



UNIVERSITY OF ALBERTA
Faculty of Nursing Undergraduate Programs
BScN COLLABORATIVE PROGRAM
Grande Prairie Regional College, Keyano College,
Red Deer College, University of Alberta



NURS 216
PATHOPHYSIOLOGY AND PHARMACOLOGY II
COURSE OUTLINE

**Note: students are expected to familiarize themselves with this course outline,
the BScN Program Student Handbook and Moodle site.**

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NURS 216 COURSE OUTLINE

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PAGE 1 OF 19

Contents

Calendar statement.....	4
NURS 216 – Pathophysiology and Pharmacology II.....	4
Course hours (for this term).....	4
Course Learning Outcomes.....	4
Course Contacts.....	5
Online Course Information.....	5
Required textbooks.....	6
Required resources.....	6
Required supplies.....	8
Performance Requirements.....	8
Student Responsibilities.....	8
Student Attendance.....	8
Academic Misconduct.....	8
Late Assignments.....	9
Specialized Supports.....	9
Accessibility Services.....	10
Academic Success Coaching.....	10
Wellness Services.....	10
Library Services.....	10
Skill Centre.....	11
E-Learning.....	11
Internet Speed.....	11
Computer Software.....	13
Recording of lectures and Intellectual Property.....	13
ITS Helpdesk.....	13
Course evaluation.....	13
Assignments Descriptions.....	14
Using LockDown Browser and Respondus for Online Exams.....	15

Calendar statement

NURS 216 – Pathophysiology and Pharmacology II

★3 The course explores selected episodic and chronic health alterations and the related pharmacological concepts. The focus is on applying foundational knowledge of pathophysiology and pharmacology to evidence-informed nursing practice. Aligns with concepts from NURS/SC INF 220 and NURS/SC INF 221 intentional clinical learning activities. Note: Available only to nursing students in the Collaborative/Honors Program and Bilingual Program. Prerequisite for Collaborative/Honors Program students: NURS 116 (or NURS 113). Prerequisite for Bilingual Program students: PHYSE 152. Students must achieve a minimum grade of C+ in order to progress in the program. Credit may be obtained for only one of NURS 216 or 215.

Course hours (for this term)

Lecture: 45 hours

Seminar: 0

Lab: 0

Course Learning Outcomes

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

1. Link knowledge of anatomy and physiology to pathophysiological and pharmacotherapeutic concepts.
2. Demonstrate theoretical understanding of pathophysiology as it relates to changes in health status.
3. Demonstrate theoretical understanding of pharmacokinetic and pharmacodynamic principles in pharmacotherapeutics.
4. Describe the pharmacotherapeutic classification, mechanism of action, properties, and effects of drugs.
5. Explain the relationship between pathophysiological concepts and pharmacotherapeutic concepts at a novice level.
6. Apply the pathophysiology and pharmacotherapeutic concepts to focused non-complex clinical examples at a novice level.
7. Identify the nursing implications in relation to pathophysiology and pharmacotherapeutics at a novice level.
8. Predict common trajectories for pathophysiological processes and pharmacotherapeutic treatments at a novice level.

Course Contacts

<u>Name</u>	<u>Office number</u>	<u>Phone number</u>	<u>Email</u>
Jennifer Courtney			jennifer.courtney@keyano.ca

Note:

- Please allow 2 business days for a response. Include N216 in your subject line.
- Professional and respectful communication is expected.

Communication:

It is the students' responsibility to ensure that they check Moodle courses at minimum of twice daily, once in morning and evening. It is recommended to check Moodle more frequently. It is the students' responsibility to ensure thorough review of all resources and content on the Moodle course site. The instructors have placed many resources and documents to ensure the students' success in each course.

Instructors will communicate with the student group by announcements in the news forum on Moodle. Please ensure that you check this at least twice daily.

It is the students' responsibility to check their Keyano College email at minimum of twice daily, once in morning and again in evening. It is recommended to check email more frequently. Please note that the method to contact your instructor is email. Please allow a 48 hour minimum response time from your instructor on business days. Instructors will not be checking emails on evenings and weekends/holidays. Do not text or call your instructor unless you will be absent for clinical that day; inquiries related to assignments and course content will be sent in an email to your instructor.

