

**ENVIRONMENTAL PLANT IDENTIFICATION AND USE
HORTICULTURAL PLANT MORPHOLOGY**

ORH3513C, ORH5117C

FALL 2018

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TEACHING ASSISTANTS:

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The E-Learning (Canvas) site will be used to give you instructions for each week, including links to the online modules, online module powerpoint slides, module transcripts, and plant lists in PDF format; lab locations; and access to the plant image library. This is an important resource you should consult almost every day! The Plant Image Library is an important resource within your Canvas site:

Userid: if-svc-enhplantid

Password: {replace Anthurium} (case-sensitive)

It is best to email me through my UF email (bart@ufl.edu). You are also welcome to make an appointment and visit me at my office (1531 Fifield Hall).

MEETING TIMES:

Lab Section - Lab Tue - Per. 4-6 (10:40am -1:40pm) (Tharp, Jablonski)

Lab Section - Lab Tue - Per. 8-10 (3:00pm-6:00pm) (Moll, Boenker)

Lab Section - Lab Wed - Per. 8-10 (3:00pm-6:00pm) (Campbell, Hazlett)

Lectures are asynchronous, but quizzes and tests are given during the Tue and Wed lab periods.

CATALOG DESCRIPTION:

Lecture - Identification, growth characteristics, culture and use of common landscape and greenhouse plants. Materials include trees, shrubs, vines, ground covers, lawn grasses and floriculture crops. Emphasizes temperate and subtropical plants.

Laboratory - Introductory, upper-division environmental laboratory course. Identify commonly used landscape plants, their use and their characteristics.

COURSE OBJECTIVES: Upon completing this course, students should be able to:

- 1) Comprehend fundamental plant morphological characteristics and use them to identify common landscape and other plant materials (approx. 155 taxa)
- 2) Learn plants live in laboratory and an additional 50 species online in the asynchronous lecture portion of the course, along with basic terminology used to describe them
- 3) Apply basic principles of botanical and horticultural taxonomy and nomenclature to describe plants
- 4) Understand the origin, use and function of plants in our environment

Learning plants does not just require you to recognize them! You will have to study both morphological terminology and nomenclature (both common and scientific names) and be able to make the connections necessary between the plants, their names, and all relevant terminology.

REQUIRED READING

Required Textbooks:

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

Harris, J. G. and Harris, M. W. 2006 (2nd edition). Plant Identification Terminology - An Illustrated Glossary. Spring Lake Publishing, Spring Lake, UT.

Recommended References:

Capon, B. 2010. Botany for Gardeners, 3rd Ed. Timber Press.

Dirr, M. A. 2009. Manual of Woody Landscape Plants, 6th Ed. Stipes Publishing.

Judd, W.S. *et al'* 2016. Plant Systematics: A Phylogenetic Approach, 4th Ed. Sinauer Associates, Inc.

Nelson, G. . 1996. The Shrubs and Woody Vines of Florida. Pineapple Press.

. 2000. The Ferns of Florida. Pineapple Press.

- . 2003. Florida's Best Native Landscape Plants. UF Press.
. 2011. The Trees of Florida, 2nd Ed. Pineapple Press.
Osorio, R. 2001. A Gardener's Guide to Florida's Native Plants. UF Press.
Simpson, M.G. 2010. Plant Systematics, 2nd Ed. Academic Press.
Stearn, W.T. 1992. Steam's Dictionary of Plant Names for Gardeners. Cassell Publishers Ltd.
Wunderlin and Hansen. 2011. Guide to the Vascular Plants of Florida, 3rd Ed. UF Press.

Additional references and study guides will also be provided when appropriate.

COURSE PREREQUISITES: Junior level standing or higher, or permission of the instructor.

CONTENT AND ORGANIZATION:

The course consists of live laboratory and asynchronous lecture portions.

Lectures are in the form of modular video presentations. They are asynchronous and Web-based. Lecture quizzes and discussions are scheduled in tandem with laboratory meetings, which are separate and live.

