

**EMC 270A Course Outline as of Fall 1997****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	17.5	Lecture Scheduled	280.00
Minimum	14.00	Lab Scheduled	8.00	2	Lab Scheduled	140.00
		Contact DHR	0		Contact DHR	0
		Contact Total	24.00		Contact Total	420.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 560.00

Total Student Learning Hours: 980.00

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:**

Eligibility for ENGL 100A or ENGL 100. Score of 25 on computational math exam. Students scoring less than 25 must complete CSKL 374 (formerly CSKL 373B) or equivalent. Math prerequisite may also be met by any math course from Area B of the General Education pattern. EMC 274 (formerly HLC 274) or equivalent (must be currently certified California EMT-1). EMC 275.1 (formerly HLC 275B) or equivalent. ANAT 58 (previously ANAT 52) or equivalent; possess current CPR card; must be admitted to program.

**Recommended Preparation:**

Six months of field experience with an EMS provider prior to start of class; HLC 60.

**Limits on Enrollment:**

### **Schedule of Classes Information:**

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

Prerequisites/Corequisites: Eligibility for ENGL 100A or ENGL 100. Score of 25 on computational math exam. Students scoring less than 25 must complete CSKL 374 (formerly CSKL 373B) or equivalent. Math prerequisite may also be met by any math course from Area B of the General Education pattern. EMC 274 (formerly HLC 274) or equivalent (must be currently certified California EMT-1). EMC 275.1 (formerly HLC 275B) or equivalent. ANAT 58 (previously ANAT 52) or equivalent; possess current CPR card; must be admitted to program.

Recommended: Six months of field experience with an EMS provider prior to start of class; HLC 60.

Limits on Enrollment:

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 1980 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 SIX STATE MANDATED DIVISIONS:

DIVISION 1: PREHOSPITAL ENVIRONMENT

UPON COMPLETION OF THIS UNIT THE STUDENT WILL BE ABLE TO;

1. IDENTIFY THE ROLES & RESPONSIBILITIES OF PERSONNEL OF EMS
2. LIST THE COMPONENTS OF THE EMS SYSTEM AND DISCUSS THE FUNCTIONS
3. IDENTIFY AND DISCUSS THE MEDICAL/LEGAL CONSIDERATIONS AS THEY APPLY TO  
THE EMT-P
4. DEMONSTRATE COMMUNICATION SKILLS NEEDED IN PREHOSPITAL SETTING
5. IDENTIFY PHASES OF RESCUE & EXTRICATION. DEMONSTRATE EXTRICATION

## TECHNIQUES

6. DEFINE LOCAL POLICY OF MAJOR INCIDENT RESPONSE

7. IDENTIFY FACTORS OF CRITICAL INCIDENT STRESS

## DIVISION 2: PREPARATORY KNOWLEDGE & SKILLS

UPON COMPLETION OF THIS UNIT, THE STUDENT WILL BE ABLE TO:

1. DEFINE MEDICAL TERMINOLOGY APPROPRIATE FOR PREHOSPITAL PERSONNEL

2. DISCUSS ANATOMY & PHYSIOLOGY THAT PERTAINS TO A PATIENT ASSESSMENT

3. DEMONSTRATE COMPLETE PATIENT ASSESSMENT FOR A SIMULATED PATIENT

4. IDENTIFY AND DISCUSS ANATOMY AND PHYSIOLOGY THAT PERTAINS TO THE AIR

WAY AND THE PROCESS OF VENTILATION

5. DEMONSTRATE ALL METHODS OF DELIVERING OXYGEN THERAPY TO PATIENTS AS

IT RELATES TO THE PREHOSPITAL SETTING

6. DISCUSS PATHOPHYSIOLOGY OF SHOCK

7. DEMONSTRATE ABILITY TO ESTABLISH VENOUS ACCESS

8. IDENTIFY AND DESCRIBE APPROVED CHEMICALS FOR USE BY EMT-P

9. CALCULATE DRUG DOSES AND IV DRIP RATES

10. DEMONSTRATE ADMINISTRATION OF CHEMICALS AS PRESCRIBED

## DIVISION 3: TRAUMA

UPON COMPLETION OF THIS UNIT, THE STUDENT WILL BE ABLE TO:

1. IDENTIFY ALL SOFT TISSUE INJURIES

2. IDENTIFY ALL MUSCULOSKELETAL INJURIES

3. DEMONSTRATE SKILLS NECESSARY TO SPLINT/IMMOBILIZE ALL TYPES OF SOFT

TISSUE AND MUSCULOSKELETAL INJURIES

4. IDENTIFY PATHOPHYSIOLOGY, MECHANISM OF INJURY, PATIENT ASSESSMENT

COMPLICATIONS OF 5 INJURIES TO THE CHEST.

