

ALS 4932L Plant Communities of the Florida Panhandle Field Lab

Summer 2021
(2 credit Field Laboratory)



Course Description: This field-oriented course will guide students through Florida's natural communities utilizing the community descriptions of the Florida Natural Areas Inventory. Narrated PowerPoints in Canvas and field instruction covers community structure, indicator species, soils and hydrology, as well as fire ecology. Field instruction provides an opportunity for students to visit examples of most community types covered in Canvas and practice community identification through evaluation of structure, species composition and review of past management practices.

Learning Objectives: At the conclusion of this course, the student will be able to:

- Identify and characterize major terrestrial and associated wetland communities of the panhandle of Florida.
- Use vegetative and floral characteristics to identify key indicator plant species of the characteristic plant communities.
- Identify environmental characteristics (soils, hydrology) associated with each plant community.

Prerequisites:

Prior coursework in Environmental Sciences, Soils, Biology, and or Botany will be beneficial. Students should have familiarity with basic biological and botanical vocabulary to facilitate understanding of plant and community identification.

Instructors:

Dr. Debbie Miller
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Cell phone: 850-240-2135

Dr. Mack Thetford
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Phone: 983-7130
Email: thetford@ufl.edu

Communication:

Office hours: Students are welcome anytime but should schedule office visits on an individual, by-appointment basis to be sure we are available. After hours contact via email is encouraged. If you have an emergency related to class attendance or lab attendance, please call Dr. Miller (850-240-2135) or Gina Mangold (352-816-0166) cell phone.

Teaching Assistant: Gina Mangold, Technician office 4803; Office Phone:850-983-7141 email: gmangold@ufl.edu

Textbook: None required. Class materials available on Canvas. Link to download a copy of the Guide to the Natural Communities of Florida 2010 – Florida Natural Areas Inventory is found in Canvas.

Class Website

Canvas (for PowerPoint lectures, print-outs, additional readings, assignments, etc.) <https://lss.at.ufl.edu/>.

Class lecture material is available through Canvas and consists of narrated PowerPoints. Please complete the lectures and quizzes appropriate to an individual field trip before that field trip. See Class Syllabus.

Field trips will be full day and include 5 weekday or Friday/Saturday trips or other days as determined by availability and an additional day for an outdoor lab final exam. Additional class meetings for student presentations will be announced based on student availability in early July. Plant Community ID final exam will take place during finals week. Field activities will occur throughout the Florida panhandle. Students will be responsible for covering the cost of all meals and should be prepared for field work with appropriate clothing, sunscreen, insect repellent, water, and sunglasses.

Attendance and Participation: Lab fieldtrips are required. Quizzes given during fieldtrips will not be made-up unless preapproved for appropriate reasons. Call ahead if you are sick and cannot make a field trip.

Participation during lab fieldtrips may be a deciding factor in determining borderline grades.

Plant Community & Plant Identification Quizzes/ Class participation	100 pts
Plant Community Field Take Home Exam	200 pts
Plant Community Presentation	35 pts
Plant Community ID Exam (Final's week)	100 pts
Total	435 pts

Plant community quizzes will take place on field trips. During each field trip 1-2 sites will be visited which contain a plant community type previously visited (not the same site, the same community type). Your quiz will consist of filling in the Community ID Sheet which of course requires you to identify the FNAI community but also includes characteristics used to support those findings. Points will be divided among characteristics and community identity. In addition, you will be asked to identify representative plant species.

Participation points for attending student presentations are equivalent to a quiz grade.

No Make-up Quizzes will be given unless preapproved

Circumstances beyond a student's control (e.g. illness, etc.) must be reported and when possible documented (e.g. doctors note) prior to a missed quiz. Students must notify the instructor before the quiz for consideration of a make-up. A make-up quiz should be taken or arrangements made to take the quiz prior to or during the next field day.

Grading Rubric for Take Home Exam

Two (2) communities are due each week beginning Week 8 of class. More details are found in "Assignments" on Canvas.

