

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

**Course Prefix and Number:** RSTH 226

**Credit Hours:** 2

**Course Title:** Clinical Seminar

**Course Prerequisites:** RSTH 203

**Textbooks:** DesJardins, T.; Cardiopulmonary Anatomy and Physiology, latest edition  
Wesley, K.; Huszar's Basic Dysrhythmias and Acute Coronary Syndromes, latest edition

**Course Description:**

This course explores hemodynamics and the effects of certain pathology on cardiopulmonary physiology while preparing the student to analyze various clinically significant ECGs for rhythm disturbances. Students are introduced to various diagnostic TErollment in Respiratory Therapy courses is limited to students who have applied, been interviewed and have been selected for the Respiratory Therapy Clinical Program.

**Learning Outcomes:**

At the end of this course the student will be able to:

- A. demonstrate an ability to interpret ECG results to determine appropriate medical intervention; identify causative agents and/or conditions relative to the dysrhythmia;
- B. interpret hemodynamic monitoring results from invasive diagnostics, including CVP, PAP, CO, CI, recommending a diagnosis and treatment for abnormal results;
- C. recognize 12-lead ECG electrode placement and the views each imply; and
- D. identify the implications of certain life-threatening dysrhythmias and appreciate the associated ACLS protocol

To achieve the learning outcomes, the student will be able to:

- 1. identify lead placement when performing a 12 lead ECG and recognize the particular view displayed when performing the diagnostic test. (A)
- 2. interpret abnormalities from example (lead II) ECGs, highlighting heart rate, rhythm, normal and abnormal ECG complexes, and other components of individual rhythm strips. (A)
- 3. describe general events within the four phases of a typical cardiac cell action potential. (A)
- 4. summarize the pathway of the normal electrical conduction system of the heart and contrast that to abnormal electrical conduction. (A)
- 5. identify various cardiac rhythms. (A)
- 6. discuss clinical presentation and treatment modalities for specific abnormal cardiac rhythms. (A)

7. describe various pulmonary arterial catheter mechanics, attributes, and troubleshooting. (B)
8. identify normal and abnormal hemodynamic values from sample invasive diagnostics (i.e. CVP, PAP, CO, CI, etc) measurements. (B)
9. define, describe, and analyze the following measurements: BP, CVP, PAP, CO, and CI. (B)
10. explain differences in pulse strength, force, and rhythm (A)
11. describe the performance of a 12-lead ECG (A)
12. interpret a Lead II ECG, differentiating regularity and artifacts (B)
13. recognize normal and abnormal on hemoximetry (B)
14. explain stress testing procedures along with indication and implications of the test (B)
15. outline steps of arterial line insertion (B)
16. assess fluid status of a patient using hemodynamic parameters (B)
17. select proper medicines during ACLS protocol (B)
18. predict a need for cardioversion, defibrillation, or transcutaneous pacing based on hemodynamic/ECG parameters (A, B)
19. describe, in general normal and abnormal heart sounds (A, B)
20. recognize and interpret jugular venous distention and peripheral edema (B)
21. discuss the effects of pulmonary circulation. (A,B)
22. discuss the factors that can alter hemodynamic status. (A,B)
23. define and discuss the impact of renal failure on the cardiopulmonary system and treatments (C)
24. discuss the effects of aging on the cardiopulmonary system (C)
25. discuss the effects of exercise on the cardiopulmonary system (C)
26. describe both myocardial infarction and “congestive” heart failure with an appreciation for a applicable changes in hemodynamic values

**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 average of 70% overall in the course

### **Course Grading Scale:**

- A- 90-100% of total possible points
- B- 80-89% of total possible points
- C- 70-79% of total possible points
- D- 60-69% of total possible points
- F- less than 60% of total possible points

**Attendance Policy:** The college attendance policy, which is available at <http://www.bpcc.edu/catalog/current/academicpolicies.html>, allows that “more restrictive attendance requirements may apply to some specialized classes such as laboratory, activity, and

clinical courses because of the nature of those courses.” The attendance policy of the Respiratory Therapy Program is described in the Respiratory Therapy Clinical Handbook.

### **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

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Equity/Compliance Coordinator

Teri Bashara, Director of Human Resources

Human Resources Office, A-105

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Bossier City, LA 71111

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Reviewed by T. Gilmore, March 2019