

NUR-182, Pharmacology for Nurses

COURSE DESCRIPTION

NUR-182, Pharmacology for Nurses is a Level I course which introduces the student to the drug classification system. Students will learn basic actions and side effects of drugs and drug regulations. Mathematical calculations necessary to the practice of nursing are taught, and students must achieve a score on a medication calculations test in order to pass this course.

1 lec., 1 credit

PREREQUISITE: Admission to the Department

C0-REQUISITES: NUR-181, NUR-183, BIO-109, PSY-101.

COURSE OBJECTIVES

1. Defines the role of the nursing process in the administration of drugs and solutions for the improvement of the health of individuals.
2. Recognizes growth and developmental capabilities as it relates to the administration of medications.
3. Expresses knowledge of various classifications of drugs and solutions.
4. Recognizes biological, psychological, sociological, cultural, spiritual and economic factors related to administration of drugs, and solutions.
5. Accepts responsibility for maintaining current knowledge of drugs and solutions.
6. Describes legal and ethical standards for administration and documentation of drugs and solutions.
7. Uses a variety of technology resources to support the learning of pharmacological theory and skills.
8. Identifies the principles related to safe medication administration.
9. Correctly calculates drug and solution medication problems according to Level I Pharmacology Math Computation Exam (PMCE).
10. Discuss teaching and learning strategies for safe administration of drugs and solutions.

COURSE EVALUATION

1. There will be 3 tests encompassing theory only which will equal 100% of the grade.
2. There will be a Pharmacological Math Computation Exam (PMCE). The passing score will be 80%. Students who fail to demonstrate proficiency on the first administered pharmacology test in the course will be permitted two opportunities to take a similar test as a re-take within the confines of this course. A student who does not demonstrate an acceptable level of proficiency (80%) on the computation re-take will receive an "F" for the course.
3. A passing course grade requires a numerical theory grade of 75% or greater.

A = 89.5% and above
B+ = 84.5 to 89.4%
B = 79.5% to 84.4%
C+ = 74.5% to 79.4%
F = 74.4% and below

REQUIRED TEXTS

Gray, Deborah. Calculate with Confidence. Elsevier, 2010

Key, Hayes, and McCuiston. Pharmacology: A Nursing Process Approach. Elsevier, 6th edition.
2009 ISBN: 978-1-4160-4663-9

COURSE OUTLINE

<u>Theoretical Content</u>	<u>Teaching/Learning Activities</u>
<p>Unit 1 Math and Dosage Calculations</p> <p>A. Systems of Measurement</p> <p>B. Methods of Calculation</p> <p>1. Oral dosages</p> <p>2. Injectable dosages</p> <p>3. IV fluids/administration</p> <p>4. Regular insulin/heparin</p> <p>5. Calculations by Kilograms</p> <p>6. Household measurement</p>	<p>Complete pharmacology math worksheets</p> <p>CAI: Giving Oral Medication Safely</p> <p>Medical Administration 1</p> <p>Medical Administration 2</p> <p>Eliminating Medication Errors - S354/B-307</p> <p>Safe Administration of Medications</p> <p>Gray, Chapter 3</p> <p>Gray, Chapter 6</p> <p>Gray, Chapter 7 – Household System only</p> <p>Gray, Chapter 8 & Chapter 9</p> <p>Gray, Chapters 10 – 16</p> <p>Gray, Chapter 17-19</p>
<p>Unit 2 Introduction to Nursing Pharmacology</p> <p>A. Introduction to Drugs</p> <p>B. Drugs & the Body (Pharmacologic Principles)</p> <p>C. Toxic Effects of Drugs</p> <p>D. Nursing Management (Nursing Process)</p> <p>E. Drug Therapy in the 21st Century</p> <p>F. Lifespan Considerations</p>	<p>Computer Assisted Instruction (CAI): Rooms B-306 & B-307, Library</p> <p>CAI: Basic Principles of Pharmacology</p> <p>Key, Chapters 1-3</p> <p>Key, Chapters 5-7</p> <p>Key, Chapter 9</p>
<p>Unit 3 Antiinfective Agents (Hazards)</p> <p>A. Antibiotics</p> <p>B. Antiviral and Antitubercular, Antifungal</p>	<p>Key, Chapters 28-33</p>
<p>Unit 4 Digestive System Agents (Food)</p> <p>A. Acid-controlling agents</p> <p>B. Antidiarrheals and laxatives</p> <p>C. Antiemetic and Antinausea Agents</p>	<p>Key, Chapters 46-47</p>

<u>Theoretical Content</u>	<u>Teaching/Learning Activities</u>
Unit 5 Respiratory System Agents (Air) A. Upper Respiratory Drugs B. Drugs Used to Treat Obstructive Pulmonary Disorders	Key, Chapters 39-40
Unit 6 Cardiovascular Agents (Water) A. Drugs for cardiac disorders 1. cardiotonic agents 2. antidysrhythmic agents 3. antianginal agents B. Antihypertensive agents & Diuretics C. Circulatory disorder agents 1. Drugs affecting blood coagulation 2. Lipid-lowering agents	Key, Chapters 41-45
Unit 7 Central Nervous System Agents (Hazards) A. Analgesic & anti-inflammatory agents B. Narcotics C. Anxiolytic & Hypnotic agents D. Antidepressants Agents E. Psychotherapeutic agents & CNS stimulants F. Antiepileptic Agents G. Antiparkinsonism Agents	Key, Chapters 19-22
Unit 8 Hormonal Agents (Hazards, Normalcy) A. Antidiabetic drugs	Key, Chapter 51
Unit 9 Ophthalmic and Otic Agents (Hazards)	Key, Chapter 48