



PPNP-106 – Pharmacology 1

Health and Human Services

Effective Term & Year: Fall 2022
Course Outline Review Date: 2023-03-01

Program Area: Health

Description:

This introductory course examines the principles of pharmacology required to administer medications in a safe and professional manner. Medication administration requires the application of the nursing process for clinical decision making. Various routes of medication administration are introduced, and complementary, Indigenous, alternative remedies and polypharmacy across the lifespan are also explored.

Program Information:

This course is one of eight courses required in Level 1 of the Practical Nursing program. Satisfactory completion of this course is required to progress to the next level.

Delivery Methods: On-campus (Face-to-Face)

Credit Type: College of the Rockies Credits

Credits: 2

Instructional Activity and Hours:

Activity	Hours
Classroom, Directed Studies or Online Instruction	30
Seminar/Tutorials	
Laboratory/Studio	
Practicum/Field Experience	
Co-op/Work Experience	

Other

Total	30
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Course Requisites:

- Complete all of the following
 - Earned a minimum grade of C+ (65%) in each of the following:
 - **PPNP101** – Anatomy and Physiology for Practical Nursing (3)
 - Completed or concurrently enrolled in:
 - **PPNP104** – Variations in Health 1 (3)
 - **PPNP105** – Health Promotion 1 (2)
 - **PPNP107** – Integrated Nursing Practice 1 (4)

Flexible Assessment: Yes

In some cases students may be able to apply for recognition of prior learning outside the classroom. This flexible assessment process provides equivalent course credit. It is a rigorous process that may include external evaluation, worksite assessment, demonstration, standardized test, self-assessment, interview, products/portfolio, and challenge exam, or other measures as appropriate. Tuition fees apply. Contact an education advisor for more information.

Course Transfer Credit:

For information about receiving transfer credit for courses taken at either British Columbia or Alberta institutions, please see <https://www.bctransferguide.ca/> or <https://transferalberta.alberta.ca> . For more transfer credit information, please visit <https://www.cotr.bc.ca/Transfer>

All requests for course transfer credit from institutions in British Columbia or elsewhere should go to the College of the Rockies Enrolment Services office.

Textbook Resources:

Textbook selection varies by instructor and may change from year to year. At the Course Outline Effective Date the following textbooks were in use:

BCCNP: Current British Columbia College of Nursing Professions (BCCNP) documents.

Clayton, B. D., & Willihnganz, M. J. (2017). *Basic pharmacology for nurses* (17th ed.). St. Louis, MO: Elsevier Saunders.

Karch, A. M. (2015). *Lippincott nursing drug guide*. Philadelphia, PA: Lippincott Williams & Wilkins.

Potter, P. A. & Perry, A. (2014). *Canadian fundamentals of nursing*. (5th ed.). Toronto, ON: Elsevier Canada.

Please see the instructor's syllabus or check COTR's online text calculator <https://textbook.cotr.bc.ca/> for a complete list of the currently required textbooks.

Learning Outcomes:

Upon the successful completion of this course, students will be able to:

- describe the responsibility of the LPN in administration of medication;
 - explain how drug standards and the legislation affect drug regulation in Canada;
 - explain the purpose of the Canadian drug laws and their application to nursing practice;
 - describe the concepts of pharmacodynamics and pharmacokinetics;
 - identify basic terminology used in pharmacology;
 - describe the principles of pharmacology as related to common drug actions and interactions;
 - demonstrate competency with basic mathematical drug calculations;
 - identify commonly used drug classification systems in Canada;
 - explain the principles of medication administration;
 - describe the routes of medication administration;
 - apply the nursing process as it relates to medication administration;
 - identify various classes of medications used to treat specific disorders/illness; and
 - identify complementary, Indigenous and alternative therapies.
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Course Topics:

- Introduction to pharmacology
- The LPN role and legal responsibilities of medication administration
- Pharmacodynamics
- Pharmacokinetics
- Drug actions and interactions
- Drug classifications according to body systems
- Principles of medication administration
- Drug distribution systems
- Basic terminology used in pharmacology
- Nursing process and pharmacology
- Routes of medication administration:
 - Oral

- Rectal
- Topical
- Parenteral
- Percutaneous
- Introduction to complementary, Indigenous and traditional healing alternatives
- Vitamin Supplements
- Herbal Preparations
- Homeopathy
- Basic medication dosage calculations
- Polypharmacy across the lifespan

See instructor's syllabus for the detailed outline of weekly readings, activities and assignments.

Evaluation and Assessments

Assessment Type: On-Campus (face-to-face)

Assessment Type	% of Total Grade
Assignment	10%
Quiz 1	30%
Quiz 2	30%
Final Comprehensive Exam	30%
Total	100%

Grade Scheme

A+	A	A-	B+	B	B-	C+	C	C-	D	F
>=95	94-90	89-85	84-80	79-75	74-70	69-65				<65

Pass requirements: None

Evaluation Notes Comments:

Math Exam – Based on drug dosage calculations, students must achieve 100% to pass, and will be given 3 attempts to achieve 100% (different exam each time).

Theory Exams – Learners must achieve an overall average of 80% on the theory portion of pharmacology. One rewrite will be available to replace the lowest achieved exam mark. Maximum grade assigned after a rewrite will be 80%.

Exam Attendance:

Students must attend all scheduled exams at the appointed time and place. Instructors may approve an alternate exam to accommodate an illness or personal crisis. Department heads will

consider other written requests. Any student who misses a scheduled exam without prior approval will receive a “0” on the exam.

Academic Policies:

College of the Rockies policies related to courses can be found at <https://cotr.bc.ca/about-us/college-policies/> and include the following:

- Policy 2.4.3 Students with Documented Disabilities
 - Policy 2.4.4 Student Conduct (plagiarism, other cheating, behavioral misconduct)
 - Policy 2.5.8 Academic Performance
 - Policy 2.5.3 Grade Appeal
 - Policy 2.4.9 Student Concerns Re Faculty
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Equivalent Course(s) and Course Code Changes

Prior Course Code: PNUR 105

Date changed: September 2012

Course Changes:

The College of the Rockies updates course outlines regularly to meet changing educational, employment and marketing needs. The instructor will notify students in writing of any updates to this outline during the semester. The instructor reserves the right to revise, add or delete material while meeting the learning outcomes of this course outline.