



## HLT 118: Fundamentals of Electrocardiography

This competency-based course introduces students to the field of electrocardiography. Topics include the anatomy and physiology of cardiovascular system, equipment maintenance, patient preparation and education, identification of arrhythmias, performing a 12-lead EKG, and specialized procedures such as exercise electrocardiography, and ambulatory electrocardiography event monitoring. At the completion of this course students will be able to sit for a national EKG certification examination. Prerequisite(s): ENG 101, HLT 106, BIO 115, or BIO 233 and BIO 234. Pre or co-requisite: HLT 116 (or permission of the Program Coordinator for graduates of a direct patient care program.) Three lecture hours and three laboratory hours per week. Instructional Support Fee applies.

### Course Student Learning Outcomes

Upon successful completion of this course, the students will be able to: 1. Describe the cardiac cycle and the conduction systems that controls the cardiac cycle 2. Identify the basic equipment /supplies, quality control, and standard precautions required for electrocardiography 3. Demonstrate patient assessment, preparation, lead placement, EKG acquisition and charting 4. Recognize common dysrhythmias, loose leads, interference, and other malfunctions 5. Maintain equipment for safety and accuracy 6. Demonstrate patient preparation and education for ambulatory monitoring 7. Demonstrate patient preparation and education for exercise electrocardiography 8. Recognize and respond to emergencies

**Credits:** 4

**Program:** Health