

**EMC 116 Course Outline as of Spring 2016****CATALOG INFORMATION**

Dept and Nbr: EMC 116 Title: ADV CARDIAC LIFE SUP

Full Title: Advanced Cardiac Life Support

Last Reviewed: 1/25/2021

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	0.50	Lecture Scheduled	5.00	1	Lecture Scheduled	5.00
Minimum	0.50	Lab Scheduled	11.00	1	Lab Scheduled	11.00
		Contact DHR	0		Contact DHR	0
		Contact Total	16.00		Contact Total	16.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 10.00

Total Student Learning Hours: 26.00

Title 5 Category: AA Degree Applicable

Grading: P/NP Only

Repeatability: 21 - Legally Mandated Repetition

Also Listed As:

Formerly: EMC 275.2

**Catalog Description:**

Designed for nursing, medical, para-medical or allied health personnel whose daily occupation demands proficiency and certification in the knowledge of advance cardiac life support skills. Student is able to analyze life threatening cardiac emergencies and apply advanced principles of cardiac and respiratory anatomy and physiology. Curriculum adheres to the American Heart Association Advance Cardiac Life Support standards.

**Prerequisites/Corequisites:****Recommended Preparation:****Limits on Enrollment:**

Course adheres to the American Heart Association standards that participants are physicians, RN's or paramedics actively involved or required by law to be certified as advanced life support providers.

**Schedule of Classes Information:**

Description: Application of cardiac and respiratory anatomy & physiology to perform advanced cardiac life support. Course adheres to the American Heart Association Advanced Cardiac Life

Support standards. (P/NP Only)

Prerequisites/Corequisites:

Recommended:

Limits on Enrollment: Course adheres to the American Heart Association standards that participants are physicians, RN's or paramedics actively involved or required by law to be certified as advanced life support providers.

Transfer Credit:

Repeatability: Legally Mandated Repetition

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

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

**CID:**

**Certificate/Major Applicable:**

Not Certificate/Major Applicable

## **COURSE CONTENT**

### **Student Learning Outcomes:**

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

1. Interpret current cardiology science and practice as it relates to advanced cardiac life support (ACLS) in pre-hospital and hospital environment.
2. Demonstrate knowledge and skills required for certification by American Heart Association in ACLS.

### **Objectives:**

Upon completion of this course, the student will be able to:

1. Describe the application of basic life support measures.
2. Identify and discuss life threatening arrhythmias.
3. List the major causes of cardio-pulmonary arrest
4. Demonstrate knowledge of current drug therapy involved in the definitive treatment of cardio-pulmonary arrest.
5. Demonstrate the use of a cardiac monitor and defibrillating equipment.
6. Demonstrate the management of an emergency cardio-pulmonary arrest, stabilization, and the procedure in transporting a patient to the critical care unit.
7. Discuss any changes in the medical legal implications of resuscitative procedure.
8. Discuss the interpersonal problems encountered during a resuscitative procedure among professional staff.
9. Describe and demonstrate the use of adjunctive equipment for airway and ventilatory maintenance.

### **Topics and Scope:**

1. Review basic life support measures
  - a. cardio pulmonary resuscitation
  - b. automatic early defibrillation
  - c. airway
2. Airway management (Lab)
  - a. oral and nasal adjuncts
  - b. assisted ventilation
  - c. endotracheal intubation
3. Arrhythmia (Lab)
  - a. atrial
  - b. ventricular
  - c. blocks
4. Cardio Pulmonary Arrest (Lab)
5. Cardiac Resuscitation (Lab)
  - a. monitor/defibrillation
  - b. medical legal
  - c. code management
6. Drug therapy
  - a. pharmacology
  - b. method of delivery

#### **Assignment:**

1. Readings selected from the Advanced Cardiac Life Support Text.
2. Memorize 7 resuscitation scenarios
3. Code team participation algorithms
4. Identify 7 EKG rhythms
5. 8 to 12 hours of reading assignments before attending class
6. Comprehensive multiple choice exam

#### **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 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.

None

Problem solving  
0 - 0%

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

Class performances, Performance exams, code team participation

Skill Demonstrations  
20 - 50%

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

Multiple choice, identify EKG

Exams  
40 - 75%

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

resuscitation protocol

Other Category  
5 - 10%

**Representative Textbooks and Materials:**

ACLS Provider Manual, 2010, American Heart Assn.

Handbook of Emergency Cardiovascular Care for HealthCare Providers 2010, American Heart Assn.

Instructor prepared materials