COURSE SYLLABUS

COURSE TITLE: BIOL-090: Biology for Post-Secondary Preparation CLASS SECTION: 001A/B TERM: Fall 2023 COURSE CREDITS: 3 DELIVERY METHOD(S): Online



Camosun College campuses are located on the traditional territories of the Lək^wəŋən 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://camosun.ca/about/covid-19-updates</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: Naveen Sorout

EMAIL: soroutn@camosun.ca

OFFICE: Fisher F352, Lansdowne Campus

HOURS: Even though this is an online course, I will always be present in F352 to answer any questions on

Wednesdays 02:00 PM – 04:00 PM, if you wish to come on campus and discuss any questions or issues you

have. Other meeting times can be arranged on campus or online if these times don't fit with your schedule. I am also available by email and try to respond as soon as possible.

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, DNAreplication 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) eTextbook

Inquiry into Life, 17th *Edition* (any edition is fine). Authors: Mader and Windelspecht. McGraw Hill Publishing. ISBN10: 1264155727

This is an etextbook that you can purchase from the bookstore. The bookstore will provide you with an individual access code along with instructions on how to use this access code. I have also provided instruction on the course D2L website (see the folder titled "Textbook Instructions" in 'Content'). You can purchase the etextbook at <u>www.camosuncollegebookstore.ca</u> (click on "Buy Digital Materials"). You can also purchase the etextbook in-person at the Camosun bookstore (they will give you your individual access code).

Once you have your access code, go to <u>https://connect.mheducation.com/class/m-evans-fall-2023</u> and enter your access code and then register. You may be asked to enter a "course code" and it is "**BIOL 090**"

(b) Lab Resources

For this online course, virtual labs will be conducted on the **McGraw Hill "Connect"** webpage, located at <u>https://connect.mheducation.com/class/m-evans-fall-2023</u> (password Biol 090). You must purchase an etextbook in order to receive an individual access code that will allow you to open the Connect webpage.

(c) Lecture Resources

Lectures are based on PowerPoint slides and will be posted on the course D2L website, along with additional resources for review and activities to complete.

To get the most out of this online course, you are expected to review all reading materials, watch selected videos or video lectures and complete assignments including: *Connect* virtual labs and assignments.

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.

Lectures: Online. See weekly content posted on D2L and *Connect*

Labs: Virtual labs online, on *Connect*

WEEK #	DATES	LECTURE TOPICS	
1	Sept 5-8	Course Introduction Module 1: Intro & Scientific Method	
2	Sept 11-15	Module 2: Chemistry of Life and Macromolecules	
3	Sept 18-22	Module 2: cont'd	
4	Sept 25-29	Module 3: Cell Structure and Function	
5	Oct 2-6	Module 4: Energetics, Cellular Respiration and Photosynthesis	
6	Oct 9-13	Module 4: cont'd Review: Modules 1-4	
7	Oct 16-20	Module 5: Cell Reproduction: Mitosis & Meiosis	
8	Oct 23-27	Module 6: Genetics - Genetic Inheritance	
9	Oct 30-Nov 3	Module 7: DNA Replication - Transcription & Translation	LECTURE QUIZ 1 – Modules 5 & 6
10	Nov 6-10	Module 9: Homeostasis, Urinary System	
11	Nov 13-17	Module 10: Digestive System	LECTURE QUIZ 2 – Modules 7 & 9
12	Nov 20-24	Module 11: Circulation & Respiration	LECTURE MIDTERM – Modules 1 - 6
13	Nov 27- Dec 1	Module 12: Reproductive System	
14	Dec 4 - 8	Review week	LECTURE QUIZ 3 – Modules 10, 11 & 12
	Dec 11 - 19	LECTURE FINAL EXAM: Modules 7 – 12 (Online - date and time scheduled by College 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 can be reviewed on the <u>CAL exams page</u>. <u>http://camosun.ca/services/accessible-learning/exams.html</u>

EVALUATION OF LEARNING

DESCRIPTION	WEIGHTING
Lecture Quizzes (x 4) – on McGraw Hill <i>Connect</i>	20%
Completion of Virtual Labs – on McGraw Hill Connect	20%
Completion of Reading Material – on McGraw Hill Connect	20%
Lecture Mid-Term: November 23 2023 Online, closed book	20%
Lecture Final Exam (TBD) Online, closed book	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 <u>Grade Review and Appeals</u> policy for more information. <u>http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf</u>

Notes about Evaluation Methods:

Lecture Quizzes are open-book and based on the learning material from the McGraw Hill etextbook. Use of slides on D2L as additional learning material is encouraged.

Quizzes will be conducted online on the McGraw Hill *Connect* portal. A missed submission will result in a zero.

Lecture Assignments are due as per the dates indicated on *Connect*. Late assignments will be graded but marks equivalent to **10%** of the total value of the assignment will be deducted for each day past the deadline, including weekends.

Lab Assignments are due as per the dates indicated on *Connect*. Late assignments will be graded but marks equivalent to **10%** of the total value of the assignment will be deducted for each day past the deadline, including weekends.

Lecture Midterm Exam take place on November 23rd 2023, whereas the Lecture Final Exam takes place during the final exam period (as scheduled by the College Registrar). The Final Exam is <u>NOT cumulative (it</u> <u>will cover Chapters 7 – 12 only</u>). These exams are conducted online, closed-book and strictly based on lecture content. The use of phones, smart watches, or other electronic devices during exams is not permitted and will result in a zero on the exam.

COURSE GUIDELINES & EXPECTATIONS

<u>To get the most out of this online course</u>, you are expected to review all reading materials, watch selected videos and video lectures and complete assignments including: *Connect* virtual labs and assignments.

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, another exam will be scheduled for the student as soon as possible.

Plagiarism

You are encouraged to discuss assignments with your classmates, however, **individual assignments must be** your own individual work – beware of plagiarism.

Plagiarizing is appropriating the work or parts or passages of another's writing (including the ideas or language) and passing them off as the product of one's own mind or manual skill (see http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.1.pdf).

Except where work is assigned to a group, all written work must be done individually. Plagiarism is a serious offence and is considered to be academic misconduct, and will not be tolerated. A student caught plagiarizing will forfeit all credit for the assignment and a note will be sent to the Dean regarding the student's behaviour.

Cheating

Cheating is a serious offence and is considered to be academic misconduct. Cheating includes but is not limited to:

- (a) using unauthorized materials or resources in a quiz/exam, and
- (b) providing information to another person regarding exam content.

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) and penalties may be severe.

Study Habits

This course covers a high volume of material, so attending each lecture and lab is imperative for success. Come to each lecture and lab prepared, having pre-read the material and reviewed any relevant textbook pages. Regularly check D2L for updates and other communication. Mark your calendar with the important dates and deadlines from this syllabus to help you stay on track, and frequently look ahead so you can plan for upcoming exams or due dates. You should plan on spending a minimum of 6 hours outside of scheduled class time for completion of assignments and general studying. It is recommended to set aside specific study times in your weekly schedule to help with time management. These habits will help you throughout your academic career.

Lecture notes will be posted on D2L in PowerPoint form. These 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 and read the assigned textbook pages. It is also recommended practice to transcribe your notes into a study-friendly format, 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.

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: http://camosun.ca/services/accessible-learning/

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 http://camosun.ca/learn/calendar/current/procedures.html) and the Grading Policy at 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-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 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.