COURSE SYLLABUS

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

CLASS SECTION: 003AB

TERM: 2025W

COURSE CREDITS: 3

DELIVERY METHOD(S): F2F labs and lectures



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.

INSTRUCTOR DETAILS

NAME: Geoffrey Morris

EMAIL: MorrisG@camosun.ca

OFFICE: Fisher 340B

HOURS: Tue 10:00-11:00am; Wed 11:30am-12:30pm; Thu 1:00-2:30pm; Fri (Ewing 201) 9:30-10:00am

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

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):

EQUIVALENCIES:

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 functional integration of all body systems in the maintenance of homeostasis and health.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

(a) Required Texts

Lab Manual:

Camosun College (2024). *Biol 153 Lab Manual* [Printed coursepack available for purchase from the campus book store. Digital files of the labs will be made available on D2L for students who prefer to print out the labs themselves or prefer to use electronic devices]

Text book (same text book as for Biol 152, Fall 2024) – you have some options:

EITHER

Co, Elizabeth. (2023). *Anatomy and Physiology*, Cengage. [Available as hardcover, loose-leaf (with MindTap), and eText]

OR

Openstax. (2022). *Anatomy & Physiology* [Available online at https://openstax.org/details/anatomy-and-physiology plus printed loose-leaf copies available for purchase in the campus book store]

(b) Other Laboratory Requirements

- i. Students are required to wear closed shoes (e.g. no flip flops, sandals, or shoes with holes) during all lab sessions; Lab coats are optional.
- ii. Binder for laboratory manual, notes and assignments.

(c) 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: Section A and B - Wednesday 10:00-11:20am, Ewing 348; Friday 10:00-11:20am, Ewing 201

Labs: Section A – Wednesday 1:30-4:20pm, Fisher 238; Section B – Friday 12:30-3:20pm, 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 6 – 10	Hemostasis Cardiovascular anatomy	Blood (lecture) Hematopoiesis (lecture)
2	Jan 13 – 17	Cardiovascular anatomy Cardiovascular physiology	LAB 1: Lab Safety (Review) and Hematology
3	Jan 20 – 24	Cardiovascular physiology (2)	LAB 2: Cardiovascular anatomy
4	Jan 27 – 31	Blood pressure Capillary exchange	LAB 3: Cardiovascular physiology
5	Feb 3 – 7	Respiratory system (2)	LAB 4: Respiratory system A&P
6	Feb 10 – 14	Respiratory system Lymphatic System	LAB EXAM #1 (Labs 1-4) (in your usual lab time, location)
7	Feb 17 Feb 18-21	Family Day (College Closed) Reading Break	NO LABS
8	Feb 24 Feb 24 – 28	MIDTERM LECTURE EXAM * Immunology (2)	Lab 5: Microbiology 1
9	Mar 3 – 7	Immunology Digestive system	LAB 6: Microbiology 2
10	Mar 10 – 14	Digestive system (2)	LAB 7: Lymphatic system and blood typing
11	Mar 17 – 21	Digestive system Metabolism	LAB 8: Digestive System A&P
12	Mar 24 – 28	Metabolism (2)	LAB 9: Nutrition and Metabolism
13	Mar 31 – Apr 4	Urinary System	LAB 10: Urinary System
14	Apr 7 – 11	Urinary System Fluid Acid Base Balance	LAB EXAM #2 (Labs 5-10) (in your usual lab time, location)
	Apr 14 – 25	FINAL COMPREHENSIVE EXAM (Date TBA)	

^{*}NOTE: The midterm exam is scheduled at Interurban campus (LACC 124), 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 noticed is required. Deadlines can be reviewed on the <u>CAL exams page</u>. https://camosun.ca/services/academic-supports/accessible-learning/academic-accommodations-exams

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, Quizzes, Prelabs in lab manual		
Midterm Lecture Exam (Mon, Feb 24, 6:00-7:30pm)	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. 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 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 or other courses in the nursing program 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 policy for more information.

https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf

COURSE GUIDELINES & EXPECTATIONS

CONCERNING SPELLING

Mastering 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 – written work in your lab manual and online (D2L) quizzes – 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. Use your lecture notes or textbook to help you complete this part of your prelab work. The prelab content must be transferred to your lab manual 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 the manual will result in a score of 10/10 and be worth the equivalent of a written 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. Once you are satisfied with your responses, submit the quiz for marking. **Your mark will be based on your submitted answers on your first attempt.** However, you can redo the quizzes as many times as you wish as part of your study activities. The prelab activities are designed to prepare you for the labs so that you can spend your lab time practicing with your partner and with the models and slides. Once you've submitted your quiz, remember to use this information to fill in or check the answers in your lab manual.

GENERATIVE ARTIFICIAL INTELLIGENCE

You may use Generative Artificial Intelligence (Gen AI) tools such as ChatGPT, Copilot, Gemini, and similar tools for ungraded learning activities, such as brainstorming or studying. However, please be aware that the material generated by these programs may be inaccurate or incomplete. You may not submit any work generated by a Gen AI tool or program for your graded coursework (assignments, exams, etc.). Use of Gen AI tools to complete graded coursework will be considered academic misconduct. Please note that different instructors will have different policies for using Gen AI tools. If in doubt, check with your instructor before using these tools.

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 will be monitored by a sign-in/sign-out binder in the lab. It is your responsibility to record your attendance using this binder.
- Attendance from the sign-in/sign-out binder will be transferred to your D2L gradebook by your instructor. If you notice any discrepancies, please contact your instructor ASAP.
- If you arrive 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)

- 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. Also, see above (in the School or Departmental Information section) for a detailed 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.
- 5. Students must be present in lab to show their completion of the written prelab activities each week. (See "D2L Quizzes and Prelabs" above.) If a student has to miss a lab due to illness or other extenuating circumstances, a lab completion mark may still be possible if the student shows their instructor their completed lab, by the next lab period. This requires completion of all pages of the lab, not just the pages that were part of the prelab assignment.
- 6. Students are expected to work independently on assignments unless instructed that the evaluation is based on group effort and evaluation.
- 7. 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.
- 8. Students are requested to have cell phones and pagers in silent mode during lectures and laboratory sessions.
- 9. 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 <u>camosun.ca/services</u>.

Support Service	Website
Academic Advising	camosun.ca/services/academic-supports/academic-advising
Accessible Learning	camosun.ca/services/academic-supports/accessible-learning
Counselling	camosun.ca/services/health-and-wellness/counselling-centre

Support Service	Website
Career Services	<u>camosun.ca/services/co-operative-education-and-career-services</u>
Financial Aid and Awards	camosun.ca/registration-records/financial-aid-awards
Help Centres (Math/English/Science)	camosun.ca/services/academic-supports/help-centres
Indigenous Student Support	camosun.ca/programs-courses/iecc/indigenous-student- services
International Student Support	camosun.ca/international
Learning Skills	camosun.ca/services/academic-supports/help- centres/writing-centre-learning-skills
Library	camosun.ca/services/library
Office of Student Support	camosun.ca/services/office-student-support
Ombudsperson	camosun.ca/services/ombudsperson
Registration	camosun.ca/registration-records/registration
Technology Support	camosun.ca/services/its
Writing Centre	camosun.ca/services/academic-supports/help- centres/writing-centre-learning-skills

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 https://camosun.ca/sites/default/files/2021-05/e-2.9.pdf and camosun.ca/services/sexual-violence-support-and-education.

To contact the Office of Student Support: 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