



Syllabus

ORH 3815/5817C Florida Native Landscaping

Spring 2018 Gainesville

Instructors

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Course Description:

This is an upper-division environmental horticulture course designed to encourage students to have an interest, understanding, and appreciation of Florida's native flora. Weekly lectures will cover plant nomenclature, effective utilization, and design elements of native plants that are commercially available for landscape use. Topical lectures will be provided from experts who have a range of knowledge in the field. Weekly lab exercises will cover some of the best native plants for our area, propagation of native plants, and incorporation of native plants into gardens and landscapes.

Prerequisite:

ORH 3513 (suggested)

Class Meeting Time and Location:

Wednesdays (2:00 pm-6:00 pm) Greenhouse complex, PSF5

*Students will be required to attend the scheduled field trip.

*The class may meet at alternate locations as needed such as Mehrhof Gardens, the UF Tree Unit, and the UF Herbarium.

Learning Objectives:

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

1. Identify 50+ species that are native to Florida and used in landscapes
2. Examine the aesthetic and functional value of native plants and how they can be better incorporated into landscapes
3. Characterize underutilized natives using learned taxonomic descriptions, species distinctions among shared genera, herbarium sampling, and photography
4. Associate original plant ecosystems with selection, use, establishment and maintenance of natives in modified landscapes
5. Determine propagation and production practices for natives
6. Distinguish between native and non-native cultivars

Course Website:

CANVAS (for lecture print-outs, additional readings, group assignment descriptions, discussions, etc.) <http://elearning.ufl.edu/>

Native Landscaping website: <http://irrecenvhort.ifas.ufl.edu/FNL/Index.htm>

Course Textbook:

Nelson, G. 2003. Florida's Best Native Landscape Plants. University Press of Florida, Gainesville, FL. **(Required)**

*There also will be supplemental reading material available online

Other Useful Book References: *desk copies can be found in the instructor's office

Barnett, M. R. and D.W. Crewz, 1997. Common Coastal Plants in Florida: A Guide to Planting and Maintenance. University Press of Florida, Gainesville, FL.

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

Daniels, J.C. 2000. Your Florida Guide to Butterfly Gardening. University Press of Florida, Gainesville, FL.

Dehgan, B. 1998. Landscape Plants for Subtropical Climates. University Press of Florida, Gainesville, FL.

Haehle, R.G. and J. Brookwell. 2004. Native Florida Plants. 2nd edition. Taylor Trade Publishing, Lanham, MD. (Recommended)

Huegel, C.N. 2010. Native Plant Landscaping for Florida Wildlife. University Press of Florida, Gainesville, FL.

Huegel, C.N. 2015. Native Plants for Shady Landscapes. University Press of Florida, Gainesville, FL.

Nelson, G. 2010. Best Native Plants for Southern Gardens. University Press of Florida., Gainesville, FL.

Nelson, G. 2011. Botanical Keys to Florida's Trees, Shrubs and Woody Vines. Pineapple Press, Inc. Sarasota, FL.

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

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

Nelson, G. 2010. The Trees of Florida. 2nd edition. Pineapple Press, Inc. Sarasota, FL.

Nelson, G. 2011. Botanical keys to Florida's trees, shrubs, and woody vines. A Guide to Field Identification. Pineapple Press, Inc. Sarasota, FL.

- Osorio, R. 2001. A Gardener's Guide to Florida's Native Plants. University Press of Florida, Gainesville, FL. (Recommended)
- Rogers, G.K. 2011. Landscape Plants for South Florida. George Rogers Publishing, Palm Beach Gardens, FL. (Recommended)
- Simberloff, D., D.C. Schmitz, and T.C. Brown (eds.). 1997. Strangers in Paradise. Island Press, Washington, D.C.
- Stibolt, G. 2015. The Art of Maintaining a Florida Native Landscaping. University Press of Florida. Gainesville.
- Suncoast Native Plant Society. 1997. The Right Plants for Dry Places. Great Outdoors Publishing Co., St. Petersburg, FL.
- Taylor, W.K. 2009. A Guide to Florida Grasses. University Press of Florida, Gainesville, FL.
- Walton, D. And L. Schiller. 2007. Natural Florida Landscaping. Pineapple Press, Inc. Sarasota, FL
- Wasowski, S. and A. Wasowski. 2010. Gardening with Native Plants of the South. Taylor Trade Publishing. Lanham, MD.
- Wunderlin, R.P. and B.F. Hansen. 2011. Guide to the Vascular Plants of Florida. 3rd edition. University Press of Florida, Gainesville, FL

Student Responsibilities:

- ✓ *Attendance:* You are expected to attend all classes and activities
- ✓ *Preparation:* You are responsible for retrieving and/or printing course materials
- ✓ *Plant ID Quizzes:* In order to do well, you will need to spend considerable time studying the live plants and PowerPoints presented, and practicing rote memorization of the scientific and common names. There are no make-up quizzes unless prior approval is granted for extreme circumstances.
- ✓ *Handing in written assignments:* Unless otherwise stated, all assignments must be posted in e-learning and/or turned in at the beginning of class on the due date.
- ✓ *Late or make-up assignments:* Assignments will be marked down 5 percentage points for each day late. Please remember, homework is assigned to prepare the student for class discussions. If you do not complete the assignments, your participation will suffer.
- ✓ *Completion of all assignments:* You must complete all assignments and participate in class in order to pass the course.