For each community type – total possible points 25

- Directions to site can be followed (**3 pts**)
- Photo content and quality (**5 pts**)
- Correctly completed id sheet (**10 pts**)
- Dried specimens (**5 pts**)
 - Species Identification
 - Clear display of plant and plant parts
- Soils report (**2 pts**)

Grading Rubric for PowerPoint Presentation

For one of your sites (from the Take Home Exam) you will develop a PowerPoint and present it to the class. Presentations will be no longer than 10 minutes (about 10-15 slides). Presentations will include:

- Directions (aerial map, google map etc.) to the site (**5 pts**)
- Photos of site (**5 pts**)
- Photos of plant specimens used in community identification (**5 pts**)
- Soil type and description (**5 pts**)
- Any other information pertinent to the plant community located on this site i.e. hydrology, condition etc. (**5 pts**)
- Slide quality, presentation style (no reading of slides or notes for maximum points) and overall flow (**10 pts**)

Plant Community Final Exam will take place during finals week.

Your final exam will consist of filling in the Community ID Sheet which of course requires you to identify the FNAI community but also includes characteristics used to support those findings. Points will be divided among characteristics and community identity as follows

Grading Rubric for Final Exam (Field)/ Rubric for quizzes

For each community type (Community ID Sheet) – Total **20 pts** each

- Community Name (**5 pts**)
- Structure (**3 pts**)
- Hydrology (**2 pts**) – must include if site is hydric, mesic or xeric; if site is hydric then source of water and duration should be included.
- Dominant species in each strata (**5 pts or 8 pts**) if no indicator species for this community type
- Indicator species (**3 pts**)
- Soil type (**2 pts**)

We will visit at least 5 sites for the exam.

Optional field guides and selected reading:

Austin, D., P.N. Honychurch, and S. Bass. 1991, 1997, 1999. Coastal Dune Plant Guide, Coastal Hammock and Mangrove Guide, Scrub Plant Guide. Gumbo Limbo Nature Center, Palm Beach, FL.

Bell, C.R. and B. J. Taylor. 1982. Florida Wild Flowers and Roadside Plants. Laurel Hill Press, Chapel Hill, NC.

Huegel, C.N. 1995. Florida Plants for Wildlife. Florida native Plant Society, Orlando, FL.

Nelson, G. 1994. The Trees of Florida Pineapple Press, Inc. Sarasota, FL.

Nelson, G. 1996. The Shrubs & Woody Vines of Florida. Pineapple Press, Inc., Sarasota, FL.

Nelson, G. 2000. The Ferns of Florida. Pineapple Press, Inc., Sarasota, FL.

Taylor, W.K. 1992. The Guide to Florida Wildflowers. Taylor Publishing Company, Dallas, TX.

Wunderlin, R.P. 1998. Guide to the Vascular Plants of Florida. University Press of Florida, Gainesville, FL.

Yarlett, L.L. 1996. Common Grasses of Florida and the Southeast. The Florida Native Plant Society, Spring Hill, FL.

Grading: Letter grade based on the following grade scale:

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Grade	Range
A	93-100
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	63-66
D-	60-63
F	< 60

Academic Honesty

In 1995 the UF student body enacted a new honor code and voluntarily committed itself to the highest standards of honesty and integrity. When students enroll at the university, they commit themselves to the standard drafted and enacted by students. In adopting this honor code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the university community. Students who enroll at the university commit to holding themselves and their peers to the high standard of honor required by the honor code. Any individual who becomes aware of a violation of the honor code is bound by honor to take corrective action. The quality of a University of Florida education is dependent upon community acceptance and enforcement of the honor code. **The Honor Code: We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.** On all work submitted for credit by students at the university, the following pledge is either required or implied: **“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”** The university requires all members of its community to be honest in all endeavors. A fundamental principle is that the whole process of learning and pursuit of knowledge is diminished by cheating, plagiarism and other acts of academic dishonesty. In addition, every dishonest act in the academic environment affects other students adversely, from the skewing of the grading curve to giving unfair advantage for honors or for professional or graduate school admission. Therefore, the university will take severe action against dishonest students. Similarly, measures will be taken against faculty, staff and administrators who practice dishonest or demeaning behavior. Students should report any condition that facilitates dishonesty to the instructor, department chair, college dean or Student Honor Court. *(Source: 2007-2008 Undergraduate Catalog)* It is assumed all work will be completed independently unless the assignment is defined as a group project, in writing by the instructor. This policy will be vigorously upheld at all times in this course.

