

**EMC 133C Course Outline as of Fall 2018****CATALOG INFORMATION**

Dept and Nbr: EMC 133C Title: PARAMEDIC 2A - MEDICAL

Full Title: Paramedic Theory 2A - Medical Emergencies

Last Reviewed: 2/12/2018

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	8.00	Lecture Scheduled	8.75	12	Lecture Scheduled	105.00
Minimum	8.00	Lab Scheduled	8.75	12	Lab Scheduled	105.00
		Contact DHR	0		Contact DHR	0
		Contact Total	17.50		Contact Total	210.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 210.00

Total Student Learning Hours: 420.00

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: EMC 130B

**Catalog Description:**

Third course in a series leading to the completion of paramedic didactic training. Emphasis is on assessment and treatment of cardiac and other medical emergencies in the field care 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).

**Prerequisites/Corequisites:**

Course Completion of EMC 109

**Recommended Preparation:****Limits on Enrollment:**

Enrollment in Paramedic Academy

**Schedule of Classes Information:**

Description: Third course in a series leading to the completion of paramedic didactic training. Emphasis is on assessment and treatment of cardiac and other medical emergencies in the field care 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). (Grade Only)

Prerequisites/Corequisites: Course Completion of EMC 109

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:**

<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:**

Both Certificate and Major Applicable

## **COURSE CONTENT**

**Student Learning Outcomes:**

At the conclusion of this course, the student should be able to:

1. Explain relationship of anatomy and physiology as it relates to the pathophysiology of the patient suffering a medical emergency.
2. Integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical emergency.
3. Integrate comprehensive knowledge of pharmacology to augment a treatment plan for a patient with a medical emergency.
4. Complete the American Heart Association Advanced Cardiac Life Support certification (ACLS).

**Objectives:**

At the conclusion of this course, the student should be able to:

1. Integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the following conditions:
  - A. Respiratory emergencies
  - B. Cardiovascular emergencies
  - C. Neurological emergencies
  - D. Endocrine emergencies
  - E. Allergic reaction and anaphylaxis
  - F. Communicable diseases
  - G. Gastrointestinal emergencies
  - H. Renal and urological emergencies
  - I. Toxicological emergencies
  - J. Behavioral emergencies

K. Gynecological emergencies

L. Obstetrical emergencies including normal and abnormal childbirth

## **Topics and Scope:**

### **I. Respiratory Emergencies**

A. Anatomy/physiology/pathophysiology

B. Chronic obstructive diseases

C. Asthma

D. Assessment and management

### **II. Cardiovascular Emergencies**

A. Anatomy/physiology/pathophysiology

B. Electrophysiology

C. Electrocardiogram (ECG) monitoring and interpretation

D. Assessment and management

E. Advanced Cardiac Life Support (ACLS)

### **III. Neurological Emergencies**

A. Anatomy/physiology/pathophysiology

B. Altered mental status

C. Cerebral Vascular Accidents (CVA)

D. Seizures

E. Neuro muscular diseases

F. Assessment and management

### **IV. Allergic Reactions and Anaphylaxis**

A. Anatomy/physiology/pathophysiology

B. Allergic Reactions

C. Anaphylaxis

D. Assessment and management

### **V. Endocrine Emergencies**

A. Anatomy/physiology/pathophysiology

B. Diabetes Mellitus

C. Primary and secondary endocrine disease

D. Assessment and management

### **VI. Communicable Diseases**

A. Anatomy/physiology/pathophysiology

B. Modes of transmission and prevention

C. Recognition and management of specific diseases

D. Public health concerns

### **VII. Gastrointestinal Emergencies**

A. Anatomy/physiology/pathophysiology

B. Upper and lower gastrointestinal diseases

C. Assessment and management

### **VIII. Renal and Urological Emergencies**

A. Anatomy/physiology/pathophysiology

B. Renal diseases

1. End stage renal disease - dialysis

2. Renal calculi

3. Renal infection

C. Urological conditions

1. Testicular torsion

2. Urinary tract infection

3. Urinary retention

- D. Assessment and Management
- IX. Toxicological Emergencies
  - A. Anatomy/physiology/pathophysiology
  - B. Alcoholism
  - C. Poisoning
  - D. Overdose
  - E. Assessment and management
- XI. Behavioral Emergencies
  - A. Anatomy/physiology/pathophysiology
  - B. Suicide
  - C. Behavioral conditions - excited delirium
  - D. Psychiatric conditions
    - 1. Depression
    - 2. Bipolar disorder
    - 3. Schizophrenia
    - 4. Anxiety
  - E. Restraints
    - 1. Physical
    - 2. Pharmacological
  - F. Assessment and management
- XII. Gynecological Emergencies
  - A. Anatomy/physiology/pathophysiology
  - B. Pelvic inflammatory disease
  - C. Sexually transmitted diseases
  - D. Assault
  - E. Trauma
  - F. Assessment and management
- XIII. Obstetrical Emergencies
  - A. Anatomy/physiology/pathophysiology
  - B. Normal labor and delivery
  - C. Ectopic pregnancy
  - D. Obstetric emergencies
  - E. Assessment and management

All areas of the Topics and Scope are covered in both the Lecture and Lab portions of the course

**Assignment:**

Lecture-Related Assignments:

1. Reading 50-80 pages per week
2. Interpretation of 5-10 medical treatment protocols

Lab-Related Assignments:

1. Demonstration of 2-5 medical skills
2. Quizzes (20)
3. Comprehensive written exams (2)
4. Comprehensive practical exams (2)
5. Medical scenarios (5 - 10)
6. ACLS written and practical exam
7. Title 22 mandated attendance
8. Patient care reports (5 - 10)

## 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.

Technical report writing (patient care reports)

Writing  
5 - 10%

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

Patient simulations, patient scenarios

Problem solving  
10 - 20%

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

Skill performance examinations

Skill Demonstrations  
30 - 40%

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

Quizzes, short answers, multiple choice, substantive exams

Exams  
30 - 40%

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

Affective behavior, attendance, participation in class discussions

Other Category  
15 - 25%

## Representative Textbooks and Materials:

Paramedic Care: Principles and Practice, Vols. 1-5. 5th ed. Bledsoe, Bryan and Porter, Robert and Cherry, Richard. Pearson. 2016

FISDAP Tracking and Testing Software

Basic Arrhythmias. 8th ed. Walraven, Gail. Pearson 2016

Advanced Cardiac Life Support Provider Manual (2015 Guidelines). American Heart Association

Understanding 12 Lead EKGs. 3rd ed. Beasley, Brenda and West, Michael. Pearson. 2013 (classic)

Emergency Medical Patients: Assessment, Care and Transport. Dalton, Twink and Limmer, Daniel and Mistovich, Joseph. Pearson. 2011 (classic)