5. DEMONSTRATE PRE HOSPITAL MANAGEMENT OF CHEST TRAUMA

6. IDENTIFY PATHOPHYSIOLOGY, MECHANISM OF INJURY, PATIENT ASSESSMENT &

COMPLICATIONS OF ABDOMINAL TRAUMA

7. DEMONSTRATE PRE HOSPITAL MANAGEMENT OF ABDOMINAL TRAUMA

8. IDENTIFY THE PATHOPHYSIOLOGY, MECHANISM OF INJURY, PATIENT ASSESSMENT

AND COMPLICATIONS OF HEAD & SPINAL CORD TRAUMA

9. DEMONSTRATE PREHOSPITAL MANAGEMENT OF THE ABOVE

10. DEMONSTRATE MANAGEMENT OF A PATIENT WITH MULTI SYSTEM TRAUMA

11. IDENTIFY PATHOPHYSIOLOGY, MECHANISMS, PATIENT ASSESSMENT AND COMP-

LICATIONS OF BURNS

12. DEMONSTRATE PREHOSPITAL MANAGEMENT OF A PATIENT WITH BURNS

## DIVISION 4: MEDICAL EMERGENCIES

UPON COMPLETION OF THIS UNIT, THE STUDENT WILL BE ABLE TO:

1. IDENTIFY THE STRUCTURES, FUNCTIONS OF THE RESPIRATORY SYSTEM

2. DISCUSS PATHOLOGY AND TREATMENT MODALITIES FOR RESPIRATORY ILLNESSES

3. IDENTIFY THE STRUCTURES & FUNCTIONS OF THE CARDIOVASCULAR

## SYSTEM

4. DISCUSS THE PATHOLOGY & TREATMENT MODALITIES FOR DISEASES OF THE CV

## SYSTEM

5. IDENTIFY COMPONENTS OF THE ELECTROCARDIOGRAM

6. RECOGNIZE NORMAL AND ABNORMAL CARDIAC RHYTHMS

7. IDENTIFY AND DISCUSS EMERGENCIES OF THE ENDOCRINE SYSTEM

8. IDENTIFY AND DISCUSS EMERGENCIES OF THE NERVOUS SYSTEM

9. IDENTIFY AND DISCUSS EMERGENCIES OF THE GASTROINTESTINAL, GENITO-URINARY, AND REPRODUCTIVE SYSTEMS.

10. DISCUSS ANAPHYLAXIS

11. DISCUSS ISSUES OF ALCOHOLISM, AND DRUG ABUSE AS THEY RELATE TO PRE HOSPITAL CARE

12. DISCUSS INFECTIOUS DISEASE AND IMPLICATIONS IN PREHOSPITAL SETTING

13. IDENTIFY & DISCUSS ENVIRONMENTAL INJURIES

14. IDENTIFY AND DISCUSS DEVELOPMENTAL STAGES OF PEDIATRIC PATIENT

15. IDENTIFY & DISCUSS ILLNESSES SPECIFIC TO PEDIATRIC PATIENTS IN THE PRE HOSPITAL SETTING

16. GIVEN A SIMULATED PATIENT WITH A MEDICAL EMERGENCY, DEMONSTRATE

ASSESSMENT AND TREATMENT IN A PRE HOSPITAL SETTING

## DIVISION 5: OBSTETRICAL, GYNECOLOGICAL, & NEONATAL EMERGENCIES

1. IDENTIFY & DISCUSS ANATOMY & PHYSIOLOGY AS IT RELATES TO PATIENT HAVING A PREHOSPITAL DELIVERY

2. IDENTIFY & DISCUSS OBSTETRICAL AND GYNOCOLOGICAL EMERGENCIES

3. DEMONSTRATE ASSISTING A PREHOSPITAL DELIVERY

4. IDENTIFY NEONATE EMERGENCIES AND DEMONSTRATE MANAGEMENT OF SAME

## DIVISION 6: SPECIAL PATIENT PROBLEMS

UPON COMPLETION OF THIS UNIT, THE STUDENT WILL BE ABLE TO:

