

EMC 104 Course Outline as of Fall 2009**CATALOG INFORMATION**

Dept and Nbr: EMC 104 Title: EMT BASIC
 Full Title: Emergency Medical Technician Basic
 Last Reviewed: 3/28/2011

Units	Course Hours per Week		Nbr of Weeks		Course Hours Total	
Maximum	5.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	5.00	Lab Scheduled	3.00	9	Lab Scheduled	52.50
		Contact DHR	3.00		Contact DHR	52.50
		Contact Total	9.00		Contact Total	157.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00

Total Student Learning Hours: 262.50

Title 5 Category: AA Degree Applicable
 Grading: Grade Only
 Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP
 Also Listed As:
 Formerly: EMC 274

Catalog Description:

Basic level course primarily designed to meet the California State Department of Health lecture requirements for the emergency medical technician who functions on an operational ambulance. Students are able to apply principles of anatomy, physiology and communications as they relate to the assessment of the sick and injured and rendering pre-hospital basic life support. Students will apply the above knowledge to develop manipulative skills necessary to the practice of an Emergency Medical Technician Basic. Students must be 18 years of age by course completion to be eligible for the State Department of Health certification.

Prerequisites/Corequisites:

Course Completion of EMC 100 (or EMC 290)

Recommended Preparation:

Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Student must have a current certification in Health Care Provider CPR.

Schedule of Classes Information:

Description: Requirement for California EMT Basic certification. Students will be required to attend scheduled weekend activities. Must be 18 years of age by course completion to be eligible

for state certification. (Grade Only)

Prerequisites/Corequisites: Course Completion of EMC 100 (or EMC 290)

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment: Student must have a current certification in Health Care Provider CPR.

Transfer Credit:

Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	Area	Effective:	Inactive:
CSU GE:	Transfer Area	Effective:	Inactive:

IGETC:	Transfer Area	Effective:	Inactive:
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CSU Transfer:	Effective:	Inactive:
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UC Transfer:	Effective:	Inactive:
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CID:

Certificate/Major Applicable:

Certificate Applicable Course

COURSE CONTENT

Outcomes and Objectives:

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

1. Demonstrate knowledge of the Emergency Medical System (EMS) at the state and county level to include the medical-legal responsibilities of the Emergency Medical Technician (EMT).
2. Identify the basic anatomy and physiology of the:
 - A. Respiratory system
 - B. Cardiovascular system
 - C. Musculoskeletal system
 - D. Nervous System
 - E. Digestive system
3. Recognize a minimum of five mechanisms, signs and symptoms of the pathophysiology as related to basic emergency care:
 - A. Respiratory system
 - B. Cardiovascular system
 - C. Central nervous system
 - D. Integumentary systems
 - E. Musculoskeletal system
4. Identify five pre-hospital modalities appropriate for diagnoses involving the systems:
 - A. Respiratory system
 - B. Cardiovascular system
 - C. Central nervous system
 - D. Integumentary
 - E. Musculoskeletal system
5. Recognize minimum of three signs and symptoms and identify

pre-hospital treatment of:

- A. Diabetic emergencies
 - B. Environmental emergencies
 - C. Seizures
 - D. Behavioral emergencies
 - E. Communicable diseases
6. Identify the basic anatomy and physiology of normal childbirth, and recognize three complications of childbirth.
 7. Identify at least two medical conditions specific to infant/pediatric and geriatric patients.
 8. Define and apply five principles of triage and multi casualty incidents.
 9. Demonstrate effective verbal and written communication skills as they relate to the Emergency Medical Services.
 10. Recognize at least three components of emergency vehicle operation and safety.
 11. Demonstration of good body mechanics for moving and lifting
 12. Provide safe and appropriate techniques in moving victims involved in motor vehicle accidents.
 13. Apply knowledge of accident scene management.
 14. Utilize rescue equipment.
 15. Apply principles of immobilization techniques.

Topics and Scope:

1. Overview
 - A. EMS system
 - B. Role and responsibilities of EMT
2. First Principles of Emergency Care
 - A. Medical and legal
 - B. Communications and crisis intervention
3. Patient Assessment
 - A. Primary and secondary exam
 - B. Vital signs
 - C. Subjective objective assessment plan
4. Respiratory System
 - A. Anatomy
 - B. Physiology
 - C. Oxygen therapy
5. Pathophysiology systems of the Respiratory System
 - A. Disease processes
 - B. Assessment and treatment
6. Cardiovascular System
 - A. Anatomy
 - B. Physiology
7. Pathophysiology of the Cardiovascular System
 - A. Disease processes
 - B. Assessment and treatment
8. Shock
 - A. Classification
 - B. Assessment and treatment
9. Central Nervous System

- A. Anatomy and physiology
- B. Assessment and treatment
- 10. Integumentary system
 - A. Anatomy and physiology
 - B. Assessment and treatment
- 11. Muscular Skeletal System
 - A. Anatomy and physiology
 - B. Assessment and treatment
- 12. Altered Level of Consciousness-Medical Emergencies
 - A. Diabetes
 - B. Seizures
 - C. Stroke
- 13. Childbirth
 - A. Anatomy and physiology
 - B. Delivery procedure
 - C. Complications
- 14. Introduction to Ambulance
 - A. Interface with advanced life support
 - B. IV therapy
 - C. Safe driving
 - D. Patient transport
- 15. Behavioral Emergencies - critical incident stress
- 16. Infectious disease
 - A. Hepatitis
 - B. AIDS
- 17. Environmental Emergencies
 - A. Heat exposure
 - B. Cold exposure
 - C. Insect/spider/snakes
- 18. Pediatric/Geriatric
 - A. Abuse
 - B. Sudden infant death syndrome
 - C. Unique physiology
- 19. Auto Extrication
 - A. Size up
 - B. Stabilization
 - C. Access/Disentanglement
 - D. Patient assessment/care
 - E. Immobilization
 - F. Transport
- 20. Patient moving and lifting
 - A. Good body mechanics
 - B. Moving/lifting techniques

Assignment:

1. Read approximately 30 pages per week.
2. Complete 3 case studies found in the syllabus of approximately 3 pages each and answer study questions.
3. Participate in 16 hours clinical time on an approved ambulance.
4. Complete report describing patient contact and clinical experience.
5. Weekly demonstration of skills.

6. Quizzes and exams will include:
 2 lab quizzes
 7 module exams
 Midterm skills exam
 Written and skills final exam

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Written homework, clinical report	Writing 5 - 15%
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Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

None	Problem solving 0 - 0%
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Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Performance exams	Skill Demonstrations 25 - 40%
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Exams: All forms of formal testing, other than skill performance exams.

Multiple choice, Completion	Exams 25 - 60%
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Other: Includes any assessment tools that do not logically fit into the above categories.

clinical attendance	Other Category 10 - 20%
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Representative Textbooks and Materials:

- Emergency Care and Course Compass, Brady, 10th ed.
 Instructor Prepared Material (EMT Basic Syllabus)