



COURSE OUTLINE

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

1. Instructor Information

Instructor:	Dominic Bergeron, PhD	
Drop-In	Tuesdays	2:30 PM – 3:20 PM
Office Hours:	Fridays	9:30 AM – 12:20 PM; 3:30 PM – 4:20 PM
Location:	F342B	
Phone:	250-370-3465	Alternative Phone:
Email:	BergeronD@camosun.ca	
Website:	http://online.camosun.ca/ (D2L entry site)	

IMPORTANT NOTE: I understand that my scheduled drop-in office hour times will not fit into everyone's class schedules. ***This should not deter you from trying to visit me in my office!*** My schedule will be posted on my office door and on the course D2L website: I can be available at almost any time that I'm not already in class or lab. Simply arrange an appointment by phone or e-mail and I'll be very pleased to meet with you at a mutually convenient time.

2. Intended Learning Outcomes

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

1. Classify and describe the unique structure and function of the four groups of macromolecules and discuss how these relate to their properties within living cells.
2. Differentiate among the various transport mechanisms available to mobilize molecules across cell membranes.
3. Name and outline the pathways utilized by cellular respiration and photosynthesis and explain the importance of these processes to living organisms.
4. Describe the basic steps of DNA replication and indicate its role in cell division and inheritance.
5. Demonstrate knowledge of the basic steps of protein synthesis, identifying the roles of DNA, mRNA, tRNA, amino acids and proteins in the processes of transcription and translation.
6. Identify and explain the principles and consequences of the cell cycle, including both mitosis and meiosis.
7. Examine the basic principles of Mendelian genetics and describe how these relate to other topics encompassed in this course.
8. Describe and explain the role of growth regulators in the control of plant growth, development and physiology.
9. Describe and explain the diversity of control mechanisms in animal systems, including the role of the endocrine and nervous systems.
10. Conduct experiment tests and use analytical techniques in the laboratory to demonstrate a few biological properties of macromolecules, cellular respiration, photosynthesis, DNA technology and plant and animal control systems.

3. Required Materials

- 1) Textbook: Campbell, N. A. & J. B. Reece. 2011. Biology, 9th ed., Pearson Education, Inc., San Francisco, CA.
- 2) Camosun College Biology Faculty. Fall, 2012. Biology 126 Lab Manual, Camosun College, Victoria, B.C.

4. Course Content and Schedule

Lecture

Tues, Fri 11:30 – 12:50 F200

Lab

Section 002A Tues. 8:30 – 12:20 F238

Section 002B Wed. 8:30 – 12:20 F238

The schedule, which follows, is an **attempt** to outline the weekly activities of the class. **It is subject to change** or modification as the need arises.

Date	Lecture Topic	Ch.	Laboratory Exercise
Sept. 4 – 7	Introduction & Characteristics of Life	8	No lab scheduled
Sept. 10 - 14	Metabolism - Introductory	1,8,9	Tools for Scientific Discovery
Sept. 17 - 21	Glycolysis & Respiration	9	Enzyme Activity
Sept. 24 - 28	Respiration completed Photosynthesis	9 10	Respiration
Oct. 1 - 5	Photosynthesis The Cell Membrane	10 7	Fermentation & Cellular Respiration
Oct. 9 – 12	The Cell Membrane	7	Lab cancelled for Thanksgiving
Thur. Oct 11	Midterm Lecture Exam 1		
Oct. 8 – College Closed for Thanksgiving			
Oct. 15 – 19	Intracellular Communication	11	Photosynthesis
Oct. 22 – 26	Mitosis & Cell Cycle	12	Midterm Lab Exam
Oct. 29 – Nov. 2	Mitosis Meiosis	12 13	Movement of Molecules
Nov. 5 – 9	Sources of Variation	14	Mitosis & Meiosis
Thur. Nov 8	Midterm Lecture Exam 2	15	Fruit Fly Eye Pigments (Part 1)
Nov. 13 – 16	Inheritance DNA Replication	16	Lab cancelled for Remembrance Day
Nov. 13 – College closed in lieu of Remembrance Day			
Nov. 19 - 23	DNA Replication Protein Synthesis	16 17	Fruit Fly eye Pigments (Part 2) DNA Lab (Part 1)
Nov. 26 - 30	Protein Synthesis	17	DNA Lab (Part 2)
Dec. 3 - 7	Regulation of Gene Expression	18	T.B.A.

5. Basis of Student Assessment (Weighting)

Lab Exam I	12.5%
Lab Exam II	12.5%
Midterm I	12.5%
Midterm II	12.5%
Final Lecture Exam	30%
Assignments/labs/quizzes	20%

*Lab exams and midterms will be unit exams.

**Final Lecture exam will be cumulative.

6. Grading System

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	<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, 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 3 rd course attempt or at the point of course completion.)
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.

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 you throughout your 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.

ADDITIONAL INFORMATION

No programmable devices are allowed in exams.

Assignments are due at the **beginning** of the class period on the due date. Assignments not handed in at the beginning of class will be considered late, for which there is a 10% penalty/day.

You must contact the instructor **prior** to missing a lab or lecture exam. Makeup exams will only be given for documented valid absences.