

COURSE OUTLINE
CARD-201
Cardiovascular Pharmacology
2 Semester Hours

HOWARD COMMUNITY COLLEGE

Description

This course is designed to prepare the cardiovascular student to choose, handle and administer the numerous cardiovascular and related drugs utilized in invasive and noninvasive Cardiology. The general principles of pharmacology such as pharmacokinetics, dose calculations, routes of administration, substrates, side effects and adverse effects will be emphasized. Prerequisite: CARD-108 (2 hours weekly)

Overall Course Objectives

Upon completion of this course, the student will understand basic pharmacology. The student will be able to:

1. Identify medications commonly used in cardiovascular treatment and testing.
2. Recognize major drug interactions and drug allergies.
3. Explain the physical and chemical properties and usage of contrast media
4. Identify common methods of drug administration.
5. Describe mechanisms of drug actions and their therapeutic benefits.
6. Determine the pharmacologic basis of adverse drug effects.
7. Recognize and describe the potential for adverse drug interactions given a clinical case study.
8. Match the appropriate cardiovascular drug, dosage and route of administration according to its' pharmacologic action.

Major Topics

1. Introduction to pharmacology
2. Adrenergic
3. Cholinergic
4. Vasopressors and Vasodilators

5. Diuretics
6. Antihypertensives
7. Local Anesthetics
8. Anticoagulants
9. Thrombolytics
10. Nitrates
11. Antiarrhythmic Agents
12. Calcium Channel Drugs
13. Contrast Agents
14. Cardiac Glycosides
15. Controlled Substances
16. Oxygen
17. Beta Blockers
18. Antibiotics

Course Requirements

Enrollment in the Cardiovascular Technology Program.

Grading/exams

Grading procedures will be determined by the individual faculty member but will include the following:

Three tests and cumulative final examination.

Each unit test will count for 20% of the grade with the final accounting for 40% of the final grade.

Writing

None.

Other Course Information

This is a Cardiovascular Core Course.