

Lecture: Tues/Thurs 8-8:50 N 210
Lab: 9:00-11:50 N 210
Professor: Andrew Gardner
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Office: N261
Office Hrs: Tuesday 12:00-1:00, Thursday 12:00-1:00, and by appointment
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Class resources

We'll use the Jepson Manual, 2nd edn. The book is available in the Bookstore. Also, you will be issued a plant press. You are required to take care of and return that press at least as good as you received it. You will not receive a grade for the class until your plant press is returned in working quality.

Course description

Botany 3700 is about the study of plant taxonomy within the larger context of plant systematic research. We will cover in detail the morphologies, relationships, and classification of local flowering plants with practice in their collection and identification. Botany 3700 satisfies the departmental diversity requirement and can be used for upper division electives or as a course in the botany concentration. Prerequisites include BIOL 1050 and BIOL 1150 or equivalents. Completion of the prerequisites is essential before taking this course.

I'll give several lectures at the beginning of the semester. Please check the Blackboard page for posted lectures, announcements, and other information. Labs for Flowering Plants will be different than labs for other courses that you have had. We will take walking field trips around campus, field trips to sites far from campus (e.g., Sonora, Turlock Lake) and will spend a LOT of time just sitting in lab with a microscope identifying plants for hours.

Field trips are a necessary part of the course. Please talk with me if you need any accommodation. Field trips will be during class and lab periods and will involve walking on unpaved, uneven surfaces (trails) as well as in mild to warm temperatures for several hours.

Major learning objectives: plant systematics

- Learn about the history and evolving goals of plant classification and systematics
- Learn major groups of plants, their morphology and relationships

Major learning objectives: plant taxonomy

- Learn about important morphological characters of plants for taxonomic purposes
- Learn to make plant collections for a wide range of future uses
- Learn about some of the print and digital resources for keying out plants
- Be able to sight-ID many woody ornamental plants (native and introduced)
- Be able to key the rest!

Assessment

To do well in Botany 3700, you will need to come to class and participate. In addition, you must be diligent in your collecting and practicing of plant identification. Plant identification takes a long time. You will have to master a new vocabulary and practice learning to see patterns which will speed your identification process along and allow you to identify plants when in the field, without your key or field guide. Attendance in class is expected, as is active participation. During lecture, take careful notes and review them.

Each student will be required to complete a **themed collection of plants** that includes a short essay covering the collection and the related preexisting specimens in the herbarium. Plants must be mounted, identified, and meta-data must be complete. Elegant, clean mounting, correct identification, and useful meta-data all make for a good collection. You will be required to collect and identify 30 different plant species. You may use any native or naturalized plant we cover, plus additional ones that you may find yourself. You may not use common and/or naturalized weeds, like dandelions, to complete your collection unless they are part of your theme. There are two deadlines for the collection: 10 mounted, identified plants are due Thursday, April 28 and 20 mounted, identified plants by Thursday, May 12. The quality of your collection must be high. Each specimen must include (where possible) all the plant parts necessary for identification. The parts must be exposed in such a way as to allow study. Include on the label all pertinent information about the plant, including location data, date, surrounding vegetation, etc. Include with your collection a brief essay about the possible patterns or uses of the specimens. This essay should connect your collection to the preexisting specimens of relevance and include citations.

Quizzes and exams are opportunities for you to convince me you know the material. In an exam, you need to articulate a correct answer. If you haven't articulated an answer previously (practicing in a study group, writing it, etc.,) you will have a more difficult time doing it during exam time. Exams will cover the concepts from lecture and lab, and will mostly be multiple choice with matching, short answer and/or diagram questions. For exams, bring a #2 pencil and a Scantron form 882-E to class on exam day.

You may not leave the room during an exam without my permission. You must turn off cell phones and remove your hats during exams. If your cell phone rings during an exam five (5) points will be deducted from your score. Cell phones must be put away during exams and accessing your cell phone during an exam is considered cheating and your exam will be treated as such. If you arrive late, after someone has finished the exam and left the room, you will not be able to take the exam.

You need to notify me prior to missing any exam. I rarely administer exams early, but if you have a serious extenuating circumstance, we may be able to make an arrangement as long as that request is accompanied by a note from a reliable source (see above). A makeup exam will not necessarily be given. If an emergency suddenly arises causing you to miss an exam, it is your responsibility to notify your instructor via phone or email as soon as practical. Hospitalization, death of a family member, or other serious events would be valid reason for missing an exam without prior notification. Documentation for why you missed the exam is required if you want to take a make-up exam. Make-up exams are different than the regular exams given to the rest of class.

