

BIOL 449/ES 425 – FLOWERING PLANT DIVERSITY

Lecture Outline Spring 2022

Course Instructor: G. A. Allen

Lab Instructor: Mya Robilliard

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

TEXTBOOKS FOR COURSE

Lecture: No text (some reference texts will be available on reserve)

Lab:

C. L. Hitchcock and A. Cronquist. 2018. Flora of the Pacific Northwest, 2nd ed. (required)

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 The 1st edition (1973), though it has outdated nomenclature and lacks some species, has been a standard regional flora for many years, and is also usable for plant ID.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. (optional)

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%
	Journal of plant observations	10%
	Plant collection	15%
	Quizzes (2)	10% (5% each)
	Lab final exam	10%

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/>

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