Software Use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator.

Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources.

Both the Counseling Center and Student Mental Health Services provide confidential counseling services at no cost for currently enrolled students.

Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance. The Counseling Center is located at 301 Peabody Hall (next to Criser Hall). Student Mental Health Services is located on the second floor of the Student Health Care Center in the Infirmary.

• *University Counseling Center*, 301 Peabody Hall, 392-1575,

www.counsel.ufl.edu

• *Career Resource Center*, CR-100 JWRU, 392-1602, **www.crc.ufl.edu/**

• *Student Mental Health Services*, Rm. 245 Student Health Care Center, 392-1171,

www.shcc.ufl.edu/smhs/

- Alcohol and Substance Abuse Program (ASAP)

- Center for Sexual Assault / Abuse Recovery & Education (CARE)

- Eating Disorders Program

- Employee Assistance Program

- Suicide Prevention Program

Students with Disabilities

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. 0001 Reid Hall, 392-8565,

In spite of our distance from Gainesville, students at UF Milton do have access to support services. If you need accommodation for any problem, feel free to call the appropriate office in Gainesville, or contact me directly.

Tentative Field Lab and Quiz Schedule:

Date	Topic	Quiz
Wednesday, June 9	Trip to Flatlands – Flatwoods, associated wetlands Scrub and Barrier Island Communities	No quiz
Monday, June 14	Visit East Eglin or Blackwater State Forest High Pine- Upland Pine and associated wetlands Shrub bogs, Seepage slopes and seepage streams	1-3 quizzes
Wednesday, June 16	Sandhill and associated wetlands Steep heads and associated plant communities	1-3 quizzes
Monday, June 28	Flood plain and associated communities	1-3 quizzes
Thursday, July 8	Student Presentations	Attendance Quiz score
TBA End of July	Optional review trip	1-3 quizzes
Wednesday, August 4	Final Exam – In the field	

Equipment and Clothing:

On all field trips – bring lunch, snacks, plenty of fluids (water and Gatorade) insect repellent and sunscreen. You may also need a sharp pocket knife and clothing which will withstand direct sun, rainy days and rough vegetation and terrain. A clipboard or small notebook will also be useful as most laboratory sessions are in the field. You also need a canteen or similar vessel for water. If you are prone to irritations or allergies by mosquitoes, fire ants, chiggers, ticks and poisonous plants, it is strongly recommended that you always use repellents and take precautions during and after each lab session. I personally use some kind of mosquito spray to put on exposed skin AND Repel Permanone for ticks and chiggers to put on clothes. (Wal-Mart, Target, etc. should have all the selection you need). NOTE: Permanone is extremely lethal to cats. It stays on your clothes for up to 6+ washes. Do NOT apply Permanone to your skin.

If you are allergic to insect bites, or if you have other medical conditions for which emergency treatment may be required, it is your responsibility to inform the instructors before the course starts, about: (1) your specific condition, (2) where you keep your medicine, and (3) how to administer emergency treatment should the situation arise. Field labs are long and tedious (oops, we mean energizing); therefore, if you are diabetic it is your responsibility to maintain your personal supply of required food or liquids, should you need them, in order to continue the laboratory.

Lyme disease, which may be contracted through tick bites, is a disease that all people working in natural resources should respect. While not fatal, it can be very painful and even debilitating. It is a risk of the profession; therefore, it is your professional responsibility to wear clothing and repellents that will minimize your chances of getting this disease. Even with these precautions, you should conduct a "tick search" each day after field sessions.

The following is important information you need to know when working outdoors:

Chiggers: <http://edis.ifas.ufl.edu/pdffiles/IG/IG08500.pdf> or

<http://pherec.org/EntGuides/EntGuide6.pdf>

Ticks & Lyme Disease: <http://edis.ifas.ufl.edu/pdffiles/MG/MG20400.pdf> or

<http://fmel.ifas.ufl.edu/buzz/clticks.shtml>

West Nile Virus: <http://edis.ifas.ufl.edu/IN117>

Dengue Fever: <http://edis.ifas.ufl.edu/in699>

Heat: http://solutionsforyourlife.ufl.edu/hot_topics/agriculture/heat_stress.html

Dehydration: <http://fineinstitute.com/patienteducation/>

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