Online Course Information

Due to the pandemic, COVID-19, this course will be delivered in an online format. Instructors will deliver course material by utilizing different platforms that best suits the course. Online resources may include Microsoft Teams, ZOOM, virtual simulation, Adobe Connect, or Voice-Over PowerPoint Presentations. Courses will remain interactive throughout the semester and may include video lectures, forum discussions and virtual group projects. Evaluation criteria will be listed in each course syllabus.

It is the responsibility of the student to ensure access to these resources and participate in course content fully. If technical difficulties arise it is the responsibility of the student to contact their instructor as soon as

possible to inform them of such. Where possible instructors will seek mutual resolution in the best interests of the class as a whole.

Required textbooks

(Note: Foundations textbooks will be used as references throughout the program. Please retain your copies as they will be required resources in future courses).

El-Hussein, M. T., Power-Kean, K., Zettel, S., Huether, S. E., McCance, K. L., Brashers, V. L., & Rote, N. S. (2018). *Understanding Pathophysiology*. Milton: Elsevier.

Giddens, J. F. (2017). *Concepts for Nursing Practice*. St. Louis, MO: Elsevier.

Lewis, S. L., Bucher, L., Heitkemper, M. M., Harding, M. M., Barry, M. A., Lok, J., Tyerman, J. & Goldsworthy, S. (2019). *Medical-Surgical Nursing in Canada*. Milton, ON: Elsevier. Lilley, L. L., Collins, S. R., Snyder, J. S., & Swart, B. (2017). *Pharmacology for Canadian Health Care Practice*. Milton: Elsevier.

Required resources

College and Association of Registered Nurses of Alberta. (2013). *Entry-to-practice competencies for the registered nurses profession*. Edmonton, AB: Author. Retrieved from http://www.nurses.ab.ca/content/dam/carna/pdfs/DocumentList/Standards/RN_EntryPracticeCompetencies_May2013.pdf

College and Association of Registered Nurses of Alberta (2010). *Ethical decision-making for registered nurses in Alberta: Guidelines and recommendations*. Edmonton: Author. Retrieved from http://www.nurses.ab.ca/content/dam/carna/pdfs/DocumentList/Guidelines/RN_EthicalDecisions_May2010.pdf

College and Association of Registered Nurses of Alberta. (2013). *Practice standards for regulated members with The Canadian Nurses Association code of ethics for registered nurses*. Edmonton: Author. Retrieved from http://www.nurses.ab.ca/content/dam/carna/pdfs/DocumentList/Standards/PracticeStandards_CNA_Ethics_2008.pdf

College and Association of Registered Nurses of Alberta. (2008). *Primary health care*. Edmonton, AB:

Author. Retrieved from

http://www.nurses.ab.ca/content/dam/carna/pdfs/DocumentList/Guidelines/PrimaryHealthCare_Sep2008.pdf

College and Association of Registered Nurses of Alberta. (2011). *Professional boundaries for registered nurses: Guidelines for the nurse-client relationship*. Edmonton, AB: Author. Retrieved from

http://www.nurses.ab.ca/content/dam/carna/pdfs/DocumentList/Guidelines/RN_ProfessionalBoundaries_May2011.pdf

Required supplies

Drug Guide of your choosing.

Elsevier Evolve online Platform with textbooks that are included.

An electronic device that is equipped with a reliable internet connection, video recording capabilities (ie. A webcam) and a microphone.

Performance Requirements

Student Responsibilities

It is your responsibility as a student to contact the Office of the Registrar to complete the forms for Withdrawal or Change of Registration, and any other forms. Please refer to the list of important dates as noted in the Academic Schedule in the Keyano College credit calendar (www.keyano.ca/creditcalendar).

The Keyano College credit calendar also has information about Student Rights and Code of Conduct. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and Code of Conduct Policies.

Student Attendance

Class attendance is useful for two reasons. First, class attendance maximizes a student's learning experience. Second, attending class is a good way to keep informed of matters relating to the administration of the course (e.g., the timing of assignments and exams). Ultimately, you are responsible for your own learning and performance in this course.

It is the responsibility of each student to be prepared for all classes. Students who miss classes are responsible for the material covered in those classes and for ensuring that they are prepared for the next class, including the completion of any assignments and notes that may be due.

