich, MEd, NRP

Title

Prehospital Emergency Care

Edition/Version

12th

Publisher

Pearson/Brady Publisher

Year

2024

Material Type

Other required materials/supplies

Description

1. Lab Pack
2. Uniform

Course Codes (Admin Only)

CB00 State ID

CCC000541808

CB24 Program Course Status

Program Applicable

Allow Pass/No Pass

Yes

Only Pass/No Pass

No