

COURSE SYLLABUS



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

CLASS SECTION: D01

TERM: Winter 2023

COURSE CREDITS: 3

DELIVERY METHOD(S): Asynchronous, Online

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](#).

<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.

INSTRUCTOR DETAILS

NAME: Dominic Bergeron, PhD

EMAIL: BergeronD@camosun.ca

OFFICE: F 248 D

HOURS: Monday: 12:30 – 2:20
 Thursday: 12:30 – 2:20

Given this is an online class, it might be impossible for you to meet me in person. This is not a obstacle, we can schedule a virtual meeting at a time that will work for both of us.

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):

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

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

REQUIRED: Mader – Inquiry into Life, 17th edition. McGraw-Hill. Should be purchased from Camosun Bookstore as it requires a special code in order to access the Connect resource (Included with purchase)

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.

<i>Week 1 – Jan 9 - 13</i>	Introduction	
<i>Week 2 – Jan 16 - 20</i>	Chemistry of Life	
<i>Week 3 – Jan 23 - 27</i>	Biological Molecules	
<i>Week 4 – Jan 30 – Feb 3</i>	A Tour of the Cell	Quiz #1 (Week 1 – 3)

<i>Week 5 – Feb 6 - 10</i>	Energetics	
<i>Week 6 – Feb 13 - 17</i>	Cell Respiration / Photosynthesis	
<i>Week 7 – Feb 20 - 24</i>	Cellular Reproduction	Quiz #2 (Week 4 – 6)
<i>Week 8 – Feb 27 – Mar 3</i>	Genetics	
<i>Week 9 – Mar 6 - 10</i>	DNA Replication	
<i>Week 10 – Mar 13 - 17</i>	Protein Synthesis	
<i>Week 11 – Mar 20 - 24</i>	Mutation / Gene Expression / Cancer	Quiz #3 (Week 7 – 10)
<i>Week 12 – Mar 27 - 31</i>	Homeostasis / Excretion / Digestion	
<i>Week 13 – Apr 3 - 7</i>	Respiration / Circulation	
<i>Week 14 – Apr 10 - 14</i>	Reproductive system	Quiz #4 (Week 11 – 13)

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
Readings – McGraw Hill Connect	15%
Virtual Labs – McGraw Hill Connect	15%
Assignments (4x; 5% each)	20%
Quizzes (4x; 5% each)	20%
Forum postings	10%
Final exam	20%
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>

COURSE GUIDELINES & EXPECTATIONS:

Material review and virtual labs

To get the most out of this online course, you are expected to review all reading materials, watch selected videos and video lectures and complete assignments including: Connect readings, Connect Virtual Labs, Assignments and forum postings.

Due Dates and Late Assignments

The due dates for the Connect assignments are established in accordance with the course and term duration. The purpose of the due dates is to help both you and I to get the assignments done so that they are helpful in preparation for lectures and lab exercises. Each Connect assignment and Virtual Lab allows ample time to be completed and must be submitted within the allowed time period, normally 7 days. Please check the dates on Connect.

Course updates, changes and other information will be posted on D2L in the “NEWS” section. Make sure log on regularly (more than once a week) to stay on top of things.

Exam Procedures

All quizzes must be written at the scheduled times with the exception of students requiring an accommodation by CAL. It is understood that emergency circumstances do occur (e.g. severe illness or family emergency); for such circumstances accommodation may be offered at the discretion of the instructor, provided the student:

- a) notifies the instructor in advance of the exam (not after), and;
- b) provides documented evidence of the circumstance (e.g. medical certificate).

If an exam/quiz is missed with an excused absence, it is up to the instructor’s discretion as to how the mark will be made up. In most cases, an oral exam will be scheduled for the student as soon as possible.

IMPORTANT:

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.

Study Habits

Good and regular study habits are essential to do well in this course. You should plan on a weekly minimum of 6 hours outside of scheduled class time for the completion of readings, Virtual Lab assignments and for general studying. Joining a study group can help make this more achievable. With the exception of the Connect readings and Virtual Labs, all course contents are uploaded to the course website (D2L).

Please take advantage of office hours if you need extra clarification and help.

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.