

COURSE SYLLABUS



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

CLASS SECTION: 004A/B

TERM: Winter 2024

COURSE CREDITS: 3

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

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

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

INSTRUCTOR DETAILS

NAME: Geoffrey Morris

EMAIL: MorrisG@camosun.ca

OFFICE: F340D

HOURS: Monday 12:00-12:30pm and 2:00-3:00pm, Thursday 9:30-11:00am, Friday 9:30-10:00am (in E201)

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):

All of:

- C in BIOL 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

(a) Required Texts

Lab Manual:

Department of Biology. (2024). *Biology 153 Anatomy & Physiology 2 Laboratory Manual*, Camosun College [digital files of the labs will be made available for students who prefer to print out the labs themselves or prefer to use electronic devices]

Text book (same as for Biol 152 in Fall 2023):

EITHER

Martini, Nath and Bartholomew. (2018). *Fundamentals of Anatomy and Physiology Eleventh Edition*, Pearson Education Inc. San Francisco. [available in hardcover; used copies should also be available]

OR

Martini, Nath and Bartholomew. (2023). *Fundamentals of Anatomy and Physiology Twelfth Edition*, Pearson Education Inc. [available as eText only]

(b) Optional Texts

OpenStax Anatomy and Physiology (<https://openstax.org/details/anatomy-and-physiology>) is a free textbook

(c) Laboratory Requirements

1. Students are required to wear closed shoes (e.g. no flip flops, sandals, or shoes with holes) during all lab sessions.
2. Binder for laboratory manual, notes and assignments.

(d) Knowledge of pre-requisite material

It is important that you are familiar with material that has already been covered in the pre-requisite courses, Biology 12 (or equivalent) and Chemistry 11 (or equivalent), and Biology 152. This information is necessary in order to understand concepts taught in Biology 153. Students are expected to review this prerequisite 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

Lectures: Mondays 12:30pm-1:50pm Fisher 336
 Fridays 10:00am-11:20am Ewing 201

Labs: 002A Mondays 8:30am-11:20pm Fisher 238
 002B Fridays 12:30pm-3:20pm Fisher 238

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

Week	Dates	Lecture	Lab activity
1	Jan 8 – 12	Hemostasis Cardiovascular anatomy	Blood (lecture) Hematopoiesis (lecture)
2	Jan 15 – 19	Cardiovascular anatomy Cardiovascular physiology	LAB 1: Lab Safety (Review) and Hematology
3	Jan 22 – 26	Cardiovascular physiology (2)	LAB 2: Cardiovascular anatomy
4	Jan 29 – Feb 2	Blood pressure Capillary exchange	LAB 3: Cardiovascular physiology
5	Feb 5 – 9	Respiratory system (2)	LAB 4: Respiratory system A&P
6	Feb 12 – 16	Respiratory system Lymphatic System	<i>LAB EXAM #1 (Labs 1-4)</i> (in your usual lab time, location)
7	<i>Feb 19</i> <i>Feb 20-23</i>	<i>Family Day (College Closed)</i> <i>Reading Break</i>	<i>NO LABS</i>
8	<i>Feb 26</i> Feb 26 – Mar 1	<i>MIDTERM LECTURE EXAM *</i> Immunology (2)	Lab 5: Microbiology 1
9	Mar 4 – 8	Immunology Digestive system	LAB 6: Microbiology 2
10	Mar 11 – 15	Digestive system (2)	LAB 7: Lymphatic system and blood typing
11	Mar 18 – 22	Digestive system Metabolism	LAB 8: Digestive System A&P
12	Mar 25 – Mar 28 Mar 29	Metabolism (2) <i>Good Friday (College Closed)</i>	LAB 9: Nutrition and Metabolism (Monday – Thursday)
13	Apr 1 Apr 2 – 5	<i>Easter Monday (College Closed)</i> Urinary System	LAB 10: Urinary System (online) (Lab 9 on Friday, in your usual lab time)
14	Apr 8 – 12	Urinary System Fluid Acid Base Balance	<i>LAB EXAM #2 (Labs 5-9)</i> (in your usual lab time, location)
	Apr 15– 23	<i>FINAL COMPREHENSIVE EXAM</i> (Date TBA)	

***NOTE:** The midterm exam is scheduled at Lansdowne campus in Young 211, 6:00-7:30pm. This exam is scheduled outside normal class time so all sections of Biology 153 can write the midterm at the same time. Plan accordingly! If this exam time conflicts with another course in your schedule, please contact your Biol 153 instructor as soon as possible to discuss other options. You do not need to miss your other class to write this exam.

