

# COURSE SYLLABUS

COURSE TITLE: BIOL-252-Pathophysiology for Nursing 1

CLASS SECTION: X04

TERM: 2024F

COURSE CREDITS: 3

DELIVERY METHOD(S): In Person



Camosun College respectfully acknowledges that our campuses are situated on the territories of the Ləkʷəŋən (Songhees and Kosapsum) and WSÁNEĆ peoples. We honour their knowledge and welcome to all students who seek education here.

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## INSTRUCTOR DETAILS

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NAME: Dr. Jane Gair

EMAIL: [gairj@camosun.ca](mailto:gairj@camosun.ca)

OFFICE: Interurban Campus: CHW 317 Flex Space

HOURS: By appt

*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

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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

## COURSE LEARNING OUTCOMES / OBJECTIVES

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Upon successful 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

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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

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Section X03:	Tuesdays:	3:00 PM - 4:20 PM	Centre for Health & Wellness, 341
	Wednesdays:	3:00 PM - 4:20 PM	Centre for Health & Wellness, 341
Section X04:	Tuesdays:	4:30 PM - 5:50 PM	Centre for Health & Wellness, 341
	Wednesdays:	4:30 PM - 5:50 PM	Centre for Health & Wellness, 341

The following schedule and course components are subject to change with reasonable advance notice, as deemed appropriate by the instructor. ***NOTE: Each D2L Quiz will be open for completion from Monday to Sunday (at midnight) of the weeks indicated below.***

WEEK or DATE RANGE	ACTIVITY or TOPIC (Textbook Readings in Parentheses)	Assessments
<b>Week 1</b> (Sep 2-6) HOLIDAY Sep. 2 (X01/2)	-Introduction to Pathophysiology & Course Structure; Cell adaptation, Injury, Death & Stress (Chp. 1, 5, 9; Chp. 4 recommended)	None
<b>Week 2</b> (Sep 9-13)	- Molecular Biology & Genetic Control of Cell Function & Cancer (Chp. 6, 8)	D2L Quiz #1
<b>Week 3</b> (Sep 16-20)	-Mechanisms of infectious diseases & Immunity (Chp.16-17)	D2L Quiz #2
<b>Week 4</b> (Sep 23-27)	-1 <sup>st</sup> class/section: <b>Exam #1 (Multiple Choice Only)</b> -2 <sup>nd</sup> class Inflammation and Tissue Repair (Chp. 18)	<b>Exam #1</b>
<b>Week 5</b> (Sep 30 - Oct 4) HOLIDAY Sep 30 (X01/2)	-Abnormal Immune Response (Chp. 19)	D2L Quiz #3
<b>Week 6</b> (Oct 7-11)	<b>EXAM # 2</b> - 2 <sup>nd</sup> class/section	<b>Exam #2</b>
<b>Week 7</b> (Oct 14-18) HOLIDAY OCT. 14 (X01/2)	-Anemia and Disorders of Blood Flow in the Systemic Circulation (Chp. 14&22; Chp. 21 is recommended for Cardiovascular System A&P review) -Disorders of Blood Pressure Regulation & Cardiac Function (Chp. 23-24)	None
<b>Week 8</b> (Oct 21-25)	-Continued: Disorders of Blood Pressure Regulation & Cardiac Function (Chp. 23-24) -Disorders of Cardiac Conduction and Rhythm & Heart Failure and Circulatory Shock (Chp. 25-26)	D2L Quiz #4
<b>Week 9</b> - (Oct 28-Nov 1)	-1 <sup>st</sup> class/section: <b>Exam # 3 (Multiple Choice Only)</b> -2 <sup>nd</sup> class/section: continued - Disorders of Cardiac Conduction and Rhythm & Heart Failure and Circulatory Shock (Chp. 25-26)	<b>Exam #3</b>
<b>Week 10</b> (Nov 4-8)	-Complete Cardiovascular content -Diabetes Mellitus and the Metabolic Syndrome (Chp. 42; Chp. 40 is recommended for Endocrine A&P review)	D2L Quiz #5
<b>Week 11</b> (Nov 11-15) HOLIDAY Nov. 11 (X01/2)	<b>EXAM # 4</b> – 2 <sup>nd</sup> class/section	<b>Exam #4</b>
<b>Week 12</b> (Nov 18-22)	-Disorders of Endocrine Control of Growth & Metabolism (Chp. 41) -Somatosensory Function, Pain, and Headache (Chp. 49; Chp. 48 recommended for Nervous System A&P review)	None
<b>Week 13</b> (Nov 25-29)	-Disorders of Motor Function (Chp. 50) -Disorders of Brain Function (Chp. 51) & Sleep (Chp. 52)	D2L Quiz #6 <b>Deferred EXAM:</b> Nov. 27 @ 1pm
<b>Week 14</b> (Dec 2-6)	-Mood, thought & Memory (Chp. 53) -Complete remaining lecture content & Final Exam review	D2L Quiz #7
<b>Final Exam Period:</b> Dec. 9-17	<b>FINAL EXAM</b> (scheduled by College Registrar, posted on myCamosun)	<b>Final Exam TBD</b>

