



**UNIVERSITY OF ALBERTA  
COLLABORATIVE  
BACCALAUREATE  
NURSING PROGRAM**

Grande Prairie Regional College  
Grant MacEwan College  
Keyano College  
Red Deer College  
University of Alberta



**NS 2150  
B3**

**Pharmacotherapeutics in Nursing**

**Winter 2007**

**COURSE INSTRUCTOR:**

**Name:** Dr. Dorothy Eiserman Ph.D, RN

**Office:** H202

**Office Phone:** (780) 539-2756

**E-mail:** [deiserman@gprc.ab.ca](mailto:deiserman@gprc.ab.ca)

**CALENDAR STATEMENT:****Pharmacotherapeutics in Nursing**

\*3 (fi 6) (3-0-0). Focuses on the mechanisms of action of drugs, their therapeutic uses and side-effect profile. General principles related to drug absorption, distribution, metabolism and excretion will be addressed. The nursing role in promoting optimal therapeutic regimens and in the management of side/adverse effects will be included.

**PREREQUISITE:**

Year 1 BScN students must have completed semester 1 prior to taking NS 2150.

**COURSE HOURS (per week):**

Lecture: 3 Seminar: 0 Lab: 0

**COURSE DATES and ROOM:**

Dates: January 3 to April 13, 2007

Wednesday: 1800-2050, Room: D208

**COURSE DESCRIPTION:**

The course begins with an introduction to drug classification and regulation - from discovery to the patient. The foundations of pharmacodynamic and pharmacokinetic principles will be introduced. Four fundamental domains of drug movement and modification will be studied: drug absorption, distribution, metabolism, and excretion (i.e., pharmacokinetics). To illustrate how the principles involved in pharmacotherapeutics need to be incorporated into professional nursing practice; examples of prototypic drugs from each Drug Class will be used. Brief scenarios will be used to contextualize pharmacology within the clinical setting. Safe, evidence-based practice will be emphasized.

**TRANSFER STATUS:**

NS 2150 is transferable to the University of Alberta as NURS 215 and part of the block transfer agreement within the University of Alberta/GPRC Collaborative program.

## **COURSE OBJECTIVES:**

**Upon completion of Nursing 2150, the nursing student will be able to:**

1. Demonstrate an understanding of the basic concepts related to the pharmacodynamic principles underlying drug actions in the human body.
2. Demonstrate an understanding of the basic pharmacokinetic principles related to movement of drugs within the human body.
3. Demonstrate an understanding of the classification, nature, properties, and effects of drugs.
4. Demonstrate an understanding of the role of nursing in promoting optimal therapeutic regimens and in the management of side/adverse effects.
5. Demonstrate an understanding of how variations in anatomy and physiology may affect the four fundamental domains of drug movement.
6. Learn to integrate evidence-based pharmacological nursing knowledge into professional practice.
7. Demonstrate an understanding of ethical and legal principles related to the administration of pharmacological agents

## **REQUIRED TEXTBOOK AND RESOURCES:**

Lilley, L.L., Harrington, S., Synder, J.S., and Swart, B. (2006). *Pharmacology and the nursing process in Canada* (1<sup>st</sup> ed.). Toronto: Elsevier.

The electronic Compendium of Pharmaceuticals and Specialties (*e-CPS*):  
<http://www.library.ualberta.ca/databases/databaseinfo/index.cfm?ID=3560>

Understanding Alberta's Drug Schedules:  
[http://pharmacists.ab.ca/ab\\_drug\\_schedules/](http://pharmacists.ab.ca/ab_drug_schedules/)

## **TEXTBOOK ON RESERVE :**

Adams, M.P, Josephson D.L., & Holland, L.N., Jr. (2005). *Pharmacology for nurses: A pathophysiologic approach*. Philadelphia: Prentice Hall.

## **RECOMMENDED TEXTBOOKS AND RESOURCES:**

Lilley, L.L., Harrington, S., Synder, J.S., and Swart, B. (2006). *Pharmacology and the nursing process in Canada: Study Guide* (1<sup>st</sup> ed.). Toronto: Elsevier

A Nursing drug handbook

**REQUIRED LEARNING EXPERIENCES:**

**NURS 2150 Lectures:** students will work with tutor in class to acquire necessary information for pharmacotherapeutics. A lecture discussion format will be utilized. This will be augmented with focused learning activities for students to work on at their own pace. From time to time, resource materials will be posted on Blackboard. Attendance is an expectation.

**COURSE EVALUATION:**

In order to pass Nursing 2150, students must **complete** the following requirements:

1. **Midterm Examination**, held February 14, 2006 during class time. (**Value: 40%** of final grade)
2. **Final Examination:** Held in the final examination period. Date and Time TBA, as per GPRC Academic Policy re Final Examinations. \*Refer to the Student Handbook for procedures for exams. (**Value: 60 %** of Final Grade).

**NOTE:** Both the midterm and final examinations will be composed of multiple choice and short answer questions.

The final examination composition will be: 25% of marks will be from material covered in Weeks 1(One) through 6 (Six); 75% of marks will be from material covered in Weeks 8 (eight) through 14 (Fourteen).

**SPECIALIZED SUPPORT and DISABILITY SERVICES:**

Students who require accommodations in this course due to disability affecting mobility, vision, hearing, learning, or mental or physical health are advised to discuss their needs with Student Services.

**ANNOUNCEMENTS**

General course announcements will be posted on Blackboard and/or made in class.

**POLICY STATEMENTS:****Late Assignment Policy:**

All assignments may be required to be completed in order to pass a course.

