

COURSE SYLLABUS



COURSE TITLE: BIOL-102: Non-Majors Biology(Diversity)

CLASS SECTION: 001AB

TERM: Fall 2022

COURSE CREDITS: 4

DELIVERY METHOD(S): In Person

Camosun College campuses are located on the traditional territories of the Lək̓ʷəŋən and W̱SÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here.

Learn more about Camosun's [Territorial Acknowledgement](#).

For COVID-19 information please visit <https://legacy.camosun.ca/covid19/index.html>

Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable explanation in advance, you will be removed from the course and the space offered to the next waitlisted student.

INSTRUCTOR DETAILS

NAME: Brooke Cameron

EMAIL: cameronb@camosun.ca

OFFICE: Fisher 246

HOURS: Mondays-Thursdays, 1pm-2pm or by appointment

As your course instructor, I endeavour to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me. Camosun College is committed to identifying and removing institutional and social barriers that prevent access and impede success.

CALENDAR DESCRIPTION

An introduction to biological diversity, evolution, ecology, scientific knowledge and the biodiversity crises. Includes a survey of the major taxonomic groups of living organisms, the evidence for evolution, natural selection, the nature of scientific knowledge, and the impact of humans on the ecology of populations, communities and ecosystems.

PREREQUISITE(S):

One of:

- C in English 12
- C in Camosun Alternative

CO-REQUISITE(S):

One of:

- C in English 12
- C in Camosun Alternative

EXCLUSION(S):

Not Applicable

COURSE LEARNING OUTCOMES / OBJECTIVES

Upon completion of this course a 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.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

REQUIRED FOR FIRST WEEK OF CLASSES:

- a) **Microsoft Word and Excel**
 - i. FREE version of Microsoft 365 is available: <https://webservices.camosun.ca/o365-opt-in/>
 - ii. Please contact IT support if you have issues: <http://camosun.ca/services/its/contact.html>
- b) ***Braiding Sweetgrass***, by Robin Wall Kimmerer
 - i. Unlimited FREE e-versions available via Camosun library: shorturl.at/lqzM3
 - ii. Hard copies for purchase at Camosun Bookstore
- c) **D2L Resources**
 - i. **BIOL 102 Lab Manual** available for download via D2L each week, must be printed
 - ii. **Lecture PowerPoint slides** available for download via D2L each week, should be downloaded, printed, and brought to each lecture

OPTIONAL:

- a) **Open Stax Biology 2e** textbook
 - i. FREE online access to relevant chapters via <https://openstax.org/details/books/biology-2e>
 - ii. Printed copies of select chapters available for purchase at Campus Bookstore

COURSE SCHEDULE, TOPICS, AND ASSOCIATED PREPARATION / ACTIVITY / EVALUATION

Lectures: 001AB Tuesdays and Thursdays 3:30pm-4:50pm F302

Lectures are where the majority of the content of this course will be explored together. Lecture attendance is expected, barring illness or emergencies. Lecture content is posted on D2L on Monday of each week and is expected to be pre-read and brought with you to class. Pre-lecture activities are expected to be completed prior to arrival, and in-class activities are to be completed during lecture time.

Labs: 001A Fridays 1:30pm-4:20pm F244
 001B Fridays 9:30am-12:20pm F244

Labs will involve hands-on exploration of course content and scientific inquiry in both laboratory and field settings. Several labs will involve outdoor surveying and habitat restoration and attendance is required, barring illness or emergencies. Lab manuals will be posted on D2L on Monday of each week and are expected to be pre-read and brought with you to lab sessions. Pre-lab activities must be completed prior to arrival.

Tentative Weekly Schedule:

The following schedule and course components are subject to change with reasonable advance notice, as deemed appropriate by the instructor.