Academic Misconduct

Students are considered to be responsible adults and should adhere to principles of intellectual integrity. Intellectual dishonesty may take many forms, such as:

- Plagiarism or the submission of another person's work as one's own;
- The use of unauthorized aids in assignments or examinations (cheating);

- Collusion or the unauthorized collaboration with others in preparing work;
- The deliberate misrepresentation of qualifications;
- The willful distortion of results or data;
- Substitution in an examination by another person;
- Handing in the same unchanged work as submitted for another assignment; and
- Breach of confidentiality.

The consequences for academic misconduct range from a verbal reprimand to expulsion from the College. More specific descriptions and details are found in the Student Rights and Code of Conduct section of the Keyano College credit calendar. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and Code of Conduct Policies.

In order to ensure your understanding of the concept of plagiarism, you must successfully complete the online tutorial found on ilearn.keyano.ca. Then print the certificate, sign it, and show it to each of your instructors. Your course work will not be graded until you show this signed certificate.

Late Assignments

All assignments are to be submitted as indicated in the syllabus and timetable. Extensions on assignments may be granted; however, must be negotiated with the instructor prior to the due date and with a date specified for late submissions. Assignments not submitted on the day and time specified will incur a 5% deduction per day including weekends. This will be applied each day until the assignment is received by the instructor. Students can submit assignments by e-mail on weekends, but must provide a paper copy on the first day following the weekend

Specialized Supports

The Student Services department is committed to Keyano students and their academic success. There are a variety of student supports available at Keyano College. Due to the continuing situation with the Covid-19 pandemic, the offered support services will be implemented differently this semester by being provided mostly virtually. In-person service can be requested as needed. All Alberta Health Services guidelines will be followed for in-person appointments—wear a mask, maintain two meters of physical distance, use hand sanitizer, and stay home if you are unwell.

All student services are available during Keyano business hours: Monday to Friday, 8h30-16h30. The Library has evening and weekend hours. Please check keyano.ca/library for current hours.

Accessibility Services

This provides individual and group learning strategy instruction for all students. Meet with a Learning Strategist to learn studying and test-taking strategies for online classes.

Students with documented disabilities, or who suspect a disability, can meet with a Learning Strategist to discuss their current learning barriers and possible accommodations. Students who have accessed accommodations in the past are encouraged to contact us to request them for the semester. Please note that requesting accommodations is a process and requires time to arrange. Contact us as soon as you know you may require accommodations. For accessibility services supports and to book a virtual appointment, please contact accessibility.services@keyano.ca.

Accessibility Services also provides individual and group learning strategy instruction for all students, as well as technology training and supports to enhance learning. Meet with a Learning Strategist to learn studying and test-taking strategies for online classes. Schedule an appointment with the Assistive Technology Specialist to explore technology tools for learning. Book an appointment today by emailing accessibility.services@keyano.ca

Academic Success Coaching

Offers you support and access to resources for your academic success to help you to find the Keys to your Success. The Academic Success Coach will work with you to develop an academic success plan, develop your study and time management skills, and connect you with the right resources here at Keyano. Academic.success@keyano.ca is the best way to access resources during virtual service delivery.

Wellness Services

This offers a caring, inclusive, and respectful environment where students can access free group and individual support to meet academic and life challenges. Mental Health Coordinators offer a safe and confidential environment to seek help with personal concerns. All individual appointments will continue virtually.

Wellness Service welcomes students to participate in any of the virtual group sessions offered throughout the academic year addressing topics including mindfulness and test anxiety.

Individual virtual appointments can be made by emailing wellness.services@keyano.ca. If you require mental health supports outside of business hours, please contact 211 from anywhere in Alberta to receive information about community supports.

Library Services

This provides students with research and information supports as they engage in their studies. Although the Keyano Library is physically closed, we remain open online. Library staff are available to support

you both virtually and in person during the fall semester. For library service supports and inquiries, please email askthelibrary@keyano.ca.

Individual support with the Information Librarian will be provided virtually. Appointments can be requested by email or by placing a [Book a Librarian](#) request using the online form found [here](#).

Research and Subject Guides are helpful resources when conducting research or addressing your information needs. To view a subject or course specific guide, use the following [Subject Guides link](#) To access additional research resources, including Citation Guides (APA, MLA, Chicago, or IEEE), go to the [Research Help Library page](#).

