



# **KEYANO COLLEGE**

## **COURSE SYLLABUS**

### **PRACTICAL NURSING 130**

#### **PHARMACOTHERAPEUTICS IN NURSING**

**JANUARY 10, 2017 – FEBRUARY 24, 2017**

**Instructors:**

Kortnie MacDougall BScN RN MN

Crystal Rose BScN RN

**Practical Nursing 130**  
**PHARMACOTHERAPEUTICS IN NURSING**  
**COURSE OUTLINE**

**CALENDAR STATEMENT:**

**PN 130: Pharmacotherapeutics in Nursing** 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.

**COURSE HOURS:**

Credits: 3

Lecture: 45

Lab: 0

Seminar: 0

**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 modifications 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.

**INSTRUCTOR INFORMATION:**

Kortnie MacDougall

Phone (Office): 780-792-2686

Office: 187A

e-mail: [Kortnie.MacDougall@keyano.ca](mailto:Kortnie.MacDougall@keyano.ca)

Crystal Rose

Phone (Office): TBA

Office: TBA

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**Instructor Office Hours:**

The instructor is available for student consultation in office from Monday to Friday (outside of classroom/clinical hours). Please contact your instructor at the number above or contact the Nursing Office at (780) 791-4889 to arrange a time.

**Email:**

Please allow 1-2 school days for a response. Include "PN 130" in your subject line.

**LEARNING OUTCOMES:****Upon completion of PN130, 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 and the health team in promoting client education optimal therapeutic regimens, and in the 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.
7. Demonstrate an understanding of ethical and legal principles related to the administration of pharmacological agents.

**REQUIRED LEARNING EXPERIENCES:**

**PN130 Lectures:** Students will work with the instructor in class to acquire necessary information for pharmacotherapeutics. Attendance is an expectation. In addition, you will need to spend approximately 1-3 hours on Moodle PN130 course site each week.

## **TEXTBOOKS AND RESOURCES:**

The following are textbooks and resources required or recommended specifically for this course. Other required/recommended program-wide textbooks/resources are listed on yearly resource lists.

## **REQUIRED TEXTBOOKS:**

Adams, M. P., Holland Jr., L. N., & Bostwick, P. M., & King, S. L. (2010). *Pharmacology for nurses: A pathophysiologic approach*. (Cdn. ed.) Toronto, ON: Pearson Canada.

Predham, B., & Buchholz, S. (2010). *Henke's med-math. (1st Canadian ed.)*. Philadelphia, PA: Lippincott Williams & Wilkins.

Drug book as required for each year of program.

## **REQUIRED COURSE RESOURCES:**

The faculty of nursing creates a Moodle site for all courses. Students are expected to access and become familiar with this site at the beginning of each course and to access their site on a regular basis throughout the course. Failure to do so may result in students missing important course-related information, resources, instructor feedback and announcements. Students must log into Moodle prior to the beginning of PN 130 and access all available resources on Moodle.

## **RECOMMENDED TEXTBOOKS:**

Lippincott Williams & Wilkins (2013). *Nursing pharmacology made incredibly easy*. (3<sup>rd</sup> ed.). Ambler, PA: Lippincott Williams & Wilkins | Wolters Kluwer Health.

**Required reading(s) and Guiding Questions for each class can be found on Moodle.  
Required readings are to be done prior to each class.**

