

BIOLOGY 153 Course Syllabus (W2022)



COURSE TITLE: BIOL-153: Anatomy & Physiology for Nursing 2

CLASS SECTION: X04A and X04B

TERM: Winter 2022

COURSE CREDITS: 4

DELIVERY METHOD(S): lectures and lab in person (F2F)

Camosun College campuses are located on the traditional territories of the Lək'wəḡən 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: Thuy Nevado

EMAIL: nevadot@camosun.bc.ca

OFFICE: F248A

HOURS: Mon 10:00-10:50 am (Tutorial in F306), Wed 10:00-10:50am and Thurs 9:30-10:20 am in F248A

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

Restricted to students in Baccalaureate of Science in Nursing This course is a continuation of BIOL 152. It examines anatomy and physiology of organ systems not studied in BIOL 152 . Physiological principles and application to nursing practice are stressed. Prior completion of BIOL 104 or BIOL 126 is an asset.

PREREQUISITE(S):

C (or better) in Biology 152

CO-REQUISITE(S):

Not Applicable

EXCLUSION(S):

Not Applicable

COURSE LEARNING OUTCOMES / OBJECTIVES

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

1. Demonstrate proper use and understanding of anatomical and physiological terminology related to organ systems not previously covered in BIOL 152.
2. Use concepts related to basic anatomy, physiology, and histology in order to explain the maintenance of health and prevention of disease.
3. Use knowledge of normal anatomy and physiology to differentiate normal from abnormal when doing physical assessments of clients.
4. Use knowledge of anatomy and physiology as a basis for further study of pathophysiology.
5. Relate knowledge of gross anatomy and physiological processes gained through laboratory activities to assessment of health.
6. Explain the function integration of all body systems in the maintenance of homeostasis and health.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

1. Martini, Nath and Bartholomew (2018). *Fundamentals of Anatomy and Physiology Eleventh Edition*, Pearson Education Inc. San Francisco.
2. Biology 153 Lab manual (*available for purchase in the Camosun Bookstore or online in D2L*)

NOTE: Students are required to wear **closed toe shoes** in the lab (e.g. no flip flops, sandals)

Knowledge of pre-requisite material

It is important that you are familiar with material that has already been covered in the prerequisite courses, Biology 12 or Chemistry 11 and Biology 152. This information is necessary in order to understand concepts taught in Biology 153. Students are expected to **review this pre-requisite material** on their own. This information, as it relates to topics covered in the course, is also examinable. You will obtain information from several sources including lectures, class discussions, textbooks, videos, laboratory exercises and clinical courses. Do not rely exclusively on any one, or only some of the sources. A strongly recommended approach to successfully completing this course is to review topics in your textbook before class and then consolidate information obtained in lectures with that in the textbook, after class.

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

Wk	Dates	Lecture	Lab activity	Quiz/Assign
1	Jan 10-14	Hemostasis Cardiovascular anatomy	Blood Hematopoiesis	A1 Hemostasis (due Jan 19)
2	Jan 17-21	Cardiovascular anatomy Cardio physiology	LAB 1: Lab Safety (Review) & Hematology	
3	Jan 24-28	Cardio physiology (2)	LAB 2: Cardiovascular anatomy	Q1 Hematology & Hemostasis (start of lab)
4	Jan 31-Feb 4	Blood pressure Capillary exchange	LAB 3: Cardiovascular physiology	Q2 CV anatomy (start of lab) A2 BP Bulk flow (due Feb 9)
5	Feb 7-11	Respiratory system (2)	LAB 4: Respiratory system A&P	Q3 Cardio phys (start of lab)
6	Feb 14-18	Respiratory system Lymphatic System	MIDTERM LAB EXAM	
7	Feb 21 Feb 22-25	Family Day (College closed) Reading Break	NO LABS	
8	Feb 28 Feb 28-Mar 4	MIDTERM LECTURE EXAM * Immunology (2)	Lab 5: Microbiology 1	A3 Immune (due Mar 9)
9	Mar 7-11	Immunology Digestive system	LAB 6: Microbiology 2	A4 Immunization (due Mar 16)
10	Mar 14-18	Digestive system (2)	LAB 7: Lymphatic system and blood typing	
11	Mar 21-25	Digestive system Metabolism	LAB 8: Digestive System A&P	Q4 Micro Blood typing (start of lab)
12	Mar 28-Apr 1	Metabolism (2)	LAB 9: Nutrition and Metabolism	Q5 Digestion (start of lab)
13	Apr 4-8	Urinary System	FINAL LAB EXAM	
14	Apr 11-14 Apr 15	Urinary System Fluid Acid Base Balance Good Friday (College closed)	LAB 10: Urinary System A&P	
	Apr 18 Apr 19-27	Easter Monday (College closed) FINAL COMPREHENSIVE EXAM (Date TBA)		

