## EMC 270A Course Outline as of Summer 2003

# **CATALOG INFORMATION**

Dept and Nbr: EMC 270A Title: EMT-P DIDACTIC Full Title: Emergency Medical Technician - Paramedic Didactic Last Reviewed: 3/12/2012

Units		Course Hours per Wee	ek	Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	14.00	Lecture Scheduled	16.00	20	Lecture Scheduled	320.00
Minimum	14.00	Lab Scheduled	8.00	17	Lab Scheduled	160.00
		Contact DHR	0		Contact DHR	0
		Contact Total	24.00		Contact Total	480.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 640.00

Total Student Learning Hours: 1120.00

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:	

## **Catalog Description:**

Course designed to meet California State Health and Safety Code training requirements for emergency medical technician-paramedic. Students are able to apply the principles of anatomy, physiology, pathophysiology, clinical symptoms and diagnosis as they pertain to pre-hospital emergency medical care of the sick and injured. The first course leading to state certification as an EMT-paramedic.

## **Prerequisites/Corequisites:**

Course Completion of EMC 109 ( or EMC 260) and Course Completion of ANAT 58 and Course Completion of EMC 114 ( or EMC 275.1 or HLC 275B)

## **Recommended Preparation:**

Eligibility for English 1A; Completion of CSKL372

## **Limits on Enrollment:**

California EMT-1 Certificate; Current CPR for Health Care Providers; Ability to lift, carry and balance in excess of 125 pounds. Current immunizations in accordance with standard guidelines.

## **Schedule of Classes Information:**

Description: This is the first course leading to licensure as an EMT-Paramedic in California. (Grade Only)

Prerequisites/Corequisites: Course Completion of EMC 109 ( or EMC 260) and Course Completion of ANAT 58 and Course Completion of EMC 114 ( or EMC 275.1 or HLC 275B) Recommended: Eligibility for English 1A; Completion of CSKL372 Limits on Enrollment: California EMT-1 Certificate; Current CPR for Health Care Providers; Ability to lift, carry and balance in excess of 125 pounds. Current immunizations in accordance with standard guidelines. Transfer Credit: Repeatability: Two Repeats if Grade was D, F, NC, or NP

# **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

AS Degree: CSU GE:	Area Transfer Area	Effective: Effective:	Inactive: Inactive:
<b>IGETC:</b>	Transfer Area	Effective:	Inactive:
CSU Transfer	Effective:	Inactive:	
UC Transfer:	Effective:	Inactive:	

CID:

## **Certificate/Major Applicable:**

Certificate Applicable Course

## **COURSE CONTENT**

## **Outcomes and Objectives:**

COURSE OBJECTIVES ARE WRITTEN TO CONFORM WITH THOSE STANDARDS OUTLINED

IN CHAPTER 1260 OF THE STATUTES OF THE HEALTH AND SAFETY CODE AND TITLE 22 DIVISION 9, PREHOSPITAL EMERGENCY MEDICAL SERVICES OF THE CALIFORNIA ADMINISTRATIVE CODE.

OBJECTIVES LISTED ARE FOR THE EIGHT STATE MANDATED MODULES:

At the completion of the course, the paramedic student will be able to:

1. Describe the roles and responsibilities of a Paramedic within an EMS System.

2. Apply the basic concepts of development, pathophysiology and pharmacology to assessment and management of patients with a medical or trauma emergency patients

3. Calculate formulas and demonstrate administration of medications within scope of practice

4. Demonstrate effective written and verbal communication with patients and members of health care team

5. Discuss and demonstrate establishing and /or maintaining a patent airway, oxygenate, and ventilate a patient

6. Define and apply components of medical history and examination to a patient with a medical or traumatic emergency

7. Perform a comprehensive physical history and exam on any emergency patient

8. Integrate pathophysiological principles and assessment findings to

formulate a field impression and implement the treatment plan for the adult or pediatric trauma patient, medical patient or chronically ill patient