## Expectations of Students Writing On-Line Exams

1. Students are responsible for accessing the exam from a location and computer of their choice. The student is responsible for discussing any computer/internet issues with the Instructor at least two days prior to the exam date listed on the course timetable.
2. Quizzes and exams are not open book exams. The quiz or exam is to have been studied for prior to the quiz/exam date and is to be completed independently; that is by oneself, not in collaboration with, or company of, another person or persons. No photos of quiz/exam questions are to be taken via phones or any other electronic device.
3. Once the quiz/exam has started, the student will submit their answers immediately before going on to the next question. The student will not be able review/change answers.
4. Students must ensure they have a reliable internet connection.
5. If students are writing from outside Fort McMurray or in another province, it is the students' responsibility to ensure the time change is adhered to. That is if the exam is to start at 0900 hours Alberta time and is being written in Ontario, then the time to begin the exam is at 1100 hours Ontario time. It is **strongly recommended** that students write within Alberta as Moodle may not be supported outside of the province. Students must seek permission from instructor if writing a quiz/exam outside of the province.
6. Time for online quizzes/exams will be strictly adhered to. For example, if a quiz is for thirty minutes it will be open for exactly thirty minutes. The instructor will let the student know the exact time of the quiz/exam.
7. No grades will be released until the instructor has had time to review the quiz/exam stats. Once the review has been done, the marks will be released. Review of quiz/exam questions in class will be done at the instructors' discretion.
8. If any arises during the taking of the quiz/exam, the student is to contact the instructor immediately at the time of the issue.
9. It is the responsibility of each student to be familiar with the contents of the Student Code of Conduct. At the beginning of January 2016, it will be mandatory that all students sign a form identifying they have read/or are familiar with the Student Code of Conduct. First, Second, and Third year students will have read or are familiar with the Keyano College Student Code of Conduct. Fourth year students will identify they are familiar with the University of Alberta Student Code of Conduct. Beginning in September 2017, all new students plus students moving from third to fourth year will be mandated to sign the above form(s).

## **Statement on Plagiarism**

All students must complete the Plagiarism/Tutorial Certificate found on Moodle. To locate this information, sign into Moodle and on the left side of the page under student the tutorial can be located.

Expectations:

1. All students must complete this tutorial. The certificate must be shown to the instructor prior to submitting any written assignment. Failure to show the instructor the certificate of completion could result in a late written assignment penalty.
2. If you have completed this tutorial in a University Studies course you can show your instructor the certificate. The tutorial is required to be completed only once during your time at Keyano unless you have left the program and returned.

## **Student Code of Conduct**

Please refer to the Student Handbook and review the Student Code of conduct Policy (Policy 110.0), Students Rights policy (Policy 111.0) and Student Code of Conduct Procedure (110.1). It is expected that you will review and be aware of expectations relative to student rights, responsibilities and behaviours

## **OVERVIEW OF COURSE EVALUATION:**

**To pass PN 130, the student must successfully complete all course requirements and receive a passing grade (C-) in the course.** (See Appendix A).

<b>Evaluation Type</b>	<b>Weight</b>	<b>Comments</b>
Exam 1 (computer-based)	20%	Units 1-3 inclusive
Exam 2 (computer-based)	20%	Unit 4
Exam 3 (computer-based)	20%	Unit 5
Final Exam (computer-based)	40%	Cumulative

## **EXAMINATIONS**

It is the responsibility of each student to be familiar with the contents of the Student Code of Conduct. At the beginning of January 2016, it will be mandatory that all students sign a form identifying they have read/or are familiar with the Student Code of Conduct. First and second year students will have read or are familiar with the Keyano College Student Code of Conduct.

The examinations cover content from readings, PowerPoints, class activities and content from class lecture/discussion. The student will only have one attempt to complete the exam once it has started. The online exam must be completed within the allotted time frame on the assigned date. The exam can be accessed via Moodle during the allotted time identified on the course timetable and is not flexible on date/time. The student will submit their answers immediately before going on to the next question. The student will not be able to review/change answers during or at the end of the exam. This is not an open-book examination. This examination is to have been studied for prior to the examination date and is to be completed independently; that is by oneself, not in collaboration or company of another person.

Students are responsible for accessing the exam from a location and computer of their choice, including a personal or Keyano College computer. The student is responsible for discussing any computer/internet access issues with the Instructor at least one day prior to the exam date listed on the course timetable. Students are responsible to ensure they have a secure internet connection; WiFi is not a secure connection to the internet and may result in an internet disruption. Instructor(s) will be available via telephone during the final examination to report any technology issues. Should any issue arise during the exam, students are responsible to contact their instructor immediately at the time of the issue.

### ***Examination #1 - (20%)***

This exam will consist of 75 multiple choice questions. Content covered will be from Units 1-3 inclusive.

### ***Examination #2 - (20%)***

This consist of 50 multiple choice questions. Content covered will be from Unit 4 inclusive.

### ***Examination #3 – (20%)***

This exam will consist of 50 multiple questions. Content covered will be from Units 5 inclusive.

### ***Final Examination – (40%)***

This exam will consist of 100 multiple choice questions. It is a cumulative final exam.

