

Master Syllabus

ALH 1110 - Principles of Electrocardiography

Division: Health Sciences

Department: Allied Health

Credit Hour Total: 3.0

Lecture Hrs: 1.0 **Lab Hrs:** 3.0 **Clinic:** 1.0

Date Revised: March 2016

Course Description:

Principles of electrocardiography, including equipment operation, recording and troubleshooting, as well as fundamental principles of the cardiovascular physiology and basic ECG interpretation. Students will also gain knowledge and skills to provide CPR for victims of all ages and will practice CPR in a team setting. Students will receive an American Heart Association Basic Life Support for Healthcare Provider card upon successful completion of skills. One classroom, three lab hours per week. A 30 hour unpaid clinical rotation will be completed during the course.

General Education Outcomes:

- ▣ Critical Thinking/Problem Solving Competency
- ▣ Written Communication Competency
- ▣ Oral Communication Competency
- ▣ Values/Citizenship/Community Competency
- ▣ Information Literacy Competency

Course Outcomes:

BLS - HCP

Perform healthcare provider CPR.

Assessment Method: Performance appraisals

Performance Criteria:

84% or better on given rubric

Components and Functions of ECG Equipment

Identify the major components and their functions of single and multiple lead ECG equipment.

Assessment Method: Locally developed exams

Performance Criteria:

70% or better on given exam

Record a 12-lead ECG Tracing

Perform a 12-lead ECG tracing on patients.

Assessment Method: Performance appraisals

Performance Criteria:

70% or better on given rubric

Functions of the Cardiovascular System

Describe the structure and general functions of the cardiovascular system.

Assessment Method: Locally developed exams

Performance Criteria:

70% or better on given exam

Physiological Basis of an ECG Tracing

Correlate the events in a cardiac cycle to the physiological findings in the ECG tracing.

Assessment Method: Performance appraisals

Performance Criteria:

70% or better on given rubric

Rate and Rhythm Disturbances of an ECG

Interpret basic rate and rhythm disturbances of an ECG tracing.

Assessment Method: Simulations

Performance Criteria:

70% or better on given rubric

Clinical Practice

Perform 12-lead electrocardiography under the supervision of an ECG tech in a medical facility.

Assessment Method: Performance appraisals

Performance Criteria:

70% or better on given rubric

Outline:

Cardiac anatomy and physiology

Electroconduction of the heart

EKG equipment

Procedure for equipment operation and patient attachment

Patient and medical considerations

Interpretation of ECG patterns

Perform electrocardiography on patients