## BOT 2710: Practical Plant Taxonomy Fall, 2020

### **Class Location and Time:**

Lecture: Tuesday & Thursday 2<sup>nd</sup> Period (8:30-9:20am), online via Zoom

Laboratory: Thurs. periods 6-8, 10-E1 and Friday periods 2-4, 6-8. Bartram/Carr Hall rooms BARTRAM B011, CARR B014 & CARR B020

## Instructor:

Dr. Lucas C. Majure Curator, University of Florida Herbarium (FLAS), Florida Museum of Natural History 789 Dickinson Hall Office phone: 352-273-2102 Email: <u>Imajure@floridamuseum.ufl.edu</u> Office Hours: By appointment

## **Teaching Assistants:**

Yuley Encarnación (yuleyencarnacion@ufl.edu) Thomas Murphy (tmurphy1@ufl.edu) Jessie Pelosi (jessiepelosi@ufl.edu) Lindsey Riibe (la.riibe@ufl.edu) Bethany Zumwalde (bzumwalde@ufl.edu)

**Course Website:** Course materials and related information will be posted on the course E-Learning (Canvas) website at http://elearning.ufl.edu/. You are responsible for all announcements made in class and/or posted on the course website for this course. Log in with your gatorlink userID and password.

**Required equipment:** Two dissecting needles, single-edged razor blades, forceps. A 10X hand lens is optional. Notebook for required drawings.

#### **Textbooks:**

- **Required:** Judd et al. (2015) *Plant Systematics: A phylogenetic approach, Fourth Edition*. Sinauer Associates. The 3<sup>rd</sup> Edition is also alright.
- **Recommended:** Castner, J. 2004. *Photographic Atlas of Botany*. We will discuss the best way to obtain this publication during our first class.
- **Optional:** Harris, J. G. and M. W. Harris. 2001. *Plant Identification Terminology: An Illustrated Glossary.* Spring Lake Publ.

#### Grading (Based on a total of 500 points)

2 Exams (100 pts each) = **200 pts** 1 Lab Practical (**100 pts**) iNaturalist Project (**50 pts**) Lab Quizzes (**60 pts**) Lab Notebook (**50 pts**)

## Keying Exercises (40 pts)

**Optional Extra Credit:** Plant collection of 20 specimens identified to species, dried, pressed and with labels. Consult with your TA regarding appropriate permissions and places to collect.

## Lecture:

Our class sessions will be audio-visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate verbally are agreeing to have their voices recorded.

If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

# Laboratory:

We will have face-to-face lab sessions to accomplish the student learning objectives of this course. In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.

- You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution, and anyone not following these guidelines will be asked to leave the lab. This will result in an unexcused absence from class.
- This course has been assigned a physical classroom with enough capacity to maintain physical distancing (6 feet between individuals) requirements. Please utilize designated seats and maintain appropriate spacing between students. Please do not move desks or stations.
- Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.
- Follow your instructor's guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.
- If you are experiencing COVID-19 symptoms (https://ufhealth.org/covid-19-symptoms), please use the UF Health screening system and follow the instructions on whether you are able to attend class. Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms (https://coronavirus.ufhealth.org/screen-test-protect/).
- Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work. Find more information in the university attendance policies (https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/).

# **UF Counseling Services**

Resources are available on-campus for students having personal problems or lacking clear career and academic goals. These resources include:

- UF Counseling & Wellness Center, 3190 Radio Rd, 392-1575, psychological and psychiatric services.
- Career Resource Center, Reitz Union, 392-1601, career and job search services. Many students experience test anxiety and other stress related problems. "A Self Help Guide for Students" is available through the Counseling Center (301 Peabody Hall, 392-1575) and at their web site: http://www.counsel.ufl.edu/.

## Accommodation for Students with Disabilities

Students who will require a classroom accommodation for a disability must contact the Dean of Students Office of Disability Resources, in Peabody 202 (phone: 352-392-1261). Please see the University of Florida Disability Resources website for more information at: http:// www.dso.ufl.edu/drp/services/. It is the policy of the University of Florida that the student, not the instructor, is responsible for arranging accommodations when needed. Once notification is complete, the Dean of Students Office of Disability Resources will work with the instructor to accommodate the student.

