



**UNIVERSITY OF ALBERTA
COLLABORATIVE BACCALAUREATE
NURSING PROGRAM**

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



NURSING 2150

2007 – 2008 COURSE OUTLINE

WINTER, 2008

Revised by the Learning Experiences Development Committee, April 2007

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Approved: May 2007

COURSE LEADER:

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COURSE HOURS (per week): 14 week course

Lecture: 3 Seminar: 0 Lab: 0

COURSE LOCATION AND TIME:

Monday: 1130-1250 (D308)

Friday: 1000-1120 (D308)

Note: D308 has wireless internet capacity so you are welcome to bring laptops to class

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 adsorption, distribution, metabolism, and excretion (i.e., pharmacokinetics). To illustrate how the principles involved in pharmacotherapeutics need to be incorporated into professional nursing practice, examples from specific drug classes will be used. Brief scenarios will be used to integrate pharmacology within the clinical setting. Safe, evidence-based practice will be emphasized.

COURSE OBJECTIVES:

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

1. Demonstrate an understanding of ¹ the basic pharmacodynamic concepts underlying drug actions in the human body.
2. Demonstrate an understanding of the basic pharmacokinetic principles that govern 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 the nurse and the health team in promoting client education optimal therapeutic regimens, and in the anticipation and management of side/adverse effects.
5. Demonstrate an understanding of how individual differences account for differences in drug response.
6. Integrate principles of drug therapies into professional practice.

¹ 'Demonstrate an understanding of...' This means through satisfactory continuous assessment, the examination regimen, class interaction with tutor, etc.

7. Demonstrate an understanding of ethical and legal principles related to the administration of pharmacological agents.

REQUIRED TEXTBOOKS AND RESOURCES:

Lilley, L., Harrington, S., and Snyder, J. (2007). *Pharmacology and the nursing process in Canada*. Toronto: Elsevier.

Understanding Alberta's Drug Schedules:
http://pharmacists.ab.ca/ab_drug_schedules/

RECOMMENDED TEXTBOOKS AND RESOURCES:

Any drug handbook or drug handbook software for a PDA.

REQUIRED LEARNING EXPERIENCES:

NURS 2150 Lectures: students will work with tutor in class to acquire necessary information for pharmacotherapeutics. Pre-reading is an expectation. Refer to course schedule for required readings.

Powerpoint slides and class activities will be posted to Blackboard.

COURSE EVALUATION:

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

Course Requirements: Value and Due Date

1. **Midterm examination :** 40% (a combination of multiple choice and short answer questions)
2. **Poster presentation:** 15% (see attached information and marking guide – Appendix A)
3. **Final examination:** 45% (a combination of multiple choice and short answer questions). Content will only be tested from mid-term to the end of the course.

*refer to the Student Handbook for procedures for exams

Total 100%

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.

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.

Plagiarism and Cheating:

Please refer to the GPRC policy on plagiarism and cheating as guidelines for NS 2150.

<http://www.gprc.ab.ca/about/administration/policies.html>

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:

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

Passing Grades in Nursing Courses

Failing Grades in Nursing Courses

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

* 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 2007-08 College calendar p. 122 regarding Progression Criteria in the Bachelor of Science in Nursing program.**

NURS 2150 Schedule

Week/Date	Topic	Readings
1 Jan 4	<u>Pharmacology Basics</u> Introduction to the course (how content organized, test, exams etc.) followed by: <ul style="list-style-type: none"> ▪ Introduction to pharmacology ▪ Common terminology ▪ The Nursing Process and Drug Therapy ▪ Content in drug guides ▪ Drug schedules 	Course outline Chapter 1: The Nursing Process and Drug Therapy
2 Jan 7 Jan 11	Pharmacological Principles <ul style="list-style-type: none"> ▪ Pharmacokinetics ▪ Pharmacodynamics ▪ Pharmacotherapeutics ▪ Pharmacognosy Lifespan considerations in medication administration	Chapter 2: Pharmacology Principles Chapter 3: Lifespan considerations
3 Jan 14 Jan 18	<u>OTC and Herbal therapy</u> <u>Drugs affecting the CNS</u> Drugs for Control of Pain	Chapter 7: Over the counter and Natural Health Products Chapter 10: Analgesic agents
4 Jan 21 Jan 25	<u>Drugs affecting the CNS</u> Drugs for insomnia Drugs for Seizures Drugs for Parkinson's Disease	Chapter 12: Central Nervous System Depressants and Muscle relaxants Chapter 13: Anti-epileptic Agents Chapter 14 : Antiparkinsonian Agents

