

COURSE SYLLABUS



COURSE TITLE: ENVR-246: Plant Diversity & Ecology

CLASS SECTION: 001

TERM: W23

COURSE CREDITS: 3

DELIVERY METHOD(S): Lecture (2hs), Lab/Field (4 hrs)

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](#).

<HOLD FOR 2021F COVID-19 LANGUAGE>

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: Ian Browning

EMAIL: browning@camosun.ca

OFFICE: P226

HOURS: See D2L schedule

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

This course covers the principles of systematics, identification and environmental relationships of selected BC non-vascular and vascular plants, algae and fungi with emphasis on taxa of ecological and economic value. Labs stress keying, taxonomy, field sampling and include field trips. Policy, legislation, biodiversity issues, restoration and ecosystem management principles are discussed throughout the course.

PREREQUISITE(S):

All of:

- C in BIOL 124

CO-REQUISITE(S):

Not applicable

EXCLUSION(S):

Not applicable

COURSE LEARNING OUTCOMES / OBJECTIVES

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

1. Use standard biological lab equipment, especially microscopes.
2. Use logic, critical thinking, and the scientific method in combination with biological terminology pertinent to algae, fungi non-vascular and vascular plants found in BC.
3. Use biological identification keys for selected groups of algae, fungi, non-vascular and vascular plants of BC.
4. Prepare herbarium specimens.
5. Preserve and/or culture various selected algae, fungi (sterile technique) and non-vascular plants.
6. On sight, identify most native non-vascular and vascular plants to Division and class and some to Order, Genus or Species.
7. Describe biodiversity issues, including rare and endangered species, introduced species, overharvesting impacts and affects of habitat loss.
8. Sample terrestrial and aquatic habitats for algae, fungi, non-vascular and vascular plants and understand the basic methods of habitat restoration.
9. Discuss the importance and impact of policy and legislation on ecosystem management issues.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

Required: Plants of Coastal British Columbia, Pojar and McKinnon

Recommended: Stern's introductory plant biology. 15th ed. McGrawHill.

Optional: Campbell, Biology, concepts and connections. 7th ed. (or later). Pearson.

See D2L site for additional online resources.

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

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

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 can be reviewed on the [CAL exams page](http://camosun.ca/services/accessible-learning/exams.html). <http://camosun.ca/services/accessible-learning/exams.html>

NOTE: Any updates to schedule will be communicated through D2L

Week M/DD	Lecture Topic	Chapter: (Stern)	Chapter: (LibreText: Botany)*	Lab/Field trip (LibreText: Botany Lab)
1 Jan09	Intro, photosynthesis, C3, C4, CAM	Ch10 Metabolism	1, 13	LAB1: Plant pigments part I Seed propagation
2 Jan16	Leaf, stem, root terminology, taxonomy & keys	Ch5-7, Ch16 struct.	10, 11, 12	LAB2: Plant pigments part II Using dichotomous keys Plant collection (pressing)
3 Jan23	keys (cont.) Bryophytes ('worts' and mosses)	Ch20 Bryophytes	6.1	LAB3: Field trip 1. [BC Museum Herbarium]
4 Jan30	Seedless vascular plants (ferns and allies)	Ch21 Seedless vascular	6.3	LAB4: Plant ID-1, Bryophytes, Plant ID-2, Ferns and allies Moss-propagation
5 Feb06	Gymnosperms	Ch22 Gymnosperms	7.1	LAB5: Plant ID-3, Trees, shrubs Plant survey practice [exclosure] Campus tree map
6 Feb13	Leaf, stem, fruit, flower terminology, taxonomy. Native and invasive plants	Ch5-7, Ch16 struct.	10, 11, 12, 7.3.1, 8.3	LAB6: Open lab and Research/presentation prep
7	No Lecture (Reading break)	Review	Review	LAB7: No Lab (Reading break) Feb 21-24
8 Feb27	Angiosperms 1 Flower structure	Ch23 Angiosperms, Ch12 Meiosis	7.3	LAB8: Field trip 2 [GH Garden]
9 Mar06	Angiosperms 2 Families	Ch23 Angiosperms Ch8 Flowers/fruits	8	LAB9: Student Presentations
10 Mar13	Fungi, lichen Fungi-plant symbiosis	Ch19 Fungi	4	LAB10: Field trip - Site 1 [Interurban campus]
11 Mar20	Plant Physiology Plant-bacteria symbiosis	Ch9 Water Ch11 Growth	13, 14, 17	LAB11: Field trip - Site 2 [Royal Roads, Coberg peninsula]
12 Mar27	Plant Ecology/adaptations	Ch25 Ecology	19, 20	LAB12: Plant ID-4, Grasses, Fungi, Lichen [Rieth's bog field trip]
13 Apr03	Biomes	Ch26 Biomes	22	LAB13: Plant ID-5, Flowering plants (Angiosperms) (Lab 23) [Uplands park field trip]
14 Apr10	Review			LAB14: Plant ID-6, Flowering plants (Angiosperms) (Lab 24)

EVALUATION OF LEARNING

DESCRIPTION	WEIGHTING
Lab competency and participation	15
Field trip activity completion/participation	15
D2L quizzes, In-class exercises	20
Research paper and presentation	15
Lab exercises	15
Plant ID Exercises	20
TOTAL	100%

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

- Lab attendance is mandatory.
- Please dress appropriately for the possibility of outdoor field activity in all weathers.
- Please be punctual. Late arrival in class can cause disruption. Field trips will depart on time. It is your responsibility to be at the meeting point on time (Camosun bus, near WT building).
- Updates to times/dates for field trips etc. will be communicated through D2L (news or email). Please check for updates regularly.

SCHOOL OR DEPARTMENTAL INFORMATION

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.