

**PHM 120**  
**PHARMACOLOGY I**

**COURSE DESCRIPTION:**

Prerequisites:     None

Corequisites:     None

This course introduces the study of the properties, effects, and therapeutic value of the primary agents in the major drug categories. Topics include nutritional products, blood modifiers, hormones, diuretics, cardiovascular agents, respiratory drugs, and gastrointestinal agents. 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 completion of this course, the student will demonstrate knowledge of each of the following:

- a. Basic pharmacology, including drug nomenclature, dosage forms, administration routes, drug actions, and body responses.
- b. Basic pharmacology of the gastrointestinal agents.
- c. Basic pharmacology of the respiratory agents.
- d. Basic pharmacology of the cardiac and vascular agents.
- e. Pharmacology of diuretics.
- f. Basic endocrinology and hormone therapy.

**OUTLINE OF INSTRUCTION:**

- I. Introduction to drug usage
  - A. Drug nomenclature
  - B. Indications and contraindications
  - C. Drug-associated problems of administration
- II. Drug dosage forms
- III. Determining factors of dosages
  - A. Age, body weight, and body surface area
  - B. Pregnancy
  - C. Time and routes of administration
  - D. Excretion rates
  - E. Possible toxic reactions
  - F. Concomitant disease processes
  - G. Drug interactions
- IV. Routes of drug administration
  - A. Oral
  - B. Topical
  - C. Parenteral

V. Drug actions and body responses

- A. Where and how drugs act - normal response
- B. Cellular response
- C. Abnormal response

VI. Gastrointestinal drugs

- A. Gastric antacids
- B. Digestants
- C. Gastric stimulants
- D. Emetics
- E. Antiemetics
- F. Agents to treat PUD
- G. Laxatives and cathartics
- H. Antidiarrheals

VII. Respiratory agents

- A. Antitussives
- B. Bronchodilators
- C. Decongestants

VIII. Cardiovascular agents

- A. Cardiac preparations
- B. Renal system and renal preparations - diuretics
- C. Antihypertensives and vasodilators
- D. Shock and hypotension agents
- E. Vascular agents
- F. Anticoagulants and coagulants

IX. Endocrine agents

- A. Hormonal agents and preparations
- B. Anticonceptive agents
- C. Diabetic and insulin preparations

X. Genitourinary drugs

- A. Anti-infectives
- B. Spasmolytics
- C. Analgesics

**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 919-536-7207, ext. 1413 or by visiting the Student Development Office in the Phail Wynn Jr. Student Services Center, room 1209.