# BOTANY 4713C PLANT TAXONOMY SPRING 2023

Lecture: T, Th 12-1:15 BIO rm # 104 Lab: T, Th 1:30-4:20 BIO rm. # 104

Pre Requisite: BOT 3015 Credit: 5

Instructor: Dr. Elizabeth Harris

Office: BIO 102a

Email: elizabeth.harris@ucf.edu

**Office Hours:** Fridays noon until 2 or by appointment

**Teaching Assistant:** Megan Conway **Email:** meganconway3995@gmail.com

**Office Hours: TBA** 

# **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
- 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. 2016. Judd, Walter, Christopher Campbell, Elizabeth Kellogg, Peter Stevens and Michael Donoghue. 4<sup>th</sup> 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 permitted, video recording is not. I do not release my powerpoints.

# **Grading:**

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

Syllabus quiz	10
3 lecture exams @ 100 pts each	300
7 written labs @ 20 pts each	140
Plant collection, 40 specimens @ 5 pts each	200
Plant collection book	50
Keying exercises, best 10 @10 pts each	100
Final exam	200
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 and provide some sort of documentation. 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.

You will be assigned a press kit. This will be yours to use for the duration of the semester. It will need to be checked back in at the end of the semester. If it is not checked back in at the end of the semester, I will issue you the grade of "I" for the course which will not be changed until the kit is returned or paid for.

**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 Accessibility 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 10	Intro to class, Ch. 1, Ch. 4	1. Terminology Exercise
Th Jan 12	Ch. 4, Plant terminology	Terminology Exercise cont.
T Jan 17 Th Jan 19	Ch. 4, Floral Formulas & Diagrams Ch. 3, History	<ul><li>2. Floral Formulas and Floral Diagrams Exercise</li><li>3. Keying Exercise, whole class</li></ul>
T Jan 24	App. 1, Botanical Nomenclature	4. Vine Keying Exercise cont.
Th Jan 26	Ch. 2, Phylogeny	5. Nomenclature Exercise
T Jan 31	Ch. 2, continued.	6. Campus walk from Bio bldg.
	App. 2, Plant collection	7. On campus field trip to Herbarium and grounds
T Feb 7	Exam 1	0.0 ' 1.1.15 '
Th Feb 9	Plant collection cont. Labels and locations	8. Specimen Label Exercise
T Feb 14 Off campus field trip to the Econ River WA—bring water and pack a lunch if desired		
	Ch. 5, Evolution of Plant Diversity	9. In class keying
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T Feb 21	Ch. 5, continued/Ch. 6	10. On campus field trip to Arboretum-Lake Claire
Th Feb 23	Ch. 6, Green Plant Phylogeny	11. In class keying
T Feb 28	Ch. 7, Lycophytes, Ferns	12. In class keying lycophytes, ferns & gymnosperms
Th Mar 2	Exam 2	13. Fossil Plant Exercise
T Mar 7	Ch. 7, Gymnosperms	Fossil Plant Exercise cont.
Th Mar 9	Ch. 8, Intro to Angiosperms	14. On campus field trip to UCF Arboretum—Wildflower Loop
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		**First 20 specimens and collection book due****
T Mar 14	Spring Break—No class	
Th Mar 16	Spring BreakNo class	
T Mar 21		owerline Road—bring water and pack a lunch if desired
Th Mar 23	Ch. 8, ANA grade and Mesangiospermae	15. In class keying ANA and Mesang
T Mar 28	Ch. 8, Monocots	16. In class keying Monocots
Th Mar 30		17. Campus walk from Bio bldg—Family ID
T Apr 4	Off campus field trip to Tosohatchee WMA—So	
Th Apr 6	Ch. 8, Eudicots: Tricolpates	18. In class keying Tricolpates
T Apr 11	Exam 3	19. Campus walk from Bio bldg—Family ID Quiz
Th Apr 13	Ch. 8, Eudicots: Malvids Clade	20. In class keying Rosids
T Apr 18	Ch. 8, Eudicots: Superasterid Clade	21. In class keying Asterids
		**Second 20 specimens and collection book due**
Th Apr 20	Review and sum up	21. Return collections
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