



RT 118 - Respiratory Care Pharmacology

Catalog Description

Transfer Status: NT

Prerequisite: Admission to the RT Program

Corequisite: RT 110

Unit(s): 3.00

Lecture: 51.00 Contact hours/102.00 Out of class hours/153.00 Total hours/3.00 Unit(s)

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Course Description: This course introduces students to fundamental pharmacological concepts and applied pharmacology. Emphasis will be placed on drug action and interaction as well as the practical aspects of routes of administration. Graded only.

Objectives

Upon successful completion of this course, the student should be able to:

1. Identify medication by both generic and trade name.
2. Demonstrate competency in the determination of medication dosage and concentration.
3. Determine the optimum route of administration for medications commonly used in the treatment of respiratory care patients.
4. Identify drug action and interaction of medications commonly used in the treatment of respiratory care patients.

Course Content

Topic Titles / Suggested Time Topic	
Topics	<u>Lecture</u>
	<u>Lec Hrs</u>
General pharmacology	9.00
Drug calculations	3.00
Autonomic Nervous System	6.00
Sympathomimetic agents	6.00
Parasympatholytics	3.00
Methylxanthines	3.00
Mediator antagonists	3.00
Corticosteroids	3.00
Mucokinesis	3.00
Diuretics, anti-hypertensives, and anti-thrombolytics	3.00
Antimicrobial therapy	3.00
Neuromuscular blocking agents and sedatives	3.00
Selective pulmonary vasodilators	3.00
Total Hours: 51.00	

Methods of Instruction

- A. Class Activities
- B. Demonstrations
- C. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture
- D. Lecture
- E. Problem-Solving Sessions
- F. Reading Assignments

Methods of Evaluation

- A. Quizzes
- B. Homework
- C. Class participation
- D. Final Examination
- E. Written Examinations

Examples of Assignments

Reading Assignments

1. Read the assigned reading for "General Pharmacology" in preparation for classroom discussion on the topic.
2. Read the assigned reading for "Drug Calculations" in preparation for classroom discussion and the solving of math problems on the topic.

Writing Assignments

1. After completion of the assigned reading and classroom discussion of "General Pharmacology" complete each item listed in the General Pharmacology Learning Objectives.
2. Complete a 3 page paper using APA format on a new drug or medical therapy currently relevant in medicine.

Out-of-Class Assignments

1. After completion of the assigned reading for the Autonomic Nervous System, complete the assigned assessment questions at the end of the chapter.
2. Complete an analysis of the medication, Albuterol, using the form made available to you by the instructor.

Recommended Materials of Instruction

Colbert, et al. (2019). Integrated CardioPulmonary Pharmacology. *BVT Publishing, 5th.*

Other Learning Materials

Recommended Drug Handbook of student's choice

Minimum Qualifications

Respiratory Technician

Respiratory Technologies

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