

BUTTE COLLEGE

COURSE OUTLINE

I. CATALOG DESCRIPTION

NSG 23 - Pharmacology Nursing

3 Unit(s)

Prerequisite(s): Admission to Vocational Nursing Program

Co-requisite(s): NSG 18, NSG 21, NSG 22, NSG 24 and NSG 28

Recommended Prep: NONE

Transfer Status: CSU

51 hours Lecture

This course covers basic applied pharmacology and major drug groups. Students will learn computation of drug dosages and safe and correct administration of medications. Emphasis will be placed on drug action, pharmacokinetics, adverse drug effects, side effects of drug therapy and nursing process related to drug groups. The course will be closely correlated to concurrent medical-surgical theory and clinical experiences. Graded only.

II. OBJECTIVES

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

- A. Identify the six rights of drug administration.
- B. Correctly interpret and calculate drug dosages.
- C. Discuss advantages and disadvantages of various routes of drug administration.
- D. Identify the sources of drug information and common terminology.
- E. Develop an awareness of legal, personal and professional responsibilities associated with providing medication to individuals.
- F. Apply the nursing process to adults receiving drug therapy.
- G. Identify the pharmacokinetics (absorption, distribution, metabolism and excretion) of each drug group.
- H. State the pharmacodynamics (action) of each class of drugs on the body.
- I. Describe the therapeutic uses of each of the common drug classifications.
- J. Describe adverse reactions and interactions of each drug group.
- K. Identify the key side effects of each drug class.
- L. Identify pertinent patient/family education related to drug therapy.
- M. Discuss principles of accurate drug administration for parenteral and non-parenteral medications.

III. COURSE CONTENT

A. Unit Titles/Suggested Time Schedule

Lecture	
<u>Topics</u>	<u>Hours</u>
1. Administration of Medication	7.00
2. Medical Math	10.00
3. General Principles of Pharmacology	5.00
4. Central Nervous System Drugs	8.00
5. Antiinfective Drugs	7.00
6. Cardiovascular Drugs	8.00
7. Endocrine Drugs	6.00
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. Discussion
- E. Reading Assignments

V. METHODS OF EVALUATION

- A. In Class Assignments
- B. Papers/Reports
- C. Written Tests
- D. Class Presentations

VI. EXAMPLES OF ASSIGNMENTS

- A. Reading Assignments
 - 1. Read chapter one in the pharmacology text on drug sources, nomenclature, laws and standards. Answer instructor generated objectives. Come to class prepared to discuss these objectives.
 - 2. Review chapter 6 in Medical Dosage Calculations text related to calculation of oral medication dosages. Answer instructor generated objectives. Come to class prepared to practice dosage calculations.
- B. Writing Assignments
 - 1. Utilize assigned readings to analyze the problem of medication errors in the hospital environment. Write a 2 page paper addressing methods to prevent medication administration errors.
 - 2. Review a vignette of a patient with specified medications. Prepare a teaching plan related to the medications ordered for this patient.
- C. Out-of-Class Assignments
 - 1. Complete the dosage calculation homework sets assigned from "additional exercises" at the end of each chapter in Olsen's Medical Dosage Calculation text.
 - 2. Complete the homework on cardiovascular medications. Describe the therapeutic classification, mode of action, indications, and assessment prior to administration for each assigned drug.

VII. RECOMMENDED MATERIALS OF INSTRUCTION

Textbooks:

- A. Abrams, A. C. . Clinical Drug Therapy: Rationales for Nursing practice. 9th Edition. Philadelphia: Lippincott Williams & Wilkins, 2009.
- B. Deglin, J. H., & Vallerand, A. H. . Davis's Drug Guide. 12th Edition. Philadelphia: F. A. Davis, 2011.
- C. Olsen, J.L., Giangrosso, A.P., & Shrimpton, D.. Medical Dosage Calculations. 10th Edition. Pearson Prentice Hall, 2011.
- D. Berman, A.J., Snyder, S., Kozier, B., Erb.. Kozier and Erb's Fundamentals of Nursing. 8th Edition. Pearson Prentice Hall, 2009.