## Schedule of Lecture and Laboratory Topics

<b>Date</b> September 1 September 3 Lab 1	<b>Topic</b> Introduction to Plant Systematics (Ch. 1) Nomenclature, classification, principles of systematics (Chs. 2-3; Appendix 1) Herbarium Tour (Virtual)	
September 8	Phylogenetics, molecular systematics (Ch. 2)	
September 10	Species, speciation, polyploidy (Ch. 5)	
Lab 2	Field techniques, plant identification (Appendix 2), iNaturalist Project intro	
September 15	Overview of Green Plants (Viridiplantae) (Ch. 6)	
September 17	Vegetative morphology (Ch. 4)	
Lab 3	Vegetative characters (Ch. 4), use and construction of keys (Appendix 2)	
September 22	Lycophytes, Ferns (Ch.7)	
September 24	Lycophytes, Ferns (continued) (Ch.7)	
Lab 4	Lycophytes, Ferns (Ch.7)	
September 29	Gymnosperms: Cycads, Gingko, Gnetales (Ch.7)	
October 1	Gymnosperms (continued): Coniferales (Ch.7)	
Lab 5	Gymnosperms (Ch.7) and keying exercise	
October 6	<b>Test 1</b> (through Gymnosperms)	
October 8	Intro to the Angiosperms (Ch. 8)	

Lab 6	Floral and fruit morphology (Ch. 4)		
October 13	Angiosperms (ANA grade): Amborellaceae, Nymphaeales, Austrobaileyales (Ch. 8- <i>for the rest of the semester</i> )		
October 15	Angiosperms (Magnoliids): Magnoliales, Laurales, Piperales		
Lab 7	ANA grade + Magnoliids, <b>Lab Quiz</b> -through Gymnosperms		
October 20	Angiosperms (Monocots): Alismatales, Liliales, Asparagales, Dioscoreales		
October 22	Angiosperms (Monocots): Arecales, Commelinales, Poales, Zingiberales		
Lab 8	Monocots and keying exercise		
October 27	Angiosperms (Eudicots): Ranunculales, Proteales, Saxifragales, Vitales		
October 29	Angiosperms (Eudicots): Rosids, cont'd – Malphigiales, Cucurbitales		
Lab 9	Ranunculales, and intro to Superrosids, <b>Lab Quiz</b> -through Monocots		
November 3	Angiosperms (Eudicots): Oxalidales, Fabales, Rosales		
November 5	Angiosperms (Eudictos): Fagales, Myrtales		
Lab 10	Rosids cont'd., Keying exercise		
November 10	Angiosperms (Eudictos): Brassicales, Malvales		
November 12	Angiosperms (Eudictos): Sapindales		
Lab 11	Rosids cont'd., Keying exercise		
November 17	Angiosperms (Eudictos): Superasterids – Caryophyllales, Santalales		
November 19	Angiosperms (Eudictos): Asterids – Cornales, Ericales		
Lab 12	Intro to Superasterids, <b>Lab Quiz</b> – through Rosids		
November 24	Angiosperms (Eudictos): Solanales, Gentianales, Boraginaceae s.l.		
November 26	No Class - Thanksgiving		
No Lab	No Class - Thanksgiving		
December 1	Angiosperms (Eudictos): Lamiales, Aquifoliales		
December 3	Angiosperms (Eudictos): Apiales, Dipsacales, Asterales		
Lab 13	<b>Lab Practical - online</b>		
December 8	Angiosperms (Eudictos): Asterales, cont'd.		
December 10	Reading day		
December 15	Final Exam		
Laboratory Sections			
R Period 6-8	(12:50-3:50pm)	Bartram B011, Carr B014, B020	
R Period 10-E1	(5:10-8:10pm)	Bartram B011, Carr B014, B020	
F Period 2-4	(8:30-11:30am)	Bartram B011, Carr B014, B020	
F Period 6-8	(12:50-3:50pm)	Bartram B011, Carr B014, B020	