#### EMC 130D Course Outline as of Fall 2015

## **CATALOG INFORMATION**

Dept and Nbr: EMC 130D Title: PARAMEDIC IV - TRAUMA

Full Title: Paramedic IV - Trauma Emergencies

Last Reviewed: 2/12/2018

Units		Course Hours per Week	]	Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	2.50	Lecture Scheduled	2.00	17.5	Lecture Scheduled	35.00
Minimum	2.50	Lab Scheduled	1.50	3	Lab Scheduled	26.25
		Contact DHR	0		Contact DHR	0
		Contact Total	3.50		Contact Total	61.25
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 70.00 Total Student Learning Hours: 131.25

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:**

Fourth didactic course in a series leading to the completion of paramedic didactic training. Emphasis is on Emergency Medical Services (EMS) Operations and the assessment and treatment of the trauma patient in the pre-hospital environment. Meets standards for both the California Health and Safety Code, Title 22 and the National Emergency Medical Services Education Standards (NEMSES) as published by U.S. Department of Transportation (DOT). This is the final course in series of didactic training as outlined in Title 22.

### **Prerequisites/Corequisites:**

Concurrent Enrollment in EMC 130A, EMC 130B, EMC 130C and EMC 131A (Students must successfully complete each prior course in the sequence to avoid having to repeat the entire sequence.)

### **Recommended Preparation:**

#### **Limits on Enrollment:**

Enrollment in Paramedic Academy

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

Description: Fourth didactic course in a series leading to the completion of paramedic didactic

training. Emphasis is on Emergency Medical Services (EMS) Operations and the assessment and treatment of the trauma patient in the pre-hospital environment. Meets standards for both the California Health and Safety Code, Title 22 and the National Emergency Medical Services Education Standards (NEMSES) as published by U.S. Department of Transportation (DOT). This is the final course in series of didactic training as outlined in Title 22. (Grade Only) Prerequisites/Corequisites: Concurrent Enrollment in EMC 130A, EMC 130B, EMC 130C and EMC 131A (Students must successfully complete each prior course in the sequence to avoid having to repeat the entire sequence.)

Recommended:

Limits on Enrollment: Enrollment in Paramedic Academy

**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:

**CSU Transfer:** Effective: Inactive:

**UC Transfer:** Effective: Inactive:

CID:

## **Certificate/Major Applicable:**

Both Certificate and Major Applicable

# **COURSE CONTENT**

## **Outcomes and Objectives:**

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

- 1. Discuss the importance of the relationship of mechanism of injury to potential traumatic injuries.
- 2. Develop a systematic approach to scene size up and control.
- 3. Integrate knowledge of anatomy, physiology and pathophysiology to the patient who has sustained a traumatic injury.
- 4. Outline steps in trauma assessment and management.
- 5. Given a trauma scenario demonstrate rapid assessment and management of the injured patient.
- 6. Discuss rescue awareness and operations.
- 7. Describe and discuss incident command management and the role of the medical officer.
- 8. Explain the role of the paramedic at the hazardous material incident.
- 9. Discuss unique characteristics and challenges in caring for patients with special circumstances.
- 10. Review paramedic knowledge and skills necessary to function in a pre-hospital environment.

# **Topics and Scope:**

I. Scene Size-Up

- a. Mechanism of injury
- b. Scene safety
- II. ITLS Trauma Assessment
  - a. Initial survey
  - b. Rapid survey
  - c. Focused exam
  - d. Ongoing exam
- III. ITLS Management Skills
  - a. Airway management
  - b. Needle thoracostomy
  - c. Vascular access
- IV. Traumatic Injuries
  - a. Head and neck
  - b. Thorax
  - c. Abdominal
  - d. Musculoskeletal
    - i. Extremity
    - ii. Burns
- V. Special Circumstances
  - a. Pediatrics
  - b. Elderly
  - c. Drug and alcohol
  - d. Trauma arrest
- VI. Medical Incident Management
  - a. Incident Command System (ICS)
  - b. Multiple Casualty Incidents (MCI)
  - c. Terrorist attacks
- VII. Hazardous Materials Incidents
  - a. Size up and scene safety
  - b. Toxicology and contamination review
  - c. Decontamination and protective equipment
  - d. Terrorist attacks
- VIII. Rescue Awareness and Operations
- IX. Review of Didactic Knowledge and Skills

### **Assignment:**

- 1. Reading 50-80 pages per week
- 2. Memorization of 5-10 trauma treatment protocols
- 3. Review 40-50 drug monographs
- 4. Demonstration of 3-10 trauma skills
- 5. Review 30-40 medical skills
- 6. Review content material of EMC130A, 130B, 130C
- 7. 2-5 quizzes
- 8. 5-10 trauma and medical group scenarios
- 9. ITLS written and skills test
- 10. One summative written and skills performance examination
- 11. Title 22 mandated attendance

#### 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.

Trauma group scenarios demonstrating team leadership

Problem solving 5 - 10%

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

Skill performance exams including trauma and medical management

Skill Demonstrations 40 - 50%

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

Quizzes and ITLS written and skills test

Exams 40 - 50%

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

Attendance and participation

Other Category 5 - 10%

## **Representative Textbooks and Materials:**

Prehospital Emergency Pharmacology (6th). B. Bledsoe. Prentice Hall: 2005

ITLS Trauma Life Support (6th). J. Campbell. Prentice Hall: 2007

Paramedic Care -5 (3rd) B. Bledsoe. Prentice Hall: 2009

Drug Reference for EMS Providers (3rd). R. Beck. Delmar: 2003

ALS Version EMS Field Guide (19th). Infor Med: 2011

Instructor prepared materials