Student Evaluation

You will be graded on the accuracy, conciseness, and grammar of your work. Any questions regarding your performance on any assignment are welcome. Grading follows University standards and will be based on the following:

EXAMS

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| Midterm exam | 100 pts |
| Final exam | 100 pts |

ID QUIZZES

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| Quiz 1 (plants 1-20) | 20 pts |
| Quiz 2 (plants 21-40) | 20 pts |
| Quiz Final (plants 1-50) | 40 pts |

ASSIGNMENTS

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| Assignment 1- Germination of native seed | 10 pts |
| Assignment 2- Small container project | 5 pts |
| Assignment 3- Plant lecture presentation | 10 pts |
| Assignment 4- Guest lecture questions and answers (5) | 10 pts |
| Assignment 5- Field trip summary report | 5 pts |

PARTICIPATION

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| Active attendance and participation in class and lab | 5 pts |
| Participation in landscape design and installation | 5 pts |

*graduate students will be expected to lead discussions and introduce speakers

Format:

- *Hands-on Activities:* The use of tools and some outdoor, physical work can be expected. These outdoor activities are indicated in the syllabus so that you can dress appropriately.
- *Plant Identification:* Students will be exposed to almost 200 different plant species but only quizzed on 50 plants. There will be three cumulative ID exams. On exam days, plan on taking a 20 minute quiz followed by other scheduled lab activities. The exams are cumulative, meaning that by the end of the semester the identification exams will cover all 50 plants.
- *Germination of Native Seed:* Each student will germinate one or more flats of seed provided in lab and monitor its growth and development. You will be responsible for the care of the seeded trays and present the seedling performance orally and in written format. This assignment is worth 10 points and will be graded using a rubric.
- *Small Container Project:* Each student will be given a container for greenhouse plants to be transplanted into (you will choose the design and plants for your individual container). You will be responsible for caring for your container garden. This includes watering, fertilizing, weeding, protecting from unusual cold temperatures, etc. You will orally present your container garden to the class, after which you will be able to take it home. This assignment is worth 5 points.
- *Plant Lecture Presentation:* Students will pair in teams of two or three depending on the size of the class. Each group will choose three plants from the list of plants that we are growing or have in the landscape and complete a detailed species report that will be

presented to the class. The lecture should include: scientific name, common name, family botanical description, growth form, size, flower description, culture, tolerances, and use. Information on closely related species, or other available cultivars is encouraged. Presentations may use PowerPoint, video, photography, hands-on activities, or other methods. This assignment is worth 10 points and will be graded using a rubric.

*Graduate students will be asked to prepare herbarium samples, digital scans, and/or plant information sheets to provide a more in depth discussion of the plants. Details will be posted on e-learning.

- *Guest Lecture Questions:* From the guest speakers, students will be asked to submit potential questions that the instructor *may* select to include on an exam. A total of five questions (with answers) are to be submitted from any of the guest lectures. Questions are due 5 days prior to the mid-term or final exam. If one of your questions is selected, a total of 2 pts will be added to your total exam score. This assignment is worth 10 points.
- *Field Trip:* During a scheduled class day we will take a field trip to a native plant nursery. Students will summarize the nursery operation in a one page or less report and submit the following week. This assignment is worth 5 points.
- *Landscape Installation Project:* As a group students will design, install and maintain a section of Mehrhof Gardens. This activity is worth 5 points for participation.

