

**Local Flora - BOT 3151C - Fall 2015**  
**Meeting time: Fridays, periods 3 – 8 (9:35 am – 3:50 pm)**  
**3 credits**

<b>Instructors:</b>	<b>Dr. Christine Davis</b>	<b>Rebecca Koll</b>
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<b>Office Hours:</b>	before/after class and by appointment	By appointment

**Description:**

Local flora is a fun, field intensive course in which you'll be introduced to local Florida plant communities and ecosystems and learn to identify the plants within them. Get ready for immersion! The course has no official academic prerequisites, so students may come to the class having had no previous botany background. Local flora requires students to master some basic botanical concepts in order to do well. If you are a beginner, don't worry! All the botany you need to know will be taught as we go along. If you are more advanced, you will still find the course challenging. We make every effort to make the course valuable to everyone.

**Learning outcomes: by the end of this course, you will be able to:**

- 1) Identify ~150 – 180 species of local plants using morphological and habitat clues.
- 2) Identify unknown plants using a dichotomous key along with text and web resources.
- 3) Develop a systematic approach to identifying an unknown plant using knowledge about plant diversity, habitat, and vegetative and reproductive morphology.
- 4) Describe connections between plant species and the local ecosystems in which they are found.
- 5) Compare and contrast fire regime and hydroperiod of major local ecosystems.
- 6) Distinguish between these terms: native, endemic, introduced, and invasive.
- 7) Outline the geographical, geological, and historical influences on local plant communities.

**Required field quiz notebook: available at Target Copy (~\$5)**

**Required equipment:**

**A 10x or 15x hand lens (available at UF Bookstore or online sources)**

**A pair of pruning shears (available at hardware and gardening stores)**

**Optional recommended books on these topics:**

Myers, R.L., and J.J. Ewel, eds. 1990. Ecosystems of Florida. University of Central Florida Press, Orlando.

Wunderlin, R. P. and Hansen, B.F. 2011. Guide to the Vascular Plants of Florida, 3rd Edition. University Press of Florida, Gainesville.

**Your course grades will be determined based on:**

1) 6 regular plant quizzes @ 60 points each	360 points (~47 %)	Grading scale:
2) 4 tests based on other material @ 50 points each	200 (~27 %)	≥ 90 – 100 = A
3) 2 Key exercises @ 30 points each	60 (~8 %)	≥ 80 – < 90 = B
4) 1 Final plant quiz @ 120 points	<u>120 (~ 16 %)</u>	≥ 70 – < 80 = C
TOTAL	740	≥ 60 – < 70 = D
		< 60 = E

#### Description of the components of your grade:

- 1) Plant quizzes.** These quizzes test your knowledge of the plant species we've learned on field trips. You'll be expected to identify the species using freshly cut specimens or living specimens in the field. On these quizzes, you will also be asked a few questions to test whether you've completed the assigned readings.  
*Each plant quiz is cumulative. Only Latin binomial plant names will be accepted: Correct genus name = 2 pts. Correct species (genus name plus specific epithet) = 3pts. No credit will be given for common names.*
- 2) Tests.** The tests are on material presented in lecture and on your reading assignments. The first three tests are closed notes. The fourth test will be comprehensive for all material covered on previous tests, plus the new reading material since the third test, and will include a portion on keying. It is **open notes**.
- 3) Key exercises.** During class time, we'll use several sources to identify unknown plants, and build our own keys to plants.
- 4) Final plant quiz.** This is the cumulative quiz testing your identification skills for all plant species learned in the course.

#### Field trips:

We will take seven field trips to visit many different types of plant communities. We will be studying the local plant life right in the places where the plants grow, and you will be learning basic techniques of field botany. On these field trips, you'll collect and learn to identify the plants upon which you'll be quizzed. You'll also get a chance to look at the plant communities we've been learning about, and have a lot of fun seeing other creatures, too.

*Bring to the field trips: clippers, bags for collecting plants, clipboard or notebook, water to drink, and snacks/lunch. (Cameras can be very helpful, too.)*

*Dress appropriately. Wear long pants and old shoes. Sandals are not recommended. Be prepared for normal Florida conditions (i.e. heat, sun, mosquitoes, poison ivy, rattlesnakes, ticks, rain, alligators, etc.) and expect sometimes to get your feet wet.*

*Field trips will not be cancelled due to weather.*

*Specimen collection* – On our field trips, each student will be encouraged to collect a small specimen of each plant species we cover for the course. You will be shown how to press and dry your specimens so that they will remain in good condition for the duration of the semester. These specimens will be your most important study aid. You should bring clippers or scissors and a bag for specimens (a plastic grocery bag will do) with you on every field trip.

#### Attendance policy:

Attendance is required for success in this course. It is intensive and cumulative – skipping class will leave you with a big chunk of missing information in your notes and collections. Don't miss class.

#### Make up policy:

Field trips **CANNOT** be made up. Quizzes and tests **CANNOT** be made up except for legitimately documented excused absences. You have one free pass on the plant quizzes – only 6 out of 7 will be counted toward your grade, with the lowest quiz score dropped.