***NOTE:** the midterm will be written outside of regular class hours on February 28th from 5:30-7:00pm in F338

EVALUATION OF LEARNING

There will be two theory examinations and two laboratory examinations. Examination questions in Biology 153 will incorporate critical thinking and problem-solving. Marks will also be awarded for prelab work, quizzes and assignments. Examinations will be given at times indicated on the Course Schedule. Assignments will be due at times as announced in class. Please see STUDENT RESPONSIBILITIES.

D2L Prelabs	5%
Assignments and quizzes	10%
Midterm Lecture Exam (Feb 28th, 5:30-7:00 pm)	25%
Lab Exam I (midterm)	12.5%
Lab Exam II (final)	12.5%
Final Comprehensive Lecture Exam	35%
	TOTAL 100%

- The lecture exams will cover topics that have been discussed during lectures. Many of these topics may also be reinforced in the laboratory.
- Laboratory exams include a practical component; for example, the identification of structures from anatomical models, dissections and slides; the following web site may be useful in reviewing lab material as it provides labeled images of tissues and models examined in the lab:

website <https://peggyhunter.opened.ca/>

- The final lecture exam is comprehensive, covering the entire semester.

IMPORTANT TO NOTE!

Exams **must be written at the scheduled times**. If a student is unable to attend an exam because of a genuine medical or other emergency, **the instructor must be notified in advance of the examination**. Late notifications will not be accommodated. Once an exam is written, there will be **no rewrites or supplementals** given. Upon submission of acceptable supporting documentation, the following accommodations will be available:

- if the Midterm Lab Exam is missed, the Final Lab Exam will be expanded and will count for 25% of the final grade
- if a student is unable to take the final laboratory examination and provides acceptable documentation, an oral laboratory examination may be given
- if the Midterm Lecture Exam is missed, a make-up Lecture Exam will be scheduled during week 11. **This exam will cover all topics up to and including week 10.**
- if the Final Lecture Exam is missed, the student will receive a mark of incomplete and will have 6 weeks from the last day of classes to write the exam. However, students will not be able to begin clinical practice until they are confirmed to have a minimum of 60% in Biology 153.

Vacation plans and scheduled flights do not constitute an emergency.

CONCERNING SPELLING

Mastering the usage of anatomical and physiological terminology will be important to you for several reasons. Correct usage (pronunciation and spelling) will

- foster self confidence
- help to earn the respect of your professional colleagues
- reduce the chances of practical mistakes which may cause harm or embarrassment. Consider the difference between the terms **peroneal** and **perineal**.

You will be expected to use acceptable pronunciation and correct spelling for presentations, assignments and exams. **Penalties for spelling errors will be applied.** If writing is illegible, no marks will be given.

PRELAB QUIZZES AND PRELABS

- Each week, your prelab activities will involve 2 components, both of which must be completed **before** you attend lab. The order in which you do the activities is up to you, but it is strongly recommended that once you have completed the D2L quizzes, submitted your answers and received feedback, that you use this information to ensure that the answers you have in your lab manual are correct.
- The prelab assignment is described on the first page of every lab, and usually involves labelling diagrams, filling in tables or answering questions in your lab manual. It is suggested that you use your lecture notes or textbook to help you complete this part of your prelab work. The prelab content must be transferred to your printed lab **before lab** each week.
- D2L prelab quizzes are open book and not timed. If you save your answers as you complete them, you can pause partway through a quiz and return another time if you are interrupted. Once you are satisfied with your responses, you submit the quiz for marking. **Your mark will be based on your answers the first time you submit a quiz.** However, you can redo the quizzes as many times as you wish as part of your study activities. Once you've submitted your quiz, remember to use this information to fill in or check the answers in your lab manual. The prelab activities are designed to provide you with a quick reference and to help you come to lab prepared so that you can spend your lab time practicing with your partner and with the models and slides.

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 notice 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>

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>

STUDENT RESPONSIBILITIES

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.

COLLEGE-WIDE POLICIES, PROCEDURES, REQUIREMENTS, AND STANDARDS

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](http://camosun.ca/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.