Skill Centre

Provides academic support services to students registered in credit programs at Keyano College in the form of tutoring, writing support groups, facilitated study groups, workshops and study space. Tutoring services are **free** to Keyano students. Tutoring is available for Math, Writing, English, and Science subject areas.

While most courses are being offered online, the Skill Center will be offering mostly virtual tutoring services and in-person sessions as requested. Please email Skill.centre@keyano.ca to get in contact with our tutoring staff.

For the most up to date information on how to book a tutoring session, please view the [Keyano Skill Centre homepage](#).

E-Learning

Technology and internet will impact your online learning experience. It's important that you are able to watch an online video and other course materials, take online quizzes, and participant in a live class with your instructor and other students.

Keyano College operates in a Windows based environment and having the correct tools for online learning is important. Here's a list of recommended system requirements for Fall 2020.

Internet Speed

Minimum Internet speeds of 5 Mbps.

Recommended Internet speeds of 25 Mbps (especially if you are sharing your internet at home). Check your internet speed with Fast.com.

System requirements:

Microsoft Windows	Apple
<p>Minimum Requirements:</p> <p>A Windows 10 computer/laptop</p> <ul style="list-style-type: none"> · Minimum 4GB of RAM. · 10GB+ available hard drive storage. · Enough available hard drive space to install the Microsoft Office suite (approximately 3GB). Microsoft Office software is free to all Keyano students and employees. · Microphone, webcam and speakers. A headset with a microphone is recommended. · System updates must be regularly installed. · Anti-Virus / Anti-Malware software 	<p>Minimum Requirements:</p> <p>A Macintosh (V10.14 and above) computer/laptop</p> <ul style="list-style-type: none"> · Minimum 4GB of RAM. · 10GB+ available hard drive storage. · Enough available hard drive space to install the Microsoft Office suite (approximately 3GB). Microsoft Office software is free to all Keyano students and employees. · Microphone, webcam and speakers. A headset with a microphone is recommended. · System updates must be regularly installed. · Anti-Virus / Anti-Malware software.
<p>Recommended Requirements</p> <ul style="list-style-type: none"> · 8GB of RAM · A method of backing up/synchronizing to local or cloud-based storage such as OneDrive is highly recommended. This is included if you complete the setup of KeyanoMail and download MS Office using your Keyano email for free. 	<p>Recommended Requirements</p> <ul style="list-style-type: none"> · 8GB of RAM · A method of backing up/synchronizing to local or cloud-based storage such as OneDrive is highly recommended. This is included if you complete the setup of KeyanoMail and download MS Office using your Keyano email for free.

Chromebooks are **not** recommended as they are not compatible with testing lockdown browsers.

A Microsoft Surface or iPad or iPad Pro may be possible alternatives in some program areas.

Specific department requirements:

Business and OA programs require Windows 10.

Other programs may utilize Windows based tools as well.

Computer Software

Students will be able to get access to Microsoft Office 365 for Free using Keyano Credentials by [clicking here](#).

Recording of lectures and Intellectual Property

Students may only record a lecture if explicit permission is provided by the instructor or by Accessibility Services. Even if students have permission to record a lecture or lecture materials, students may not publish any of the lectures or lecture materials, this includes any recordings, slides, instructor notes, etc. on any platform. Thus no student is allowed to publish or sell instructor notes without formal written permission. It is important to recognize that the Canadian Copyright Act contains provisions for intellectual property.

ITS Helpdesk

If you are having issues with your student account, you can contact the ITS Helpdesk by emailing its.helpdesk@keyano.ca or calling 780-791-4965.

Course evaluation

Assignments/Course components	Dates	Weight	Course objectives no.
1) In-class quizzes	See Course Schedule	30%	1-8

2) Mastery Assessments/HESI Reviews	See Learner Guides	15%	1-8
3) Midterm Exam	See Course Schedule	25%	1-8
4) Final Exam- Cumulative	TBA – Final Exam Schedule	30%	1-8

Assignments Descriptions

1) In-class quizzes (30%)

There will be 6 in-class quizzes. These quizzes will be 20 questions and cover the two lectures prior to the quiz. See class schedule for quiz dates. The total category is worth 30%, with each individual assessment equating to 5% each. In case of exams and quizzes, various question styles may be used. Respondus Lockdown Browser will be used for quizzes.

