



ILLINOIS VALLEY COMMUNITY COLLEGE

COURSE OUTLINE

DIVISION: Nursing

**COURSE: Nursing 1205: Pharmacology I for the
Nursing Student**

Date: Fall 2019

Credit Hours: 1.5

Prerequisite(s): Acceptance into the nursing program and concurrent enrollment in NUR 1201.

Delivery Method: **Lecture** **1.5 Contact Hours (1 contact = 1 credit hour)**
 Seminar **0 Contact Hours (1 contact = 1 credit hour)**
 Lab **0 Contact Hours (2-3 contact = 1 credit hour)**
 Clinical **0 Contact Hours (3 contact = 1 credit hour)**
 Online
 Blended

Offered: **Fall** **Spring** **Summer**

IAI Equivalent –**Only for Transfer Courses**-go to <http://www.itransfer.org>.

CATALOG DESCRIPTION:

This course is designed to prepare the nursing student to safely administer medications in the clinical setting. The intent of this course is to introduce the nursing student to the fundamentals of drug therapy and pharmacotherapeutics of nursing practice. The focus of major drug classifications and specific medicinal agents will be discussed in relation to pharmacodynamics, pharmacokinetics, therapeutic use, adverse reactions, and precautions. Major classifications studied in this course include, Anti-inflammatory Agents, Non-narcotic and Narcotic Analgesics, and Anti-infective Agents. Students who successfully complete Nursing 1205 with a “C” or greater will continue the study of pharmacology in Nursing 1206.

GENERAL EDUCATION GOALS ADDRESSED

[See last page for Course Competency/Assessment Methods Matrix.]

Upon completion of the course, the student will be able:

[Choose up to three goals that will be formally assessed in this course.]

- To apply analytical and problem-solving skills to personal, social, and professional issues and situations.
- To communicate successfully, both orally and in writing, to a variety of audiences.
- To construct a critical awareness of and appreciate diversity.
- To understand and use technology effectively and to understand its impact on the individual and society.
- To develop interpersonal capacity.
- To recognize what it means to act ethically and responsibly as an individual and as a member of society.
- To recognize what it means to develop and maintain a healthy lifestyle in terms of mind, body, and spirit.
- To connect learning to life.

EXPECTED LEARNING OUTCOMES AND RELATED COMPETENCIES:

[Outcomes related to course specific goals. See last page for more information.]

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

1. Discuss and describe contemporary issues in Pharmacology:
 - 1.1 The Drug Approval Process
 - 1.2 Transcultural and Genetic Considerations
 - 1.3 Drug Interactions and Over the Counter Medications
 - 1.4 Drugs of Abuse
 - 1.5 Herbal Therapy with Nursing Implications
 - 1.6 Pediatric Pharmacology
 - 1.7 Geriatric Pharmacology
 - 1.8 Medication Administration in the Community Setting
 - 1.9 The Role of the Nurse in Drug Research
2. Describe the fundamentals of drug therapy:
 - 2.1 Drug Action: Pharmaceutic, Pharmacokinetic, and Pharmacodynamic Phases
3. Describe, identify, differentiate, and demonstrate Principles of Drug Administration
4. Differentiate steps of the nursing process and client teaching in relationship to drug therapy:
 - 4.1 Health teaching related to drug therapy
 - 4.2 Culturally sensitive health teaching tips
 - 4.3 Nurse's role related to drug therapy plans
5. Discuss representative medications within specific classifications of drugs in relation to the mechanisms of action, pharmacokinetics, indications, side effects / adverse reactions, significant drug-drug / drug-food interactions, dosage and administration, and nursing management:
 - 5.1 Anti-inflammatory and Pain Management
 - a. Anti-inflammatory Drugs

- b. Drugs for Pain Management: Nonnarcotic and Narcotic Analgesics
- 5.2 Anti-infective Agents
 - a. Antibacterial Drugs
 - b. Antitubercular Drugs
 - c. Antifungal Drugs
- 6. Recognize the most common drugs administered according to classifications, mechanisms of action, uses, client responses, and nursing implications.

MAPPING LEARNING OUTCOMES TO GENERAL EDUCATION GOALS

[For each of the goals selected above, indicate which outcomes align with the goal.]

