



CAMOSUN COLLEGE
School of Arts & Science
Department of Biology

BIOL-102-001AB
Non-Majors Biology (Diversity)
Fall 2019

COURSE OUTLINE

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.

1. Instructor Information

(a)	Instructor:	Brooke Cameron, BEd., MSc.
(b)	Office Hours:	Tuesday mornings (10:30am-12:30pm) Tuesdays and Fridays after lecture (30 min) Wednesday afternoons (4pm-5:30pm) Or by appointment
(c)	Location:	Lansdowne Campus, F246
(d)	Phone:	250-370-3196
(e)	Email:	CameronB@camosun.bc.ca
(f)	Website:	http://online.camosun.ca (D2L)

2. Intended Learning Outcomes

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

1. Identify and classify living organisms to their major taxonomic groupings, and to list their defining characteristics.
2. Describe the major lines of evidence for evolution.
3. Explain the mechanics of natural selection and speciation.
4. Discuss the nature of scientific knowledge; its limits and strengths, and how it is produced.
5. Explain basic concepts in population and community ecology.
6. Recognize and explain the major threats to biodiversity and ecosystem processes, and ways in which these threats might be mitigated.

3. Required Materials

- a. Concepts of Biology (2013), Openstax by Rice University. Available to download for free at openstax.org/details/concepts-biology and also posted on the course D2L site.
A shortened hard copy version (containing only the chapters we will use) is available to purchase at the Camosun Bookstore, Lansdowne Campus.
- b. BIOL 102 Lab Manual (2019). (Available to print from D2L)

4. Course Content and Schedule

Biology 102-001A/B Lectures:	Tuesdays and Fridays	1:00PM-2:20PM	F268
Biology 102-001B Lab:	Monday	9:30AM - 12:20PM	F224
Biology 102-001A Lab:	Monday	1:30PM - 4:20PM	F224

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	LECTURE (Tue/Thu)	Chapter	LAB / Field Trip (Mon)
1 (Sep 2-6)	Introduction to Biology & Science Early Theories, Evidence of Evolution	1.1 (p.9-16) 1.2 (p20-27) 11.1 (p.255-260) 11.3 (p.264-267)	NO LAB (LABOUR DAY)
2 (Sep 9-13)	Mechanisms of Evolution Speciation	11.2 (p.260-264) 11.4 (p267-273)	Lab 1: Science, Data, Graphs
3 (Sep 16-20)	History of Life & Systematics Viruses	12 (p. 281-296)	Lab 2: Mechanisms of Evolution
4 (Sep 23-27)	Prokaryotes (Bacteria, Archaea) Single-Celled Eukaryotes (Protists)	13(p.297-316)	Lab 3: Microscopes
5 (Sept 30- Oct 4)	Tues Oct 1-LECTURE MIDTERM I Fungi	13 (p. 317-331)	Lab 4: Prokaryotes and Protista
6 (Oct 7-11)	Seedless Plants	14 (p. 331-345)	LAB EXAM I
7 (Oct 14-18)	Seed Plants	15 (p.345-357)	NO LAB (THANKSGIVING)
8 (Oct 21-25)	Invertebrates I	15 (p.363-388)	Lab 5: Fungi and Plants
9 (Oct 28-Nov 1)	Invertebrates II	15 (p.363-388)	Lab 6: Invertebrates I
10 (Nov 4-8)	Tues Nov 5-LECTURE MIDTERM II Vertebrates	15 (p.389-410)	Lab 7: Invertebrates II
11 (Nov 11-15)	Population Ecology Community Ecology	19 (p. 515-541)	NO LAB (REMEMBRANCE DAY)
12 (Nov 18-22)	Ecosystem Ecology	20 (p.547-580)	Lab 8: Vertebrates
13 (Nov 25-29)	Biodiversity Crisis	21 (p.587-610)	Lab 9: Field Trip to Mount Doug
14 (Dec 2-6)	Biodiversity Crisis	21 (p.587-610)	LAB EXAM II
Dec 9-17	FINAL EXAM PERIOD		

** Textbook chapters noted here will be covered, at least in part. However, in some cases we will not be covering the whole chapter in Biology 102. Specific page and figure numbers will be referenced during class.

Other important dates of note:

September 17: Fee Deadline Fall '19
September 30: Orange Shirt Day
October 14: Thanksgiving Day College closed
October 17: ShakeOut - BC provincial preparedness
October 18: Final Schedule for Fall '19 Exams posted to Camlink
November 11: Remembrance Day College closed
December 7: Last day of instruction for most Fall '19 courses
December 9: Examination period begins for Fall '19 courses
December 9 - December 17: Exams
December 25 - January 1: Holiday Break, College closed

5. Basis of Student Assessment (Weighting)

(a) Assignments & Quizzes:

Lab (In-lab work, weekly lab assignments) 20%
Lecture (small in-lecture assignments, one final assignment) 5%

(b) Lecture Exams:

Midterm 1 (Tuesday, Oct 1) 15%
Midterm 2 (Tuesday, November 5) 15%
Final exam (December 9-17, TBA) 25%

(c) Lab Exams:

Lab Exam 1 (Week 6 in-lab: October 7) 10%
Lab Exam 2 (Week 14 in-lab: December 2) 10%

Midterms and lab exams will be unit-based (non-cumulative). The final lecture exam (during exam period) will be cumulative, with greater emphasis on the last unit (ecology, biodiversity crisis). Formats for tests will be majority multiple choice questions with potential for short essay questions. Lab exams will consist of stations with equipment and/or specimens, with accompanying questions testing both practical and theoretical knowledge. All tests and exams are mandatory and cannot be excused.