1. IDENTIFY & DISCUSS THE PREHOSPITAL CARE OF PATIENTS EXPERIENCING BEHAVIORAL EMERGENCIES

2. DEMONSTRATE PRE HOSPITAL MANAGEMENT OF THE ABOVE

## Topics and Scope:

DIVISION 1; PRE-HOSPITAL ENVIRONMENT; SECTION 1 ROLES AND RESPONSIBILITIES

SECTION 2; EMERGENCY MEDICAL SERVICES SYSTEMS; SECTION 3; MEDICAL/LEGAL

CONSIDERATIONS; SECTION 4; EMERGENCY MEDICAL SERVICES COMMUNICATIONS;

SECTION 5; EXTRICATION AND RESCUE; SECTION 6 MAJOR INCIDENT RESPONSE; SECTION 7; STRESS MANAGEMENT

DIVISION 2; SECTION 1; MEDIAL TERMINOLOGY; SECTION 2; GENERAL PATIENT ASSESSMENT AND INITIAL MANAGEMENT; SECTION 3; AIRWAY AND VENTILATION

SECTION 4; PATHOPHYSIOLOGY OF SHOCK; SECTION 6; GENERAL PHARMACOLOGY;

DIVISION 3; SECTION 1; SOFT TISSUE INJURIES; SECTION 2; MUSCULOSKELETAL INJURIES; SECTION 3 ; CHEST TRAUMA; SECTION 4; ABDOMINAL TRAUMA; SECTION 5; HEAD AND SPINAL CORD TRAUMA; SECTION 6; MULTISYSTEM

INJURIES;  
 SECTION 7; BURNS;  
 DIVISION 4; MEDICAL EMERGENCIES; SECTION 1; RESPIRATORY SYSTEM;  
 SECTION 2; CARDIOVASCULAR SYSTEM; SECTION 3; ENDOCRINE EMERGENCIES;  
 SECTION 4; NERVOUS SYSTEM; SECTION 5; ACUTE ABDOMEN, GENITOURINARY,  
 AND  
 REPRODUCTIVE SYSTEMS; SECTION 6; ANAPHYLAXIS; SECTION 7; TOXICOLOGY,  
 ALCOHOLISM, AND DRUG ABUSE; SECTION 8; INFECTIOUS DISEASES; SECTION 9;  
 ENVIRONMENTAL INJURIES; SECTION 10; PEDIATRICS;  
 DIVISION 5; OBSTETRICAL, GYNECOLOGICAL, NEONATAL EMERGENCIES;  
 DIVISION 6; SPECIAL PATIENT PROBLEMS; SECTION 1; PRE-HOSPITAL CARE OF  
 PATIENTS EXPERIENCING BEHAVIORAL EMERGENCIES; SECTION 2; ASSAULT VI  
 CTIMS;  
 SECTION 3; GERIATRIC PATIENTS; SECTION 4; DISABLED PATIENTS;

### Assignment:

Assignments include approximately 800 pages of reading from the various texts to include:

Analysis of the impact of the paramedic in the prehospital environment of medical practice.

Ability to demonstrate proficiency of related skills as assigned in text and with discussion and practice facilitated by instructor

Ability to recognize and treat variety of trauma and medical related emergencies based on reading, discussion and practical application of skills techniques.

Ability to identify cardiac dysrhythmias through completion of ECG workbook.

### 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.

Exams

Problem solving  
5 - 10%

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

Class performances, Performance exams

Skill Demonstrations  
25 - 50%

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

Multiple choice, True/false, Matching items

Exams  
40 - 75%

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

None

Other Category  
0 - 0%

**Representative Textbooks and Materials:**

PARAMEDIC TEXTBOOK

SANDERS

PUBLISHED BY MOSBY, 1994

PREHOSPITAL DRUG THERAPY ARE IN THE STREETS

GONSOULIN, MOSBY LIFELINE 1994

PALS QUICK REVIEW

AEHLERT, MOSBY 1995

ADVANCE LIFE SUPPORT SKILLS

ALLISON, ET AL MOSBY LIFELINE 1994

ACLS QUICK REVIEW

AEHLERT, MOSBY 1994

BASIC TRAUMA LIFE SUPPORT, 3RD ED

CAMPBELL, MD PRENTICE HALL, 1995

THE ANATOMY COLORING BOOK, 2ND ED

KAPIT & ELSON, HARPER COLLINS, 1993