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](https://camosun.ca/services/academic-supports/accessible-learning/academic-accommodations-exams).

<https://camosun.ca/services/academic-supports/accessible-learning/academic-accommodations-exams>

## EVALUATION OF LEARNING

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DESCRIPTION	WEIGHTING
D2L Quizzes	1%
Exam #1 (Multiple Choice Only)	10%
Exam #2	22%
Exam #3 (Multiple Choice Only)	10%
Exam #4	22%
Final Exam	35%
	<b>TOTAL</b>
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 <a href="https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf">Grade Review and Appeals</a> policy for more information. <a href="https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf">https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf</a>	100%

## COURSE GUIDELINES & EXPECTATIONS

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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.

### D2L Quizzes

Online quizzes will require completion on D2L as detailed in the course outline schedule of assessments above. These brief D2L quizzes will assist in ensuring that you are staying up to date with the content being covered and collectively they will comprise 1% of your final grade. You may attempt these review questions twice during the period that they remain open (approx. 1 week, see outline above for deadlines); your final mark will be an average of those two attempts. If you are satisfied with the mark you receive on the first attempt and do not make a second attempt, the first attempt will be your final mark for the quiz.

There will be a 2-hour time limit assigned to complete these quizzes online, within the period that they are open. These quizzes are designed to be completed within 30 minutes, so you will have plenty of time to complete them. Once the time-period has been completed, you will be informed which questions are incorrect, however, the correct answer will not be revealed – which will redirect you to look back through your resources to gain a better understanding of the concept. A separate schedule for these quizzes will be posted to D2L reminding students of the deadline. ***It is your responsibility to***

***ensure that these D2L quizzes are completed on time considering they remain open for multiple days as extensions will not be granted.***

***Once the deadline has closed, students will no longer have the opportunity to gain marks for completing these quizzes.*** A copy version will be posted after the deadline closes to allow for additional practice and will not impact your original mark.

### **Exams**

Exam information (types of questions, material covered, duration, regulations) will be posted on D2L approximately one week before each scheduled exam date. Exams will be a combination of multiple-choice questions (MCQ), fill-in-the blank and short written answer questions. There will be a total of 5 in-person assessments to complete during the course of the semester including 2 MCQ only exams, 2 MCQ combined with written answers exams and 1 final exam which is comprehensive for the course material (combination of MCQ and written answer questions). Note that the exam format will differ between these assessments and detailed exam outlines will be posted to D2L during the course.

### ***IMPORTANT EXAM INFORMATION:***

***All 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 directly (not someone in Nursing) BEFORE the examination day and submit supporting information to corroborate your emergency. A note simply stating that you were unable to write an examination due to a non-emergency related situation will not suffice (personal, confidential information is not required). Minor ailments are not considered valid excuses. ***Contacting your instructor after an assessment has already taken place will result in receiving a zero for that assessment.*** In addition, please draw your attention specifically 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 or other non-emergency situations. Examinations cannot be written before the scheduled dates or times or by switching to other section times as these rooms are all at capacity for exam writing purposes.

