

EMC 275.1 Course Outline as of Summer 2002**CATALOG INFORMATION**

Dept and Nbr: EMC 275.1 Title: BASIC ARRHYTH RECOG

Full Title: Basic Arrhythmia Recognition Course

Last Reviewed: 12/10/2018

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	2.00	Lecture Scheduled	3.00	11	Lecture Scheduled	33.00
Minimum	2.00	Lab Scheduled	0	4	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	33.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 66.00

Total Student Learning Hours: 99.00

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 27 - Exempt From Repeat Provisions

Also Listed As:

Formerly: HLC 275B

Catalog Description:

Application of basic principles of cardiac anatomy and physiology to recognize basic heart arrhythmias. Designed for health and allied care personnel who assume responsibility for cardiac monitoring in the pre-hospital and hospital setting.

Prerequisites/Corequisites:**Recommended Preparation:****Limits on Enrollment:****Schedule of Classes Information:**

Description: Basic principles of cardiac anatomy & physiology to recognize basic heart arrhythmias. Course for health & allied care personnel who assume responsibility for cardiac monitoring in the pre-hospital or hospital setting. (Grade Only)

Prerequisites/Corequisites:

Recommended:

Limits on Enrollment:

Transfer Credit:

Repeatability: Exempt From Repeat Provisions

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	Area	Effective:	Inactive:
CSU GE:	Transfer Area	Effective:	Inactive:

IGETC:	Transfer Area	Effective:	Inactive:
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CSU Transfer:	Effective:	Inactive:
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UC Transfer:	Effective:	Inactive:
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CID:

Certificate/Major Applicable:

Not Certificate/Major Applicable

COURSE CONTENT

Outcomes and Objectives:

The students will be able to:

1. Label and define nine anatomical structures of the heart and their basic function.
2. Define the following terms related to cardiac electrophysiology:
 - A. Depolarization.
 - B. Repolarization.
 - C. Action potential.
 - D. Refractory states.
3. Describe the sequence of cardiac activation and recovery, and relate this information to the EKG configuration.
4. Demonstrate a systematic method of EKG interpretation.
5. Identify normal waveforms for monitoring leads II, MCL 1, MCL 6.
6. Classify arrhythmias according to site, mechanism and severity.
7. Identify 15 arrhythmias.
8. Recognize and describe 4 conduction defects.
9. Identify 3 premature and escape beats and state the mechanism for each.
10. Given the major arrhythmias , discuss possible nursing and medical interventions for each.

Topics and Scope:

1. Overview.
 - A. Cardiac anatomy and physiology.
 - B. Myocardial blood supply.
 - C. Cardiac conduction system.
2. EKG Interpretation.
 - A. Vectors, lead placements.
 - B. Waves and measurements.

- C. Analysis of EKG rhythm strips.
- 3. Conduction System.
 - A. Anatomy.
 - B. EKG analysis.
 - C. Sinus rhythms.
- 4. Atrial Rhythms.
- 5. Junctional Rhythms.
- 6. Ventricular Rhythms.
- 7. Review of all Cardiac Rhythms.
- 8. Heart Blocks.
- 9. Pacemakers.
 - A. 12 lead EKGs.
 - B. Bundle branch.
- 10. Review.

Assignment:

- 1. Read approximately 10 pages per week.
- 2. On a weekly basis identify approximately 20 rhythm strips.

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.

Written homework

Writing
5 - 10%

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

Homework problems, Quizzes, Exams

Problem solving
5 - 25%

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

Class performances, Performance exams

Skill Demonstrations
30 - 60%

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

Completion, IDENTIFY EKG RHYTHM STRIPS

Exams
15 - 45%

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

None

Other Category
0 - 0%

Representative Textbooks and Materials:

EKG Workbook by Huff, Lippincott 4thed. 2002
Instructor prepared materials.