# COURSE SYLLABUS

COURSE TITLE: BIOL-151: Human Physiology CLASS SECTION: 003A TERM: Winter, 2023 COURSE CREDITS: 4 DELIVERY METHOD(S): Lecture and laboratory



Camosun College campuses are located on the traditional territories of the Lək<sup>w</sup>əŋən and WSÁNEĆ 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 <u>https://legacy.camosun.ca/covid19/index.html</u>

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: Douglas Panton

EMAIL: pantond@camosun.bc.ca

OFFICE: TECH 219

HOURS: Tuesday, Wednesday and Thursday. 8:30 - 10:00 am.

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):

# 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

- Text: Sherwood, Kell and Ward. 2<sup>nd</sup>. Canadian edition (2013) Human Physiology: from cells to systems, Nelson education ltd. Toronto
- Lab Manual: Biology 151: Human Physiology Labs

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

| WEEK/DATE           | LECTURE TOPIC                    | LAB  |
|---------------------|----------------------------------|--|
| Jan. 9-13           | Intro to Chemistry               | Lab 1: Intro to<br>Laboratory Science                    |
| Jan 16-20           | Intro to Cellular physiology     | Lab 2: Intro to<br>Chemical Concepts                     |
| Jan. 23-27          | Digestive Physiology             | Lab 3: Digestion of<br>Organic Molecules                 |
| Jan. 30 - Feb. 3    | Metabolism                       | Lab 4: Cellular<br>Respiration and<br>Glucose Monitoring |
| Feb. 6-10           | "MIDTERM 1"<br>Neural Physiology | Lab 5: Reflexes and cranial nerve tests                  |
| Feb.13-17           | Neural Physiology                | Lab 6: Sensory<br>perception                             |
| Feb 20<br>Feb 20-24 | FAMILY DAY<br>READING BREAK      | NO LABS  |
| Feb. 27 - Mar.4     | Muscle Physiology                | Lab 7: Muscle<br>Physiology                              |

| Mar 6-10              | Cardiovascular Physiology                                      | Lab 8: Cardiovascular<br>Physiology |
|-----------------------|--|-------------------------------------|
| Mar 13-17             | Hematology   | Lab 9: Hematology<br>and Immunology |
| Mar. 20-24            | "MIDTERM 2"<br>Immunology / Defense Systems                    | Lab 10: Respiratory<br>Physiology   |
| Mar 27-31             | Respiratory Physiology   | Lab 11: Urinalysis                  |
| Apr. 3-7              | Renal Physiology   |                                     |
| Apr. 7                | Good Friday  | Monday lab only                     |
| Apr. 10-14<br>Apr. 10 | Renal Physiology &<br>Reproductive Physiology<br>Easter Monday | Lab exam                            |
| Apr 17-25             | FINAL EXAM PERIOD<br>(exam scheduled by registrar)             |                                     |

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 scan be reviewed on the <u>CAL exams page</u>. <u>http://camosun.ca/services/accessible-</u> learning/exams.html

## EVALUATION OF LEARNING

| DESCRIPTION          | WEIGHTING |
|----------------------|-----------|
| Assignments X 3      | 15%       |
| Laboratory reports   | 15%       |
| Laboratory exam      | 15%       |
| Lecture midterms X 2 | 25%       |
| Lecture final exam   | 30%       |
| TOTAL                | 100%      |

me as soon as possible. Refer to the <u>Grade Review and Appeals</u> policy for more information. http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf

# COURSE GUIDELINES & EXPECTATIONS

# SCHOOL OR DEPARTMENTAL INFORMATION

#### 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 <u>http://camosun.ca/students/</u>.

| 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 <u>Centre for Accessible</u> <u>Learning</u> (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: <a href="http://camosun.ca/services/accessible-learning/">http://camosun.ca/services/accessible-learning/</a>

## Academic Integrity

Please visit <u>http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.13.pdf</u> for policy regarding academic expectations and details for addressing and resolving matters of academic misconduct.

## Academic Progress

Please visit <u>http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.pdf</u> 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 <u>http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf</u> 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 <u>http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf</u> for further details about grading.

## Grade Review and Appeals

Please visit <u>http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf</u> 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"

(<u>http://camosun.ca/learn/calendar/current/procedures.html</u>) and the Grading Policy at <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf">http://camosun.ca/learn/calendar/current/procedures.html</a>) and the Grading Policy at <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf">http://camosun.ca/learn/calendar/current/procedures.html</a>) and the Grading Policy at <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf</a>.

# 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 <a href="http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf">http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf</a> 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-servicesand-support/e-2.9.pdf and camosun.ca/sexual-violence. To contact the Office of Student Support: <u>oss@camosun.ca</u> 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 <a href="http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf">http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf</a> 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.