

COURSE SYLLABUS



COURSE TITLE: BIOL-252: Pathophysiology for Nursing 1

CLASS SECTION: X04

TERM: Fall 2022

COURSE CREDITS: 3

DELIVERY METHOD(S): Lecture (in-person)

Camosun College campuses are located on the traditional territories of the Ləkʷəŋən and W̱SÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here.

Learn more about Camosun's [Territorial Acknowledgement](#).

For COVID-19 information please visit <https://legacy.camosun.ca/covid19/index.html>

Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable explanation in advance, you will be removed from the course and the space offered to the next waitlisted student.

INSTRUCTOR DETAILS

NAME: Dr. Jane Gair

EMAIL: gairj@camosun.ca

OFFICE: CC 118-A & CHW 3rd Floor flex space (Interurban)

HOURS: Wednesdays and Thursdays 2:00 – 3:00 pm (by appointment – please email to book a time)

As your course instructor, I endeavour to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me. Camosun College is committed to identifying and removing institutional and social barriers that prevent access and impede success.

CALENDAR DESCRIPTION

Students will examine foundational concepts of pathophysiology and then focus on specific disorders within the cardiovascular, endocrine, and nervous systems of the human body with relevance to nursing practice.

PREREQUISITE(S):

All of:

- C in BIOL 153

CO-REQUISITE(S):

All of:

- C in NURS 232
- C in NURS 260
- C in NURS 280

EXCLUSION(S):

Not Applicable

COURSE LEARNING OUTCOMES / OBJECTIVES

Upon completion of this course a student will be able to:

1. Demonstrate an understanding of foundational concepts of pathophysiology.
2. Explain how and why normal physiology is altered in the pathogenesis of diseases with reference to cardiovascular, endocrine and nervous systems.
3. Correlate diagnostic and management protocols with the pathophysiology of diseases studied.
4. Explain in simple terms the major aspects of a patient's disease to the patient.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

1. Hannon, R.A. and Porth, C.M. (2017). Porth Pathophysiology, Concepts of Altered Health States. 2nd Canadian edition. Wolters Kluwer.
2. A recently published Anatomy and Physiology textbook

COURSE SCHEDULE, TOPICS, AND ASSOCIATED PREPARATION / ACTIVITY / EVALUATION

The following schedule and course components are subject to change with reasonable advance notice, as deemed appropriate by the instructor.

| | | | |
|---------------------|--------------------|--------------------|-----------------------------------|
| Section X04: | Tuesdays: | 3:00 PM - 4:20 PM | Centre for Health & Wellness, 350 |
| | Wednesdays: | 12:30 PM - 1:50 PM | Centre for Health & Wellness, 349 |