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>

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 (<i>Feb 26th, 6:00-7:30 pm</i>)	25%
Lab Exam #1	12.5%
Lab Exam #2	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 supplemental exams** given. Upon submission of acceptable supporting documentation, the following accommodations will be available:

- If Lab exam #1 is missed, EITHER a make-up lab exam will be scheduled outside of class time OR Lab Exam #2 will be expanded to include all of the lab material and will count for 25% of the final grade. This will be decided between the instructor and the student, as soon as possible once the student notifies the instructor about the need to miss this exam.
- If a student is unable to take Lab exam #2 as scheduled and provides acceptable documentation, an oral or written 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.

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

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 (on D2L) AND PRELAB COMPLETION (in your lab manual)

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 written 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. Each week, at the beginning of lab, the instructor will check your lab for completion and will assign you a mark out of 1. Completion of all prelabs in your manual will result in a score of 10/10 and be worth the equivalent of a quiz.
- **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.

GUIDELINES FOR LAB ATTENDANCE IN BIOLOGY AT CAMOSUN

In order to pass the course, students are required to meet the minimum lab attendance, participation and completion requirements.

- Laboratory activities involve practical applications of your knowledge and manual skills development. Development of these skills is a requirement to meet the Course Learning Outcomes.
- Meeting Course Learning Outcomes is a requirement for gaining credit in the course, as well as ensuring articulation, pre-requisite and transferability standards are met.
- Laboratory activities are in-person activities; attendance and participation is required. Online alternatives are not available.
- Laboratory attendance may be monitored by a sign-in/sign-out binder in the lab or by your instructor (while checking prelab completion). It is your responsibility to record your attendance using this binder or confirm that your instructor has recorded your attendance.
- Attendance from the sign-in/sign-out binder will be transferred to your D2L course page by your instructor. If you notice any discrepancies, please contact your instructor ASAP.
- If you arrive significantly late to the lab, you may miss the opportunity to sign-in, and/or participate in graded assessments such as pre-lab quizzes.

Missed Labs Guidelines:

- Students who will miss a laboratory session have an obligation to seek out concessions directly from their instructor in a timely manner, BEFORE the lab period occurs.
- If notification is provided AFTER the lab has occurred, concessions may not be available.
- If you miss up to three (3) laboratory sessions, you are still eligible to meet the Learning Outcomes for the course.
- Concessions offered for the first three (3) missed laboratory sessions will depend on the reason for laboratory absence and is up to instructor discretion. Concessions may include writing up the laboratory report with provided data, omitting the lab, or other concessions.
- If you miss a **total of four (4) or more labs for any reason** (including, but not limited to: life circumstances, legitimate illness or family/pet emergency, planned vacations, milestone family events, work commitments, childcare or eldercare commitments, competitive athletic events), you will be unable to meet with learning outcomes for the class and will receive a **failing grade (F) in the entire course**, regardless of marks received on graded lab and lecture components. Exceptions will only be considered through an academic concession granted by the instructor or Dean/Associate Dean.
- This guideline applies to in-person laboratory activities only; for missed Lab Exams, please see the section in this outline on Exams (above).
- Please note that if you are suffering from a serious medical illness that prevents you from participating in this course, Camosun College has a Compassionate Medical Withdrawal Policy (<https://camosun.ca/services/forms#medical>)

STUDENT RESPONSIBILITY

1. Students are expected to hand in any required reports and assignments on time. **Late assignments will receive a penalty of 10% per day.**
2. Attendance is important to ensure success. If unable to attend a session, the student is responsible for arranging to obtain information such as notes, handouts and announcements. See above (in the School or Departmental Information section) for a description of the departmental lab attendance guidelines.
3. Examinations must be written as scheduled. Exceptions may be made for emergencies at the discretion of the instructor and only if documentation of the illness or emergency acceptable to the department is received. The student must notify the instructor **in advance** of the examination.
4. In-class work may sometimes be evaluated for marks. This may include quizzes given during class time. If a student misses a class due to medical or other extenuating circumstances, the student should contact their instructor as soon as possible to make alternate arrangements, where possible. Students must be present in lab to show their completion of the written prelab activities each week. (See “Prelab quizzes and prelab completion” above.)
5. Students are expected to work independently on assignments unless instructed that the evaluation is based on group effort and evaluation.
6. Students must know and follow all Safety Rules and Procedures and must sign the Safety Contract before participating in any laboratory activity. Failure to follow the Safety Rules and Procedures will result in penalties at the discretion of the instructor.
7. Students are requested to have cell phones and pagers in silence mode during lectures and laboratory sessions.
8. All laboratories start punctually. Information necessary for performing the laboratory correctly and safely is given at the beginning of the lab.

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](#) (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.