

CAMOSUN COLLEGE School of Arts & Science Department of Biology

BIOL-090-D02A Non-Majors General Biology 2021W

COURSE OUTLINE

The course description is online @ http://camosun.ca/learn/calendar/current/web/biol.html
☐ Please note: This outline will <u>not</u> be kept indefinitely. It is recommended students keep this outline for
their records, especially to assist in transfer credit to post-secondary institutions.

1. Instructor Information

(a) Instructor	Emy Montgomery, PhD. (lecture); Charles Molnar, MSc. (lab)	
(b) Office hours	Any time mutually convenient time (set up via e-mail)	
(c) Location	N/A	
(d) Phone	N/A	Alternative:
(e) E-mail	montgomerye@camosun.bc.ca; molnar@camosun.bc.ca (Please use BIOL 090 in the subject line!)	
(f) Website	https://online.camosun.ca/d2l/home (D2L)	

2. Intended Learning Outcomes

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

- 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.
- 12. Describe the structure and explain the functions of the human immune system. Apply this knowledge to immune dysfunction, particularly allergies and AIDS.

3. Required Materials

- i. Textbook (Concepts of Biology)
 - a. Free download, go to https://opentextbc.ca/conceptsofbiology1stcanadianedition/
- ii. Access to Microsoft 365 Word & Excel
 - a. Free with Camosun student e-mail, go to https://webservices.camosun.ca/o365-opt-in/
- iii. For some of the labs, some simple household kitchen materials will be needed (see D2L)
- iv. Lecture outlines (see D2L)

4. Course Content and Schedule

This course will be taught remotely and involves reading articles, watching videos, attending virtual tutorials and labs and completing assignments and exams to engage with the material. There will be synchronous and asynchronous activities.

Synchronous D2L Collaborate Meetings:

Labs: Wednesdays 1:30pm-4:30pm

Lab assignments will be posted on D2L and students are expected to be present for the first part of the synchronous lab session to confirm understanding of lab requirements. The rest of the lab period is used to aid in the completion of the assignment. Please direct all lab related questions to **Charles Molnar**.

Lecture/Tutorials: Tuesdays 1pm-2:20pm

Thursdays 1pm-2:20pm

Lecture material will be posted on D2L and students are expected to read/review the material prior to the tutorial sessions. Weekly assignments/quizzes will allow students to demonstrate understanding. Please direct all lecture related questions to **Emy Montgomery**.

<u>Please note that scheduled dates are subject to change. Topics may be added or deleted depending on time constraints.</u>

Table 1. BIOL 090 Course Content Schedule

		Quiz topics
Week	Lecture topics	Complete by Friday @ 11:59 PM each week
11-Jan	Module 0: Course introduction Module 1: Scientific method	0, 1
18-Jan	Module 2: Chemistry of life	2
25-Jan	Module 3: Cells	3
01-Feb	Module 4: Respiration and photosynthesis	4
08-Feb	Midterm 1: Tues Feb 9 1:00 PM	no quiz
15-Feb	No classes, Reading break	no quiz
22-Feb	Module 5: Cell cycle	5
01-Mar	Module 6: Genetics	6
08-Mar	Module 7: Transcription Module 8: Cancer	7, 8
15-Mar	Midterm 2: Tues Mar 16 1:00 PM	no quiz

22-Mar	Module 9: Homeostasis	9
29-Mar	Module 10: Digestive system Module 11: Circulation and respiration	10
05-Apr	Module 11: Respiration Module 12: Reproduction	11, 12
12-Apr	Final Exam: TBD	

Please see course page on D2L for lab schedule and dates.

5. Basis of Student Assessment (Weighting)

(a)	Assignments Weekly Lab Assignments Lecture Assignments	25% 15%
(b)	Exams Lecture Exam #1 (<u>Tues Feb 9</u>) Lecture Exam #2 (<u>Tues Mar 16</u>) Lecture Exam #3 (<u>TBD</u>)	10% 10% 20%
	Lab Exam #1 Lab Exam #2	10% 10%

6. Grading System

X	Standard Grading System (GPA)
	Competency Based Grading System

7. Recommended Materials to Assist Students to Succeed Throughout the Course

Student Expectations in this Course:

- Attendance:
 - o Students are expected to attend virtual collaborate sessions twice weekly (tutorials)
 - Students unable to attend are encouraged to review the recorded sessions
 - Students are required to write the quizzes/exams on their scheduled date (no exceptions)
- Assignment Submissions:
 - Students are <u>expected</u> to submit all work on time via D2L
 - Late submissions will receive a 10% deduction for every day they are past due
- Academic Honesty
 - It is the student's responsibility to review the school's policy on cheating/plagiarizing to ensure they do not act dishonestly in this course. See the <u>School of Arts & Science</u> <u>Academic Honesty Guidelines</u>
 - Students caught <u>cheating</u> or <u>plagiarizing</u> (whether accidental or on purpose) will have a
 permanent record sent to the Dean, and be academically penalized according to the
 quidelines
 - Having ANYONE other than the student create or write an assignment/exam will result in an immediate zero on the assessment piece and may be removed from the course/college
- Work Ethic
 - Students are <u>expected</u> to reach out to the instructor if there is any confusion or concern regarding the course schedule or its content, and to keep up with content
- Group Work

 All group work will be marked with one single grade, with the assumption that all students have reviewed the work and contributed equally

See D2L "Content Page" entitled "Start Here" for greater detail regarding assessment in this course, expectations, and instructor details.

8. College Supports, Services and Policies



Immediate, Urgent, or Emergency Support

If you or someone you know requires immediate, urgent, or emergency support (e.g. illness, injury, thoughts of suicide, sexual assault, etc.), **SEEK HELP**. Resource contacts @ http://camosun.ca/about/mental-health/emergency.html or http://camosun.ca/services/sexual-violence/get-support.html#urgent

College Services

Camosun offers a variety of health and academic support services, including counselling, dental, disability resource centre, help centre, learning skills, sexual violence support & education, library, and writing centre. For more information on each of these services, visit the **STUDENT SERVICES** link on the College website at http://camosun.ca/

College Policies

Camosun strives to provide clear, transparent, and easily accessible policies that exemplify the college's commitment to life-changing learning. It is the student's responsibility to become familiar with the content of College policies. Policies are available on the College website at http://camosun.ca/about/policies/. Education and academic policies include, but are not limited to, Academic Progress, Admission, Course Withdrawals, Standards for Awarding Credentials, Involuntary Health and Safety Leave of Absence, Prior Learning Assessment, Medical/Compassionate Withdrawal, Sexual Violence, Student Ancillary Fees, Academic Integrity, Grade Review & Appeals, Student Misconduct and Academic Accommodations for Students with Disabilities and Student Penalties and Fines.

A. GRADING SYSTEMS http://camosun.ca/about/policies/index.html

The following two grading systems are used at Camosun College:

1. Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	Α		8
80-84	A-		7
77-79	B+		6
73-76	В		5
70-72	B-		4
65-69	C+		3
60-64	С		2
50-59	D		1
0-49	F	Minimum level has not been achieved.	0

2. Competency Based Grading System (Non GPA)

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes

Grade	Description	
СОМ	The student has met the goals, criteria, or competencies established for this course, practicum or field placement.	
DST	The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement.	
NC	The student has not met the goals, criteria or competencies established for this course, practicum or field placement.	

B. Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy at http://camosun.ca/about/policies/index.html for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	Incomplete: A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	In progress: A temporary grade assigned for courses that are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.
CW	Compulsory Withdrawal: A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.