

COURSE SYLLABUS



COURSE TITLE: BIOL-151: Human Physiology

CLASS SECTION: 001A/B

TERM: W22

COURSE CREDITS: 4

DELIVERY METHOD(S): F2F lectures and labs

Camosun College campuses are located on the traditional territories of the Lək̓ʷəŋən 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: Jennifer Giuliani

EMAIL: GiulianiJ@camosun.bc.ca

OFFICE: F352

HOURS: Mondays 9:00-9:50am and 1:00-1:50pm in F352

Wednesdays 10:00-10:50am in F352 and 1:30-2:30pm outside (see D2L for meeting location/details)

(Other meeting times can be arranged, if these times don't fit with your schedule.)

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 the companion to BIOL 150. It provides an overview of functional relationships within the human body. Physiological processes are studied at both the cellular and organ system level, with an emphasis on the maintenance of homeostasis. Laboratory exercises illustrate basic physiological principles.

PREREQUISITE(S):

All of:

- C in BIOL 150

And one of:

- C in Chemistry 11
- C in Camosun Alternative

CO-REQUISITE(S):

Not Applicable

EXCLUSION(S):

Not Applicable

COURSE LEARNING OUTCOMES / OBJECTIVES

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

1. Describe the concept of homeostasis and explain how it operates in the major physiological systems of the human body.
2. Demonstrate an understanding of the functioning of the major physiological systems of the human body at the cellular and systemic levels.
3. Explain how the major physiological systems of the body interact to bring about biological behaviors.
4. Understand how physiological processes are altered in injury or disease.
5. Apply anatomical vocabulary in a physiological context.
6. Perform laboratory procedures relevant to physiology (observe physiological phenomena, measure physiological data, organize / record / analyze results of physiological experiments).
7. Utilize critical thinking to apply physiological concepts to specific problem solving situations.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

(a) Required Texts

(i) Lab Manual:

Biol 151 Lab Manual (W22), Camosun College.

(ii) Textbook:

Martini, Nath and Bartholomew. (2018). *Fundamentals of Human Anatomy and Physiology, 11th edition*, Pearson Education Inc. [available in print and digital versions]

*note: this is the same anatomy & physiology text that was used for Biol 150 Human Anatomy last semester. If you have an anatomy-only textbook from a previous course, you may choose to purchase a physiology-only textbook for this course. More information will be provided in the first class.

(b) Additional, Optional Resources

Lab coats are encouraged, but *not required*. We will discuss this in greater detail during the first lab.

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

(c) Knowledge of Prerequisite Material

It is important that you are familiar with material that has already been covered in the prerequisite courses, including Biol 150 (Human Anatomy) and Chemistry 11 (or equivalent). This information is necessary in order to understand many of the concepts covered in Biol 151. Students are expected to review the prerequisite material on their own, as needed, using Chapters 2 and 3 in the textbook and the resources posted on D2L.

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 Topics	Lab Topics
1	Jan. 10 – 14	Homeostasis (and course intro) Cell Membranes & Transport	Lab 1: Introduction to the physiology lab
2	Jan. 17 – 21	Neural Physiology	Lab 2: Movement of molecules
3	Jan. 24 – 28	Neural Physiology (cont'd, as needed) Senses	Lab 3: Nervous system
4	Jan. 31 – Feb. 4	Cardiovascular Physiology 1: Heart	Lab 4: Senses
5	Feb. 7 – 11	Cardiovascular Physiology 2: Blood vessels	Lab 5: Cardiovascular system
6	Feb. 14 – 18	Monday, Feb. 14th: Lecture Midterm #1 Respiratory Physiology	Lab 6: Dive reflex (and review)
7	Feb. 21 – 25	Reading Break! No classes this week [Monday, February 21 st : Holiday (College closed)]	
8	Feb. 28 – Mar. 4	Respiratory Physiology (cont'd) Renal Physiology	Midterm Lab Exam (Labs 1-6) <u>and</u> Lab 7: Respiratory system
9	Mar. 7 – 11	Renal Physiology (cont'd) Digestion	Lab 8: Urinary system
10	Mar. 14 – 18	Monday, Mar. 14th: Lecture Midterm #2 Digestion (cont'd) and Metabolism	Lab 9: Digestion
11	Mar. 21 – 25	Metabolism (cont'd, if needed) Muscle Physiology	Lab 10: Muscle physiology
12	Mar. 28 – Apr. 1	Immunology Hematology (cont'd next week, if needed)	Lab 11: Immunology <u>and</u> Lab 12: Endocrine and blood
13	Apr. 4 – 8	Endocrine Physiology Reproduction: Gamete Formation	Final Lab Exam (Labs 1-12)
14	Apr. 11 – 15	Reproduction: Pregnancy & Development [Friday, April 15 th : Holiday (College closed)]	No Labs (due to Friday holiday)
	Final Exam Period Apr. 19 – 22	[Monday, April 18 th : Holiday (College closed)] Final Lecture Exam: date and time to be scheduled by college registrar (schedule posted mid-February)	

