CAMOSUN COLLEGE	**School of Arts & Science** **BIOLOGY DEPARTMENT** **BIOL 103-002A/B** **Non-Majors General Biology** **Fall 2015**

COURSE OUTLINE

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

Ω *Please note: the College electronically stores this outline for five (5) years only.*
*It is **strongly recommended** you keep a copy of this outline with your academic records.*
You will need this outline for any future application/s for transfer credit/s to other colleges/universities.

1. Instructor Information

(a)	Instructor:	Jennifer Giuliani
(b)	Office Hours:	Mondays 1:00-2:00pm Tuesdays 10:00-11:50am, 1:30-2:20pm Thursdays by appointment Fridays 9:45-10:45am
(c)	Location:	F352
(d)	Phone:	250-370-3445
(e)	Email:	GiulianiJ@camosun.bc.ca
(f)	Website:	https://online.camosun.ca/ to login to D2L

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 Materials

Texts:

Molnar and Gair. Concepts of Biology First Canadian Edition. 2015.

*This is an open source textbook, available for free online. Printed copies are available for purchase in the bookstore, if you wish.

http://opentextbc.ca/biology/

Biology 103 Lab Manual, Camosun College.

*Course pack. Please purchase your copy from the bookstore.

4. Course Content and Schedule

Lectures:

Wednesdays 3:00-4:20pm Y201
Fridays 11:00am-12:20pm Y201

Labs:

Section A: Mondays 9:30am-12:20pm F226
Section B: Wednesdays 9:30am-12:20pm F226

*A detailed weekly schedule is included on the last page of this document.

5. Basis of Student Assessment (Weighting)

(a) Assignments/ Quizzes 15%
(details to be announced in class, and on D2L)

(b) Lecture Exams:

Midterm Exam 1	15%
Midterm Exam 2	15%
Final Exam	25%

(c) Lab Exams:

Lab Exam 1	15%
Lab Exam 2	15%

6. Grading System

(No changes are to be made to this section unless the Approved Course Description has been forwarded through the Education Council of Camosun College for approval.)

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	Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite.	1
0-49	F	Minimum level has not been achieved.	0

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 E-1.5 at **camosun.ca** 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, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. *(For these courses a final grade will be assigned to either the 3rd course attempt or at the point of course completion.)*
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.

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

LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College calendar, at Student Services, or the College web site at camosun.ca.

STUDENT CONDUCT POLICY

There is a Student Conduct Policy **which includes plagiarism**.
It is the student's responsibility to become familiar with the content of this policy.
The policy is available in each School Administration Office, at Student Services, and the College web site in the Policy Section.

Note: Other course policies will be discussed in the first week of classes, and posted on D2L in a separate document. These policies will cover topics including lab safety and attendance, late submission of assignments, and missed exams.

Biology 103-002A/B Fall 2015 Schedule

*Please note: the following is a tentative schedule of course topics and events. Any changes to this schedule will be announced in class and posted on D2L.

Week	Date	Lecture Topics	Lab	Lab Topic
1	Sep 8 - 11	Scientific method Biochemistry basics, bonding	Introduction to Biol 103 labs	
2	Sep 14 - 18	Water, pH Organic macromolecules	1	Metric measurements/ pH
3	Sep 21 - 25	The cell, organelles Energy, enzymes, thermodynamics	2	Microscope/ cells
4	Sep 28 – Oct 2	Photosynthesis Cellular metabolism	3	Macromolecules
5	Oct 5 - 9	Wed. lecture topic: TBA Friday, October 9: Midterm Exam 1	4	Diffusion & osmosis
6	Oct 12	Thanksgiving – College closed	*No Labs*	
	Oct 13 - 16	Cell division, cell cycle Mitosis, meiosis		
7	Oct 19 - 23	Mendelian genetics Inheritance patterns	5	Enzymes
8	Oct 26 - 30	DNA replication Protein synthesis Transcription/ translation	-	*Lab Exam 1*
9	Nov 2 - 6	Topics in Biotechnology Cancer	6	Mitosis
10	Nov 9 - 13	Wednesday, November 11: Remembrance Day – College Closed	*No Labs*	
		Friday, November 13: Midterm Exam 2		
11	Nov 16 - 20	Homeostasis Nervous system Digestive system & nutrition	7/8	Inheritance Cat lab
12	Nov 23 - 27	Circulatory system Respiratory system	9/10	Nutrition Human anatomy
13	Nov 30 – Dec 4	Excretory system Reproductive systems	10	Human anatomy
14	Dec 7 - 11	Immune Response	-	*Lab Exam 2*
	Dec 14 - 22	Final Exam Period Exam schedule will be set by the college, and posted on Camlink on October 16		