		Tuesdays and Thursdays (F302)	Fridays (F244)
Week	Dates	Lecture Topic/Activity	Lab Topic/Activity
1	06-Sep	Introduction to BIOL 102 & Biology	Lab 1: Science
	08-Sep	Science: How to Know	
2	13-Sep	Reproduction: Let's Talk Sex	Lab 2: Microscopes and Reproduction
	15-Sep	Life, Classified	
3	20-Sep	Evolution: Life... Uh... Finds a Way	Lab 3: Evolution
	22-Sep	Book Meeting #1 & Evolution	
4	27-Sep	Community Ecology: Teamwork	<i>NO LAB (Day of Truth and Reconciliation)</i>
	29-Sep	Test #1 (10%)	
5	04-Oct	Community Ecology II	Lab 4: Habitat Restoration (Off-Campus)
	06-Oct	Ecosystem Ecology: Talking Dirt	
6	11-Oct	Ecosystem Ecology II	Lab 5: Book Meeting #2; Bacteria and Protists
	13-Oct	Bacteria and Prokaryotes: Forever Single	
7	18-Oct	Protists and Eukaryotes: Working Together	Lab 6: Fungi
	20-Oct	Kingdom Fungi: The Fungus Among Us	
8	25-Oct	Test #2 (10%)	Lab 7: Plants
	27-Oct	Kingdom Plantae: Leaf it up to Them to Grow	
9	01-Nov	Plant Diversity: Flower Power	Lab 8: Invertebrates I
	03-Nov	Book Meeting #3 & Humans and Plants	
10	08-Nov	Animal Evolution: What's the (Body) Plan?	<i>NO LAB (Remembrance Day)</i>
	10-Nov	Porifera and Cnidaria: Old Animals	
11	15-Nov	Worms: Squirming into Your Heart	Lab 9: Invertebrates II
	17-Nov	Book Meeting #4 & Molluscs: Big Softies	
12	22-Nov	Arthropods and Echinoderms: Jointed Legs and Spiny Skin	Lab 10: Salish Sea Visit (Off-Campus)
	24-Nov	Vertebrates and Humans: A Tail as Old as Time	
13	29-Nov	Test #3 (10%)	Lab 11: Habitat Restoration #2 (Off-Campus)
	01-Dec	Humans and Ecosystems: What's Our Role?	
14	06-Dec		
	08-Dec	Book Meeting #5 & Conclusions	
--	Dec 12-20	Final Exam (15%, Date TBA)	

EVALUATION OF LEARNING

DESCRIPTION	WEIGHTING
Pre-and In-class Lecture and Lab Activities	5%
Lecture Assignments (~5)	5%
Weekly Lab Assignments (~10)	25%
Book Meeting Attendance and Participation (5)	5%
Book Meeting Assignments (5)	15%
Lecture Tests (3)	30%
Final Exam	15%
	TOTAL 100%

Details of Assessment:

Pre- and In-Class Lecture and Lab Activities (5%)

In-class lecture and lab activities typically act as learning opportunities, with major weighting to participation and completion. Students are expected to attend all lectures and labs, barring any illness or emergencies, so a missed activity will result in a missed grade.

Lecture and Lab Assignments (5% and 25%)

All assignments are typically done outside of class time, so students can fine tune and fully complete their work. Assignments must be submitted on time for prompt grading and return (late work is not accepted). Submissions are expected to be neat and legible with all key course information (full name, course, section, date) at the top of the document or risk not being marked.

Book Meetings and Assignments (5% and 15%)

Throughout this course, we will be reading *Braiding Sweetgrass* by Robin Kimmerer. There will be five in-class meetings for the five sections of the book, where students are expected to have read the relevant pages and have completed the specific assignment for discussion and submission. More information available on D2L under "Book Meetings".

Tests (30%)

Tests will take place during regular lecture hours. Tests will mostly be open book (no technology, only notes), thus lecture attendance and note taking will be important throughout the course. Test format and content to be discussed later in the course.

Final Exam (15%)

Final exam will take place during exam period and will be cumulative. DO NOT book travel before learning the exam schedule. More details on the format and content later in the course.

If you have a concern about a grade you have received for an evaluation, please come and see me as soon as possible. Refer to the [Grade Review and Appeals](http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf) policy for more information. <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf>

COURSE GUIDELINES & EXPECTATIONS

Weekly Habits

This course is FUN but full of content and information. Missed lectures/labs and poor study habits can lead students struggling in the course. To do well, time management is key. Come to each lecture and lab prepared, having pre-read the material and reviewed any relevant videos or chapters. Regularly check D2L for updates and communications. Mark your calendars with important dates and deadlines listed in this outline and look ahead to what is due as you progress. These habits will help you throughout your academic career.

Common Challenges

In this science-based course, many students struggle with the amount of content covered. When completing assignments, cheating and plagiarism are often more likely to occur as students lack the confidence to complete their work on their own and seek outside support. 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>). Please reach out if you need support BEFORE it becomes an academic integrity issue!

Office Hours

Students are *highly* encouraged and invited to visit office hours throughout the term. Office hours are a great chance to check in, review assignment details, tests, or content, get time management strategies and study tips, or share interesting new articles and pictures. Students who check in typically gain accountability with the course and their grade demonstrates this. Don't be shy, take advantage of your resources and come say hi (also, coffee with oat milk is always welcome ☺)!

Science Help Center

If a student is ever confused or uncertain about a concept or assignment and would prefer a different approach, the science help center offers free tutoring and support to all Camosun students. View their hours via <https://camosun.ca/services/academic-supports/help-centres/science-help-centre>

I look forward to engaging with you this term, however you see fit! Let's learn about the amazing biodiversity this planet has to offer and how to best protect it.

