

BIOL 449/ES 425 – FLOWERING PLANT DIVERSITYLECTURE OUTLINE

SPRING 2018

TWF 9:30 CUNNINGHAM 146

Course Instructor: G. A. Allen

office: Cunningham 218b

Lab Instructor: Rande Kanne

office: Cunningham 210

<u>Lecture</u>	<u>Date</u>	<u>Lecture</u>
1.	Jan 3	An introduction to flowering plants
2.	Jan 5	Angiosperm structure and variation: Flowers
3.	Jan 9	Flowers (cont'd)
4.	Jan 10	.Fruits
5.	Jan 12Inflorescences; vegetative structures
6.	Jan 16	Vegetative structures (cont'd)
7.	Jan 17	Angiosperm classifications: a brief history
8.	Jan 19	Nomenclature
9.	Jan 23	Keys, ID and herbaria
10.	Jan 24	Defining and describing species
11.	Jan 26	The hierarchy of classification: phylogenetic methods
12.	Jan 30	Molecular evidence in plant systematics
13.	Jan 31	Angiosperm groups: overview and ANA lineages, Magnoliids
14.	Feb 2	Monocots I
15.	Feb 6Monocots II
16.	Feb 7	Monocots III
17.	Feb 9	Guest lecture – angiosperms & mycorrhizae
	Feb 12-16	READING BREAK
18.	Feb 20	Basal Eudicots
19.	Feb 21	MIDTERM EXAM
20.	Feb 23	Rosids I
21.	Feb 27	Rosids II
22.	Feb 28	Rosids III
23.	Mar 2	Guest lecture – Hawaiian plant natural history
24.	Mar 6	Caryophyllales
25.	Mar 7	Asterids I
26.	Mar 9	Asterids II
27.	Mar 13	Asterids III
28.	Mar 14	Plant Reproduction I
29.	Mar 16	Plant reproduction II
30.	Mar 20	Pollination adaptations
31.	Mar 21	Plant polyploidy & hybridization
32.	Mar 23	Guest lecture – alpine flora of BC
33.	Mar 27	Plant biogeography I
34.	Mar 28	Plant biogeography II
	Mar 30	GOOD FRIDAY
35.	Apr 3	Plant conservation
36.	Apr 4	Guest lecture –the BC Conservation Data Centre
37.	Apr 6	REVIEW

LABORATORY

The labs will introduce you to flowering plant diversity (variation in flowers and vegetative structures), the use of keys, and many plant families of this region.

PROJECTS

In addition to regular labs, you will be assigned two field-based lab projects:

1. A collection of **10 correctly pressed** and **identified** plant specimens.
2. An illustrated journal of flowering plant observations.

More information will be available in the first lab, and on the **course website**.

TEXTS

Lecture:

No text (refs on reserve)

Lab:

C. L. Hitchcock and A. Cronquist. 1973. Flora of the Pacific Northwest (optional). This book, though somewhat out of date, has the best botanical keys for our area. A new updated edition is expected to be out in 2018. We have several lab copies, but if you own one, bring it.

J. G. Harris and M. W. Harris. 1994. Plant Identification Terminology (optional).

Copies of other regional floras will be available for reference in the lab.

GRADING

Lecture:	Midterm Exam I	20%	}	50%
	Final Exam	30%		
Lab:	Quizzes	15%	}	50%
	Final Lab Exam	15%		
	Lab Projects 1 & 2	each 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%

PREVENTING PLAGIARISM AND CHEATING – Please read UVic’s policy on academic integrity:

<http://web.uvic.ca/calendar2013/FACS/UnIn/UARE/PoAcl.html>