



**CAMOSUN COLLEGE**  
**School of Arts & Science**  
**Department of Biology**

**BIOL-103-001A/B**  
**Non-Majors General Biology**  
**Winter 2019**

**COURSE OUTLINE**

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The course description is online @ <http://camosun.ca/learn/calendar/current/web/biol.html>

Ω Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for their records, especially to assist in transfer credit to post-secondary institutions.

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**1. Instructor Information**

(a) Instructor	Charles Molnar	
(b) Office hours	TBA	
(c) Location	F-340B	
(d) Phone	250 370-3449	Alternative: _____
(e) E-mail	molnar@camosun.bc.ca	
(f) Website		

**2. Intended Learning Outcomes**

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

1. Describe the concept of homeostasis.
2. Explain how basic physicochemical changes can impact cell function.
3. Work in a culture of scientific endeavor and use critical thinking skills.
4. Identify the critical roles played by water in the maintenance of life on earth.
5. Explain the structures and roles of biological macromolecules, particularly carbohydrates, proteins and lipids.
6. Describe the complexity and diversity of cellular ultrastructure and the functions of significant cellular organelles, in particular chloroplasts, mitochondria, ribosomes, Golgi apparatus, cilia and flagellae.
7. Describe basic metabolism and energy producing pathways within the cell.
8. Explain the concept of the gene in the contexts of both Mendelian inheritance as well as the biochemical expression of genetic information.
9. Relate the structure of nucleic acids to the storage and replication of genetic information.
10. Explain the mechanisms used to regulate and translate genetic information into the assembly of functional proteins.
11. Describe the interactions between the environment and long-term changes in genetic information, particularly in consideration to neoplasia.
12. Describe the anatomy of the human digestive, cardiovascular and excretory systems and explain how the physiology of these organ systems is related to organization at the molecular and cellular level.
13. Describe the structure and explain the functions of the human immune system. Apply this knowledge to immune dysfunction, particularly allergies and AIDS.

### 3. Required Material

(a) **Textbook:** Molnar and Gair . **Concepts of Biology First Canadian edition 2015.**  
*This is an open source free textbook.*

**(b) Lab Manual**

Biology 103 Lab Manual (Fall 2018/Winter 2019), Camosun College.

### 4. Course Content and Schedule

(subject to change or modification as the need arises)

**Biology Fall 2018- Course Schedule**  
***(Note: Scheduled dates are subject to change)***

**Feb.18-22 Reading break. Exam Period April 15-18, 23-26. Final exam schedule posted Feb. 22**

**You will not be granted an altered exam time based on conflict with booked flights.**

<b>Wk</b>	<b>Date</b>	<b>Lecture Topics</b>	<b>Lab</b>	<b>Lab Topics</b>
1	Jan. 7			Introduction
2	Jan. 14		1	Measurements
3	Jan. 21		2	Microscopes and Cells
4	Jan. 28		3	Macromolecules
5-6	Feb. 4	Lecture exam 1	4	Diffusion and osmosis
	Feb. 11			Enzyme Lab
7-8	Feb. 18		5	No Lab
	Feb. 25	<b>Lab Exam 1</b>		
9	March 4		6	Mitosis
10	March 11	Lecture exam 2	7/8	Cat Lab/Inheritance
11	March 18		9	Nutrition
12	March 25		10	Human Physiology
13	April 1		10	Human Physiology
14	April 8			<b>Lab exam 2</b>
	April 15-18, 23-26	<i>Exam period</i>		

**Lectures:** Section 01A/B Tuesday and Thursday 11:00-12:20 Young Bldg, Room 201

**Lab:** Section 01A: F 9:30-12:20 Fisher Bldg, Room 226

Section 01B: M 2:30 -4:50, Fisher Bldg, Room 226

## 5. Basis of Student Assessment (Weighting)

**Lecture and Lab Assignments/quizzes:** 15%

### Exams:

Midterm 1	15%
Midterm 2	15%
Lab Exam 1	15%
Lab Exam 2	15%

Final Exam 25%

Midterms I and II, as well as the lab exams, will be unit exams.

The final lecture exam will be cumulative.

Please bring a pen *and* pencil to all exams.

## 6. Grading System

Standard Grading System (GPA)

Competency Based Grading System

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

Links will be provide to students to access instructional videos and lectures

## 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 and Misconduct, Student Ancillary Fees, Student Appeals, Student Conduct, 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	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C		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
COM	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
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I	<i>Incomplete:</i> 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	<i>In progress:</i> 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	<i>Compulsory Withdrawal:</i> 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.

