

# PHAR 401: Medical Pharmacology II

This course is designed to present the pharmacological basis of therapeutics by discussion of the principles of drug action and the mechanism of action of representative agents. The initial portion of the course will be devoted to an exploration of concepts such as pharmacokinetics, drug metabolism, dose-response relationships, and resistance, and toxicity. Subsequent portions of the course will focus on the chemistry, mechanism of action and pharmacologic action of drugs affecting the autonomic and central nervous systems, the cardiovascular, and renal systems, pathogenic microbes, cancer and hormones. A review of the relevant physiology of each organ system will be presented.

## Learning Objectives

- Grasp the basic scientific concepts and principles that serve as the foundation of understanding the pharmacology of specific medications.
- Understand the basic physiologic mechanisms that govern drug pharmacokinetics, action, and toxicity.
- Describe the basic drug development process and regulation thereof.

**Credits:** 2

**Class Type:** Graduate Course

**Prerequisites:**

PHAR 400

The above course(s) or permission from the instructor. Understanding of basic concepts in biology, chemistry, and biochemistry.

**Program:** Biochemistry, Chemistry, Pharmacology, and Toxicology

**Availability:** Fall 2021

**Session:** Session B