| WEEK or DATE RANGE | ACTIVITY or TOPIC (Textbook Readings in Parentheses) | QUIZZES /ASSIGNMENTS |
|---|---|---|
| Week 1 (Sep 5-9) HOLIDAY Monday | Introduction to Pathophysiology and Course Structure; Cell adaptation, Injury, Death (Ch. 1, 5; Ch. 4 recommended) | No Quiz |
| Week 2 (Sep 12-16) | Molecular Biology & Genetic Control of Cell Function; Cancer (Ch. 6, 8) | Quiz #1 |
| Week 3 (Sep 19-23) | Mechanisms of infectious diseases & Immunity (Ch. 16-17) | Quiz #2 |
| Week 4 (Sep 26-30) HOLIDAY Friday | Abnormal Immune Response, Inflammation and Tissue Repair (Ch. 18-19) | Quiz #3 |
| Week 5 (Oct 3-7) MIDTERM 1 | TUES: Complete remaining lecture content. Discuss Presentations and review for midterm. MIDTERM 1 - in class exam WED, Oct 5th | No Quiz |
| Week 6 (Oct 10-14) HOLIDAY Monday | Structure and Function of the Cardiovascular System & Disorders of Blood Flow in the Systemic Circulation (Ch. 21-22) | Quiz #4 1st Group Video Projects due |
| Week 7 (Oct 17-21) | Disorders of Blood Pressure Regulation & Cardiac Function (Ch. 23-24) | Quiz #5 |
| Week 8 (Oct 24-28) | Disorders of Cardiac Conduction and Rhythm & Heart Failure and Circulatory Shock (Ch. 25-26) | Quiz #6 |
| Week 9 (Oct 31-Nov 4) MIDTERM 2 | TUES: Complete remaining lecture content. Discuss Presentations and review for midterm. MIDTERM 2 - in class exam WED, Nov 2nd | No Quiz |
| Week 10 (Nov 7-11) HOLIDAY Friday | Mechanisms of Endocrine control & Disorders of Endocrine Control of Growth and Metabolism (Ch. 40-41) | Quiz #7 2nd Group Video Projects due |
| Week 11 (Nov 14-18) | Diabetes Mellitus and the Metabolic Syndrome (Ch. 42) Organization and Control of Neural Function (Ch. 48) | Quiz #8 |
| Week 12 (Nov 21-25) | Somatosensory Function, Pain, and Headache (Ch. 49) Disorders of Motor Function (Ch. 50) | Quiz #9 |
| Week 13 (Nov 28-Dec 2) | Disorders of Brain Function (Ch. 51) Sleep Disorders (Ch. 52) | Quiz #10 |
| Week 14 (Dec 5-9) | Mood, thought & Memory (Ch. 53) Discuss Video Presentations and complete any remaining lecture content & review for Final Exam | No Quiz 3rd Group Video Projects due |
| Final Exam Period: Dec. 12-20 | FINAL EXAM (scheduled by College Registrar, posted on myCamosun) | |

Students registered with the Centre for Accessible Learning (CAL) who complete quizzes, tests, and exams with academic accommodations have booking procedures and deadlines with CAL where advanced noticed is required. Deadlines can be reviewed on the [CAL exams page](http://camosun.ca/services/accessible-learning/exams.html). <http://camosun.ca/services/accessible-learning/exams.html>

EVALUATION OF LEARNING

| DESCRIPTION | WEIGHTING |
|--|--------------|
| Midterm Exam #1 (Week 5 – WED, Oct 5 th) | 22.5% |
| Midterm Exam #2 (Week 9 – WED, Nov 2 nd) | 22.5% |
| Video Project Assignment | 5% |
| Quizzes (On D2L) | 20% |
| Final Exam | 30% |
| | TOTAL |
| | 100% |

If you have a concern about a grade you have received for an evaluation, please come and see me as soon as possible. Refer to the [Grade Review and Appeals](http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf) policy for more information.
<http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf>

COURSE GUIDELINES & EXPECTATIONS

Biology 252 is the first of two pathophysiology courses for students in the second year of the Bachelor of Science Nursing Program. The course initially focuses on foundational concepts of pathophysiology that define dysfunction of the major organ systems and then proceeds to examine specific diseases within the cardiovascular, endocrine and nervous systems of the human body. The objective is to enable students to apply theoretical knowledge to nursing practice. While the course will cover diagnosis and medical management of diseases studied, protocols related to nursing care and nursing management will be covered in nursing courses.

Tests and examinations must be written at the scheduled time unless there is a documented medical or other emergency that prevents you from doing so. In this case, you must notify the Instructor (not someone in Nursing) BEFORE the examination and submit a doctor's note that indicates the doctor's evaluation of why you were unable to write the examination. A note simply stating that you were unwell or unable to write an examination will not suffice (personal, confidential information is not required). Minor ailments are not considered valid excuses. A doctor's note is not required for COVID related illness, but it is still necessary to inform the Instructor of your inability to write a scheduled exam. Your attention is specifically drawn to Camosun's examination policy which states that examinations must be written at the scheduled time except in case of an emergency. Examinations will NOT be deferred for vacations or pre-booked flights. Examinations cannot be written before the scheduled dates or times.

