BIOL 449/ES 425 – FLOWERING PLANT DIVERSITY

LECTURE OUTLINE SPRING 2017 TWF 9:30 ELLIOTT 162

Course Instructor: G. A. Allen office: Cunningham 218b
Lab Instructor: Rande Kanne office: Cunningham 210

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

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

Letter Grade Scale:

A+	≥ 90.0%
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%

PREVENTING PLAGIARISM AND CHEATING – Please read UVic's policy on academic integrity: http://web.uvic.ca/calendar2013/FACS/UnIn/UARe/PoAcI.html