6. Grading System

Standard Grading System (GPA)

Competency Based Grading System

7. Recommended Materials 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.

Lecture Attendance

Students are expected to attend all classes and be on time. If an in-class assignment was missed, it cannot be made up. It is your responsibility to acquire all information given during a class missed, incl. notes, hand-outs, assignments, laboratory data, changed exam dates etc.

Laboratory Attendance

Students are expected to attend labs and lab exams during their assigned section (A or B). Switching between sections on a permanent or temporary basis requires instructor's permission. Lab assignments

can only be handed in for labs actually attended (except in cases of documented illness/emergency). You are encouraged to discuss assignments with your lab partner, however, each assignment has to be your individual work – beware of plagiarism. It is absolutely necessary to read and mentally work through each exercise before coming to lab. Late attendance will not be tolerated and may result in inability to attend the lab and subsequent loss of credit for any assignments. Lateness in arriving, failure to attend the lab or leaving the lab before its scheduled finish time will result in forfeiting credit for that lab, including any written assignments.

Missed Exams

Without exception, all lecture exams must be written at the scheduled times. 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 the student:

- (a) notifies the instructor in advance of the exam (not after), and
- (b) provides documented evidence of the circumstance (i.e. medical documentation).

In the event of emergency circumstances, it is at the instructor's discretion whether to administer a make-up exam or adjust the weighting of the final exam to make up the missing marks.

*** HOLIDAYS OR SCHEDULED FLIGHTS ARE NOT CONSIDERED TO BE EMERGENCIES ***

Be sure not to make travel plans for the end of semester until the final exam schedules are finalized and posted. Please ask any family members who might make travel plans on your behalf to consult you before booking tickets.

Missed Lab Exams

Without exception, all lab exams must be written at the scheduled times. Lab exams differ from lecture exams in their formatting and the fact that they cover lab content in a non-cumulative manner. Due to the nature of our shared lab space with other courses, lab exams cannot be made up outside of our regularly scheduled lab time.

Written Work and 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 non-negotiable late penalty (rounded to the nearest full mark) except in cases of documented illness/emergency. Late assignments will not be accepted after marked assignments have been returned to the rest of the class. A professional format is expected, i.e. a neat, legible, clean copy. "Rough" drafts risk rejection and a subsequent late penalty or reduced marks. If the assignment is more than one page, separate pages must be stapled.

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>). Plagiarism is a serious offence and is considered to be academic misconduct, and so will not be tolerated. A student caught plagiarizing will forfeit all credit for the assignment and perhaps the course. Except where work is assigned to a group, all written work, including lab data processing and graphs, must be done individually.

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:

- (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.

Student Safety

Consider the following laboratory safety practices:

Lab footwear	<ul style="list-style-type: none"> • For safety reasons WorkSafeBC mandates that students are required to wear closed shoes in all lab times. Flip flops, sandals or shoes with holes are not acceptable.
Eating & drinking	<ul style="list-style-type: none"> • Absolutely NOTHING may be ingested while in the lab. Chewing gum and applying makeup or lip balm are similarly prohibited. NO EXCEPTIONS will be made, even for medications. • If something must be consumed, then it may be taken out of the lab.
Hair	<ul style="list-style-type: none"> • It is recommended that long hair be tied securely to prevent it from being exposed to lab equipment.
Hand washing	<ul style="list-style-type: none"> • Hands should be thoroughly washed BEFORE leaving the lab.

Study Habits

Good and regular study habits are essential to do well in this course. You should plan on a weekly minimum of 4 hours outside of scheduled class time for the completion of assignments and for general studying. Joining a study group can help make this more achievable.

Lecture presentations will be uploaded to D2L. 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 and review text and videos to support your understanding. It is also recommended practice to transform lecture 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.

Please take advantage of office hours if you need extra clarification and help.

Summary of Student Responsibilities

1. Attend classes and labs and actively engage.
2. Should it be necessary to miss a lecture, it is the student's responsibility to catch up on anything that may have been missed (e.g. important announcement or assignments).
3. Hand in assignments on time.
4. Be present to receive evaluation of written or oral assessments
5. Follow all Safety Rules and Procedures. Students must sign the Safety Contract before participating in any laboratory activity.
6. The use of cell phones during a test or quiz is prohibited and will result in a zero for that assessment if it is found on person during assessment.
7. All laboratories start punctually and are mandatory- come prepared!

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
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.