#### Academic 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."

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:

<https://catalog.ufl.edu/ugrad/current/advising/info/student-honor-code.aspx>

University grade policies:

For additional important information regarding UF's grade policies, please see:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Students with disabilities:

Students requesting classroom accommodation must first register with the Dean of Students Office. This office will provide documentation to the student, who must then provide this documentation to the instructor when requesting accommodation.

Some Additional Resources (we'll be using many of these during the course):

<http://www.plantatlas.usf.edu/> - Florida Plant Atlas - a good resource for photographs and range maps of Florida plants.

<http://www.fnai.org/> - Florida Native Areas Inventory - a great source of data, maps and info on plant communities, rare species and conservation lands in Florida.

<http://www.fs.fed.us/database/feis/plants/index.html> - USDA Forest Service Fire Effects Data - lots of general information about fire effects on species we cover in class. Easy to look up.

<http://www.flmnh.ufl.edu/natsci/herbarium/> - University of Florida Herbarium - all kinds of info on Florida plants and collecting, including a database of images and specimens stored in the herbarium.

<http://www.virtualherbarium.org/> - Fairchild Tropical Garden Herbarium Virtual Herbarium.

\*Duncan, W.H., and Duncan, M.B. 1988. *Trees of the Southeastern United States*. University of Georgia Press, Athens, GA.

\*Godfrey, R.K..1988. *Trees, Shrubs, and Woody Vines of Northern Florida and Adjacent Georgia and Alabama*. University of Georgia Press, Athens, GA.

\*Godfrey, R.K. and J.W. Wooten. 1979. *Aquatic and Wetland Plants of Southeastern United States: Monocotyledons*. University of Georgia Press, Athens, GA.

\*Godfrey, R.K. and J.W. Wooten. 1981. *Aquatic and Wetland Plants of Southeastern United States: Dicotyledons*. University of Georgia Press, Athens, GA.

\*Harris, J.G., and Harris, M.W. 2001. *Plant Identification Terminology: an Illustrated Glossary*. Spring Lake Publishing, Spring Lake, UT.

\*Taylor, W. K. 1998. *Florida Wildflowers in their Natural Communities*. University Press of Florida, Gainesville.

\*Tobe, J.D. et al. 1998. *Florida Wetland Plants: An Identification Manual*. Fla. Dept. of Enviro. Protection, Tallahassee.

**Tentative schedule – subject to change. We will notify you as soon as possible regarding any modifications to this schedule.**

<b>Meeting</b>	<b>Agenda</b>	<b>Meeting place</b>	<b>Homework assigned:</b>
Aug. 28	<b>Introduction and syllabus</b> <b>Lecture 1:</b> Plant diversity and taxonomy <b>Laboratory exercise:</b> Vegetative characters <b>Practice field trip</b> on campus and plant press demo	Rolfs 315	
Sept. 4	<b>Lecture 2:</b> Determining factors of local flora, endemism, and phylogenetics	Rolfs 315	Study for Test 1 Reading material – pine dominated communities
Sept. 11	<b>Test 1: Lectures 1 and 2 and lab</b> <b>Field trip 1:</b> Morningside Nature Center	Behind Bartram-Carr	Study for Quiz 1 on trip 1
Sept. 18	<b>Quiz 1</b> <b>Field trip 2:</b> Cedar Key Scrub	Behind Bartram-Carr	Study for Quiz 2 on trips 1 – 2 Reading material – hardwood dominated communities
Sept. 25	<b>Quiz 2</b> <b>Field trip 3:</b> Alfred J. Ring Park	Behind Bartram-Carr	Study for Quiz 3 on trips 1 – 3
Oct. 2	<b>Quiz 3</b> <b>Field trip 4:</b> San Felasco Hammock Preserve State Park	Behind Bartram-Carr	Study for Test 2 on pine and hardwood dominated communities Study for Quiz 4 on trips 1 – 4
Oct. 9	<b>Test 2:</b> pine and hardwood dominated communities <b>Quiz 4</b> <b>Key exercises 1</b>	Rolfs 315	Reading material – coastal communities
Oct. 16	<b>Field trip 5:</b> Sweetwater Wetlands Park	Behind Bartram-Carr	Study for Quiz 5 on trips 1 – 4
Oct. 23	<b>Quiz 5</b> <b>Field trip 5:</b> Anastasia State Park	Behind Bartram-Carr	Study for Quiz 6 on trips 1 – 5 Reading material – freshwater wetlands
Oct. 30	<b>Quiz 6</b> <b>Field trip 6:</b> Suwannee River		Study for Quiz 7 on trips 1 – 6
Nov. 6	<b>HOMECOMING – no class</b>		
Nov. 13	<b>Quiz 7</b> <b>Field trip 7:</b> Seahorse Key Marine Laboratory	Behind Bartram-Carr	Study for Test 3 on coastal and freshwater wetland communities
Nov. 20	<b>Test 3:</b> coastal and freshwater wetland communities <b>Key exercises 2</b>	Rolfs 315	Study for final quiz on trips 1 – 7 Compile notes for Test 4 on all communities
Nov. 27	<b>THANKSGIVING – no class</b>		
Dec. 4	<b>Final quiz</b> <b>Test 4:</b> all communities, keying (open notes)	Rolfs 315	Have a happy holiday!