

COURSE SYLLABUS



COURSE TITLE: BIOL-090: Biology for Post-Secondary Preparation

CLASS SECTION: D01

TERM: Winter 2022

COURSE CREDITS: 4

DELIVERY METHOD(S):

In-person lectures: Lansdowne Campus

Lecture: Mondays and Wednesdays 4:30pm to 5:50pm

Lab: Have no fixed time. You will find recorded guidance on collaborate (part of D2L)

Online activities, assignments, and study tools – D2L

Camosun College campuses are located on the traditional territories of the Ləkʷəŋən and W̱SÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here. Learn more about Camosun's [Territorial Acknowledgement](#).

<HOLD FOR 2021F COVID-19 LANGUAGE>

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. Please fill out the attendance survey explained in the first lecture on Jan.10th.

INSTRUCTOR DETAILS

NAME: Charles Molnar

EMAIL: molnar@camosun.bc.ca

OFFICE: F-340B ONLINE OFFICE HOURS

Mondays: 10:30 AM – 11:30 AM; Mondays: 2:30 PM – 3:30 PM

Wednesdays: 12:30 PM – 1:15 PM

Or by request – please email through D2L for an appointment

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

Learners will gain an understanding of basic life processes and acquire the human biology theoretical and laboratory foundations required for successful transition to first-year post-secondary majors biology courses, including anatomy and physiology. Learners will discuss animal and plant cellular structure and function, the mechanisms underlying cell reproduction, gene expression and energy production, and the anatomy and

physiology of whole animals. As a preparatory course, an emphasis will be placed upon teaching learning skills effective for studying biology.

PREREQUISITE(S):

One of: C in English 12; C in Camosun Alternative

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 meet the following learning outcomes as outlined in the 2018-19 BC ABE Articulation Guide (<http://www.bctransferguide.ca/search/abe>):

1. Explain the roles for the various molecules and macromolecules in cellular function;
2. Explain the structure and functions of cells and subcellular structures and compartments;
3. Describe the cellular and molecular processes of cell division, including mitosis, meiosis, DNA replication and gene expression;
4. Describe the cellular and molecular requirements for cell metabolism and the processes of cellular respiration, photosynthesis and carbon fixation;
5. Use the principles of Mendelian inheritance to solve genetics problems;
6. Using examples, explain how human body systems are under controlled by mechanisms of homeostasis;
7. Explain how and why the human body is organized at the cellular, tissue and organ levels;
8. Describe the structure and function of the digestive, cardiovascular, respiratory, endocrine, renal and reproductive systems;
9. Demonstrate effective use of laboratory reagents, equipment and microscopes;
10. Demonstrate the ability to accurately collect and process data in the laboratory setting;
11. Communicate experimental results, interpretations and conclusions effectively, including through formal lab reports.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

- (a) Recommended Textbook: OpenStax Concepts of Biology, 1st Canadian Edition. Available (FREE) online: <https://opentextbc.ca/biology/>
- (b) Lab Instructions and Lecture Outlines will be available 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.

Course Schedule for BIOL 090 D01 Winter 2022

WEEK #	DATES	LECTURE TOPICS	LAB TOPICS
1	Jan. 10-14	1- Biology 2- Science	<i>Introduction</i>
2	Jan. 17-21	3- Chemistry 4- Water & pH	1- Science and Data
3	Jan. 24-28	5- Macromolecules 6- Cell Biology	2- Water and pH
4	Jan.31-Feb. 4	7- Cell Membranes & Transport 8- Enzymes	3- <i>Microscopes and Cells</i>
5	Feb.7-11	LECTURE EXAM #1 (Wed., Feb. 9) 9- Cellular Respiration	4- Osmosis
6	Feb.14-18	10- Mitosis 11- Meiosis 12- DNA Replication	Lab Exam #1
7	Feb. 21-25	Reading break	Reading break – no labs
8	Feb. 28-Mar. 4	13- Protein Synthesis 14- Mutations	Lab 5- Enzymes
9	Mar. 7-11	LECTURE EXAM #2 (Wed. Mar. 9)	5- Mitosis and Cancer
10	Mar.14-18	15- Histology	6- <i>Genetics</i>
11	Mar. 21-25	16- Histology 18A- Homeostasis & Nutrition	7- Nutrition and Digestion
12	Mar.28-Apr.1	18B- Digestive System 19- Urinary System	8- Anatomy 1
13	Apr. 4-8	20- Respiratory System 21- Circulatory System	9- Anatomy 2
14	Apr. 11-14	22- Immune System	LAB EXAM #2
	April 19-27	LECTURE EXAM #3 (Date TBA) on-line 3 hour 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 scan 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	
Weekly Pre-Lab and other Quizzes/Questions	5%	TOTAL
Weekly Lab and Text Assignments	30%	
Lecture Exam #1	10%	
Lecture Exam #2	15%	
Lecture Exam #3- Date TBA (April 19-27) online exam	20%	
Lab Exam #1	10%	
Lab Exam #2	10%	
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>

