Course Name: ECG Basics
Course Number: HLTSC 136
Division: Health Sciences
Area: Health Science
Prerequisite: None
Corequisite:

Hours Required: Class: 30  Lab: 30  Credits: 3

Course Description/Purpose
The purpose of this class is to teach the theory and skill of correctly administering an electrocardiograph and other forms of ECG testing. The class also covers related basic cardiac anatomy and physiology/electrophysiology of the heart; the normal ECG; basic identification of cardiac rhythms; infection control; lead systems and care of monitoring equipment, care of the patient undergoing testing including ECGs, holter monitors and stress testing; quality assurance guidelines; legal and ethical considerations and specific communication skills needed by an ECG technician.

Major Units
- Introduction to Role of ECG Technician
- Infection Control/Universal Precautions
- Cardiovascular System Function
- The Normal ECG
- Rhythm Identification
- Lead Systems
- Acquiring the ECG
  - 3-Lead
  - 12-Lead
  - Holter Monitor
  - Treadmill-Stress Test and Echo-Stress Testing
- Legal and Ethical Considerations

Educational/Course Outcomes
Student learning will be assessed by a variety of methods, including, but not limited to, quizzes and tests, journals, essays, papers, projects, laboratory/clinical exercises and examinations, presentations, simulations, portfolios, homework assignments, and instructor observations.

Cognitive Each student will be expected to Identify/Recognize . . .
- the role expectations of an ECG technician;
- standard precautions/infection control measures used in all clinical settings;
- basic anatomy and physiology of cardiac and circulatory function;
- normal cardiac function and the relationship of function to each part of the ECG tracing;
- patient preparation and instructions for selected tests;
- the correct procedures for 3- and 12-lead ECGs as well as holter monitoring and treadmill testing;
- the differences between an acceptable and a nondiagnostic tracing.

Performance Each student will be expected to Demonstrate/Practice . . .
- the correct techniques for 3- and 12-lead ECGs, holter monitoring, and stress testing;
- standard precautions in administering tests and in care of equipment;
- emergency techniques/actions.

Attitudinal Each student will be expected to Feel, Think, or Believe . . .
- the value of maintaining patient confidentiality.