Late material will lose 25% for each day missed after the deadline. Make-up and Late Work for the class is possible, but only with an excuse note from some reliable person (hospital, police, etc). You must make arrangements with me to take care of any work needed to be made up. I'll probably make a couple of mistakes along the way. If you think I've graded something incorrectly, send me an email and tell me about it and I'll make sure it's right. However, I do have a statute of limitations on regrades: one week from when I return them. February 25 is the census date, which is the last day to drop or add a class. University policy states that February 25 is the last day to choose CR/NC. Consult with your advisor before making your decision.

Grades are based on the percentage of total points earned, and are not "curved."

A	93-100%	C+	77-80%	D-	60-63%
A-	90-93%	C	73-77%	F	0-60%
B+	87-90%	C-	70-73%		
B	83-87%	D+	67-70%	CR	70-100%
B-	80-83%	D	63-67%	NC	0-70%

Expectations related to the learning environment

Students

- a. I expect students to actively participate in class discussion, group activities, and peer-peer teaching.
- b. I expect students to be prepared for class each day.
- c. I expect students to respect each other, me, the environments in which we'll operate, and themselves.
- d. I expect students will not cheat, but if students do so, they will not be surprised by an automatic F for the assignment or a referral to the appropriate disciplinary committee. Cheating is "submitting an in-class assignment for a student who is not present or submitting work that is not your own, but claiming that it is your own original work." Lying is "communication with intent to deceive" and cheating falls into that category.
- e. Please don't use your phones in class. Please restrict your computer and internet usage to relevant classroom activities to keep from distracting your classmates or me.
- f. Please discuss with me any circumstances or accommodations you would need so we can ensure that the class is an environment in which you can learn and have fun. Please do so within the first full week of class, but don't hesitate to talk to me at any time about any thing that is impeding your success in class.
- g. You may not eat in the classroom because it is a laboratory, but I will give you breaks, and encourage you to keep the glucose levels up!
- h. Plan ahead and keep up with the assignments; and don't hesitate to talk to or email me if you're having a hard time doing so.

Professor

- a. I will come to class prepared to teach an informative lecture containing information relevant to the learning objectives.
- b. I will strive to help you prepare for your exams by giving you 'signposts' along the way to focus your study.
- c. I will not purposely be sneaky on quizzes or exams, but I have high expectations of everyone, including myself.
- d. I will answer questions respectfully and will begin and end class on time.
- e. I will set policy and strive to be fair to all students.
- f. I will return assignments/tests promptly with useful comments.
- g. I enjoy writing letters of recommendation. Because they are a letter of recommendation I do like to be able to recommend the candidate. As such, I can't usually recommend students unless they achieve a B or better in the class. In addition, if you only take the class, do well and never come talk to me, I cannot recommend you either. What would I say? Writing only 2-3 sentences isn't a compelling letter! If you do think you will need a letter from a professor get to know that professor.

The schedule is subject to change and will be updated as needs arise.

Date	Graded Items	Points	Activity
28-Jan			Lec: Syllabus; Me, CA flora
2-Feb			Lec: History of Classification
4-Feb			Lec: Taxonomy & systematics
9-Feb	Q1	10	Lec: Plant Diversity; Plant parts
11-Feb			Lec: Angiosperms; Flower parts
16-Feb	Q2	10	Lec: Fruits
18-Feb			Lec: Major clades; Families
23-Feb	Exam 1	30	
25-Feb			Campus woody plants
1-Mar			
3-Mar			
8-Mar	Q3	10	Field Trip to Hickman
10-Mar			
15-Mar			
17-Mar			
22-Mar	Q4	10	La Grange
24-Mar			
29-Mar	SPRING BREAK		
31-Mar	SPRING BREAK		
5-Apr			Knights Ferry
7-Apr			
12-Apr	Exam 2 (plants)	30	
14-Apr			
19-Apr			SPI (Sonora) FT
21-Apr			
23-Apr			Optional Saturday Trip to Coast Redwoods???
26-Apr	Q5	10	
28-Apr	Collection I (10 spec.)	20	
3-May			
5-May			
10-May	Q6	10	
12-May	Collection II (20 spec.)	70	
14-May			Optional Saturday Trip to Sierra Nevada???
17-May			
??	Final Exam (cumulative)	40	
	Participation	10	
	Total	260	