

BUTTE COLLEGE

COURSE OUTLINE

I. CATALOG DESCRIPTION

RT 128 - Respiratory Care Pharmacology

3 Unit(s)

Prerequisite(s): RT 115

Co-requisite(s): RT 120, RT 125, BCIS 33

Recommended Prep: NONE

Transfer Status: NT

51 hours Lecture

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.

II. OBJECTIVES

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

- A. Identify medication by both generic and trade name.
- B. Demonstrate competency in the determination of medication dosage and concentration.
- C. Determine the optimum route of administration for medications commonly used in the treatment of respiratory care patients.
- D. Identify drug action and interaction of medications commonly used in the the treatment of respiratory care patients.

III. COURSE CONTENT

A. Unit Titles/Suggested Time Schedule

		Lecture	
<u>Topics</u>			<u>Hours</u>
1. General pharmacology			9.00
2. Drug calculations			3.00
3. Autonomic Nervous System			9.00
4. Sympathomimetic agents			6.00
5. Parasympatholytics			3.00
6. Methylxanthines			3.00
7. Mediator antagonists			3.00
8. Corticosteroids			3.00
9. Mucokinesis			3.00
10. Surfactants			3.00
11. Antimicrobial therapy			3.00
12. Neuromuscular blocking agents			3.00
Total Hours			51.00

IV. METHODS OF INSTRUCTION

A. Lecture

B. Class Activities

C. Homework: Students are required to complete two hours of outside-of-class homework for each

- hour of lecture
- D. Demonstrations
- E. Problem-Solving Sessions
- F. Reading Assignments

V. METHODS OF EVALUATION

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

VI. EXAMPLES OF ASSIGNMENTS

- A. 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.
- B. 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. After completion of the assigned reading and classroom discussion of "Drug Calculations" complete each item listed in the Drug Calculations Learning Objectives.
- C. Out-of-Class Assignments
 - 1. Complete an analysis of the medication, Albuterol, using the form made available to you by the instructor.
 - 2. Complete a concept map for the medication Ipratropium Bromide, using the form made available to you by the instructor.

VII. RECOMMENDED MATERIALS OF INSTRUCTION

Textbooks:

- A. Colbert, et al. . Integrated CardioPulmonary Pharmacology. 3rd Edition. Pearson, 2012.

Materials Other Than Textbooks:

- A. Recommended Drug Handbook of student's choice

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Date: 04/02/2012