(a) Weekly Lecture Quizzes/text assignments (10%)

Text assignments are found in D2L, they are submitted online by 5PM on Monday. Text assignment 1 is due Mon. Jan. 17. At 5:00. Text assignments may be handed in one day late with a 10% penalty. No latter submissions accepted.

(b) Weekly Pre-Lab and other Quizzes/.Questions (5%)

- (i) Each lab will have questions to complete in the lab manual PRIOR to arrival to the lab session
- (ii) If the questions are not completed by the beginning of the lab session, a zero will be given (**no late submissions**)

(c) Weekly Lab Assignments (20%)

- (i) Lab assignments are due one week after the lab session and may be in the form of a D2L quiz, a hand-written or typed report, and/or demonstration of in-lab data. Several labs have a D2L quiz, Quizzes are due by the following Monday at 5PM.
- (ii) Written assignments are allowed to be submitted ONE day late with a **10% penalty** but will not be accepted after that

(d) Lecture Exams (10%, 15%, and 20%)

- (i) Lecture exams #1 and #2 and #3 take place on line.

(e) Lab Exams (10% and 10%)

- (i) Lab exams take place on-line. They are strictly based on lab material/content

COURSE GUIDELINES & EXPECTATIONS

Lecture Attendance

Attendance will NOT be required for lectures (except for Day 1). All lectures from previous term have been recorded and uploaded onto D2L for review as needed. EXAMS are the only exception.

Laboratory Work

Laboratory work for this course is mandatory. It is expected that students will read and prepare for each lab.

Written Assignments

A **professional format** is expected, i.e. a neat, legible, clean copy. "Rough" drafts risk rejection and a subsequent late penalty or reduced marks.

Unless otherwise stated, all assignments are due by the due date. Late assignments will **not** be accepted after a one-day grace period (10% penalty).

Missed Lecture Exams

All lecture exams must be written at the scheduled times. However, it is understood that emergency circumstances occur (e.g. illness or emergency in the immediate family); for such circumstances accommodation may be offered at the discretion of the instructor, provided the student:

- notifies the instructor **in advance** of the exam (not after), and
- provides documented evidence of the circumstance (i.e. medical documentation).

*** HOLIDAYS OR SCHEDULED FLIGHTS ARE NOT CONSIDERED TO BE EMERGENCIES ***

Be sure not to make travel plans for the end of semester until the final exam schedules are finalized and posted. Please ask any family members who might make travel plans on your behalf to consult you before booking tickets.

Cheating & Plagiarism

Cheating is a serious offence and is considered to be academic misconduct. A student caught cheating on an exam, quiz, or assignment will forfeit all credit for that submission, as well as have a note sent to the Dean.

Cheating includes but is not limited to:

- using unauthorized materials or resources NO GOOGLING,
- providing information to another person regarding exam content

Plagiarizing is appropriating the work of another person (including the ideas or language) and passing them off as your own (see <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.1.pdf>). For example, having a classmate "help" by seeing and copying their work is a serious form of plagiarism and will result in forfeit all credit for that submission, as well as have a note sent to the Dean.

Except where work is assigned to a group, all written work, **including lab data processing** and graphs, must be done individually.

The consequences for cheating and plagiarism are outlined by Camosun College policies (see <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf>).

Study Habits

Good (and regular!!) study habits are required to do well in this course. You should plan on a minimum of 4 hours outside of scheduled class time for the completion of assignments and for general studying. Joining a study group can help make this more fun.

Lecture outline notes templates are available for on D2L in PowerPoint form. It is highly recommended that students print them out (3 to a page) and bring them to each lecture (or have them in front of them as they watch recordings). These slides should be used as a study guide, not as your sole source of information. You will need to write down additional key words for examples and explanations given during lecture and watch recommended videos to really solidify your understanding. It is also recommended practice to transcribe these notes into a study-friendly format after each lecture, incorporating additional information from your textbook. Study these notes before the next class to prepare yourself for new material, which will often build on previously covered material.

Please take advantage of office hours to check-in, have a chat, or clarify a concept or assignment. It makes a world of difference.

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.