**In Summary: All exams must be taken at the scheduled time.**

- **If an illness or emergency prevents you from attending the scheduled exam time**
  - **You must notify your instructor directly in advance of the examination time**
  - **You must provide appropriate documentation (as noted above)**
  
- **For Exams # 1 and 3 missed due to an acceptable medical emergency:**
  - **The weight of the exam will be transferred to the next exam (either exam # 2 or #4)**
  - **Therefore, that exam will be now worth 32% (10% + 22%) of your final grade**
  - **Furthermore, your exam will have additional questions to reflect untested material and no extra time can be provided to complete the exam past 80 mins**
  
- **There will be a single scheduled date & time for writing any deferred larger exams that are missed due to an acceptable medical emergency: (#2 & 4)**

- This will take place at 1pm on November 27<sup>th</sup> (week 13; see also Course Schedule above)
- You will write a different version of the original exam
- If you cannot make this deferral date and time due to another medical emergency:

This exam material will be transferred to your final exam and the final exam will carry the increased weight of the missed exam (22% + 35% = 57%).

- If the final exam is missed due to an acceptable medical emergency there is also only one deferral date and time scheduled as per College policies.
  - Please note these deferrals may be scheduled to take place in the evening or weekend.
- **PLEASE NOTE:** These assessments have been planned and spread out across the course, the term, and the material in order to provide you with the best chance for success in the course, as well as retention of the information. For this reason, please do your best to write all assessments as outlined here on the dates they are scheduled.

Examination questions will require return of factual information as well as 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. Please expect that certain concepts and information found in your textbook that may not directly be discussed in lecture may also be found on your exams and quizzes.

**Attend classes regularly and pay attention to class discussions. Repeated absences from class and reliance on notes obtained from peers will compromise success in the course. A variety of concepts will not be adequately understood by only viewing the PowerPoint notes packages provided on D2L and thus will require the understanding generated through classroom discussion and explanations in addition to supporting readings and video explanations when required.** 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. ***A final minimum overall course mark of 60% is required to proceed with the next level of the nursing program.*** Writing examinations and other required tasks is compulsory.

A very good prior understanding of the physiology and associated anatomy of the organ systems being studied is ESSENTIAL for success in this course, as this forms the basis for studying pathophysiology. Due to time constraints, Anatomy and Physiology will NOT be reviewed or re-taught in this course. Students are required to review this information on their own prior to commencement of lectures on the appropriate organ system. While this is important for all students in class, those who did not complete anatomy and physiology (A&P) recently (i.e. as scheduled in the nursing program for the current cohort)

and students who achieved less than 75% in these courses generally find this essential. You may choose to review your previous A&P textbook and material, or we also recommend that you review the various A&P related chapters in your pathophysiology textbook as highlighted in the course schedule. Ongoing review of foundational concepts studied in Biol 252 is not only strongly recommended for success in this semester, but it will also be vital for success in the following semester in Biol 253.

Course content is made available via several sources including lectures, class discussions, textbooks, websites and videos. This course outline lists all the topics that will be studied. You are strongly encouraged to review each topic in the textbook (based on the course schedule of topics) before classes and to consolidate information obtained in lectures with that in the textbook after each class.

BIOL 252 is both content and concept driven, with a large volume of new information to deal with. In addition, the course involves skills 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. Class discussions and your textbooks are good resources for clinical scenarios. Refer to the online resources accompanying the books.

**According to current college policy, students may not use recording devices in the classroom without prior written permission from the Instructor. When the use of a recording device is sanctioned by the College's Center for Assisted Learning to accommodate a student's learning, the Instructor must be provided with an Instructor notification letter that specifies the use of a recording device and a recording agreement needs to be completed and signed by the student (contact the Instructor for this). Recordings made in the classroom under this accommodation are strictly for the student's personal use only, and distribution of recorded material in any form or on any forum is prohibited. All recorded materials must be permanently deleted/destroyed at the latest on the day following the final exam in the course.**

**Based largely on the college's privacy guidelines, recordings of lectures will not be provided for asynchronous, individual study.**

You are encouraged to consult the course Instructor if you require assistance. While the Instructor is willing and able to assist with understanding course content and directing you to appropriate resources, they cannot do the work for you. The responsibility lies with the student to source out and utilize resources that best suit their study needs. Do not wait until just before or after an examination to do this.

## SCHOOL OR DEPARTMENTAL INFORMATION

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Ensure that you have the necessary prerequisites for BIOL 252 and that you are enrolled in all co-requisite courses. 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

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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

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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 [camosun.ca/services](https://camosun.ca/services).

