

BIOL 449/ES 425
FLOWERING PLANT DIVERSITY

LECTURE OUTLINE SPRING 2016

Course Instructor: G. A. Allen
Lab Instructor: Rande Kanne

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<u>Lecture</u>	<u>Date</u>	<u>Lecture</u>
1.	Jan 5	An introduction to flowering plants
2.	Jan 6	Angiosperm structure and variation: Flowers I
3.	Jan 8	Flowers II
4.	Jan 12	Inflorescences; plant tissues
5.	Jan 13	Vegetative structures I
6.	Jan 15	Vegetative structures II
7.	Jan 19	Angiosperm classifications: a brief history
8.	Jan 20	Nomenclature, ID and herbaria
9.	Jan 22	Defining and describing species
10.	Jan 26	Modern methods of classification
11.	Jan 27	Plant DNA and molecular variation
12.	Jan 29	Molecular systematics
13.	Feb 2	Angiosperm groups: overview and basal (ANITA) lineages
14.	Feb 3	Magnoliids
15.	Feb 5	Monocots I
	Feb 8-12	READING BREAK
16.	Feb 16	Monocots II
17.	Feb 17	Monocots III
18.	Feb 19	<u>MIDTERM EXAM</u>
19.	Feb 23	Basal Eudicots
20.	Feb 24	Rosids I
21.	Feb 26	Rosids II
22.	Mar 1	Rosids III
23.	Mar 2	Caryophyllales
24.	Mar 4	Asterids I
25.	Mar 8	Asterids II
26.	Mar 9	Asterids III
27.	Mar 11	Patterns of plant reproduction; hybridization
28.	Mar 15	Flowering plant embryology
29.	Mar 16	Plant chromosomes and polyploidy
30.	Mar 18	Adaptations for pollination
31.	Mar 22	Plant chemical diversity
32.	Mar 23	Plant biogeography I
33.	Mar 29	Plant biogeogeography II
34.	Mar 30	Plant conservation
35.	Apr 1	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:

W. S. Judd et al. 2016. Plant Systematics: A Phylogenetic Approach, 4th ed.(optional).

Lab:

C. L. Hitchcock and A. Cronquist. 1973. Flora of the Pacific Northwest (recommended).

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	20%	}	50%
	Final Exam	30%		
Lab:	Quizzes	15%	}	50%
	Final Lab Exam	15%		
	Lab Projects 1 & 2	each 10%		

Letter Grade Scale:

A+	≥ 90.0%
A	85.0-89.9%
A-	80.0-84.9%
B+	77.0-79.9%
B	73.0-76.9%
B-	70.0-72.9%
C+	65.0-69.9%
C	60.0-64.9%
D	50.0-59.9%
F	< 50.0%

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