All assignments are expected to be passed in at the time and place they are due. Extensions on assignments may be granted and must be negotiated with the instructor prior to the due date and with a date specified for late submissions.

A penalty of one letter grade for each working day that an assignment is submitted after the due date will be deducted from the final mark. For example, a paper scored at B+ would receive an adjusted grade of B if handed in one day late. Late assignments are due by 4:00 pm and must be verified (stamped with date and time) by Nursing office personnel.

### **Assignment of Final Grade:**

A grade will be assigned for each assignment using the marking criteria and then based on the grade descriptors (excellent, good, satisfactory, poor). Rationale will be given as to the assigned grade. Grading descriptors will be provided for each assignment.

### **Grading Criteria for Nursing Courses:**

<b>Alpha Grade</b>	<b>4 Point Equivalent</b>	<b>Descriptor</b>
<b>A+</b>	<b>4.0</b>	<b>Excellent</b>
<b>A</b>	<b>4.0</b>	<b>Excellent</b>
<b>A-</b>	<b>3.7</b>	<b>First Class Standing*</b>
<b>B+</b>	<b>3.3</b>	<b>First Class Standing*</b>
<b>B</b>	<b>3.0</b>	<b>Good</b>
<b>B-</b>	<b>2.7</b>	<b>Good</b>
<b>C+</b>	<b>2.3</b>	<b>Satisfactory</b>
<b>C</b>	<b>2.0</b>	<b>Satisfactory</b>
<b>C-</b>	<b>1.7</b>	<b>Satisfactory</b>

### **Passing Grades in Nursing Courses**

### **Failing Grades in Nursing Courses**

<b>Alpha Grade</b>	<b>4 Point Equivalent</b>	<b>Descriptor</b>
<b>D+</b>	<b>1.3</b>	<b>Poor/Minimal Pass</b>
<b>D</b>	<b>1.0</b>	<b>Poor/Minimal Pass</b>
<b>F</b>	<b>0.0</b>	<b>Failure</b>

\* Very Good/Above Average is an alternate descriptor for First Class Standing.

*Students **may** receive a grade of D or D+ in an assignment or component of a course, but must have an overall grade of C- to achieve a passing grade in a nursing course.*

**\*\*Note: Refer to the 2006-07 GPRC College calendar p. 37 for further details regarding the grading policy and p. 122 and 123 regarding Progression Criteria in the Bachelor of Science in Nursing program.**

### NURS 2150 Schedule

All Chapter readings are from Lilley, L.L., Harrington, S., Synder, J.S., and Swart, B. (2006). *Pharmacology and the nursing process in Canada* (1<sup>st</sup> ed.). Toronto: Elsevier.

**NOTE:** *The weekly topics, generally, will be covered in the order listed, however, there may be some variations in the presentation and timing of the topics.*

Date/Week	Topics to Be Covered	Textbook Chapters/Pages for Reference
<b>Jan 3, 2007</b> <b>Week 1</b>	Intro to the Course Pharmacology Basics Drug Guide 101 Life Span Considerations	Chapter 2 A Current Drug Guide Chapter 3 Video: Medication Challenges in the Elderly
<b>Jan 10, 2007</b> <b>Week 2</b>	Over the Counter Medications Alternative therapies Analgesics	Chapter 7 Video: Alternative Therapies Chapter 10
<b>Jan 17, 2007</b> <b>Week 3</b>	Anti-Infectives	Chapters 37, 38, 39, 40
<b>Jan 24, 2007</b> <b>Week 4</b>	Drugs Affecting the Respiratory System Agents Affecting the Gastro-Intestinal System	Chapters 35, 36  Chapters 49, 50, 51
<b>Jan 31, 2007</b> <b>Week 5</b>	Drugs Affecting the Endocrine System	Chapters 29 thru 34
<b>Feb 7, 2007</b> <b>Week 6</b>	Anti-hypertensive Agents Diuretics	Chapter 24 Chapter 25
<b>Feb 14, 2007</b> <b>Week 7</b>	<b>Mid-Term Examination</b>	
<b>Feb 21, 2007</b>	<b>Reading Week</b> <b>No Class</b>	
<b>Feb 28, 2007</b> <b>Week 8</b>	Agents used to treat: Cardiovascular Disease, Myocardial Infarction Angina	Chapter 21 Chapter 22 Chapter 23
<b>Mar 7, 2007</b> <b>Week 9</b>	Coagulation Modifiers Antilipemic Agents	Chapter 27 Chapter 28
<b>Mar 14, 2007</b> <b>Week 10</b>	Drugs Affecting the Central Nervous System: Agents Used to Treat Insomnia Agents Used to Treat Seizures Antiparkinsonian Agents	Chapter 12 Chapter 13 Chapter 14

<b>Mar 21, 2007 Week 11</b>	Drugs Affecting the Central Nervous System: Anxiety, Emotions, Mood Stimulants	Chapter 15 Chapter 16
<b>Mar 28, 2007 Week 12</b>	Drugs Affecting the Autonomic Nervous System: Adrenergic Drugs Adrenergic-Blocking Drugs Cholinergic Drugs Cholinergic-Blocking drugs	Chapter 17 Chapter 18 Chapter 19 Chapter 20
<b>Apr 4, 2007 Week 13</b>	Anti-Inflammatory Agents Miscellaneous Agents: Dermatologic Agents Ophthalmic Agents, Otic Agents	Chapter 43  Chapter 55 Chapters 56, 57
<b>April 11, 2007 Week 14</b>	Complete Required Topics Review	