Goals	Outcomes
First Goal	
To connect learning to life.	3. Describe, identify, differentiate, and demonstrate Principles of Drug Administration 4. Differentiate steps of the nursing process and client teaching in relationship to drug therapy: 4.1 Health teaching related to drug therapy 4.2 Culturally sensitive health teaching tips 4.3 Nurse’s role related to drug therapy plans

COURSE TOPICS AND CONTENT REQUIREMENTS:

- A. Principles of Pharmacology
 - 1. Drug Approval Process
 - a. Drug Standard and Legislation
 - b. Nurse Practice Act
 - c. Drug Names
 - d. Drug Resources
 - e. Pregnancy Categories
 - 2. Fundamentals of Drug Therapy
 - 1. Three Phases of Drug Activity
 - a. Pharmaceutic Phase
 - b. Pharmacokinetic Phase
 - c. Pharmacodynamic Phase
- B. Pharmacology across the Lifespan
 - 1. Pediatric Pharmacology
 - a. Pharmacokinetics and Pharmacodynamics
 - b. Nursing Implications
 - c. Considerations for the Adolescent
 - 2. Geriatric Pharmacology
 - a. Physiologic Changes
 - b. Polypharmacy
 - c. Pharmacokinetics and Pharmacodynamics
 - d. Effects of Selected Drug Groups on Older Adults
 - e. Non-compliance and Non-adherence
 - f. Health Teaching with the Older Adult
- C. Nursing Process and Patient Teaching

1. Assessment
 2. Planning
 3. Implementation
 4. Evaluation
- D. Over-the-Counter Medications
1. Pharmacokinetic / Pharmacodynamic Interactions
- E. Medication Administration in the Community Setting
1. “Six-Plus-Six Rights” of Drug Administration
 2. Medication Self-Administration
 3. Factors That Modify Drug Response
 4. Guidelines for Drug Administration
 5. Forms and Routes for Drug Administration
 6. Nursing Implications for Administration of Parenteral Medications
 7. Developmental Needs of Pediatric Patients
 8. Technological Advances
 9. Medications and Calculations
 10. Patient Teaching
- F. Herbal Therapy with Nursing Implications
- a. Commonly Used Herbal Remedies
 - b. Potential Hazards of Herbal Therapy
 - c. Tips for Consumers and Health Care Providers
- G. Pain Management
- a. Rating pain
 - b. Narcotic analgesics
 - c. Non-narcotic analgesics
- H. Cultural, Legal and Ethical Issues in Pharmacology
- a. Cultural traditions/medications
 - b. Ethnic/genetic influence on medications
 - c. Laws pertaining to medication administration
 - d. Ethical dilemmas that can occur with medication administration
- I. Anti-Inflammatory and Pain Management
1. Anti-Inflammatory Drugs
 - a. Non-steroidal Anti-Inflammatory Drugs
 - b. Corticosteroids
 2. Anti-gout Agents
- J. Anti-Infective Agents
1. Antibacterial
 - a. Penicillins
 - b. Cephalosporins
 - c. Macrolides
 - d. Tetracyclines
 - e. Aminoglycosides
 - f. Fluoroquinolones
 - g. Unclassified Antibacterial Drugs
 - h. Sulfonamides

INSTRUCTIONAL METHODS:

- Lecture
- Classroom Discussions
- Classroom Activities
- Self-Study
- Case Studies

INSTRUCTIONAL MATERIALS:

Lilley, L.L., Rainforth-Collins, S., & Snyder, J., (2019). *Pharmacology and the Nursing Process*, 9th ed. St. Louis, MO: Elsevier.

Hubert, R. J., & VanMeter, K. (2018). *Goulds Pathophysiology for the Health Professions* (6th ed.). St. Louis, MO: Elsevier.

STUDENT REQUIREMENTS AND METHODS OF EVALUATION:

A= 93-100

B= 86-92

C= 80-85

D= 70-79

F= Below 70

4 Unit Exams and one Individual Project Grade will combine for a total.

Course Competency/Assessment Methods Matrix

Nur 1205	Assessment Options																																
For each competency/outcome place an "X" below the method of assessment to be used.	Assessment of Student Learning	Article Review	Case Studies	Group Projects	Lab Work	Oral Presentations	Pre-Post Tests	Quizzes	Written Exams	Artifact Self Reflection of Growth	Capstone Projects	Comprehensive Written Exit Exam	Course Embedded Questions	Multi-Media Projects	Observation	Writing Samples	Portfolio Evaluation	Real World Projects	Reflective Journals	Applied Application (skills) Test	Oral Exit Interviews	Accreditation Reviews/Reports	Advisory Council Feedback	Employer Surveys	Graduate Surveys	Internship/Practicum /Site Supervisor Evaluation	Licensing Exam	In Class Feedback	Simulation	Interview	Written Report	Assignment	
	Direct/ Indirect	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	I	I	I	I	D	D							
Assessment Measures – Are direct or indirect as indicated. List competencies/outcomes below.																																	
1. Discuss and describe contemporary issues in Pharmacology:																							X	X	X								
1.1 The Drug Approval Process			X						X				X															X				X	
1.2 Transcultural and Genetic Considerations									X				X															X				X	
1.3 Drug Interactions and Over the Counter Medications			X	X					X				X																			X	
1.4 Drugs of Abuse									X				X														X						
1.5 Herbal Therapy with Nursing Implications			X						X				X																				
1.6 Pediatric Pharmacology			X						X				X																				
1.7 Geriatric Pharmacology			X						X				X																				
1.8 Medication Administration in the Community Setting												X																					

