

Virginia Western Community College

NUR 230

Pharmacology

Prerequisite NUR 111 and NUR 226 **Corequisite(S)** NUR 112 **Pre/Corequisite(s)** BIO 205

Course Description

Introduces general principles of drug action, pharmacology of the major drug classes, and specific agents within each class. Includes math calculations necessary to adapt dosages to the multidimensional needs of individuals across the lifespan.

Semester Credits: 3

Lecture Hours: 3

Lab/Clinical/Internship Hours: 0

Required Materials

Frandsen, G. & Smith Pennington, S. (2013). *Abrams' Clinical Drug Therapy* (10th ed.). Philadelphia, PA: Lippincott Williams & Wilkins. ISBN 978-1-60913-711-3

Frandsen, Geryl. (2013). *PrepU for Abrams' Clinical Drug Therapy*. Philadelphia, PA: Lippincott Williams & Wilkins. ISBN: 9781451186833

Lippincott (2018). *Nursing 2018 Drug Handbook*. (28th edition). Philadelphia, PA: Wolters Kluwer & Lippincott Williams & Wilkins. ISBN: 9781496353597

Course Objectives

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

- **Safety:** Analyze safety risks associated with medication use in the adult population.
- **Patient Centered Care:** Investigate the role of patient values, beliefs and attitudes, as well as community resources related to pharmacologic therapy for adults in the provision of patient-centered care.
- **Critical Thinking:** Utilize critical thinking skills in order to inform nursing practice associated with pharmacologic intervention for adult health problems.
- **Teamwork:** Identify the contribution of health care team members responsible for safe medication use for adult patients, as well as the nurse's role within the healthcare team.
- **Evidence Based Practice:** Employ evidence-based resources to guide clinical decision-making regarding the use of pharmacologic agents.
- **Informatics:** Discuss the benefits and limitations of information and technology resources to support clinical decision-making related to pharmacologic interventions.
- **Culture:** Identify cultural, ethnic, and spiritual considerations affecting medication use and education for adult patients.

Topical Description

Part 1: Introduction; Drugs and the Body, Toxic Effects of Drugs, Nursing Process in Drug Therapy and Patient Safety, Review of Dosage Calculations, Challenges to Effective Drug Therapy

Part 2: Chemotherapeutic Agents, Cell Physiology, Anti-infective Agents, Antibiotics, Antiviral Agents,

Antifungal Agents, Antiprotozoal Agents, Anthelmintic Agents, Antineoplastic Agents

Part 3: Drugs Acting on the Immune System including Vaccines

Part 4: Drugs Acting on the Central and peripheral Nervous Systems, Antidepressant Agents, Psychotherapeutic Agents, Anti-seizure Agents, Anti-parkinsonism Agents, Muscle Relaxants, Narcotics, General and Local Anesthetic Agents, Neuromuscular Junction blocking Agents

Part 5: Drugs Acting on the Autonomic Nervous System, Adrenergic Agonists, Adrenergic Blocking antagonists, Cholinergic Agonists, Anticholinergic Agents

Part 6: Drugs Acting on the Endocrine System Hypothalamic and Pituitary Agents, Adrenocortical Agents, Thyroid and Parathyroid Agents, Agents to Control Blood Glucose Levels

Part 7: Drugs Acting on the Reproductive System

Part 8: Drugs Acting on the Cardiovascular System including drugs affecting Blood Pressure, Cardio tonic Agents, Antiarrhythmic Agents, Antianginal Agents, Lipid-Lowering Agents, Drugs Affecting Blood Coagulation, Drugs Used to Treat Anemias.

Part 9: Drugs Acting on the Renal System including Diuretic Agents, Drugs Affecting urinary Tract and Bladder

Part 10: Drugs Acting on the Respiratory System including Drug Affecting Upper and Lower Respiratory Track

Part 11: Drugs Acting on the Gastrointestinal System including Drugs Affecting Gastrointestinal Motility, Drugs Affecting Gastrointestinal Secretions, Antiemetic Agents

Note to Instructors