

**Bossier Parish Community College**  
**Master Syllabus**

**Course Prefix and Number:** ALHT 112

**Credit Hours:** 4

**Course Title:** Basic ECG

**Course Prerequisites:** Previous or current enrollment in ALHT 109 and BLGY 110

**Textbook:** None

**Course Description:**

A course designed to provide students with skills related to arrhythmia recognition and monitoring. The laboratory is integrated with the lecture and will provide practicing interpretation with workbook ECGs, actual ECGs and telemetry strips from hospital settings, and hands-on application of cardiac monitoring equipment.

**Learning Outcomes:**

At the end of the course, the student will

- A. apply knowledge of cardiovascular anatomy and physiology to understand the procedures of noninvasive cardiac monitoring;
- B. apply concepts of pathophysiology to the clinical implications of arrhythmias; and
- C. demonstrate and apply the skills and knowledge of monitoring equipment used to detect cardiac electrical activity.

To achieve the learning outcomes, the student will

- 1. describe the location and structures of the heart. (A)
- 2. summarize the electrical conduction system of the heart. (A)
- 3. distinguish the differences between the electrical and mechanical functions of the heart. (A)
- 4. summarize how nerve impulses are generated and cardiac muscles contract. (A)
- 5. use the steps of rhythm analysis to differentiate arrhythmias that originate in the SA node, atrium, AV junction, and the ventricles. (A, B)
- 6. detect pacemaker rhythms and malfunction. (B)
- 7. analyze 12-lead electrocardiograms. (A, B, C)
- 8. identify arrhythmia significance and clinical picture. (A, B, C)
- 9. operate 12-lead ECG machines. (C)
- 10. demonstrate the anatomical location of leads and electrode placement in the 12-lead ECG, portable monitors, and telemetry monitors. (A, C)

**Course Requirements:** To earn a grade of “C” or higher the student must earn 70% of the total points for the course and meet all of the following course requirements.

- minimum 70% on cardiac rhythm recognition test (final exam)
- satisfactorily perform a 12-lead ECG

**Course Grading Scale:**

- A- 90% or more of the total possible points and a minimum of 70% on the cardiac rhythm recognition test and satisfactorily perform a 12-lead ECG
- B- 80% or more of the total possible and a minimum of 70% on the cardiac rhythm recognition test and satisfactorily perform a 12-lead ECG
- C- 70% or more of the total possible and a minimum of 70% on the cardiac rhythm recognition test and satisfactorily perform a 12-lead ECG
- D- 60% or more of the total possible points and a minimum of 70% on the cardiac rhythm recognition test and satisfactorily perform a 12-lead ECG
- E- less than 60% of the total possible points or less than 70% on the cardiac rhythm recognition test or failure to satisfactorily perform a 12-lead ECG

**Attendance Policy:** The college attendance policy is available at <http://catalog.bpcc.edu/content.php?catoid=5&navoid=369#class-attendance>

**Course Fees:** This course is accompanied with an additional non-refundable fee for supplemental materials, laboratory supplies, certification exams and/or clinical fees.

**Nondiscrimination Statement**

Bossier Parish Community College does not discriminate on the basis of race, color, national origin, gender, age, religion, qualified disability, marital status, veteran's status, or sexual orientation in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of its operations. Bossier Parish Community College does not discriminate in its hiring or employment practices.

COORDINATOR FOR SECTION 504 AND ADA

Angie Cao, Student and Disability Services Specialist

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Equity/Compliance Coordinator  
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Reviewed by Wendy McGee/ April 2022