5 Jan 28 Feb 1	Drugs for Anxiety, emotional, and mood disorders	Chapter 15: Psychotherapeutic Agents
6 Feb 11	<u>Drugs affecting the autonomic nervous system</u> Review for Mid-term	Chapter 19: Cholinergic Agents Chapter 20: Cholinergic-Blocking Agents
7 Feb 15	Mid-term Test	
8 Feb 25 Feb 29	<u>Drugs affecting the Cardiovascular and Renal systems</u> ▪ Drugs for angina, MI, CVA	Chapter 21: Positive inotropic agents Chapter 22: Antidysrhythmic agents Chapter 23 : Antianginal agents
9 Mar 3 Mar 7	<u>Drugs affecting the Cardiovascular and Renal system</u> ▪ Drugs for hypertension ▪ Diuretics	Chapter 24: Antihypertensive Agents Chapter 25: Diuretic Agents
10 Mar 10 Mar 14	<u>Drugs affecting the Cardiovascular and Renal systems</u> ▪ Drugs for Coagulation Disorders ▪ Drugs for Lipid Disorders	Chapter 27: Coagulation Modifier Agents Chapter 28: Antilipemic agents

11 Mar 17 Mar 21	<u>Drugs affecting the Endocrine System</u> Drugs for diabetes Drugs for thyroid disorders	Chapter 31: Antidiabetic Agents Chapter 30: Thyroid and Antithyroid Agents
12 Mar 24 Mar 28	<u>Drugs affecting the Respiratory System</u> Drugs for asthma, COPD, bronchitis, emphysema <u>Drugs affecting the Gastrointestinal system</u>	Chapter 36: Bronchodilators and other respiratory agents Chapter 49: Acid-controlling agents Chapter 50: Antidiarrheals and laxatives Chapter 51: Antiemetics and antinausea agents
13 Mar 31 Apr 4	<u>Anti-infective Agents</u> Drugs for bacterial infections Drugs for viral infections Drugs for fungal infections Drugs for tuberculosis	Chapter 37: Antibiotics Chapter 38: Antiviral agents Chapter 39: Antituberculosis agents Chapter 40: Antifungal agents
14 April 5 April 11	<u>Anti-inflammatory, Antirheumatic, and Related Agents</u> Drugs for inflammatory disease processes <u>Poster Presentations</u>	Chapter 43: Anti-inflammatory agents
15	Final Exam during Exam Week	

Appendix A

Instructions and Marking Guide for Poster Presentations

Purpose:

The poster presentation will help the student make the link between a disease and a specific group of medications that treat the disease and the nursing knowledge that is necessary for the student to have to safely administer the medication.

Instructions:

1. The poster will consist of the following components as a minimum:
 - Pathophysiology of the disease in brief
 - Explanation of the drug group with a prototype drug
 - The pharmacokinetics and pharmacodynamics
 - Patient/client education
 - Nursing implications
 - Reference list in APA format
2. The display of the information can be done as creatively as you would like. The posters will be displayed in D308 on the tables or walls on **April 11th, 2008**.
3. Students will work in pairs or alone as desired. You will be expected to talk about your poster to the instructor and other students and answer any questions. Evaluation of the poster will occur during the presentation.

Marking Criteria:

A (excellent): The poster contains comprehensive and complete information about the identified disease pathophysiology. The relationship between the choice of drug group and disease is clear and comprehensive. The pharmacokinetics and pharmacodynamics are interpreted by the authors and relate clearly to the presented information about the disease. The most relevant patient/client education needs are identified in the poster. The nursing implications are prioritized and relate to the disease process. The poster is very creatively displayed and the author (s) is/are able to answer all questions knowledgeably about the content. All reference information is available in proper APA format.

B (very good): The poster contains complete information about the identified disease pathophysiology. The relationship between the choice of drug group and disease is clear but may be missing some information. The pharmacokinetics and pharmacodynamics are interpreted by the authors and relate to the presented information about the disease. Relevant patient/client education needs are identified in the poster. Some minor information may be missing. The nursing implications relate to the disease process. The poster is creatively displayed and the author (s) is/are able to answer most questions knowledgeably about the content. Most reference information is available with only minor errors in APA format.

C (good satisfactory): The poster contains most information about the identified disease pathophysiology. The relationship between the choice of drug group and disease is satisfactory but may be missing some information. The pharmacokinetics and pharmacodynamics are present but may not relate directly to the presented information about the disease. Some relevant patient/client education needs are identified in the poster but information is missing. The nursing implications mostly relate to the disease process. The poster is somewhat creatively displayed and the author (s) is/are able to answer some questions knowledgeably about the content. Most reference information is available with some consistent errors in APA format.

D (marginal): The poster contains limited information about the identified disease pathophysiology. The relationship between the choice of drug group and disease is satisfactory but missing relevant information. The pharmacokinetics and pharmacodynamics are present but missing information. Patient/client education needs are identified in the poster. Some significant information may be missing. The nursing implications do not relate specifically to the disease process. The poster could be more creative in nature and the author (s) is/are unable to answer some questions knowledgeably about the content. Some reference information is missing and there are substantial errors in APA format.

F (fail): The poster contains misinformation about the identified disease pathophysiology. The relationship between the choice of drug group and disease is missing relevant information. The pharmacokinetics and pharmacodynamics are missing or contain misinformation. Patient/client education needs are not identified in the poster or contain incorrect information. The nursing implications do not relate to the disease process. The poster could be more creative in nature and the author (s) is/are unable to answer questions about the content. All reference information is missing and there are substantial errors in APA format