## Plagiarism

Plagiarizing is appropriating the work of another 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. **Plagiarism will not be tolerated.** Plagiarism, **including the copying of any part of assignments or lab assignments**, is a serious offence and is considered to be academic misconduct. In some cases, the lab instructor may prefer a lab assignment to be written as a group. In such cases, handing in one assignment for the group will be acceptable. Otherwise, lab assignments handed in by individuals are expected to be individually prepared.

## Cheating

A student caught cheating on an exam will forfeit all credit for that exam and perhaps for the course. Cheating is a serious offence and is considered to be academic misconduct.

**Cheating includes, but is not limited to, using unauthorized materials in a quiz/exam and 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-&-support/e-2.5.pdf> and <http://camosun.ca/about/policies/education-academic/e-2-student-services-&-support/e-2.5.1.pdf>) and may be severe. **No electronic devices are allowed in exams. Cell phones must be off and stored. For emergencies the phone must be left with me during an exam. All breaches of these policies will be reported to the Dean's office.**

## Lab Safety

Under **NO** circumstances will students ingest food or drink in the lab. Taking oral medication or applying makeup or lip balm in the lab is also prohibited. You may leave the lab at a convenient time if you are thirsty, need a snack or require medication. For safety reasons students are **required** to wear closed shoes and pants in all lab times. Flip flops, sandals or shoes with holes are not acceptable. The spirit of this is safety, so make sure your 'closed-toed' shoes are actually safe!

Failure to adhere to the lab safety principles will result in the inability to enter the lab, or expulsion from the lab, and the subsequent **loss of credit** for that lab, including any pre-lab assessment credit.

## Laboratory Attendance

**A 1% final grade penalty applies to any unexcused absence from lab. Frequent lates may count as an absence. Should you miss roll call at the beginning of lab, please identify yourself to the instructor as "late" or you may remain marked "absent."** You need to attend labs and lab exams during your assigned section (A or B). Switching between sections on a permanent or temporary basis requires the instructor's permission. **Lab assignments can only be handed in for labs actually attended.**

It is *absolutely* necessary to read and mentally work through each exercise before coming to lab. Otherwise you may not be able to finish on time, annoy your lab partner, or flunk a pre-lab pop quiz. (See Student Contract on D2L and distributed week1)

### **Biology Missed Exams and Assessments**

Quizzes and the exams must be written at the scheduled times. Under no circumstances will make-up exam be administered. 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 (a) the instructor is notified in **advance of the exam** (not after) and (b) the student provides documented evidence of the circumstance (i.e. medical certificate). The accommodation will be in the form of a make-up exam or adjusting the weighting of the final lecture exam to make up the missing marks, at the discretion of the instructor. (See Student Contract on D2L and distributed week1)

***Please note: holidays or scheduled flights are not considered to be emergencies! Individual bonus assignments will not be given.***

### **Late Penalties**

Unless otherwise stated, all assignments are due at the **beginning** of the lab/class of the due date. There is a 10% /day late penalty (including weekend days). The format is expected to be professional, i.e. a neat, legible, clean copy. "Rough" drafts risk rejection and a subsequent late penalty. (See Student Contract on D2L and distributed week1)

If the assignment is more than one page, separate pages **must be stapled before** you come to class.

### **Study Habits:**

You will probably find Biology 103 not very difficult, but surprisingly labor-intensive. Good (and regular!!) study habits are required to do well in this course. You should plan on a *minimum* of 6 hours outside of scheduled class time for the completion of assignments and for general studying. Joining a study group can help this make more fun.

Lecture notes will be provided in point 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 given during lecture. 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.

Due to time constraints, not all details can be covered in lecture, and you may be held responsible for textbook material not specifically discussed in class. Please keep up with your readings, and take advantage of office hours if you need extra clarification and help, or simply would like to discuss a topic a little further.

**In the lab week 1, you will sign a safety contract and a course contract. By signing these you acknowledge that you have read and understood this course outline and the safety material in the first pages of your lab manual.**

**For written assignments follow these guidelines: (applies to bonus assignments occasionally given)**

1. Use 8 ½ x 11" paper.
2. Make 1 inch margins on the top, bottom, and sides.
3. The first word in every paragraph should be indented one half inch.
4. Use Times New Roman font, size 12.
5. Double space the entire paper.