

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

**COURSE DESCRIPTION:**

Prerequisites: Enrollment in the Pharmacy Technology program or permission of the program director and BIO 163 or BIO 168 and BIO 169  
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.

**COURSE OBJECTIVES:**

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

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- 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

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- B. Spasmolytics
- C. Analgesics

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### **REQUIRED TEXTBOOKS AND MATERIALS:**

To be announced by instructor.

### **STATEMENT OF STUDENTS WITH DISABILITIES**

Students who require academic accommodations due to any physical, psychological, or learning disability should request assistance from the Disability Services Coordinator 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 the Disability Services Coordinator within the first two weeks of class. The Coordinator can be contacted by calling 686-3652, (V/TT), or by visiting the Student Services Office, Room 23, of the White Building.