Support Service	Website
Academic Advising	<a href="https://camosun.ca/services/academic-supports/academic-advising">camosun.ca/services/academic-supports/academic-advising</a>
Accessible Learning	<a href="https://camosun.ca/services/academic-supports/accessible-learning">camosun.ca/services/academic-supports/accessible-learning</a>
Counselling	<a href="https://camosun.ca/services/health-and-wellness/counselling-centre">camosun.ca/services/health-and-wellness/counselling-centre</a>
Career Services	<a href="https://camosun.ca/services/co-operative-education-and-career-services">camosun.ca/services/co-operative-education-and-career-services</a>
Financial Aid and Awards	<a href="https://camosun.ca/registration-records/financial-aid-awards">camosun.ca/registration-records/financial-aid-awards</a>
Help Centres (Math/English/Science)	<a href="https://camosun.ca/services/academic-supports/help-centres">camosun.ca/services/academic-supports/help-centres</a>
Indigenous Student Support	<a href="https://camosun.ca/programs-courses/iecc/indigenous-student-services">camosun.ca/programs-courses/iecc/indigenous-student-services</a>



Support Service	Website
International Student Support	<a href="https://camosun.ca/international">camosun.ca/international</a>
Learning Skills	<a href="https://camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills">camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills</a>
Library	<a href="https://camosun.ca/services/library">camosun.ca/services/library</a>
Office of Student Support	<a href="https://camosun.ca/services/office-student-support">camosun.ca/services/office-student-support</a>
Ombudsperson	<a href="https://camosun.ca/services/ombudsperson">camosun.ca/services/ombudsperson</a>
Registration	<a href="https://camosun.ca/registration-records/registration">camosun.ca/registration-records/registration</a>
Technology Support	<a href="https://camosun.ca/services/its">camosun.ca/services/its</a>
Writing Centre	<a href="https://camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills">camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills</a>

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.

#### COLLEGE-WIDE POLICIES, PROCEDURES, REQUIREMENTS, AND STANDARDS

##### Academic Integrity

Students are expected to comply with all College policy regarding academic integrity; which is about honest and ethical behaviour in your education journey. The following guide is designed to help you understand your responsibilities: <https://camosun.libguides.com/academicintegrity/welcome>  
Please visit <https://camosun.ca/sites/default/files/2021-05/e-1.13.pdf> for Camosun's Academic Integrity policy and details for addressing and resolving matters of academic misconduct.

##### Academic Accommodations for Students with Disabilities

Camosun College is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging appropriate academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. If you are a student with a documented disability and think you may need accommodations, you are strongly encouraged to contact the Centre for Accessible Learning (CAL) and register as early as possible. Please visit the CAL website for more information about the process of registering with CAL, including important deadlines: <https://camosun.ca/cal>

### Academic Progress

Please visit <https://camosun.ca/sites/default/files/2023-02/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 <https://camosun.ca/sites/default/files/2021-05/e-2.2.pdf> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <https://camosun.ca/registration-records/tuition-fees#deadlines>.

### Grading Policy

Please visit <https://camosun.ca/sites/default/files/2021-05/e-1.5.pdf> for further details about grading.

### Grade Review and Appeals

Please visit <https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf> for policy relating to requests for review and appeal of grades.

### 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 (see [Medical/Compassionate Withdrawals policy](#)). Please visit <https://camosun.ca/services/forms#medical> to learn more about the process involved in a medical/compassionate withdrawal.

### Sexual Violence

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 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 Policy: <https://camosun.ca/sites/default/files/2021-05/e-2.9.pdf> and [camosun.ca/services/sexual-violence-support-and-education](https://camosun.ca/services/sexual-violence-support-and-education).

To contact the Office of Student Support: [oss@camosun.ca](mailto:oss@camosun.ca) or by phone: 250-370-3046 or 250-370-3841

### 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 <https://camosun.ca/sites/default/files/2021-05/e-2.5.pdf> to understand the College's expectations of academic integrity and student behavioural conduct.

### Looking for other policies?

The full suite of College policies and directives can be found here: <https://camosun.ca/about/camosun-college-policies-and-directives>

**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.