

## Department:

Medical Assistant

## Course Description:

An introduction to the principles of pharmacology, including drug terminology; drug origins, forms, and actions; routes of administration; as well as the use of generic name drugs, trade name drugs, and categories of drugs to treat various body systems.

## Course Competencies:

Upon completion of the course, the student should be able to:

1. Calculate Drug Dosage.
2. List several forms in which drugs are manufactured, their advantages, and disadvantages.
3. List several routes of drugs administration and describe their advantages and disadvantages.
4. List the steps of the drug cycle and explain how a drug is affected or changed.
5. Distinguish between local, systemic, therapeutic, allergies, and side effects of drugs.
6. Identify the trade names of common generic drugs used to treat each body system.
7. When given a common generic or trade name drug, identify the category it belongs to.
8. Describe the pharmacologic action of common drugs/drug categories/treat systems.
9. Pronounce and spell common generic and trade name drugs and their categories.
10. Define common drug abbreviations, including units of measurement.
11. Demonstrate the proper use of drug reference materials.
12. Prepare and administer oral medication.
13. Prepare and administer an injection.
14. Reconstitute powdered drugs.
15. Prepare and administer subcutaneous medication.
16. Prepare and administer intramuscular medication.
17. Prepare and administer intradermal medication.
18. Administer Z-track injection.

## Course Content:

- A. Today's Medical Assistant
  1. Medication and IV Therapy (includes medical math)
    - a) Introduction to Administration of Medicine
    - b) Oral Administration
    - c) Parenteral Administration
    - d) Tuberculin Testing
    - e) Allergy Testing
    - f) Intravenous Therapy
- B. Introduction to Pharmacology
  1. Antibiotics and Antihistamines
  2. Drugs that affect skin and mucous membranes
  3. Drugs that affect the Respiratory System
  4. Drugs that affect the Circulatory System

5. Drugs that affect the CNS
  6. Pain Medications
  7. Tranquilizers and Antidepressants
  8. Prostaglandins
  9. Drugs that affect the Autonomic Nervous System
  10. Drugs that affect the Digestive System and Endocrine System
  11. Diuretics, Immunizing Agents, and Antineoplastic Drugs
  12. Drug Therapy in women, children, and older adults
  13. Home Health, End of Life, and Substance Abuse
  14. Herbal Therapies and Interactions
- C. Mosby's Nursing Drug Reference (reference text for research activities)
1. Drug Categories
  2. Individual Drugs

## Learning Assessments:

Course competencies will be assessed by use of quizzes, exams, final exam, individual or group projects, daily assignments, homework, and workbooks.

## Instructional Materials:

Textbooks: Gauwitz, D. (2020). *Administering Medications: Pharmacology for Healthcare Professionals* (9<sup>th</sup> ed.). New York, NY: McGraw Hill Education. ISBN-13: 978-1259928178

Skidmore-Roth, L. (2022). *Mosby's 2021 Nursing Drug Reference* (35<sup>th</sup> ed.). St. Louis, MO: Elsevier. Vital Source eBook. ISBN-13: 978-0323826075

### Guidelines for Requesting Accommodations Based on Documented Disability or Medical Condition

It is the intention of Highland Community College to work toward full compliance with the Americans with Disabilities Act, to make instructional programs accessible to all people, and to provide reasonable accommodations according to the law.

Students should understand that it is their responsibility to self-identify their need(s) for accommodation and that they must provide current, comprehensive diagnosis of a specific disability or medical condition from a qualified professional in order to receive services. Documentation must include specific recommendations for accommodation(s). Documentation should be provided in a timely manner prior to or early in the semester so that the requested accommodation can be considered and, if warranted, arranged.

In order to begin the process all students **must** complete the "Disabilities Self-Identification Form" on our [Disability Services website](#).

This form can also be accessed at the Highland Community College homepage under Students Services/Student Resources/Disability Service or by contacting the Disabilities Coordinator.

### A Note on Harassment, Discrimination and Sexual Misconduct

Highland Community College seeks to assure all community members learn and work in a welcoming and inclusive environment. Title VII, Title IX, and College policy prohibit harassment, discrimination and sexual misconduct. Highland Community College encourages anyone experiencing harassment, discrimination or sexual misconduct to talk to report to the Vice President for Student Services, the Human Resources Director or complete an [online report](#) about what happened so that they can get the support they need and Highland Community College can respond appropriately.

There are both confidential and non-confidential resources and reporting options available to you. Highland Community College is legally obligated to respond to reports of sexual misconduct, and therefore we cannot guarantee the confidentiality of a report, unless made to a confidential resource. Responses may vary from support services to formal investigations. As a faculty member, I am required to report incidents of sexual misconduct and thus cannot guarantee confidentiality. I must provide our Title IX coordinator with relevant details such as the names of those involved in the incident. For more information about policies and resources or reporting options, please review our [Equity Grievance Policy](#).