

CATALOG INFORMATION

Dept and Nbr: EMC 274 Title: EMT - LECTURE/LAB
Full Title: Emergency Medical Technician Lecture/Lab
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: HLC 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 EMT. Students must be 18 years of age by course completion to be eligible for the State Dept of Health certification. Students are not permitted to take FIRE 208.1 concurrently with this course.

Prerequisites/Corequisites:
EMC 290 or equivalent; current certification in CPR.

Recommended Preparation:
Eligibility for ENGL 100A or ENGL 100.

Limits on Enrollment:

Schedule of Classes Information:
Description: Lecture/lab requirement for EMT 1A certification. Students will be required to attend assigned weekend activities as scheduled. Must be 18 years by course completion to be

eligible for certification. Students may not enroll in Fire 208.1 concurrent with course. (Grade Only)

Prerequisites/Corequisites: EMC 290 or equivalent; current certification in CPR.

Recommended: Eligibility for ENGL 100A or ENGL 100.

Limits on Enrollment:

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 in the:
 - A. Respiratory system
 - B. Cardiac system
 - C. Central nervous system
 - D. Soft tissue system
 - E. Musculoskeletal system
4. Identify five pre-hospital modalities appropriate for diagnoses involving the:
 - A. Respiratory system
 - B. Cardiac system
 - C. Central nervous system
 - D. Soft tissue system
 - E. Musculoskeletal system

5. Recognize minimum of three signs and symptoms and identify pre-hospital treatment of the following:
 - 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. Skills Introduction; apply 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/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 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/treatment of spinal and head injuries
10. Muscular Skeletal System
 - A. Anatomy and physiology
 - B. Assessment/treatment of fractures.
11. Altered Level of Consciousness-Medical Emergencies
 - A. Diabetes
 - B. Seizures
 - C. Stroke
12. Childbirth
 - A. Anatomy and Physiology
 - B. Delivery procedure
 - C. Complications
13. Introduction to Ambulance
 - A. Interface with advanced life support
 - B. IV therapy
 - C. Safe driving
14. Behavioral Emergencies - critical incident stress
15. Infectious Disease
 - A. Hepatitis
 - B. AIDS et al
16. Environmental Emergencies
 - A. Heat exposure
 - B. Cold exposure
 - C. Insect/spider/snakes
17. Pediatric/Geriatric
 - A. Abuse
 - B. SIDS
 - C. Unique physiology
18. Auto Extrication
 - A. Size up
 - B. Stabilization
 - C. Access/Disentanglement
 - D. Patient assessment/care
 - E. Immobilization
 - F. Transport

Assignment:

1. Read approximately 50 pages per week.
2. Complete 3 case studies found in the syllabus of approximately 3 pages each and answer study questions.
3. Participate in 8 hours clinical time in an emergency department, and 8 hours clinical time on an approved Sonoma County Ambulance.
4. Complete one page impression paper describing patient contact and clinical experience.
5. Weekly (16) demonstration of skills requiring competed skill sheet to be turned in.
6. Quizzes and exams will include:
 - 2 lab quizzes
 - 7 module exams

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, Term papers

Writing
5 - 15%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework problems

Problem solving
5 - 15%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Performance exams

Skill Demonstrations
25 - 40%

Exams: All forms of formal testing, other than skill performance exams.

Multiple choice, essay exam

Exams
25 - 50%

Other: Includes any assessment tools that do not logically fit into the above categories.

clinical attendance

Other Category
10 - 20%

Representative Textbooks and Materials:

Emergency Care and Course Compass, Brady, 9th ed. 2002 edition
Instructor Prepared Material (EMT 1A Syllabus)