

BOT2710 – Practical Plant Taxonomy

Fall 2016, 3 credits

I. Class Meeting Times

Lecture: Tuesday, Thursday	Period 2	8:30–9:20am	Bar 211
Lab: Thursday (Pat)	Periods 6–8	12:30–3:50pm	Rolfs 105
Thursday (Pat)	Periods 10–E1	5:10–8:10pm	Rolfs 105
Friday (Greg)	Periods 2–4	8:30–11:30am	Rolfs 105
Friday (Greg)	Periods 6–8	12:50–3:50pm	Rolfs 105

II. Instructors

Emily Sessa, Professor

Department of Biology
Office: Bartram 521A
Office Hours: By appointment
Phone: 352-392-1098
Email: emilysessa@ufl.edu

Patrick Milligan & Greg Stull, TAs

Office Hours: By appointment
Pat's Email: pmilligan@ufl.edu
Pat's Office: 411 Carr Hall
Greg's Email: gwstull@gmail.com
Greg's Office: 210 Dickinson Hall

Ann Wagner, Lab Coordinator

Email: amwagner@ufl.edu

Jeffrey Hubbard, Greenhouse Manager

Email: raybot66@ufl.edu

III. Course Communications

Course materials and related information will be posted on the course E-Learning (Canvas) website at <http://lss.at.ufl.edu>. You are responsible for all announcements made in class and/or posted on the course website for this class.

IV. Course Description & Learning Objectives

Introduction to plant taxonomy including principles of systematic botany, nomenclature, and classification, and emphasizing identification of major plant families. Students will work with common local ferns, lycophytes, gymnosperms, and flowering plants, with a focus on learning to recognize the major groups of plants anywhere in the world.

- Understand principles of plant systematics, nomenclature, and classification.
- Become proficient in plant identification skills, including the use of technical keys.
- Learn to recognize major plant families in the field.
- Learn to use and understand phylogenetic trees.
- Gain a basic understanding of botanical vocabulary and terminology.
- Learn about major themes and trends in plant evolution.

V. Herbarium & Greenhouses

379 Dickinson Hall. The herbarium library has useful books on plant systematics and identification and is open daily from 9am-5pm (closed during lunch). Request admittance the front desk of Dickinson. The greenhouses are located behind and around Bartram-Carr. Contact Jeff Hubbard (email provided above) for greenhouse access. They are normally open 9-4 on weekdays.

VI. Required Equipment & Texts

Dissecting kit (including dissecting needles, single-edged razor blades, and forceps). 10x hand lens and colored pencils are optional, but may prove helpful.

(1) Judd et al. (2015) *Plant Systematics: A phylogenetic approach, Fourth Edition*. Sinauer.

(2) Laboratory Manual, available from Target Copy.

(3) Castner, J. (2004) *Photographic Atlas of Botany*. (Obtained through lab)

(4) **Optional:** Harris & Harris (2004) *Plant Identification Terminology*. Spring Lake.

VII. Assessments and Grading

Your grade is calculated out of a total of 500 points, as follows:

	Points		Points		Points
Exams (80 pts each)	160	A	450–500	C	350–369
Lecture attendance	100	A-	435–449	C-	335–349
Lab practical	80	B+	420–434	D+	320–334
Lab quizzes (10 pts each)	100	B	400–419	D	300–319
Lab presentation	20	B-	385–399	D–	285–299
Two projects (20 pts each)	40	C+	370–384	E	284 and below
Total	500				

*Note that a “C-” or lower are not qualifying grades 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). Note: a C- average is equivalent to a GPA of 1.67, and therefore, it 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>

VIII. UF Counseling Services

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

- UF Counseling & Wellness Center, 3190 Radio Rd, 392-1575, provides psychological and psychiatric services, and can assist with stress & anxiety issues (<http://www.counsel.ufl.edu/>)
- 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/>.
- Career Resource Center, Reitz Union, 392-1601, career and job search services.

IX. Attendance and Conduct in Class

Students are expected to be on time for class, and attendance in all class periods is mandatory. Please contact the instructor at least a week in advance if you must be absent. **This includes absences for religious or athletic reasons.**

The policies for allowable absences and make-up work follow the university attendance policies: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>. The student is responsible for scheduling any make-up work with the instructor.

Only approved electronic devices may be used in class. Approved electronic devices are laptop computers (when used to take notes or otherwise participate in classroom activities) and voice recording devices. Unapproved electronic devices include cell phones, MP3 players, etc.

