

BIOLOGY 324 – BIOLOGY OF LAND PLANTS
COURSE SYLLABUS – FALL TERM 2025

Monday, Thursday; 11:30am – 12:50pm
Cornett Building (COR) B135

Course Instructor:	Lise Nehring Office: Petch 041g	email: lisenehring@uvic.ca
Senior Lab Instructor:	Dylan Ziegler Office: Cunningham 126a	email: dylanziegler@uvic.ca

Course Objectives: To provide an understanding of the diversity in land plant anatomy, morphology, and modes of growth and reproduction; and of land plant evolution and the increasing complexity of plant form over time. Laboratory exercises are closely coupled with lecture topics and reinforce the concepts learned in class.

Intended Learning Outcomes: By the end of the course, students should have a working knowledge of:

- the anatomy and diversity of plant cells,
- the anatomy, morphology, diversity and evolution of plant vegetative and reproductive structures,
- plant life cycles,
- plant phyla and their evolution.

This knowledge will be demonstrated by the recall of formal botanical terms and names, and accurate, labelled diagrams of plant life cycles, cells, and vegetative and reproductive structures.

Textbook: Raven Biology of Plants, 8th Ed'n (2013), Evert & Eichhorn, Freeman Publ.
(recommended, **not required**)

Lab Manual: Biology 324 Laboratory Manual 2024 (**required** - available from the Bookstore)
Labs are held in Cunn 118 – Please attend the lab section in which you are registered.

Web Material: The slides for each lecture will usually be made available before class on the BIOL 324 Brightspace site. Brightspace will also contain lab-related material, quiz results, general announcements, etc. Students should check the site for postings before coming to the lectures and labs.

Evaluation:	Lab	35% (required)
	Two Midterm Exams	30% (15% each)
	Final Exam	35% (required)

Midterm and final exams will be based mainly on lecture material, but readings from the text will help reinforce concepts. Midterm and final exams will be in-person, closed book, hard copy exams with multiple choice, short answer and diagram questions. There will be no deferred or supplemental midterm or lab exams. If you miss one midterm, the weight will be shifted to the final exam. If you miss two midterms, the second missed midterm will be given a mark of zero (0). Deferred final exams will only be considered if a formal Request for Academic Concession is approved.

We acknowledge and respect the Lək'wəḡən (Songhees and X̱wəpsəm/Esquimalt) Peoples on whose territory the university stands, and the Lək'wəḡən and WSÁNEĆ Peoples whose historical relationships with the land continue to this day.

Plants hold an important part in the traditional teaching of Indigenous Peoples and this course aims to honor this relationship.

Letter Grade Conversion:	A+ 90-100%	A 85-89.5%	A- 80-84.5%
	B+ 77-79.5%	B 73-76.5%	B- 70-72.5%
	C+ 65-69.5%	C 60-64.5%	D 50-59.5%
	F (fail) <49.5%		

Failure to complete the lab requirements or the final exam will result in a grade of “N” regardless of the cumulative percentage on other elements of the course. N is a failing grade and factors into GPA as a value of 0.

Proposed Course Outline 2024

DATE	LECTURE	LABORATORY
Sept 4	Introduction	No lab this week
8	Cells & tissues	Organs, cell types & tissues
11	Roots	
15	Stems	Roots & stems
18	Secondary growth	
22	Leaves	Secondary growth
25	First Land Plants	
29	MIDTERM 1	Leaves & modified plant organs
Oct 2	Liverworts & Hornworts	
6	Moss	LAB EXAM 1 this week
9	First Vascular Plants	
13	Thanksgiving – no classes	No labs this week
16	Lycopods	
20	Ferns & Horsetails	Evolution, life cycles & Bryophytes
23	Progymnosperms & Seed Plants	
27	MIDTERM 2	Lycophytes & Monilophytes
30	Ginkgos & Cycads	
Nov 3	Conifers I	Gymnosperms
6	Conifers II & Gnetophytes	
10	Reading Break – no class	No labs this week
13	Angiosperms - flowers	
17	Angiosperms – gametophytes	Anthophytes (flowers, fruit & seed)
20	Angiosperms – pollination	
24	Angiosperms – seed & fruit	LAB EXAM 2 this week
27	Angiosperms – diversity	
Dec 1	Review & Summary	

Academic Policies and Regulations:

[Undergraduate policies and academic regulations](#) are described in the UVic Undergraduate Calendar. Please read very carefully the Policy on Academic Integrity, the Academic Concession Regulation/Guidelines, and Academic Important dates.

Academic Integrity: Students are required to abide by all academic regulations set as set out in the [University calendar](#), including standards of academic integrity. Violations of academic integrity (e.g. cheating and plagiarism) are considered serious and may result in significant penalties. The exams (quizzes, midterms and final exam) must all be completed **individually** and not with a friend or classmate or a group. You are prohibited from sharing any information about the exam with others.

Academic Concession Regulation/Guidelines:

Please refer to the links below when determining what is a 'valid reason' to request an Academic Concession and the process for requesting a concession.

[Academic Concessions Regulation](#) and [Academic Concession Guidelines](#)

Academic Important Dates:

Check [here](#). It is the student's responsibility to attend to Add/Drop dates published in the Calendar (last day to add courses – Jan 24, last day to drop without failure – Feb 29). Students must not assume they will be dropped automatically from any course they do not attend. It is also the students' responsibility to check their records and registration status.

UVic Services:

Centre for Accessible Learning (CAL) - UVic is committed to creating a learning experience that is as accessible as possible. If you are registered with the CAL and anticipate or experience any barriers to learning in this course, please feel welcome to discuss your concerns with the course instructor. If you are a student with a disability or chronic health condition, you can meet with a CAL advisor to discuss access and accommodations.

<https://www.uvic.ca/accessible-learning/index.php>

Counselling Services - Counselling Services can help you make the most of your university experience. They offer free professional, confidential, inclusive support to currently registered UVic students.

<https://www.uvic.ca/services/counselling/>

Elders' in Residence - The Office of Indigenous Academic and Community Engagement (IACE) has the privilege of assembling a group of Elders from local communities to guide students and others in Indigenous ways of knowing and being. <https://www.uvic.ca/services/indigenous/students/programming/elders/index.php>

Health Services - University Health Services (UHS) provides a full service, primary health clinic for students, and coordinates healthy student and campus initiatives. <http://www.uvic.ca/services/health/>

Mental Health Supports - In addition to providing both face to face and online mental health resources through the Student Wellness Centre, a 24x7 phone & online student mental health resource and support program is available for all UVic students, no matter where they are located, at any time.

<https://www.uvic.ca/services/counselling/resources/supportconnect/>

Student Support for Online Technology

Learn Anywhere: <https://onlineacademiccommunity.uvic.ca/LearnAnywhere/>

Sexualized Violence Prevention and Response - UVic takes sexualized violence seriously. We encourage students to learn more about how the university defines sexualized violence and its overall approach by visiting www.uvic.ca/svp. If you or someone you know has been impacted by sexualized violence and needs information, advice, and/or support please contact the sexualized violence resource office in Equity and Human Rights (EQHR). If you want to take part in the important prevention work taking place on campus, you can also contact the sexualized violence resource office in EQHR; Sedgewick C119, Phone: [250.721.8021](tel:250.721.8021), Email: svpcoordinator@uvic.ca