

BOT 2710C: Practical Plant Taxonomy
Fall 2025

Class Location and Time:

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

Laboratory: Thurs. periods 6-8 (12:50-3:50pm), 10-E1 (5:10-8:10pm) and Friday periods 2-4 (8:30-11:30am), 6-8 (12:50-3:50pm). Rolfs Hall 105

Instructors:

Dr. Lucas C. Majure
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Florida Museum of Natural History
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Laboratory Instructors:

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Lab Manager

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Course Description: Introduces plant taxonomy including principles of systematic botany, nomenclature and classification, museum collections, but emphasizing

identification of vascular plant families. Students will be able to identify the common ferns, fern allies, gymnosperms and flowering plant families around north Florida.

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: A 10X hand lens is optional. Notebook for required drawings. Other necessary equipment will be provided in lab.

Textbooks:

- **Required:** Judd et al. (2015) *Plant Systematics: A phylogenetic approach, Fourth Edition*. Sinauer Associates. The 3rd Edition is also acceptable.
- **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.

This course complies with all UF academic policies. For information on those policies and for resources for students, please see this link: <https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/>

Grading (Based on a total of 600 points):

2 Exams (100 pts each) = **200 pts**
1 Lab Practical = **100 pts**
5 Lab Quizzes (10 pts each) = **50 pts**
Lab Notebook – due weekly = **50 pts**
5 Keying Exercises (10 pts each) = **50 pts**
iNaturalist Project – UF Natural Areas – due Nov. 21 = **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 **Tuesday, Nov. 18**.

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 **Tuesday, Dec. 2**.

Optional Extra Credit 3 (5 pts for any one event attended): McCarty Woods Restoration Event (August 23 -8:30-10 am, other dates TBD). There will be multiple events this fall, and students can receive extra credit for attending any one of those events.

Grade curves and extra credit:

At the instructors' sole discretion, a curve MAY be applied to grades for exams. There is no curve for assignments, or final course scores. DO NOT request special treatment, extra, extra credit, grade bumps, etc., at the end of the course. Emails making such requests will be ignored.

Grading Scale:

Point Range (%)	Letter Grade
≥ 90.00	A
≥ 86.66	A–
≥ 83.33	B+
≥ 80.00	B
≥ 76.66	B–
≥ 73.33	C+
≥ 70	C
≥ 66.66	C–
≥ 63.33	D+
≥ 60	D
≥ 56.66	D–
< 56.66	E

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.

- We understand that absences happen, but if you make this a habit, you will perform poorly in this class. All lab sessions are required. If you know in advance that you are unable to attend your lab section for an excused absence (e.g. conference, religious holiday), please contact your TA well in advance to see if it might be possible to attend one of the other lab sections. This is at the discretion of the TA and may be limited by room capacity or other considerations. On days of the lab practicals, late arrivals may be denied access at the discretion of the TA.

Schedule of Lecture and Laboratory Topics

Date	Topic
August 21 Lab 1	Introduction to Plant Systematics (Ch. 1) - LCM Field methods, overview of herbaria, use and construction of keys (Appendix 2)
August 26	Nomenclature, classification, principles of systematics - LCM (Ch. 2-3; Appendix 1)
August 28 Lab 2	Phylogenetics, molecular systematics (Ch. 2) - LCM Herbarium Tour (Dickinson Hall)
September 2 September 4 Lab 3	Species, speciation, polyploidy (Ch. 5) - LCM Vegetative morphology (Ch. 4) - LCM Vegetative characters (Ch. 4), phylogeny reconstruction.
September 9 September 11 Lab 4	Overview of Green Plants (Viridiplantae) (Ch. 6) - ND Lycophytes, Ferns (Ch.7) - ND Lycophytes, Ferns (Ch.7), Lab Quiz 1 – vegetative characters
September 16 September 18 Lab 5	Gymnosperms: Cycadales, <i>Ginkgo</i> , Gnetales (Ch.7) - ND Gymnosperms (continued): Coniferales (Ch.7) - ND Gymnosperms (Ch.7) and Keying exercise, Lab Quiz 2 – Lycophytes, Ferns
September 23 September 25 Lab 6	Test 1 (through Gymnosperms) - ND Intro to the Angiosperms (Ch. 8) - ND Angiosperm floral and fruit morphology lab (keying exercise – fruit)
September 30	Angiosperms (ANA grade): Amborellaceae, Nymphaeales, Austrobaileyales (Ch. 8- <i>for the rest of the semester</i>) Angiosperms - Magnoliids (Magnoliales, Laurales, Piperales) - LCM
October 2 Lab 7	Angiosperms- Magnoliids continued, Laurales, Piperales (Monocots): Alismatales, Liliales, Asparagales, Dioscoreales - LCM ANA Grade, Magnoliids, Lab Quiz 3 – Gymnosperms, keying exercise.
October 7	Angiosperms (Monocots): Arecales, Commelinales, Poales, Zingiberales – LCM, ND
October 9 Lab 8	Angiosperms - Monocots, continued; (Eudicots): Ranunculales, Proteales, Saxifragales, Vitales, Oxalidales - LCM Monocots, Keying exercise.

October 14	Angiosperms (Eudicots): Rosids, cont'd – Malphigiales, Cucurbitales - LCM
October 16	Angiosperms (Eudicots): Rosids, cont'd - Fabales, Rosales, Fagales, Myrtales – LCM, ND
Lab 9	No Lab, homecoming – homework - iNaturalist
October 21	Angiosperms (Eudicots): Rosids, cont'd - Brassicales, Malvales, Sapindales - LCM
October 23	Angiosperms (Eudicots): Superasterids – Caryophyllales, Santalales, Cornales, Ericales – LCM, ND
Lab 10	Rosids 1; Lab Quiz 4 – ANA Grade, Magnoliids, Monocots
October 28	Test 2 (Angiosperms through the Monocots) - LCM
October 30	Angiosperms (Eudicots): Asterids – Solanales, Gentianales, Aquifoliales - LCM
Lab 11	Rosids 2: Lab Quiz 5 – through Fabaceae
November 4	Angiosperms (Eudicots): Asterids – Lamiales - LCM
November 6	Angiosperms (Eudicots): Boraginaceae s.l., Dipsacales - LCM
Lab 12	Superasterids through Ericales, Keying exercise.
November 11	Holiday - Veterans Day
November 13	Angiosperms (Eudicots): Apiales, Asterales - ND
Lab 13	Solanales, Gentianales, Lamiales, Boraginaceae s.l., Apiales, Asterales
November 18	Introduction to herbarium specimen transcription - LCM
November 20	In-Class Review - Bartram-Carr Woods – ALL
Lab 14	Lab Practical - iNaturalist Observations Due
November 25	<i>No Class - Thanksgiving</i>
November 27	<i>No Class - Thanksgiving</i>
No Lab	<i>No Class - Thanksgiving</i>
December 2	In-Class Review - McCarty Woods - ALL
December 4	Reading day
December 8	Final Exam 3-5 pm (Bartram 211)

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