COURSE SYLLABUS



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

CLASS SECTION: 001AB

TERM: Fall 2023

COURSE CREDITS: 3

DELIVERY METHOD(S): In Person

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

Learn more about Camosun's Territorial Acknowledgement.

INSTRUCTOR DETAILS

NAME: Brooke Cameron

EMAIL: cameronb@camosun.ca

OFFICE: Fisher 246

HOURS: Mondays and Wednesdays 11-11:30am and 3:00pm-4:30pm 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 SECOND 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: https://tinyurl.com/4hw7vrsu
 - 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 for labs
- ii. **Lecture PowerPoint slides** available for download via D2L each week, recommended to be downloaded, printed, and brought to each lecture. These will be the content covered on tests.

OPTIONAL (WILL NOT BE HEAVILY USED IN COURSE)

a) Open Stax Biology 2nd Edition

- i. Free to access and print: 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 Mondays and Wednesdays 9:30am-10:50am F200

Lectures are where most of the content of this course will be explored and graded. There will often be graded pre-lecture and in-lecture activities and assignments, thus attendance is required.

 Labs:
 001A
 Thursdays
 9:30am-12:20pm
 F244

 001B
 Thursdays
 1:30pm-4:20pm
 F244

Labs will involve scientific inquiry in both laboratory and field settings. Several labs will involve outdoor activity. Lab manuals will be posted on D2L and must be pre-read, pre-labs completed, and brought with you to lab sessions. Lab assignments are due the following week. Attendance is required.

Tentative Weekly Schedule:

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

Week	Dates	Lecture Topic Mondays and Wednesdays (F200)	Lab Topic Thursdays (F244)	
1	04-Sep	No Lecture; Holiday Monday	No Lab First Wook	
	06-Sep	1- Science	No Lab First Week	
2	11-Sep	2- Biology	Lab 4. Caiantifia la suim	
	13-Sep	3- Biodiversity and Evolution	Lab 1: Scientific Inquiry	
3	18-Sep	4- Natural Selection and Speciation	Lab 2: Mount PKOLS Hike	
	20-Sep	5- Community Ecology	(OFF-CAMPUS)	
4	25-Sep	Book Meeting #1	Lab 2. Evaluation	
	27-Sep	6- Classification	Lab 3: Evolution	
5	02-Oct	No Lecture; Holiday Monday	Lab 4: Rithet's Bog Restoration (OFF-CAMPUS)	
	04-Oct	Test #1 (Modules 1-5)		
6	09-Oct	No Lecture; Holiday Monday	Lab 5: Microscopes	
	11-Oct	7- Prokaryotes		
7	16-Oct	Book Meeting #2	Lab 6: Bacteria and Protists	
7	18-Oct	8- Protists		
0	23-Oct	9- Fungi	Lab 7. Franci	
8	25-Oct	10- Plants	Lab 7: Fungi	
0	30-Oct	11- Animals	Lab O. Dianta	
9	01-Nov	Book Meeting #3	Lab 8: Plants	
10	06-Nov	Test #2 (Modules 6-10)	Lab 9: Rithet's Bog Restoration	
10	08-Nov	12- Porifera and Cnidaria	(OFF-CAMPUS)	
11	13-Nov	No Lecture; Holiday Monday	Lab 10. Animala I	
	15-Nov	13- Platyhelminthes, Nematoda, Annelida	Lab 10: Animals I	
12	20-Nov	Book Meeting #4	Lab 11: Medicine Walk	
	22-Nov	14- Molluscs, Arthropods, Echinoderms		
12	27-Nov	15- Vertebrates	Lab 12: Animals II	
13	29-Nov	16- Humans and Nature	Lau 12. Allillidis II	
14	04-Dec	16- continued	— Lab Exam	
	06-Dec	Book Meeting #5		
11-19 Dec Test #3 (Modules 11-16) (Date TBA)				

Students registered with the Centre for Accessible Learning (CAL) who complete quizzes, tests, and exams with academic accommodations have booking procedures and deadlines with CAL where advanced noticed is required. Deadlines scan be reviewed on the <u>CAL exams page</u>. http://camosun.ca/services/accessible-learning/exams.html

EVALUATION OF LEARNING

DESCRIPTION	WEIGHTING
Pre-and In-class Activities	10%
Lecture and Lab Assignments	30%
Book Meeting Activities and Assignments	20%
Lecture Tests (3x10%)	30%
Lab Exam (1)	10%
TOTAL	100%

Details of Assessment:

Pre- and In-Class Activities (10%)

<u>Pre</u>-lecture and <u>pre</u>-lab activities typically involve a small (5-20 minute) amount of preparatory work to be done prior to arrival to better engage in the material of the day. <u>In</u>-lecture and <u>in</u>-lab activities typically act as learning opportunities, with major weighting to participation and completion. Students are expected to attend all lectures and labs, so a missed activity will result in a missed grade.

Lecture and Lab Assignments (30%)

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 and should be completed solely by the student unless otherwise stated.

Book Meeting Activities and Assignments (20%)

We will be reading *Braiding Sweetgrass* by Robin Kimmerer and having five in-lecture meetings to discuss the book. Students are expected to have read the relevant pages and complete the specific questions and assignment for discussion and submission. More information available on D2L under "Book Meetings".

Lecture Tests (30%)

Tests will take place during regular lecture hours on lecture material and are non-cumulative. Tests will be akin to open book (no technology, only one 8.5"x11" page of notes), thus good note taking and organization of material will be important. DO NOT book travel before learning the exam schedule for Test #3, as it cannot be written prior to the scheduled exam date. More details on the format and content later in the course.

Lab Exam (10%)

The lab exam will take place during regular lab hours on lab material and lab skills. The exam will be primarily skill-based on microscope use, calculations, and organism identification. More details on 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 <u>Grade Review and Appeals</u> 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. 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 resources. Check D2L weekly 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. Submit ALL assignments. These habits will help you through your academic career.

Office Hours

Students are *highly* encouraged to visit office hours throughout the term to better acquaint themselves with the course and its instructor (they are immediately after our lectures!). Office hours are a great chance to check in, review assignment details, tests, or content, get time management strategies and study tips, or just say hi. Students who check in typically gain accountability with the course and their grade demonstrates this. Promise you will come say hi AT LEAST ONCE this term!

Cheating and Plagiarism

In this science-based course, many students struggle with the amount of content covered. When completing assignments, cheating and plagiarism are more likely to occur as students lack the confidence to complete their work on their own. 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!

Science Help Center

If a student is ever confused or uncertain about a concept or assignment and wanted outside help, the science help center offers *free tutoring* in biology, chemistry, and physics! A great place to confirm your assignments and graphs, study, and get to find study groups. View their hours via https://camosun.ca/services/academic-supports/help-centres/science-help-centre

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.