

## Department:

Practical Nursing

## Course Description:

This course provides an introduction to the principles of pharmacology. Emphasis is placed on nursing care related to the safe calculation and administration of medications to clients across the life span.

## Course Competencies:

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

1. Discuss the principles of pharmacology, pharmacokinetics, and pharmacodynamics in relation to medication therapy.
2. Discuss nursing implications and concepts of safety when performing medication administration.
3. Demonstrate proper techniques that support safe medication administration.
4. Describe the legal and ethical implications/aspects of medication administration.

## Course Content:

- A. Principles of Pharmacology
  1. Describe the role of the United States Food and Drug Administration in determining the safety of drugs for use by the population.
  2. Define common terminology, abbreviations, and symbols used in describing drug properties.
  3. Describe common terminology used for medication administration.
  4. Differentiate between the terms pharmacology, pharmacokinetics, and pharmacodynamics.
  5. Identify measures that support safe medication administration.
  6. Define the following terms: drug actions, side effects, adverse effects, nursing implications, contraindications, and interactions.
  7. Describe the various resources that support evidence-based drug information.
  8. Discuss legal/ethical issues related to medication administration.
- B. Safe Medication Administration
  1. Discuss factors that can decrease the risk of making a medication error.
  2. Identify the rights of medication administration.
  3. Determine the various routes by which medication can be administered.
  4. Perform basic metric conversions and drug calculations.
  5. Discuss the role of the nurse related to educating clients about their medications.
  6. Demonstrate proper techniques that support safe medication administration (oral, ophthalmic, otic, nasal, rectal, topical, inhaled, vaginal, subcutaneous, intramuscular, and intradermal medications)

C. Clinical Lab Objectives:

1. Apply the rights of medication administration.
2. Perform basic metric conversions and drug calculations
3. Demonstrate proper techniques that support safe medication administration:
  - Oral
  - Ophthalmic
  - Otic
  - Nasal
  - Rectal
  - Topical
  - Inhaled
  - Vaginal
  - Subcutaneous
  - Intramuscular
  - Intradermal medications

## Learning Assessments:

Competencies may be evaluated by multiple measures, including exams, papers, article reviews, research, experiments, and projects.

## Instructional Materials:

Textbooks: Watkins, C. (2025). *Pharmacology Clear and Simple: A Guide to Drug Classifications and Dosage Calculations*, (5<sup>th</sup> Ed.). Philadelphia, PA: F. A. Davis Company. ISBN 13:978-1-7196-4474-1

Online: ATI Comprehensive Testing and Review Package for PNs

### **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](#).