

**PHM 125
PHARMACOLOGY II**

COURSE DESCRIPTION:

Prerequisites: PHM 120, BIO 163 or BIO 168 and BIO 169

Corequisites: None

This course provides a continuation of the study of the properties, effects, and therapeutic value of the primary agents in the major drug categories. Topics include autonomic and central nervous system agents, anti-inflammatory agents, and anti-infective drugs. Upon completion, students should be able to place major drugs into correct therapeutic categories and identify indications, side effects, and trade and generic names. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

LEARNING OUTCOMES:

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

- a. Apply knowledge of basic pharmacology of central nervous system (CNS) drugs to explain clinical uses and adverse effects of these agents for treatment of common disease states.
- b. Apply knowledge of basic pharmacology of autonomic nervous system (ANS) agents to explain clinical uses and adverse effects of drugs for treatment of common disease states.
- c. Apply knowledge of basic pharmacology of vitamins, minerals, and nutritive agents to explain clinical uses and adverse effects of drugs for treatment of common disease states.
- d. Apply knowledge of basic pharmacology of antimicrobial agents to explain clinical uses and adverse effects of drugs for treatment of common disease states.
- e. Apply knowledge of basic pharmacology of antineoplastic agents to explain clinical uses and adverse effects for treatment of common disease states.

OUTLINE OF INSTRUCTION:

- I. Apply knowledge of basic pharmacology of CNS drugs to explain clinical uses and adverse effects of these agents for treatment of common disease states.
 - A. Opioid analgesics
 - B. Opioid antagonists
 - C. Non-narcotic analgesics
 - D. Analgesic-antipyretics
 - E. Sedative-hypnotics
 - F. Anesthetic agents
 - G. Skeletal muscle relaxants
 - H. Anticonvulsants
 - I. Anti-Parkinson drugs
 - J. Antidepressants
 - K. Antipsychotics
 - L. CNS stimulants
- II. Apply knowledge of basic pharmacology of the ANS agents to explain clinical uses and adverse effects of drugs for treatment of common disease states.
 - A. Review of ANS function
 - B. Adrenergic agents

- C. Adrenolytic agents
 - D. Cholinergic agents
 - E. Anticholinergic agents
 - F. Ganglionic and neuromuscular blocking agents
- III. Apply knowledge of basic pharmacology of vitamins, minerals, and nutritive agents to explain clinical uses and adverse effects of drugs for treatment of common disease states.
- A. Vitamins
 - B. Minerals
 - C. Herbal and nutritional supplements
 - D. Trace elements
- IV. Apply knowledge of basic pharmacology of antimicrobial agents to explain clinical uses and adverse effects of drugs for treatment of common disease states.
- A. Introduction and definitions
 - B. Antibiotics and antibacterial agents
 - C. Antifungal agents
 - D. Antiviral/antiretroviral agents
 - E. Antiprotozoal agents
 - F. Antimycobacterial agents
 - G. Antimalarial drugs
 - H. Antiseptics and disinfectants
- V. Apply knowledge of basic pharmacology of antineoplastic agents to explain clinical uses and adverse effects for treatment of common disease states.
- A. Alkylating agents
 - B. Antimetabolites
 - C. Hormonal agents
 - D. Radioactive isotopes
 - E. Antibiotics
 - F. Natural products
 - G. Targeted agents
 - H. Adjuncts to anticancer chemotherapy

REQUIRED TEXTBOOKS AND MATERIALS:

To be announced by instructor.

STATEMENT FOR STUDENTS WITH DISABILITIES:

Students who require academic accommodations due to any physical, psychological, or learning disability are encouraged to request assistance from a disability services counselor within the first two weeks of class. Likewise, students who potentially require emergency medical attention due to any chronic health condition are encouraged to disclose this information to a disability services counselor within the first two weeks of class. Counselors can be contacted by calling 686-3652 or by visiting the Student Development Office in the Phail Wynn Jr. Student Services Center, room 1309.