X. Accommodations for Students with Disabilities

Students who require accommodations for a disability must contact the Dean of Students Office of Disability Resources, in Peabody 202 (phone: 352-392-1261). Please see the DRC website (<http://www.dso.ufl.edu/drc/>) for more information. The student should provide documentation of accommodation requirement **by the second week of classes**. No accommodations are available to students who lack this documentation. 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.

XI. 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>.

XII. Lecture & Lab Schedule (subject to change)

Week	Lec #	Date	Topic	Readings
1	1	23-Aug	• Introduction to systematics & taxonomy	ch. 1
	2	25-Aug	• Phylogenetics, molecular systematics	Baum paper, ch. 2
	Lab 1		Lab: Herbarium tour, field techniques, plant ID	
2	3	20-Aug	• Nomenclature, classification, species	ch. 2, 37-41; ch. 3, 5
	—	1-Sep	NO LECTURE TODAY	
	Lab 2		Lab: Vegetative characters, keying	
3	4	6-Sep	• Intro to Green Plants (Viridiplantae)	ch. 6, 158-176
	5	8-Sep	• Lycophytes & Ferns	ch. 7, 194-216
	Lab 3		Lab: Lycophytes, ferns (quiz 1; keying project due)	
4	6	13-Sep	• Gymnosperms I	ch. 7, 216-222, 230-232
	7	15-Sep	• Gymnosperms II	ch. 7, 222-230
	Lab 4		Lab: Gymnosperms (quiz 2)	
5	8	20-Sep	• Flowers, fruits, inflorescences	ch. 4, 73-79, 85-94
	9	22-Sep	• Angiosperm overview, pollination syndromes	ch. 8, 237-244; ch. 4, 79-85
	Lab 5		Lab: Flowers, fruits, inflorescences (quiz 3)	
6	10	27-Sep	• ANA grade	ch. 8, 244-299
	11	29-Sep	• Magnoliids	ch. 8, 250-262
	Lab 6		Lab: ANA, Magnoliids (quiz 4)	
7	12	4-Oct	• Monocots I	ch. 8, 263-276
	13	6-Oct	• Monocots II	ch. 8, 276-291
	—		NO LABS THIS WEEK - HOMECOMING	
8	14	11-Oct	• Monocots III	ch. 8, 293-296, 300-317
	15	13-Oct	• Ranunculales, Saxifragales, Vitales	ch. 8, 323-343
	Lab 7		Lab: Monocots (quiz 5)	

9	16	18-Oct	• Rosids I: Malpighiales, Fabales, Cucurbitales	ch. 8, 348-375; 393-397
		20-Oct	EXAM I (lectures 1-15)	
	Lab 8		Lab: Ranunculales, Vitales, Malpighiales, Fabales, Cucurbitales (quiz 6)	
10	17	25-Oct	• Rosids II: Fagales	ch. 8, 397-409
	18	27-Oct	• Rosids III: Rosales	ch. 8, 375-393
	Lab 9		Lab: Fagales, Rosales (quiz 7)	
11	19	1-Nov	• Rosids IV: Myrtales, Brassicales	ch. 8, 409-424
	20	3-Nov	• Rosids V: Sapindales, Malvales	ch. 8, 424-442
	Lab 10		Lab: Myrtales, Brassicales, Sapindales, Malvales (quiz 8; pollination project due)	
12	21	8-Nov	• Santalales, Caryophyllales	ch. 8, 442-465
	22	10-Nov	• Caryophyllales, cont.	ch. 8, 442-461
	—		NO LABS THIS WEEK - VETERAN'S DAY	
13	23	15-Nov	• Asterids I: Cornales, Ericales	ch. 8, 465-486
	24	17-Nov	• Asterids II: Gentianales, Solanales	ch. 8, 487-503
	Lab 11		Lab: Santalales, Caryophyllales, Ericales, Gentianales, Solanales (quiz 9)	
14	25	22-Nov	• Asterids III: Lamiales	ch. 8, 503-523
	—	24-Nov	NO LECTURE - THANKSGIVING	
	—		NO LABS - THANKSGIVING	
15	26	29-Nov	• Asterids IV: Apiales, Aquifoliales, Dipsacales	ch. 8, 523-537
	27	1-Dec	• Asterids V: Asterales	ch. 8, 537-549
	Lab 12		Lab: Lamiales, Apiales, Aquifoliales, Asterales (quiz 10)	
16	28	6-Dec	• Carnivorous plants	no reading
		15-Dec	Final Exam (all lectures) and Lab Practical	