



Nursing (NURS) 316

Review of Pathophysiology and Pharmacology for BN Practice I (Revision 4)

Status: Replaced with new revision, see the [course listing](#) for the current revision ✕

Delivery mode: [Individualized study online](#). Delivered via Brightspace.

Credits: 3

Area of study: Applied Study

Prerequisites: Available only to Bachelor of Nursing students with professor approval.

Post-LPN BN: [BIOL 235](#)

Precluded: None

Challenge:

NURS 316 is not available for challenge.

Faculty:

[Faculty of Health Disciplines](#) 

Notes:

This course will not apply toward the degree requirements for the Post-RN Bachelor of Nursing program. Post-RN BN students who wish to take this course extra to degree may request professor approval.

Overview

Nursing 316 Review of Pathophysiology and Pharmacology for BN Practice 1 provides an integrated review of the pathology of disease and pharmacological interventions. This course includes the foundation of pathophysiology and pharmacology related to: cell and tissue function; integrative body functions; hematopoietic function; infection and Immunity; circulatory function; and respiratory function.

Outline

NURS 316 comprises seven units. Each unit includes recommended readings, and related learning activities.

- Unit 1: Basic Foundations for Pathophysiology and Pharmacology
- Unit 2: Cell and Tissue Function
- Unit 3: Integrative body Functions
- Unit 4: Hematopoietic Function
- Unit 5: Infection and Immunity
- Unit 6: Circulatory Function
- Unit 7: Respiratory Function

Learning outcomes

After completing *Nursing 316: Review of Pathophysiology and Pharmacology for BN Practice 1*, you will achieve or exceed the following learning outcomes:

- Explain the links between the clinical signs and symptoms of common diseases and the underlying pathophysiological processes;
- Articulate the relationships between pathophysiological processes and tests used to diagnose common diseases;
- Describe variations of pathophysiological processes across the lifespan;
- Describe the principles of homeostasis, compensation and adaptation in ordered and disordered physiology as manifested in the various body systems;
- Identify major classifications of pharmacotherapeutic agents and prototypes of each as used in the treatment of common health alterations;

- Describe the therapeutic actions, indications, pharmacokinetics, contraindications, most common adverse reactions, and important drug-drug interactions associated with drug classifications and specific drugs;
- Identify physiological and pathophysiological differences that must be considered in assessing therapeutic medication dosages administered across the lifespan;
- Competently calculate drug dosages;
- Describe ethical, legal and professional responsibilities for the Registered Nurse related to safe medication administration.

Evaluation

To **receive credit**  for NURS 316, students must complete all of the required assignments, achieve a minimum pass grade of 64% on the Final Exam, and a composite grade of at least **C(64 percent)** .

The assignments and weighting of the composite grade is as follows:

Activity	Weight
Assignment 1: Medication Calculation Assessment (100% Pass Required. Multiple Attempts)	Pass/Fail
Assignment 2: Unit Quizzes	25%
Assignment 3: Cumulative Unit Assessment (Units 1-4) (Invigilated)	35%

Activity	Weight
Assignment 4: Final Exam	40%
Total	100%

Undergraduate nursing (NURS) courses require the use of **ProctorU** as the only approved invigilation platform. This requirement applies to all assessments designated as invigilated, regardless of whether they are identified as exams, quizzes, tests, cumulative unit assessments, or any other invigilated course activities. **There are no exceptions.**

Materials

Digital course materials

Links to the following course materials will be made available in the course:

Norris, T., & Tuan, R. L. (2019). *Porth's essentials of pathophysiology* (5th ed). Wolters Kluwer.

Tucker, R. (2023). *Karch's focus on nursing pharmacology* (9th ed). Wolters Kluwer.

Other Materials

A variety of electronic journals and websites are used in the course and paper copies are not included in the course package.

Important links

- › [Academic advising](#) 
- › [Program planning](#) 
- › [Request assistance](#) 
- › [Support services at AU](#) 

Athabasca University reserves the right to amend course outlines occasionally and without notice. Courses offered by other delivery modes may vary from their individualized study counterparts.

Opened in Revision 4, July 12, 2024

Updated October 8, 2026

View [previous revision](#) 