

Bossier Parish Community College
Master Syllabus

Course Prefix and Number: RSTH 204

Credit Hours: 3

Course Title: Cardiopulmonary Pharmacology

Course Prerequisites: RSTH 203

Textbook: Colbert, B.; Integrated Cardiopulmonary Pharmacology; latest edition

Course Description:

An introduction to the pharmacokinetics and pharmacodynamics of drug agents used in the care of patients with cardiopulmonary diseases. Enrollment in Respiratory Therapy courses is limited to those students who have applied, been interviewed and selected for the Respiratory Therapy Clinical Program.

Learning Outcomes:

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

- A. compute proper drug dosages for medications commonly administered by respiratory care practitioners;
- B. recognize classifications of medications commonly used in respiratory care, identifying indications, side-effects, and potential hazards, recommending and modifying pharmacologic interventions as indicated; and
- C. demonstrate the ability to properly recognize and utilize pharmacologic terminology such as frequency of administration nomenclature and ordering medication dosing regimen.

To achieve the learning outcomes, the student will:

- 1. Define key terms and processes related to general pharmacologic principles. (B, C)
 - 2. Perform drug calculations using English and metric units of measurement. (A, C)
 - 3. Distinguish between the anatomy, neurotransmitters, receptors, and functions of the two divisions of the autonomic nervous systems (ANS). (B, C)
- 4. Distinguish among the four ANS drug groups. (B, C)
- 5. Discuss the various methods of delivery of aerosol medications to treat pulmonary conditions. (B, C)
- 6. Discriminate between the three main drug groups used for the treatment of bronchospasm. (B, C)
- 7. State the indications, contraindications, adverse reactions, onset of action and dosage range for bronchodilator drugs commonly used in respiratory therapy. (B, C)
- 8. Describe the action of the various mucokinetic, antitussives and expectorant drug agents. (B, C)
- 9. Describe the role and importance of the various surfactant replacement agents. (B, C)

10. Describe the pharmacotherapy of the various anti-inflammatory and anti-asthmatic agents. (B, C)
11. Understand the basic concepts of anti-infective therapy. (B, C)
12. Identify the basic classifications of antibiotic, antiviral, and antifungal drugs. (B, C)
13. Describe indications and pharmacologic effects of anti-arrhythmics, anti-hypertensives, anti-lipidemics, and vasodilators. (B, C)
14. Discuss the action and clinical use of neuromuscular blockers, sedatives, hypnotics, anxiolytic and anesthetic agents in respiratory therapy. (B, C)
15. Discuss the role of the various therapeutic medical gases in respiratory therapy. (B, C)
16. Discuss the pharmacologic management of COPD, asthma, CF, and respiratory infectious diseases. (B, C)
17. Describe the classification, clinical indication, side effects, and dosage of the commonly used current ACLS drugs. (B, 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 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

Angie Cao, Student and Disability Services Specialist

Disability Services, F254, 6220 East Texas Street, Bossier City, LA 71111

318-678-6511

acao@bpcc.edu

Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.

Equity/Compliance Coordinator
Teri Bashara, Director of Human Resources
Human Resources Office, A-105
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Bossier City, LA 71111
Phone: 318-678-6056
Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.

Reviewed by Jennifer Anderson, April 2019