Some examination questions will require return of factual information. Others will involve interpretation, assimilation and application of information often based on clinical scenarios. You can practice working through clinical scenarios by referring to your textbooks and their accompanying student resources. Interpretation, assimilation and application of information are repeatedly undertaken in class discussions. **Attend classes regularly and pay attention to class discussions – ASK questions. Repeated absences from class and reliance on notes obtained from peers will compromise success in the course.** Integral to this course is the ability to demonstrate in exams the use of correct scientific/medical terminology with correct spelling. Knowledge of accepted medical abbreviations is also required. For the latter, some exam questions will use medical

abbreviations and your answers will have to be written without the use of abbreviations. A penalty will be applied for incorrect spelling and use of abbreviations in answers to exam questions.

Writing examinations, completing all quizzes and other required tasks is compulsory.

Prior understanding of the physiology and associated anatomy of the organ systems being studied is essential, as this forms the basis for studying pathophysiology. Students are advised to review relevant Anatomy and Physiology concepts on their own prior to commencement of lectures on the appropriate organ system.

Course content is made available via several sources including online PPTs to support the upcoming lectures, textbooks, and other websites/video links. Many of these sources complement each other and you will have a stronger understanding if you diversify your use of these tools. This course outline lists all topics that will be studied. You are encouraged to review each topic in the textbook before class and to consolidate information obtained in lectures with that in the textbook after each class.

This course is both content and concept driven, with a large volume of new information to process. In addition, the course involves skills related to clinical information that some may not be adequately experienced in e.g. critical thinking, problem solving, assimilating and applying information, and working with clinical scenarios. Since these skills develop with practice over time, applying them regularly to course content is important. Engaging with the Instructor during class time by asking questions, forming study groups and discussions with your peers and utilizing your textbook are good resources for developing these skills. Refer to the online student resources accompanying the books.

According to college policy, students may not use recording devices without prior written permission from the Instructor. When the use of a recording device is sanctioned by the College's Centre for Assisted Learning in order to accommodate a student's learning challenge, the Instructor must be provided with an Instructor notification letter from the Centre for Assisted Learning that specifies the use of a recording device and a recording agreement (see Instructor for this) has to be accepted by the student regarding the following. Recordings made in class are strictly for the student's personal use only, and distribution of recorded material in any form or any forum is prohibited. All recorded materials must be permanently deleted/destroyed at the latest on the day final grades for the course are posted.

You are encouraged to consult the Instructor if you require assistance with course material. It is important to be reminded that the responsibility lies with students to source out and utilize resources that best suit their study needs in order to achieve their learning goals.

SCHOOL OR DEPARTMENTAL INFORMATION

Ensure that you have the necessary prerequisites for Biol 252 and that you are enrolled in all co-requisite courses. Any student not enrolled in a full nursing course load for the current semester MUST inform the Instructor of this by September 18th. Note that Biol 153 is a prerequisite for BIOL 252 while NURS 232, NURS 260 and NURS 280 are co-requisites. These requirements are checked, and any student enrolled without them will likely be de-registered from the course if formal transfer credit or co-requisite waiver was not obtained.

STUDENT RESPONSIBILITY

Enrolment at Camosun assumes that the student will become a responsible member of the College community. As such, each student will display a positive work ethic, assist in the preservation of College property, and assume responsibility for their education by researching academic requirements and policies; demonstrating courtesy and respect toward others; and respecting expectations concerning attendance, assignments, deadlines, and appointments.