STUDENT RESPONSIBILITY

Enrolment at Camosun assumes that the student will become a responsible member of the College community. As such, each student will display a positive work ethic, assist in the preservation of College property, and assume responsibility for their education by researching academic requirements and policies; demonstrating courtesy and respect toward others; and respecting expectations concerning attendance, assignments, deadlines, and appointments.

SUPPORTS AND SERVICES FOR STUDENTS

Camosun College offers a number of services to help you succeed in and out of the classroom. For a detailed overview of the supports and services visit <http://camosun.ca/students/>.

Academic Advising

<http://camosun.ca/advising>

Accessible Learning

<http://camosun.ca/accessible-learning>

Counselling	http://camosun.ca/counselling
Career Services	http://camosun.ca/coop
Financial Aid and Awards	http://camosun.ca/financialaid
Help Centres (Math/English/Science)	http://camosun.ca/help-centres
Indigenous Student Support	http://camosun.ca/indigenous
International Student Support	http://camosun.ca/international/
Learning Skills	http://camosun.ca/learningskills
Library	http://camosun.ca/services/library/
Office of Student Support	http://camosun.ca/oss
Ombudsperson	http://camosun.ca/ombuds
Registration	http://camosun.ca/registration
Technology Support	http://camosun.ca/its
Writing Centre	http://camosun.ca/writing-centre

If you have a mental health concern, please contact Counselling to arrange an appointment as soon as possible. Counselling sessions are available at both campuses during business hours. If you need urgent support after-hours, please contact the Vancouver Island Crisis Line at 1-888-494-3888 or call 911.

COLLEGE-WIDE POLICIES, PROCEDURES, REQUIREMENTS, AND STANDARDS

Academic Accommodations for Students with Disabilities

The College is committed to providing appropriate and reasonable academic accommodations to students with disabilities (i.e. physical, depression, learning, etc). If you have a disability, the [Centre for Accessible Learning](#) (CAL) can help you document your needs, and where disability-related barriers to access in your courses exist, create an accommodation plan. By making a plan through CAL, you can ensure you have the appropriate academic accommodations you need without disclosing your diagnosis or condition to course instructors. Please visit the CAL website for contacts and to learn how to get started:

<http://camosun.ca/services/accessible-learning/>

Academic Integrity

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.13.pdf> for policy regarding academic expectations and details for addressing and resolving matters of academic misconduct.

Academic Progress

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf> for further details on how Camosun College monitors students' academic progress and what steps can be taken if a student is at risk of not meeting the College's academic progress standards.

Course Withdrawals Policy

Please visit <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <http://camosun.ca/learn/fees/#deadlines>.

Grading Policy

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf> for further details about grading.

Grade Review and Appeals

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf> for policy relating to requests for review and appeal of grades.

Mandatory Attendance for First Class Meeting of Each Course

Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable reason in advance, you will be removed from the course and the space offered to the next waitlisted student. For more information, please see the "Attendance" section under "Registration Policies and Procedures" (<http://camosun.ca/learn/calendar/current/procedures.html>) and the Grading Policy at <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf>.

Medical / Compassionate Withdrawals

Students who are incapacitated and unable to complete or succeed in their studies by virtue of serious and demonstrated exceptional circumstances may be eligible for a medical/compassionate withdrawal. Please visit <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf> to learn more about the process involved in a medical/compassionate withdrawal.

Sexual Violence and Misconduct

Camosun is committed to creating a campus culture of safety, respect, and consent. Camosun's Office of Student Support is responsible for offering support to students impacted by sexual violence. Regardless of when or where the sexual violence or misconduct occurred, students can access support at Camosun. The Office of Student Support will make sure students have a safe and private place to talk and will help them understand what supports are available and their options for next steps. The Office of Student Support respects a student's right to choose what is right for them. For more information see Camosun's Sexualized Violence and Misconduct Policy: <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.9.pdf> and camosun.ca/sexual-violence. To contact the Office of Student Support: oss@camosun.ca or by phone: 250-370-3046 or 250-3703841

Student Misconduct (Non-Academic)

Camosun College is committed to building the academic competency of all students, seeks to empower students to become agents of their own learning, and promotes academic belonging for everyone. Camosun also expects that all students to conduct themselves in a manner that contributes to a positive, supportive, and safe learning environment. Please review Camosun College's Student Misconduct Policy at <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf> to understand the College's expectations of academic integrity and student behavioural conduct.

Changes to this syllabus: Every effort has been made to ensure that information in this syllabus is accurate at the time of publication. The College reserves the right to change courses if it becomes necessary so that course content remains relevant. In such cases, the instructor will give the students clear and timely notice of the changes.