EMC 115 Course Outline as of Fall 2015

CATALOG INFORMATION

Dept and Nbr: EMC 115 Title: ADVANCED RHYTHMS/12-LEAD
Full Title: Advanced Interpretation of Arrhythmias and 12-Lead EKG
Last Reviewed: 3/9/2015

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	1.00	Lecture Scheduled	3.00	4	Lecture Scheduled	12.00
Minimum	1.00	Lab Scheduled	5.00	1	Lab Scheduled	20.00
		Contact DHR	0		Contact DHR	0
		Contact Total	8.00		Contact Total	32.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 24.00 Total Student Learning Hours: 56.00

Title 5 Category:	AA Degree Applicable
Grading:	P/NP Only
Repeatability:	21 - Legally Mandated Repetition
Also Listed As:	
Formerly:	EMC 275.5

Catalog Description:
Designed for paramedical and other allied health personnel whose occupation entails interpretation and/or knowledge of 12-lead electrocardiogram (EKG). Application of principles needed to interpret a 12-lead electrocardiogram (EKG).

Prerequisites/Corequisites:
Course Completion of EMC 114

Recommended Preparation:
Course Completion of EMC 116

Limits on Enrollment:

Schedule of Classes Information:
Description: This course designed for the Health & Allied Health Care Professional who requires Advanced Cardiac Care monitoring skills in the pre-hospital or hospital setting. (P/NP Only)
Prerequisites/Corequisites: Course Completion of EMC 114
Recommended: Course Completion of EMC 116
Limits on Enrollment:
Transfer Credit:

Repeatability: Legally Mandated Repetition

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

Student Learning Outcomes:
At the conclusion of this course, the student should be able to:
1. Interpert a 12-lead electrocardiogram.
2. Determine appropriate treatment for patient having a myocardial infarction.

Objectives:
Upon completion of this course the student will be able to:
1. Identify normal and abnormal cardiac rhythms.
2. Explain rules that differentiate between cardiac rhythms.
3. Identify axes, and axis deviation.
4. Recognize left anterior and left posterior hemiblock.
5. Identify atrial and ventricular hypertrophy.
6. Discuss pathophysiology of myocardial infarction.
7. Demonstrate ability to locate area of infarction by use of 12-lead EKG
8. Discuss the current medical management of a cardiovascular emergency, including drug therapy.

Topics and Scope:

1. Cardiac anatomy and physiology
    A. structures
    B. cardiac cycle
    C. autonomic nerve system
2. Electrocardiogram
    A. leads
    B. vectors
    C. wave forms
3. Cardiac rhythms
    A. atrial
    B. ventricular
    C. wide complex tachycardia

4. Guidelines to determine axis and axis deviation
    A. hexaxial reference system
    B. bundle branch blocks
5. Hemiblocks
    A. left posterior
    B. left anterior
6. Myocardial infarction (MI) and identification of location of MI
    A. pathophysiology
    B. recognition of location of MI with 12-lead EKG
7. Current practice and treatment of cardiac disease
    A. drug therapy
    B. invasive procedures

Assignment:

1. Reading assignments from instructor prepared materials (90 pages)
2. Identify location of MI on minimum of 10 EKG strips
3. Interactive exercises to develop management assessment and treatment skills
4. Complete 1 written 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 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.

interactive excercises	Problem solving 15 - 20%

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

Class performances, rhythm and 12-lead EKG interpretation	Skill Demonstrations 65 - 70%

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

Multiple choice, True/false, Matching items, Completion	Exams 15 - 20%

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

None	Other Category 0 - 0%

Representative Textbooks and Materials:
Instructor prepared materials.