2) Mastery Assessments/HESI Patient Reviews (15%):

Mastery Assessments and HESI patient reviews must be completed in order to receive the 15% participation marks. There is a mastery assessment that must be completed for each concept. These are worth 1% each. HESI patient reviews are worth 2% each. Students must complete the Patient Review for Gas Exchange as well as ONE of the Glucose Regulation reviews. These assessments can be found on the Evolve Webpage under the N216 course folder. (PASSWORD: 216) **3) Midterm Examination (25%):**

75 questions. Covers all material discussed on the following topics: fluid & electrolytes, anxiety, mood & affect, intracranial regulation, & cognition. Respondus Lockdown Browser will be used.

4) Final Examination (30%):

100 questions. Covers all course material. Details will be announced in advance. Registrar's office scheduling date, time, and exam location. Time limitation is strictly applied. Respondus Lockdown Browser will be used.

Using LockDown Browser and Respondus for Online Exams

This course requires the use of LockDown Browser for online exams. Watch this [short video](#) to get a basic understanding of LockDown Browser and the optional webcam feature (which may be required for some exams).

Then download and install LockDown Browser from this link:

<https://ilearn.keyano.ca/course/view.php?id=28874#section-7>

To take an online test, start LockDown Browser and navigate to the exam. (You won't be able to access the exam with a standard web browser.) For additional details on using LockDown Browser, review this Student Quick Start Guide (PDF)

Finally, when taking an online exam, follow these guidelines:

- Select a location where you won't be interrupted
- Before starting the test, know how much time is available for it, and that you've allotted sufficient time to complete it
- Turn off all mobile devices, phones, etc. and don't have them within reach
- Clear your area of all external materials — books, papers, other computers, or devices
- Remain at your desk or workstation for the duration of the test
- LockDown Browser will prevent you from accessing other websites or applications; you will be unable to exit the test until all questions are completed and submitted
- Do not click on any links that may appear in questions as it will terminate the exam.

Final grades

The assignments are marked as raw scores according to the percentage weight assigned to each. The marks on course assignments will contribute to the overall letter grade according to the percentage that each assignment is weighted in the course. At the end of the course, all assignment scores are totaled for a term

summary mark in the course based on the grading scale below. The FINAL COURSE GRADE is based on the cumulative total of individual student's weighted assignment marks.

Grading rubric is located in Appendix A.

Deferred Final Exams:

A student who has missed a final exam because of incapacitating mental and/or physical illness, severe domestic affliction or for circumstances as described in Keyano College's Examination Policy in the Credit Calendar. Students are required to follow the process outlined in the policy should they wish to apply for a deferred exam.

Policy Statements:

The course outline acts as an agreement between the student and the instructor of this class regarding the details of the course.

Keyano College is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the College in this respect. Students are particularly urged to familiarize themselves with the provisions of the Academic Policies and Student Rights and Code of Conduct and avoid any behavior which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the College.

Audio or video recording, digital or otherwise, of lectures, labs, seminars or any other teaching environment by students is allowed only with the prior written consent of the instructor or as a part of an approved accommodation plan. Student or instructor content, digital or otherwise, created and/or used within the context of the course is to be used solely for personal study, and is not to be used or distributed for any other purpose without prior written consent from the content author(s).

Students wishing to proceed in the Nursing program must achieve a grade of at least C+ in the foundational Nursing courses. Policy regarding the foundational course minimum pass can be found in the Keyano College Credit Calendar.

Please refer to the Nursing Program Student Handbook for specific Nursing Program Policies, including, attendance, examinations, withdrawal dates for classes, and plagiarism.

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

Please refer to the Student Handbook and review the Student Code of Conduct Policy (Policy 110.0), Student 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 behavior.

APPENDIX A

Keyano College Percentage – Alpha Grading System

Descriptor	Percentage Scale	Alpha Scale
Excellent	96-100	A+
	90-95	A
	85-89	A-

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NURS 216 COURSE OUTLINE

DEV. 2020

REV. 1.0

SEPTEMBER 2020

PAGE 17 OF 19

Good	80-84	B+
	76-79	B
	72-75	B-
Satisfactory	68-71	C+
	64-67	C
Minimum Pass	60-63	C-
Poor	55-59	D+
	50-54	D
Failure	0-49	F



Nursing

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

Instructor

Arlene Starks, Chair

Date Authorized

Dr. Eli Ahlquist, Dean

Date Authorized

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PAGE 19 OF 19