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

DESCRIPTION	WEIGHTING
Lab Assignments (approx. 10)	10%
Midterm Lab Exam (in lab, Week 8)	10%
Final Lab Exam (in lab, Week 13)	15%
Lecture Assignments (approx. 5)	5%
Scientific Literature Project (part 1 due late January, part 2 due late March)	5%
Lecture Midterm #1 (Monday, February 14 th)	15%
Lecture Midterm #2 (Monday, March 14 th)	15%
Final Lecture Exam (during the final exam period, date/time/location TBA)	25%
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>

The final lecture exam will be a cumulative exam, based on lecture topics covered throughout the full semester, but with an emphasis on those topics covered since the cut-off for lecture midterm #2. A detailed breakdown of topics covered on each exam will be posted on D2L prior to each exam.

COURSE GUIDELINES & EXPECTATIONS

This course includes 3h lecture and 3h lab each week. Lecture times are divided into 2 (two) 1.5h sessions per week.

Lectures: Mondays 11:30am – 12:50pm in F268

Wednesdays 8:30am – 9:50am in F268

Labs: Section 001A = Fridays 12:30pm – 3:20pm in F224

Section 001B = Thursdays 9:30am – 12:20pm in F224

Attendance, Exams, and Submission of Assignments

It is expected that you will attend all lectures and labs. If you do miss a lecture, it is your responsibility to find out what you missed that day and get caught up. Attendance in the lab is required for completion of lab assignments. If you are unable to attend a lab, please contact your instructor as soon as possible to discuss possible arrangements.

Exams must be written at their scheduled time. This course will have two lecture midterms (scheduled and written during class time), one lab midterm exam and one final lab exam (scheduled and written during lab time), and one final exam (to be scheduled by the college registrar and written at the specified time during the final exam period). Please refer to the detailed course schedule above for the dates and times of these exams. In particular, please wait until after the final exam schedule has been posted before booking any travel arrangements for the end of term. Ensure that your travel is scheduled for after the completion of your final exam for this class. The final exam schedule will be posted on myCamosun mid-February.

**If you are unable to write a scheduled exam due to extreme, extenuating circumstances, you must contact your instructor as soon as possible, prior to the exam. Proper documentation may be required for alternate arrangements to be made.

All course assignments will have a specified due date. Be sure to submit all assignments on time to avoid deductions. A 10% deduction per day late will be applied to any assignments that are submitted after the due date/time. Extenuating circumstances will be considered. If you are unable to submit an assignment on time, please contact your instructor as early as possible to discuss possible arrangements. Submitting assignments on time will help you to keep up with the course material and receive timely feedback that will help you with other course assignments and exams.

Some course assignments will be group work; most course assignments will be individual work. When submitting your own, individual assignment, be sure that it is your work and yours alone. This applies even if you are working with a study group! I do encourage you to study and work with other students, but the work that you submit must still be your own.

These course expectations and policies will be discussed during the first week of classes. If you have any further questions, please contact your instructor.

Group Work

During the lab component of the course, you will work in small groups to perform demonstrations and experiments. Aim for equal (not necessarily identical) participation of all group members. Discuss individual responsibilities within the group and include the instructor in these discussions as needed. Lab assignments will usually be submitted as individual work, but may sometimes be submitted as group work. Details will be described each week in lab.

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.

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.