

BOT 2710C: Practical Plant Taxonomy
Fall, 2022

Class Location and Time:

Lecture: Tuesdays & Thursdays, 2nd Period (8:30-9:20am), Bartram-Carr Hall (Bartram 211)

Laboratory: Thurs. periods 6-8, 10-E1 and Friday periods 2-4, 6-8. Rolfs Hall 105

Instructor:

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

Laboratory Instructors:

Yuley Encarnación (yuleyencarnacion@ufl.edu)
Thomas Murphy (tmurphy1@ufl.edu)

Herbarium: 379 Dickinson Hall. The University of Florida Herbarium non-circulating library has numerous volumes on plant systematics and identification and is open from 9 am – 5 pm. Access can be requested by contacting the collections manager Alan Franck (francka@floridamuseum.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. Other necessary equipment will be given in lab.

Textbooks:

- **Required:** Judd et al. (2015) *Plant Systematics: A phylogenetic approach, Fourth Edition*. Sinauer Associates. The 3rd Edition is also alright.
- **Required:** Lab manual, available as pdf on course website.
- **Recommended:** Castner, J. 2004. *Photographic Atlas of Botany*.
- **Optional:** Harris, J. G. and M. W. Harris. 2001. *Plant Identification Terminology: An Illustrated Glossary*. Spring Lake Publ.

Grading (Based on a total of 600 points)

2 Exams (100 pts each) = **200 pts**
1 Lab Practical (**100 pts**)
Lab Quizzes (10 pts each) = **50 pts**
Lab Notebook – due weekly (**50 pts**)
Keying Exercises (**50 pts**)
iNaturalist Project – UF Natural Areas (**50 pts**)
Final Exam (**100 pts**)

Optional Extra Credit 1 (15 pts): Plant collection of 15 specimens identified to species, dried, pressed and with labels. Consult with your TA regarding appropriate permissions and places to collect. These are due on **Monday, Nov. 28.**

Optional Extra Credit 2 (15 pts): Herbarium specimen transcription. Students will be given the opportunity to transcribe herbarium specimen labels based on imaged specimens through the Symbiota Portal. A minimum of 15 transcribed specimens would be needed to receive full credit. These are due **Monday, Dec. 7.**

Grading Scale:	90% or above	A, A-
	80-89%	B+, B, B-
	70-79%	C+, C, C-
	60-69%	D+, D
	59% & below	E, failing

Letter grades will be assigned following assessment of the distribution of scores, so these values are approximate. Note that a C- will not be a qualifying grade for critical tracking courses. In order to graduate, students must have an overall GPA and an upper-division GPA of 2.0 or better (C or better). A C- average is equivalent to a GPA of 1.67, and it therefore does not satisfy this graduation requirement. For more information on grades and grading policies, please visit:

<http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>.

Lecture: Our class sessions will be held in Bartram Hall 211 on Tuesday and Thursday mornings 8:30-9:20.

Laboratory: We will have in-person laboratories in Rolfs Hall 105 on Thursday and Fridays.

- 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/>.

Honesty Policy:

- All students registered at the University of Florida have agreed to comply with the following statement: "I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."
- In addition, on all work submitted for credit the following pledge is either required or implied: "On my honor I have neither given nor received unauthorized aid in doing this assignment."
- If you witness any instances of academic dishonesty in this class, please notify the instructor or contact the Student Honor Court (392-1631) or Cheating Hotline (392-6999). For additional information on Academic Honesty, please refer to the University of Florida Academic Honesty Guidelines at: <http://www.dso.ufl.edu/judicial/procedures/academicguide.html>.

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.

COVID-19 policy

In response to COVID-19, the following recommendations are in place to maintain your learning environment, to enhance the safety of our in-classroom interactions, and to further the health and safety of ourselves, our neighbors, and our loved ones.

- If you are not vaccinated, get vaccinated. Vaccines are readily available and have been demonstrated to be safe and effective against the COVID-19 virus. Visit one.ufl.edu for screening / testing and vaccination opportunities.

- If you are sick, stay home. Please call your primary care provider if you are ill and need immediate care or the UF Student Health Care Center at 352-392-1161 to be evaluated.
- As with any excused absence, you will be given a reasonable amount of time to make up missed work. But any absences, even for COVID-19, require a doctor's note to be excused.