SUPPORTS AND SERVICES FOR STUDENTS

Camosun College offers a number of services to help you succeed in and out of the classroom. For a detailed overview of the supports and services visit <http://camosun.ca/students/>.

| | |
|-------------------------------------|---|
| Academic Advising | http://camosun.ca/advising |
| Accessible Learning | http://camosun.ca/accessible-learning |
| Counselling | http://camosun.ca/counselling |
| Career Services | http://camosun.ca/coop |
| Financial Aid and Awards | http://camosun.ca/financialaid |
| Help Centres (Math/English/Science) | http://camosun.ca/help-centres |
| Indigenous Student Support | http://camosun.ca/indigenous |
| International Student Support | http://camosun.ca/international/ |
| Learning Skills | http://camosun.ca/learningskills |
| Library | http://camosun.ca/services/library/ |
| Office of Student Support | http://camosun.ca/oss |
| Ombudsperson | http://camosun.ca/ombuds |
| Registration | http://camosun.ca/registration |
| Technology Support | http://camosun.ca/its |
| Writing Centre | http://camosun.ca/writing-centre |

If you have a mental health concern, please contact Counselling to arrange an appointment as soon as possible. Counselling sessions are available at both campuses during business hours. If you need urgent support after-hours, please contact the Vancouver Island Crisis Line at 1-888-494-3888 or call 911.

Academic Accommodations for Students with Disabilities

The College is committed to providing appropriate and reasonable academic accommodations to students with disabilities (i.e. physical, depression, learning, etc). If you have a disability, the [Centre for Accessible Learning](#) (CAL) can help you document your needs, and where disability-related barriers to access in your courses exist, create an accommodation plan. By making a plan through CAL, you can ensure you have the appropriate academic accommodations you need without disclosing your diagnosis or condition to course instructors. Please visit the CAL website for contacts and to learn how to get started:

<http://camosun.ca/services/accessible-learning/>

Academic Integrity

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.13.pdf> for policy regarding academic expectations and details for addressing and resolving matters of academic misconduct.

Academic Progress

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf> for further details on how Camosun College monitors students' academic progress and what steps can be taken if a student is at risk of not meeting the College's academic progress standards.

Course Withdrawals Policy

Please visit <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <http://camosun.ca/learn/fees/#deadlines>.

Grading Policy

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf> for further details about grading.

Grade Review and Appeals

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf> for policy relating to requests for review and appeal of grades.

Mandatory Attendance for First Class Meeting of Each Course

Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable reason in advance, you will be removed from the course and the space offered to the next waitlisted student. For more information, please see the "Attendance" section under "Registration Policies and Procedures"

(<http://camosun.ca/learn/calendar/current/procedures.html>) and the Grading Policy at <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf>.

Medical / Compassionate Withdrawals

Students who are incapacitated and unable to complete or succeed in their studies by virtue of serious and demonstrated exceptional circumstances may be eligible for a medical/compassionate withdrawal. Please visit <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf> to learn more about the process involved in a medical/compassionate withdrawal.

Sexual Violence and Misconduct

Camosun is committed to creating a campus culture of safety, respect, and consent. Camosun's Office of Student Support is responsible for offering support to students impacted by sexual violence. Regardless of when or where the sexual violence or misconduct occurred, students can access support at Camosun. The Office of Student Support will make sure students have a safe and private place to talk and will help them understand what supports are available and their options for next steps. The Office of Student Support respects a student's right to choose what is right for them. For more information see Camosun's Sexualized Violence and Misconduct Policy: <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.9.pdf> and camosun.ca/sexual-violence. To contact the Office of Student Support: oss@camosun.ca or by phone: 250-370-3046 or 250-3703841

Student Misconduct (Non-Academic)

Camosun College is committed to building the academic competency of all students, seeks to empower students to become agents of their own learning, and promotes academic belonging for everyone. Camosun also expects that all students to conduct themselves in a manner that contributes to a positive, supportive, and safe learning environment. Please review Camosun College's Student Misconduct Policy at <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf> to understand the College's expectations of academic integrity and student behavioural conduct.

Changes to this syllabus: Every effort has been made to ensure that information in this syllabus is accurate at the time of publication. The College reserves the right to change courses if it becomes necessary so that course content remains relevant. In such cases, the instructor will give the students clear and timely notice of the changes.