## **ASSIGNMENT OF FINAL GRADE:**

All evaluative components are marked as raw scores according to the percentage weight assigned to each. At the end of the course, all scores are totaled for a term summary mark in the course. The final percent grade is converted to an Alpha grade.

## **ABSENCE FROM QUIZZES AND EXAMS:**

If you are ill and unable to write an exam, you must let the tutor know prior to the exam so that other arrangements can be made. Please call the tutor or the Administrative Assistant at 780-791-4889. If there is no answer, you must leave a message about the absence. Failure to call prior to the exam will result in a failure for that exam.

## **NURSING PROGRAM POLICIES:**

Please refer to the Keyano College Nursing Program Student Handbook for specific Nursing program policies and to the Keyano College Calendar for general college policies.

Refer to Keyano College Calendar for Student Rights and Responsibilities, Misconduct and Discipline, and Student Appeal Procedure.

## **SPECIALIZED SUPPORTS AND DUTY TO ACCOMMODATE:**

### ***Students with Disabilities***

It is the College's goal that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, please let Disability Services know immediately so that you can discuss options. You are welcome to contact Disability Services (780-791-8934) to establish reasonable accommodations.

## GUIDING QUESTIONS

Guiding questions are provided on Moodle for each lecture. These questions are designed to help students focus on important points in each chapter of the textbook. In addition, for all different types of medications the mechanisms of action, drug effects, indications, interactions, contraindications, side and toxic effects, and nursing considerations need to be addressed. This information will be referred to as '**prototype information**' in the guiding questions. This information will come from the textbooks as well as the drug guide. All information is testable.

## COURSE SCHEDULE:

Class	Topic(s)
Class 1 January 10	<b>Course Orientation</b> <b>Unit 1:</b> Introduction to Pharmacology: Drug Regulation & Approval, & Drug Classes & Schedules
	<b>Unit 1:</b> Pharmacokinetics & Pharmacodynamics
Class 2 January 11	<b>Unit 2:</b> Pharmacology & the Nurse-Patient Relationship
	<b>Unit 3:</b> Professional, Personal, & Cultural Influences in Pharmacotherapy
Class 3 January 17	<b>Exam #1 (20%)</b>
Class 4 January 19	<b>Unit 4:</b> The Nervous System
Class 5 January 23	<b>Unit 4:</b> The Nervous System
Class 6 January 25	<b>Exam #2 (20%)</b>
Class 7 January 30	<b>Unit 5:</b> The Cardiovascular System
Class 8 February 3	<b>Unit 5:</b> The Cardiovascular and Respiratory System
Class 9 February 7	<b>Exam #3 (20%)</b>
Class 10 February 10	<b>Unit 6:</b> The Immune System
Class 11 February 13	<b>Unit 7:</b> The Gastrointestinal System
Class 12 February 17	<b>Unit 8:</b> The Endocrine and Genitourinary System
Class 13 February 21	<b>Unit 9:</b> The Musculoskeletal System, Integumentary System and Eyes/Ears
Class 14 February 22	Extra class if required
Final Exam February 24	<b>Final Examination (40%)</b>

\*Please see Course Timetable for dates, times and locations of classes. Course Timetable is located on Moodle for PN 130

## APPENDIX A

### Keyano College Percentage- Alpha Grading System

<b>Descriptor</b>	<b>Percentage Scale</b>	<b>Alpha Scale</b>
<b>Excellent</b>	<b>96-100</b>	<b>A+</b>
	<b>90-95</b>	<b>A</b>
	<b>85-89</b>	<b>A-</b>
<b>Good</b>	<b>80-84</b>	<b>B+</b>
	<b>76-79</b>	<b>B</b>
	<b>72-75</b>	<b>B-</b>
<b>Satisfactory</b>	<b>68-71</b>	<b>C+</b>
<b>Minimum Pass</b>	<b>64-67</b>	<b>C</b>
	<b>60-63</b>	<b>C-</b>
<b>Poor</b>	<b>55-59</b>	<b>D+</b>
	<b>50-54</b>	<b>D</b>
<b>Failure</b>	<b>0-49</b>	<b>F</b>

This course outline has been reviewed and approved by the Program Chair.

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*Kortnie MacDougall BScN RN MN*  
Instructor

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Bev Maron, Chair

Date Authorized

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Vincella Thompson, Dean

Date Authorized

**Signed copies to be delivered to:**  
Instructor  
Registrar's Office