

BOTANY 4713 PLANT TAXONOMY SPRING 2014

Lecture: T Th 12-1:20, Lab: T Th 8-11:50 in BIO 104
Pre Requisites: BSC 2010C and BSC 2011C or C.I.

Credit: 5

Instructor: Dr. Elizabeth Harris

Office: BIO 202B

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Office Hours: T and Th 1:30-2:30 or by appointment

Course Description:

Systematic classification and identification of vascular plants, with emphasis on the flora of peninsular Florida.

Objectives:

1. Learn basic techniques of plant identification (emphasizing morphological terminology)
2. Recognize and characterize ~50 major plant families and ~150 local species in the field and from herbarium specimens
3. Acquire a basic understanding of the relationships among flowering plants
4. Gain exposure to a diversity of plant communities and species
5. Prepare a museum quality herbarium specimen and use a research herbarium

Required books:

- 1) Wunderlin, Richard, and Bruce Hansen. 2011. Guide to the Vascular Plants of Florida, Third Edition. University Press of Florida.
- 2) Harris, James and Melinda Woolf Harris. 2003. Plant Identification Terminology. Second Edition. Spring Lake Publishing, Spring Lake, Utah.
- 3) Plant Systematics. Judd, Walter, Christopher Campbell, Elizabeth Kellog, Peter Stevens and Michael Donoghue. 2007. Third edition. Sinauer Associates.
- 4) Collection book

Additional supporting media:

The following websites will be useful in identifying Florida plants.

<http://florida.plantatlas.usf.edu/>

<http://hort.ifas.ufl.edu/floragator/>

Classroom Conduct: By enrolling at UCF, all students have agreed to abide by the Golden Rule.

Please become familiar with this document at: <http://www.goldenrule.sdes.ucf.edu/>

Please also use common courtesy in class by arriving and departing on time, refraining from talking during class, and silencing cell phones. Audio recording of lectures is permitted. Taking pictures of the Powerpoint images on the projection screen with digital cameras or camera-cell phones is not permitted.

Grading:

Lecture and lab are combined into one class grade that breaks down as follows:

3 lecture exams @ 100 pts each	300
5 written labs @ 20 pts each	100
Plant collection, 40 specimens @ 5 pts each	200
Keying exercises, best 10 @ 10 pts each	100
Participation (including attendance)	100
<u>Final exam</u>	<u>200</u>
Total	1,000

89.5-100% = A, 79.5-89.4% = B, 69.5-79.4% = C; 59.5-69.4% = D; 0-59.4% = F

If you have a valid, documented reason for missing a lecture or laboratory session (from doctor, police, judge, official UCF event, etc.), you must contact me within 24 hours of the start of the class. Attendance will be taken at the beginning of each class and lab. It is mandatory to wear long pants and closed-toe shoes (preferably hiking boots/shoes if possible) for all outdoor field trips. Closed-toe shoes are required by OSHA regulations in the laboratory at all times. After the first week, if you are not wearing closed toed shoes you will be asked to leave and an unexcused absence will be recorded. There will be no smoking, eating or drinking in the laboratory.

Disability Access Statement: The University of Central Florida is committed to providing reasonable accommodations for all persons with disabilities. This syllabus is available in alternate formats upon request. Students with disabilities who need accommodations in this course must contact the professor at the beginning of the semester to discuss needed accommodations. No accommodations will be provided until the student has met with the professor to request accommodations. Students who need accommodations must be registered with Student Disability Services, Student Resource Center Room 132, phone (407) 823-2371, TTY/TDD only phone (407) 823-2116, before requesting accommodations from the professor.

Please read the assigned chapters listed below before coming to the lecture.

Please note: assigned readings from chapters that may not have been discussed in lecture may be covered on exam material. Exams will be based on the material covered in lecture and assigned readings.

Also note that the instructor reserves the right to make changes to the syllabus or other aspects of the course at anytime. These changes will be announced in class.

Tentative Schedule (subject to change):

Lecture		Lab
T Jan 7	Intro to class, Ch. 1, Ch. 4	1. Terminology Exercise
Th Jan 9	Ch. 4, Plant terminology	Terminology Exercise cont.
T Jan 14	Ch. 4, Floral Formulas & Diagrams	2. Floral Formulas and Floral Diagrams Exercise
Th Jan 16	Ch. 3, History	3. Keying Exercise
T Jan 21	App. 1, Botanical Nomenclature	4. Nomenclature Exercise, keying cont.
Th Jan 23	Ch. 2, Phylogeny	5. Phylogeny Exercise
T Jan 28	Ch. 2, continued.	Phylogeny Exercise cont., keying
Th Feb 30	App. 2, Plant collection	6. <i>On campus field trip to Herbarium and grounds</i>
T Feb 4	Exam 1	7. <i>On campus field trip to UCF Arboretum</i>
Th Feb 6	Ch. 5, Molecular Systematics	8. In class keying
T Feb 11	<i>Off campus field trip to the Econ River WA—bring water and pack a lunch</i>	
Th Feb 13	Ch. 6, Evolution of Plant Diversity	9. In class keying
T Feb 18	Ch. 6, continued/Ch. 7	10. <i>On campus field trip to UCF Arboretum</i>
Th Feb 20	Ch. 7, Green Plant Phylogeny	11. In class keying
T Feb 25	Ch. 8, Lycophytes, Ferns	12. In class keying lycophytes and ferns
Th Feb 27	Exam 2	13. Lycophytes and ferns cont.
T Mar 4	Spring Break—No class	
Th Mar 6	Spring Break---No class	
T Mar 11	Ch. 8, Gymnosperms	14. In class keying Gymnosperms
Th Mar 13	Ch. 9, Intro to Angiosperms	15. <i>On campus field trip to UCF Arboretum</i> **First 20 specimens due**
T Mar 18	<i>Off campus field trip to</i>	
Th Mar 20	Ch. 9, ANITA grade and Magnoliid Complex	16. In class keying ANITA and Magnoliids
T Mar 25	Ch. 9, Monocots	17. In class keying Monocots
Th Mar 27	Ch. 9, Commelinoid Clade	18. In class keying Commelinoids
T Apr 1	<i>Off campus field trip to</i>	
Th Apr 3	Ch. 9, Tricolpates	19. In class keying Tricolpates
T Apr 8	Exam 3	20. In class keying
Th Apr 10	Ch. 9, Rosid Clade	21. In class keying Rosids
T Apr 15	Ch. 9, Asterid Clade	22. In class keying Asterids
Th Apr 17	Review and sum up	**Second 20 specimens due** 23. Return collections
Th Apr 24	10-12:50, Final Exam	