



Course Description

PAS1822L | Electrocardiography | 1.00 credit

This course is a study of the principles and practical application of electrocardiography for the physician assistant. It includes practice in Basic and Advanced Cardiac Life Support measures for life-threatening emergencies. Prerequisites: HSA2532, PAS1800C, PAS1803, PAS1831, PAS2936

Course Competencies:

Competency 1: The student will summarize the basic scientific principles behind electrocardiography by:

1. Defining action potentials and their flow through the cardiac conduction system
2. Defining the limb and chest leads of the electrocardiogram
3. Defining absolute and relative refractory periods, the vulnerable period, depolarization and repolarization
4. Describing the "systemic approach" to 23-lead EKG interpretation
5. Measuring heart rate, PR interval, QRS interval and QT interval

Competency 2: The student will develop the skills necessary to obtain and properly interpret a normal EKG by:

1. Placing the EKG leads in a correct position
2. Describing the components of the EKG
3. Recalling the anatomy of the heart's electrical conduction system
4. Determining the electrical axis of an EKG
5. Defining the normal axis

Competency 3: The student will develop the skills necessary to obtain and properly interpret abnormal EKG by:

1. Recognizing the incomplete and complete right and left bundle branch block
2. Recognizing left and right atrial enlargement
3. Recognizing left and right ventricular hypertrophy
4. Defining and recognizing the typical electrocardiographic appearance of evolving myocardial ischemia, injury, and infarction

Competency 4: The student will be able to recognize most common types of arrhythmias by:

1. Reading and interpreting EKGs using computer software

Learning Outcomes:

- Solve problems using critical and creative thinking and scientific reasoning
- Demonstrate knowledge of ethical thinking and its application to issues in society