

BIOL 449/ES 425 – FLOWERING PLANT DIVERSITY

Lecture Outline Spring 2021

Course Instructor: G. A. Allen

Lab Instructor: Sara Bird

<u>Lecture</u>	<u>Date</u>	<u>Lecture</u>
1.	Jan 12	An introduction to the angiosperms
2.	Jan 13	Angiosperm structure and variation: Flowers I
3.	Jan 15	Flowers II and fruits
4.	Jan 19	Inflorescences; vegetative structures (roots & stems)
5.	Jan 20	Vegetative structures (wood, leaves, hairs)
6.	Jan 22	A history of angiosperm classifications
7.	Jan 26	Nomenclature
8.	Jan 27	Keys, ID and herbaria
9.	Jan 29	Defining and describing species
10.	Feb 2	The hierarchy of classification: phylogenetic methods
11.	Feb 3	Molecular evidence in plant systematics
12.	Feb 5	Angiosperms worldwide: overview and origins
	Feb 9	MIDTERM EXAM #1
13.	Feb 10	Magnoliids
14.	Feb 12	Monocots I
	Feb 16	READING BREAK
	Feb 17	READING BREAK
	Feb 19	READING BREAK
15.	Feb 23	Monocots II
16.	Feb 24	Monocots III; Basal Eudicots
17.	Feb 26	Rosids I
18.	Mar 2	Rosids I
19.	Mar 3	Rosids III
20.	Mar 5	Caryophyllales I
21.	Mar 9	Caryophyllales II
22.	Mar 10	Guest lecture 1
	Mar 12	MIDTERM EXAM #2
23.	Mar 16	Asterids I
24.	Mar 17	Asterids II
25.	Mar 19	Asterids III
26.	Mar 23	Asterids IV
27.	Mar 24	Plant reproductive biology I
28.	Mar 26	Plant reproductive biology II
29.	Mar 30	Pollinators and pollination adaptations
30.	Mar 31	Plant polyploidy and hybridization
	Apr 2	(Good Friday)
31.	Apr 6	Plant biogeography
32.	Apr 7	Guest lecture 2
33.	Apr 9	Plant conservation

TEXTBOOKS FOR COURSE

Lecture: No text (some useful references will be available on reserve)

Lab: Two optional texts.

C. L. Hitchcock and A. Cronquist. 2018. Flora of the Pacific Northwest, 2nd ed. This is a very recently updated edition, with excellent geographic coverage and botanical keys for our area. The 1st edition (1973), though it has outdated nomenclature and lacks some species, has been a standard regional flora for many years, and is also usable for plant ID.

J. G. Harris and M. W. Harris. 1994. Plant Identification Terminology. This is a very useful illustrated guide for learning plant structures and terms.

LABORATORY

The labs will introduce the flowering plant diversity of this region (variation in flowers and vegetative structures) and will provide opportunities to learn the common plant families and the use of keys. It will include individual field-based projects such as a plant collection and a plant observation journal. More information will be available in the first lab, and on the **course website**.

GRADING AND ASSESSMENT

LECTURE (50%)	Midterm #1	15%
	Midterm #2	15%
	Final Exam	20%
LAB (50%)	Scavenger hunt exercise	5%
	Plant family assignment	5%
	Plant observations journal	15%
	Plant collection	10%
	Quizzes	15%

Letter Grade Scale:

A+	≥ 90%
A	85-89%
A-	80-84%
B+	77-79%
B	73-76%
B-	70-72%
C+	65-69%
C	60-64%
D	50-59%
F	< 50%

Statement of Inclusion

The University of Victoria is committed to creating a learning experience that is as accessible as possible. If you are registered with the Centre for Accessible Learning (CAL) and anticipate or experience any barriers to learning in this course, please feel welcome to discuss your concerns with me. If you are a student with a disability or chronic health condition you can meet with an advisor at CAL to discuss access and accommodations <https://www.uvic.ca/services/cal/>

Policy on Academic Integrity

Academic integrity requires commitment to the values of honesty, trust, fairness, respect, and responsibility. It is expected that students, faculty members and staff at the University of Victoria, as members of an intellectual community, will adhere to these ethical values in all activities related to learning, teaching, research and service. Any action that contravenes this standard, including misrepresentation, falsification or deception, undermines the intention and worth of scholarly work and violates the fundamental academic rights of members of our community. This policy is designed to ensure that the university's standards are upheld in a fair and transparent fashion. Students are responsible for the entire content and form of their work. Nothing in this policy is intended to prohibit students from developing their academic skills through the exchange of ideas and the utilization of resources available at the university to support learning (e.g., The Centre for Academic Communication). Students who are in doubt as to what constitutes a violation of academic integrity in a particular instance should consult their course instructor.

Please read Uvic's policy on academic integrity:

<https://www.uvic.ca/learningandteaching/faculty/resources/instructional/integrity/index.php>