S Y L L A B U S

LOCAL FLORA BOT 3151C Summer B 2019 3 credits

Instructors:

Paul Corogin, Ph.D. – pcorogin@ufl.edu – 410 Bartram Hall – Office hours: TBA, and by appointment – (352) 256-8102
Emilie-Kate Tavernier – e.tavernier@ufl.edu – 220 Carr Hall – Office hours: Monday 1pm-4pm or by appointment.

Course Description: Local flora is a field-based biology course that explores the rich biodiversity of plant life in northern Florida. Through a series of field trips, you will be introduced to various plant communities and ecosystems of northern Florida, and you will learn to identify some of the plant species that occur in these habitats. This course has no official academic prerequisites – students do not need any previous botany background. Yet the course does require students to master some basic botanical concepts in order to do well. Beginners need not worry – all the concepts needed for success in this course will be taught as we go along. Advanced students will still find the course challenging. Get ready for immersion!

Course Objectives: By the end of the course, you will be able to: **(1)** Identify (by their Latin botanical names) around 150 plant species, using morphological and habitat clues. **(2)** Correctly recognize selected natural (and disturbed) ecosystems typical of North Florida, along with their characteristic plant communities. **(3)** Compare and contrast important aspects of local ecosystems, such as fire regime and hydroperiod. **(4)** Outline the geographical, geological, and historical influences that have shaped Florida's plant communities. **(5)** Identify unknown plants using a dichotomous key along with text and web resources. **(6)** You will be introduced to basic techniques for specimen collection and curation.

Required Textbook: Wunderlin, R. P. and Hansen, B.F. 2011. ***Guide to the Vascular Plants of Florida, 3rd Edition.*** University Press of Florida, Gainesville. (Available at UF Bookstore)

Required equipment: One 10x (or 15x) hand lens. (Available at UF Bookstore or online sources)

Additional readings: Selected readings will be assigned from Florida Natural Areas Inventory (FNAI): ***Guide to the Natural Communities of Florida, 2010 edition***, downloadable in PDF format from: http://www.fnai.org/naturalcommguide.cfm. ***You will be quizzed on these readings.***

Recommended book: Myers, R.L., and J.J. Ewel, eds. 1990. ***Ecosystems of Florida***. University of Central Florida Press, Orlando. (Available from online sources ~$30) – For a deeper look at Florida's ecosystems.

Schedule: **Wednesdays: Periods 2 – 5 (9:30 AM – 3:15 PM)** – Short field trips, quizzes, key exercises, lectures.
Saturdays: Periods 2 – 5 (9:30 AM – 3:15 PM) – Long field trips, quizzes.

For field trips, we will meet behind Bartram/Carr and travel by van to the location, **leaving promptly**.

- Bring clippers, hand lens, bag for collecting plants, clipboard or notebook, water to drink.
- 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, ticks, rain, etc.) and expect to get your feet wet.
- ***Field trips will not be canceled due to weather.*** * **Field trip attendance is expected** *

WEDNESDAYS: (9:30AM – 3:15 PM)		**SATURDAYS: (9:30 AM – 3:15 PM)**	
July 3 Rolfs 105	**Introduction:** Course intro, Plant diversity and taxonomy, Scientific names. **Lab:** Vegetative characters (outdoors).	**July 6** Rolfs 105	**Lecture:** Flora of Florida: determining factors **Lab:** Floral and fruit characters. Intro to Keying. **Key Exercise 1.**
July 10 Rolfs 105	**Field Trip 1** - Alfred Ring Park. **Demo:** Pressing and drying plant specimens	**July 13**	**Test 1 –** Plant diversity, taxonomy; vegetative, flower, and fruit morphology. **Field Trip 2 –** San Felasco Hammock State Park
July 17 Rolfs 105	**Lecture:** Endemism **Quiz 1** – Trip 1. **Key Exercise 2.** **Field Trip 3 -** UF Campus.	**July 20**	**Quiz 2** – Trips 1-2. **Field Trip 4 –** Cedar Key.
July 24 Rolfs 105	**Lecture:** Intro to Asteraceae and Poaceae. **Quiz 3 -** Trips 1-3. **Key Exercise 3.** **Field Trip 5 -** UF Natural Area Teaching Lab.	**July 27**	**Quiz 4** – Trips 1-4. **Field Trip 6 –** Ocala National Forest.
July 31	**Quiz 5 -** Trips 1-5. **Key Exercise 4.** **Field Trip 7 -** Morningside Nature Center.	**Aug 3**	**Quiz 6** – Trips 1-6. **Field Trip 8 -** Suwannee River.
Aug 7 Rolfs 105	**Final Plant Quiz -** In class. **Test 2 – open notes,** on plant communities and endemism.		

Your final grade will be determined based upon the following components:

			Grading scale:
1) 6 plant quizzes @ 70 points each	**420 points**	**(53% of total)**	**90% – 100% = A**
2) 2 tests covering conceptual material @ 100 points each	**200**	**(25%)**	**80% – 89% = B**
3) 4 key exercises @ 15 points each	**60**	**(7%)**	**70% – 79% = C**
4) 1 final plant quiz @ 120 points	**120**	**(15%)**	**60% – 69% = D**
TOTAL:	**800**	**possible points**	**< 60% = E**

Your final grade will be expressed as a percentage, calculated from the total points you earn, divided by total possible points.