Grading Policy

Final grades will be based on the follow scale:

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|---------------|----|-------------|
| 94-100% | A | 309-330 pts |
| 90-93% | A- | 296-308 pts |
| 87-89% | B+ | 286-295 pts |
| 83-86% | B | 273-285 pts |
| 80-82% | B- | 263-272 pts |
| 77-79% | C+ | 253-262 pts |
| 73-76% | C | 240-252 pts |
| 70-72% | C- | 230-239 pts |
| 67-69% | D+ | 220-229 pts |
| 63-66% | D | 207-219 pts |
| 60-62% | D- | 197-206 pts |
| ≤59%..... | E | ≤196 pts |

Please feel free to stop by, call or email your instructor(s) to discuss the class or your grades.

| ORH 3815/5817C – Florida Native Landscaping Schedule-Gainesville | | |
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| Week | Date | Activity |
| 1 | Jan 10 | Introduction of students/faculty; Brian Owens-greenhouse safety; Tour of greenhouses; Propagation of natives: Plug planting 1, Seed germination 1 |
| 2 | Jan 17 | Lecture: Defining Native Plants Plug planting 2; Seed germination 2; cutting propagation 1 Invited Speaker: Cammie Donaldson, Executive Director, Florida Association of Native Nurseries/ Native Plant Horticulture Foundation- “Securing our Future with Native Plants” |
| 3 | Jan 24 | Dr. Bart Schutzman, Lecturer- “A Review of Plant Morphology” Wilson- Plant ID List 1 |
| 4 | Jan 31 | Crop management Invited Speaker: Lloyd Singleton, Extension Agent, Florida-Friendly Landscaping; “Native Plant use in Managed Communities” Wilson-Plant ID List 2 |
| 5 | Feb 7 | Lecture: Right plant/right place-how native ecosystem associations can help Invited Speaker: Marc Frank -Extension Botanist, Associate Collection Manger UF Herbarium, Florida Museum of Natural History. “Florida’s Flora and How to Prepare Voucher Specimens” 379 Dickinson Hall ID Quiz 1 (plants 1-20) |
| 6 | Feb 14 | FIELD TRIP – Green Isle Gardens Native Plant Nursery; plan for an all-day event with vans leaving at 9:00am. Address 6043 Lake Erie Rd, Groveland, FL |
| 7 | Feb 21 | Invited Speaker: Chris Harchick-Biological Scientist –“Years of Research used to Guide Growers and Arborists in Pruning Practices of Native Trees”- Tour of tree unit: 2977 SW 23 rd Terrace Bldg 1356 Wilson-Plant ID List 3 |
| 8 | Feb 28 | Individual Container Planting Invited Speaker: Meg Whitmer, Landscape Architect- “Native Designs that Work” Mid-term Exam |
| 9 | March 7 | Spring Break |
| 10 | March 14 | Lecture: Native Alternatives to Ornamental Invasives Wilson-Plant ID List 4 |
| 11 | March 21 | Group Landscape Planting at Mehrhof Hall Cumulative ID Quiz 2 (plants 21-40) |
| 12 | March 28 | Invited Speaker: Dr. Gail Hansen, Associate Professor- “Designing Urban Landscapes with Natives” Individual Container Planting Presentations, Seedling Presentations |
| 13 | April 4 | Crop Management Invited Speaker: Dr. Jaret Daniels-Associate Professor, Entomology and Nematology Department, “Maximizing Residential Landscape Resources for Insect Pollinators”. |

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| | | Wilson-Plant ID List 5 |
| 14 | April 11 | Invited Speaker: Dr. Jeff Norcini- OecoHort Consulting, FDOT State Wildflower Specialist- "Native Wildflower Gardening for Residential Landscapes" Student Plant Lecture Presentations |
| 15 | April 18 | Lecture: Introduction of new native plants to the market Crop Management Student Plant Lecture Presentations-continued |
| 16 | April 25 | Greenhouse Cleanup Cumulative ID Exam (plants 1-50) |
| 17 | TBD | Final Exam |

1. Class attendance, make-up exams and other work: Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>. You are required to inform your lab instructor if you must miss a class as some activities require significant preparation time prior to the scheduled date of the activity and you may not have an option to make it up.

2. Accommodations for 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. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation. www.dso.ufl.edu/drc/ 0001 Reid Hall, 352-392-8565

3. Textbooks: Optional as described in syllabus

4. UF grading policies for assigning grade points: See <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>.

5. Online course evaluation process:

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.

6. Materials and Supplies Fees: \$50

7. Critical dates for exams or other work: Critical dates are posted within the Canvas E-Learning system and conform to the general weekly schedule of topics and assignments provided in the tentative lecture schedule.

8. Academic Integrity: As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and

the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

9. Campus Helping Resources: Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides 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.

- *University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu/cwc/*
Counseling Services
Groups and Workshops
Outreach and Consultation
Self-Help Library
Wellness Coaching
- U Matter We Care, www.umatter.ufl.edu/
- *Career Resource Center, First Floor JWRU, 392-1601, www.crc.ufl.edu/*

10. 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.

11. Class demeanor: *Common courtesy:* Cell phones and other electronic devices may be used to photograph plants during class but must be placed in silent mode. Students who receive or make calls/messages during class will be asked to leave. Students engaging in disruptive behavior (e.g., talking, texting, etc.) will be asked to leave the class. Repeat violations of these rules will result in dismissal from class.