9. Identify components of scene safety and management

10. Recognize components of 12 Lead EKG and its significance in prehospital care

## **Topics and Scope:**

Module 1: Prehospital Care Environment

a. Roles and Responsibilities

b. Importance of Personal Wellness

c. Injury Prevention Activities to reduce death, disabilities and health care cost.

d. Legal Issues as they apply to out-of-hospital environment

e. Ethics and Decision making as they apply to out-of-hospital environment

f. Assessment and Management of emergency patients

g. Formulating a field impression and implementing a

pharmacologic management plan

h. Accessing the venous circulation and administering medications

i. Effective communication with patients while providing care

j. Physiological, psychological, and sociological changes

throughout human development with assessment and communication strategies for patients of all ages

Module 2: Airway Management

a. Anatomy and physiology of the respiratory system

b. Basic and advanced life support - airway adjuncts

c. Principles of oxygenation and ventilation

d. Intubation and maintaining airways

Module 3: Patient Assessment

a. Techniques to obtain a medical history from patient

b. Pathophysiological significance of physical exams findings

c. Principles of history taking and techniques of physical exam

to perform patient assessment

d. Clinical decision making to help form field impression

e. Verbal dissemination of patient information, in person or over radio

f. Effective documentation of patient assessment, care and transport

Module 4: Trauma Patient

a. Pathophysological significance of traumatic injuries

b. Principles of kinematics to enhance the patient assessment and predict injuries based on the mechanism of injury

c. Recognition and treatment plan for the patient with:

1. shock or hemorrhage

2. soft tissue injury

3. burn injury

4. suspected head injury

5. suspected spinal injury

6. thoracic injury

7. suspected abdominal trauma

- 8. musculskeletal inury
- Module 5: Medical Patient
- a. Anatomy and physiological review of systems
- b. Recognition and treatment plan for the patient with
- 1. respiratory problem
- 2. cardiovascular disease
- 3. neurological problem
- 4. endocrine problem
- 5. allergic or anaphylactic reaction
- 6. gastroenterologic problem
- 7. renal or urologic problem
- 8. toxic exposure
- 9. hematopoietic system problem
- 10.environmentally induced or exacerbated medical or traumatic condition
- 11.infectious and communicable diseases
- 12.behavioral emergencies
- 13.gynecological emergency
- 14.normal or abnormal labor

Module 6: Patient with special needs treatment plan for

- 1. the neonatal patient
- 2. the pediatric patient
- 3. the geriatric patient
- 4. the patient who has sustained abuse or assault
- 5. for diverse patients and those who face physical, mental, social and financial challenges
- 6. the acute deterioration of chronic care patient
- Module 7: Scene management
- a. Safe and effective ground and air medical transport
- b. Multiple casualty incident management techniques
- c. Rescue awareness from water, hazardous atmospheres, trenches,
- highways and hazardous terrain
- d. Hazardous materials emergencies
- e. Safe operation at crime scenes and other emergencies

## Assignment:

Assignments include:

- a. Reading approximately 50 pages per week from assigned texts
- b. Memorization of state mandated policies and protocols as assigned
- c. Develop drug profiles of assigned weekly drugs
- d. Memorize all protocols as assigned
- e. Study for daily quizzes and 5 division exams
- f. Complete EKG worksheets as assigned

## 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.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.

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

senario discussions, demos essay, research projs

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

Class performances, Performance exams, Paramedic psychomotor skills as defined by CA regs

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

Multiple choice, True/false, Matching items

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

None

## **Representative Textbooks and Materials:**

Bledsoe et al, Paramedic Principles and Practice, 2001, Prentice Hall Publishing

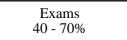
Cherry, Drug Guide for Paramedic, 2001 Prentice-Hall Publishing Walraven, Basic Arrhythmias 1999, 5th ed, Prentice-Hall Publishing Burns, Pathophycology, 1998, Appleton & Lange Publishing Gausche-Hill, Pediatric Education for PreHospital Professionals, 2001, Jones& Bartlett

Instructor prepared materials.

Writing 0 - 0%	

Problem solving 5 - 10%

Skill Demonstrations 25 - 50%



Other Category
0 - 0%