The components of your grade:

1) Plant quizzes will be given in the classroom and in the field. These quizzes will test your ability to correctly identify and name plant species from our field trips, and to place them in the context of their habitat preference and importance to humans. *Quizzes will also include questions from assigned readings*. All quizzes are 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 – Two tests will be given, each worth 100 points. The first test (*closed* notes) covers lecture and lab material from the first week of class. The second test (*open notes*) covers material from lectures and reading assignments on plant communities and endemism.

3) Key Exercises – We will use keys to identify unknown plants in class or in the field.

4) Final plant quiz – Same format as the regular plant quizzes, but slightly longer, covering all the plants from all 8 field trips. This will be held **Wednesday August 7, in class.**

University grade policies – for additional important information regarding UF's grade policies, please see:
https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Makeups – *Field trips can NOT be made up.* Quizzes may be made up only if you miss a quiz for a valid reason (e.g., sickness, accident, death in family, etc.) We will work with you to determine if your reason is valid. A makeup quiz will be given at the end of the semester for those who need it. Key exercises may be made up during class time.

Attendance policy – Attendance is required for success in this course. The course 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.

Students with disabilities - Students requesting classroom accommodation must first register with the Dean of Students Office. That office will provide documentation to the student, who must then provide this documentation to the instructor when requesting accommodation.
http://biostat.ufl.edu/resources/student-resources/uf-student-support-links/accommodations-for-students-with-disabilities/

Some Additional Resources – We will use many of these during the course**:**

http://www.florida.plantatlas.usf.edu/ - USF Florida Plant Atlas – an excellent resource for photographs and ranges of Florida plants. The companion website for Wunderlin & Hansen's *Guide to the Vascular Plants of Florida, 3rd Ed.*

https://www.fnai.org/index.cfm - Florida Natural Areas Inventory – a great source of data, maps and info on plant communities, rare species and conservation lands in Florida.

https://www.feis-crs.org/feis/faces/index.xhtml;jsessionid=3FB9D25A579A08F5447155BDEA1AA510 – USDA Forest Service Fire Effects Information System – Lots of general info on species we cover in class.

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

http://www.virtualherbarium.org/lf/ – Fairchild Tropical Garden Virtual Herbarium – Florida Flora Picture Gallery – for more photos of species we cover in class.

https://plants.sc.egov.usda.gov/java/ – USDA Plants Database – Type a plant name in the search box for more plant info.

Some books you might find useful:

*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.

BOT 3151C – Local Flora – Summer B 2019 – Syllabus, continued.

BOT 3151 (Local Flora) is a 3-credit, 3000-level biological science field course offered by the UF Biology Department as part of our Botany program. The subject matter is the plant life of northern peninsular Florida – Gainesville's "local flora". This class provides students with a field-based opportunity to become familiar with the plant biodiversity of this region, and to learn about the various ecosystems that support this biodiversity and determine its patterns. The course serves students from a wide variety of backgrounds, not just science majors. The course even serves working professionals who need to gain plant identificaion skills and a basic knowledge of the local plant life. This course has no official academic prerequisites; students do not need any previous botany background. Yet the course is challenging, and requires students to master some basic concepts in order to do well. Whether you are beginner or advanced, you will find the course challenging and rewarding.

Field trips – *Much of our class time will be spent in the field.* This is a field-based course, and most of your learning will be done in a hands-on manner. We will study the local plant life right in the places where the plants grow, and you will learn basic techniques of field botany. Some of the plant identification quizzes and key exercises will be given in the field during the shorter field trips. Therefore it is essential that students come to class properly prepared for this outdoor field experience. Dress appropriately and bring water/liquids to drink, snacks if you want, and your 10x hand lens, a clipboard or field notebook for taking notes, and rain gear in case of wet weather. Taking photos of the plants can also be helpful for study purposes. ***Field trips will not be cancelled due to weather,*** although lightning storms will require us to seek shelter.

Specimen collection – On field trips, each student will be allowed to collect a small specimen of each plant species on the list. We will show you 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 – (there's nothing like the real thing in front of you) – therefore we strongly encourage you to make a collection of preserved specimens as we move through the course. Bring with you on every field trip a bag for specimens (a plastic grocery bag will do). A pair of pruning clippers is useful as well.

What you are responsible for learning – Your course grade will be based *primarily* on your ability to recognize and correctly identify the species we will cover on field trips. You will be required to give the correct Latin botanical name for each species (no credit given for common names). This is where the bulk of your points will come from. Additionally, you will be responsible for knowing the basic definitions and key characteristics of each of the ecosystems (habitats) we will cover, including the important dominant plant species in each ecosystem. For each plant species, you should also know its habitat preference, whether it is native to Florida or introduced, and what use or importance it has (if any) to humans.

This course will be fun – if you put in the time to study for it. Most students have a great time, study reasonably hard, and earn high grades. However, it is possible to fail this course. The most common reason for failure or low grades is not studying enough. If you want a high grade, you will have to work for it. ***The 'Summer B' term goes by very fast!*** If you let yourself fall behind, you will have a tough time catching up, and the course will become frustrating and stressful for you. That would be a bummer, and you can prevent that from happening. *So spend some time each day studying your plants, okay?*

If you need this course to graduate – then study hard and earn a passing grade! No special favors will be done for anyone. If you find you need help, please come to us right away, *while there is still time to do something about it.* Do not wait till the last minute to tell us you need help. We want everyone to succeed.

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://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/