

**BIOLOGY 324 – BIOLOGY OF LAND PLANTS
COURSE SYLLABUS – WINTER TERM 2025**

Monday, Thursday; 1:00 – 2:30 p.m.

MacLaurin (MAC) Room D207

Course Instructor: Lise Nehring email: lisenehring@uvic.ca
Office: Petch 041g

Senior Lab Instructor: Dr. Lan Tran email: ltran@uvic.ca
Office: Cunn 126a

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 to 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 but not required

Lab Manual: Biology 324 Laboratory Manual 2025 (**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 (Feb 3 & Mar 6)	30% (15% each)
	Final Exam (April 2024)	35% (required)

Midterm and final exams will be based mainly on lecture material, but readings from the text will help reinforce concepts. All lecture midterm and lab 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 lecture midterm or lab exams. If you miss one lecture midterm or lab exam, the percentage will be added to the second lecture midterms or lab exam. If you miss two lecture midterms or lab exams, you will be given a mark of zero (0) for both exams. Deferred final exams will only be considered if a formal Request for Academic Concession is approved.

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

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%

N 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 2025

DATE		LECTURE	TEXT Chapters	LABORATORY
Jan	6	Introduction	1	No lab this week
	9	Cells & tissues	3, 23	
	13	Roots	24	
	16	Stems	25	Organs, cell types & tissues
	20	Secondary growth	26	Roots & stems
	23	Leaves	25	
	27	First land plants & Bryophytes	16	Secondary growth
	30	Bryophytes		
	3	MIDTERM 1	16	Leaves & modified plant organs
	6	First Vascular Plants	17	
Feb	10	Lycophytes & Equisetophytes	17	LAB EXAM
	13	Ferns	17	
	17-21	Reading Break - No classes		No labs this week
	24	Ferns	18	Evolution, life cycles & Bryophytes
	27	Progymnosperms & Seed Plants		
Mar	3	Cycads	18	Lycophytes, Monilophytes
	6	MIDTERM 2	18	
	10	Ginkgo & Conifers	18	Gymnosperms
	13	Conifers	18	
	17	Gnetophytes	18	Anthophytes (flowers, fruit & seed)
	20	Angiosperms – flowers	19, 20	
	24	Angiosperms – gametophytes	19, 20	LAB EXAM
	27	Angiosperms – pollination	19	
	31	Angiosperms – seeds & fruit	20	
	3	Angiosperm – diversity		
Apr				

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 22**, last day to drop without failure – **Feb 28**). 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