

**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 Week |                   | Nbr of Weeks |    | Course Hours Total |        |
|---------|-----------------------|-------------------|--------------|----|--------------------|--------|
| 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:**

|                      |                      |            |           |
|----------------------|----------------------|------------|-----------|
| <b>AS Degree:</b>    | <b>Area</b>          | Effective: | Inactive: |
| <b>CSU GE:</b>       | <b>Transfer Area</b> | Effective: | Inactive: |
| <b>IGETC:</b>        | <b>Transfer Area</b> | Effective: | Inactive: |
| <b>CSU Transfer:</b> |                      | Effective: | Inactive: |
| <b>UC Transfer:</b>  |                      | 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 pre-hospital 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. Pathophysiological 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. musculoskeletal injury

#### 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.

Writing  
0 - 0%

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

senario discussions, demos essay, research projs

Problem solving  
5 - 10%

**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

Skill Demonstrations  
25 - 50%

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

Multiple choice, True/false, Matching items

Exams  
40 - 70%

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

None

Other Category  
0 - 0%

### **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.