Schedule of Lecture and Laboratory Topics

Date	Topic
August 25 Lab 1	Introduction to Plant Systematics (Ch. 1) Field methods, overview of herbaria, use and construction of keys (Appendix 2)
August 30	Nomenclature, classification, principles of systematics (Ch. 2-3; Appendix 1)
September 1 Lab 2	Phylogenetics, molecular systematics (Ch. 2) Herbarium Tour (Dickinson Hall)
September 6 September 8 Lab 3	Species, speciation, polyploidy (Ch. 5) Vegetative morphology (Ch. 4) Vegetative characters (Ch. 4), phylogeny reconstruction.
September 13 September 15 Lab 4	Overview of Green Plants (Viridiplantae) (Ch. 6) Lycophytes, Ferns (Ch.7) Lycophytes, Ferns (Ch.7), Lab Quiz – vegetative characters
September 20 September 22 Lab 5	Gymnosperms: Cycadales, <i>Ginkgo</i> , Gnetales (Ch.7) Gymnosperms (continued): Coniferales (Ch.7) Gymnosperms (Ch.7) and keying exercise
September 27 September 29 Lab 6	Test 1 (through Gymnosperms) Intro to the Angiosperms (Ch. 8) Floral and fruit morphology (Ch. 4), Lab Quiz -through Gymnosperms
October 4	Angiosperms (ANA grade): Amborellaceae, Nymphaeales, Austrobaileyales (Ch. 8- <i>for the rest of the semester</i>)
October 6 Lab 7	Angiosperms - Magnoliids (Magnoliales, Laurales, Piperales) No Lab, homecoming
October 11	Angiosperms (Monocots): Alismatales, Liliales, Asparagales, Dioscoreales

October 13	Angiosperms (Monocots): Arecales, Commelinales, Poales, Zingiberales
Lab 8	ANA grade + Magnoliids, Monocots
October 18	Angiosperms (Eudicots): Ranunculales, Proteales, Saxifragales, Vitales, Oxalidales
October 20	Angiosperms (Eudicots): Rosids, cont'd – Malphigiales, Cucurbitales
Lab 9	Ranunculales, and intro to Superrosids, Lab Quiz -through Monocots
October 25	Angiosperms (Eudicots): Rosids, cont'd - Fabales, Rosales, Fagales, Myrtales
October 27	Angiosperms (Eudictos): Rosids, cont'd - Brassicales, Malvales, Sapindales
Lab 10	Rosids cont'd., Keying exercise
November 1	Test 2
November 3	Angiosperms (Eudictos): Superasterids – Caryophyllales, Santalales, Cornales, Ericales
Lab 11	Intro to Superasterids, Lab Quiz – through Sapindales
November 8	Angiosperms (Eudictos): Asterids – Solanales, Gentianales, Aquifoliales
November 10	Angiosperms (Eudictos): Asterids – Lamiales
Lab 12	Asterids – through Lamiales
November 15	Angiosperms (Eudictos): Boraginaceae s.l., Dipsacales
November 17	Angiosperms (Eudictos): Apiales, Asterales
Lab 13	Asterids through Asterales; Lab Quiz – through Lamiales
November 22	<i>No Class - Thanksgiving</i>
November 26	<i>No Class - Thanksgiving</i>
No Lab	<i>No Class - Thanksgiving</i>
November 29	Introduction to herbarium specimen transcription
December 1	In-Class Review - Bartram-Carr Woods & McCarty Woods
Lab 13	Lab Practical
December 8	Reading day
December 10	Final Exam

Laboratory Sections

R Period 6-8	(12:50-3:50pm)	Rolfs 105
R Period 10-E1	(5:10-8:10pm)	Rolfs 105

F Period 2-4	(8:30-11:30am)	Rolfs 105
F Period 6-8	(12:50-3:50pm)	Rolfs 105

Optional Field Trips (All on UF Campus)

October 1, Natural Areas Teaching Lab – 9:00 am

November 12, Harmonic Woods and Lake Alice Conservation Area – 9:00 am