PPNP-115 – Pharmacology 2

Health and Human Services

Effective Term & Year: Fall 2027
Course Outline Review Date: 2032-03-01

Program Area: Health

Description:

Learners build on content from Pharmacology 1 to develop their understanding of pharmacotherapeutics prescribed for illnesses across the lifespan. Topics include drug classifications and links with common diseases and illnesses based on a body system approach, drug resistance, and the practical nurse's legal responsibilities associated with the administration of opioids. Learners will discuss interactions of complementary, Indigenous, and alternative therapies and prescription medications.

Program Information:

This course is one of seven courses required in Level 2 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

Course Requisites:

- Complete all of the following
  - Successful completion of Level 1 courses.
  - Completed the following:
    - PPNP108 – Consolidated Practice Experience 1 (2)
  - Completed or concurrently enrolled in:
    - PPNP111 – Professional Practice 2 (1)
    - PPNP112 – Professional Communication 2 (2)
    - PPNP113 – Variations in Health 2 (3)
    - PPNP114 – Health Promotion 2 (2)
    - PPNP116 – Integrated Nursing Practice 2 (5)

Prior Learning and Recognition: Yes

Students are able to request formal recognition of their prior learning or experience outside the classroom. Challenge examination, portfolio-assisted assessment, work-based assessment or a combination of assessments that is appropriate to identify, assess, and recognize prior skills, competencies, and knowledge to achieve course credit. Tuition fees apply, refer to Policy 2.5.5 Prior Learning Assessment and Recognition (PLAR) or 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 Columba 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:

BCCNM: Current British Columbia College of Nurses and Midwives (BCCNM) documents.

Astle, B. J., & Duggleby, W. (2024). *Potter and Perry's Canadian fundamentals of nursing* (7th ed.). Elsevier.

Vallerand, A. H., & Sanoski, C. A. (2026). *Davis's Canadian drug guide for nurses* (20th ed.). F.A. Davis Company.

Willihnganz, M. J., Gurevitz, S. L., & Clayton, B. D. (2026). *Basic pharmacology for nurses* (20th ed.). Elsevier.

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

1. Describe medication classifications, actions, interactions, and nursing implications for body systems, including endocrine, neurological, cardiovascular, respiratory, gastrointestinal, genitourinary, and musculoskeletal systems, and miscellaneous drug classifications.

- 1.1 Describe the effects, uses, and indications for antimicrobials, as well as the relationship with drug resistance.
- 1.2 Describe the potential interactions between prescription medications and complementary, Indigenous, and alternative therapies, including herbal preparations.

2. Relate drug interactions, polypharmacy, and food-drug effects to medications used by clients across the lifespan, particularly in older adults.

- 2.1 Describe age-related changes and safe medication practices in older adults.
- 2.2 Discuss how age-related changes impact pharmacokinetics.

3. Discuss opioid side effects, indications for use, and the practical nurse's legal responsibilities related to opioid administration.

- 3.1 Discuss the principles of pain management.
- 3.2 Explore types of analgesics.
- 3.3 Describe major classes of drugs that are substances of addiction.

4. Conduct basic mathematical drug calculations correctly.

- 4.1 Review medication calculation content from Pharmacology 1.
- 4.2 Identify common unit conversion factors.

- 4.3 Discuss the 24-hour clock and why this is important in medication administration.
- 4.4 Summarize the consequences of mathematical errors when calculating drug dosages.

5. Examine the LPN’s professional role within the interprofessional team in ordering, processing, dispensing, administering, and monitoring prescription medications and complementary and alternative therapies.

- 5.1 Explore the BCCNM documents that guide the practical nurse’s role in relation to medication handling.
- 5.2 Discuss legal, professional, and ethical considerations when ordering, processing, dispensing, administering, and monitoring medications.

Course Topics:

Course outcomes will be met through examination and exploration of the following:

- Drug Classifications according to body systems:
  - Endocrine System
  - Nervous system, including effects on cognition and mental health (anti-depressants, anxiolytics, antipsychotics, sedatives and hypnotics, and anticonvulsants and antiepileptics)
  - Cardiovascular system
  - Respiratory system
  - Gastrointestinal system (not including medications used to treat constipation)
  - Genitourinary system
  - Musculoskeletal system
  - Sensory system
- Miscellaneous drug classifications (antineoplastics)
- Antimicrobial, antiviral, and antifungal agents
- Analgesics: opioid and non-opioid
- Drug resistance
- Interactions of prescription medications with complementary, Indigenous, and alternative therapies, including herbal preparations
- Medication dosage calculations

See instructor 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
Exam 1	35%
Exam 2	45%

Medication Case Study	20%
Math Exam	Pass/Fail
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:

An overall average of B+ (80%) or higher is required to pass this course and a PASS (100%) on the medication calculation exam.

Evaluation Notes: If a student falls below the minimum 80% requirement, they will have one opportunity to retest.

Evaluation Notes Comments:

The student has three attempts to achieve a PASS (100%) on the medication calculation exam. See course syllabus for retest process.

Additional Evaluation Information:

No rewrites will be granted for any assignments or exams within this course.

Please see the instructor's syllabus for specific classroom policies related to this course, such as details of evaluation, penalties for late assignments and use of electronic aids.

Student Attendance/Absence

- As adult learners, students are expected to attend all classes. Attendance is taken as a means of monitoring student success. In the event of illness or other unavoidable cause of absence, the student should notify the appropriate instructor as soon as possible.
- Students must attend all clinical/preceptorship experiences. If illness or other unavoidable absence occurs, the student must notify the appropriate instructor prior to the time s/he is expected.
- Unexcused/excessive absences from clinical/preceptorship may mean students must withdraw from the program.

Written Assignments

- Assignments about clients must be written using the clients' INITIALS ONLY.
- A 15% penalty will be applied for each day past due date for late assignment submissions. If any assignment is more than three days late, it will be assigned a grade of "0".

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 2.1.4 Course Audit
- Policy 2.4.1 Credential Framework
- Policy 2.4.3 Students with Documented Disabilities
- Policy 2.4.4 Student Rights, Responsibilities and Conduct
- Policy 2.4.8 Academic Performance
- Policy 2.4.9 Student Feedback and Concerns
- Policy 2.4.11 Storage of Academic Works
- Policy 2.5.3 Student Appeal
- Policy 2.5.5 Prior Learning Assessment and Recognition (PLAR)

Equivalent Course(s) and Course Code Changes

Prior Course Code: PNUR 205

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.