Lecture materials consist of:

- 1) Approximately 40 video modules, along with their PDF transcripts and PDF handouts of the PowerPoint presentations. Watch the videos each week and be prepared the following class session to be quizzed on that material.
- 2) Ten plant study modules, covering approximately 50 species. These are broken down into either taxonomic groups (plant families or genera) or horticultural categories (house or landscape plants), along with associated terminology and conceptual materials.
- 3) Assignments to reinforce lecture materials, covering the diverse topics of plant nomenclature, classification, vegetative, floral and fruit morphological terminology, and use and creation of dichotomous keys

How Plant Materials are Learned

Students will be expected to learn and identify plants in the live laboratory. Another 50 plants will be learned in online modules in the asynchronous lecture portion of the course. Plants in the online plant modules are well-known throughout the world and will be connected conceptually with both the live lab and the lecture material. They will be featured together with their significant morphological characteristics. The laboratory plant lists taught live will explore plants cultivated in the region of Florida where the student is based. Plants learned online may be tested on in lab for extra credit, but WILL appear in lecture quizzes and exams.

Lecture materials include terminology used in plant identification, rules and application of plant nomenclature (botanical and horticultural), relevant plant materials to illustrate terminology and other lecture topics, and functional aspects of horticultural plants in our environment. The live laboratory sessions will build on lecture material and expose students to plant materials related to lecture topics.

All terminology is important, but in this course, the most crucial terms are the vegetative features, mostly centering around leaves and stems. You should be able to recall all the terms on the flash cards without any word banks, clues, or special hints.

Other vegetative, floral or fruit terms will be tested using multiple choice, T/F, or matching with word banks. You are responsible for any conceptual materials mentioned in lectures with all the above methods of testing as well as fill-in-the-blank questions. In lecture, you are asked to commit terms other than those presented in the flashcard deck to memory. These could also be asked for in fill-in-the-blank questions. A handout will be made available for study called "Concepts and terms" that you can use as a study guide.

The way you should learn plant names and what is required is spelled out on your handout entitled "**Writing of Scientific Names.**" You will learn plants both live and from ten online plant modules. These will be tested on repeatedly. All lab quizzes, midterms and final are comprehensive and include plants you currently learned as well as those from past lists. Plant quizzes will always include an extra credit plant, most commonly drawn from the previous week's online plant module. In the Gainesville lab, the midterm and final each have extra credit plants.

OPTIONAL ASSIGNMENTS

Lecture

The lowest lecture quiz will automatically be dropped, but should you be unsatisfied an additional lecture quiz grade, you will have the opportunity to complete an optional assignment to replace an additional quiz grade. This is not merely a graded assignment, but I refer to it as a "failure is not an option" assignment. You do not have the option of accepting a mediocre or simply a passing grade for the replacement. I will only accept it when I feel it is

perfected, which may require one or more resubmissions. At that time, the replacement grade will be a 100%. To be efficient and respectful of both your and my time in working with an optional assignments, be careful to COMPLETELY follow instructions to prevent needless resubmissions, and when I supply a list of corrections to be made, check the list off carefully and completely before resubmitting.

Lab

As with the lecture quizzes, the lowest grade will be automatically dropped, and an optional “failure is not an option” assignment (see above) will be made available to replace a second lowest quiz grade with a 100%.

E-LEARNING SITE

Sign onto the E-Learning site with your Gátörünk credentials. If at any time you experience problems with Canvas then it is your responsibility to contact the UF Computing Help Desk at: <http://helpdesk.ufl.edu> or (352) 392-4357. Please make sure to have Canvas Notifications enabled.

COURSE EVALUATIONS:

Students are expected to provide feedback on the quality of instruction in this course based on ten criteria. These evaluations are conducted online 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>.

ASSESSMENT AND GRADING:

For information on current UF policies for assigning grade points, see <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Lecture Assessments (2/3 of course):

Weekly Quizzes 20% of lecture grade
Midterm Exam 40% of lecture grade
Final Exam 40% of lecture grade

Lab Assessments (1/3 of course):

Weekly Quizzes 40% of lab grade
Midterm Exam 30% of lab grade
Final Exam 30% of lab grade

The graduate section (HOS5117C) will have an additional assignment (TBA) that will be added to the above, and will constitute 20% of the course grade, making the value of lecture plus lab assessments above equal to 80%.

GRADING

Remember that the Canvas grades are ONLY the raw scores for your weekly quizzes, midterms and finals. The calculation of their relative values has not been made; therefore the values Canvas calculates from those raw scores are NOT correct. You will have to do extra math to determine how you are doing in the course!

Grade Range: Course letter grades will be based on the following scale:

| | |
|----|-------------|
| A | 92.45-100 |
| A- | 89.45-92.44 |
| B+ | 86.45-89.44 |
| B | 82.45-86.44 |
| B- | 79.45-82.44 |
| c+ | 76.45-79.44 |
| c | 72.45-76.44 |
| c- | 69.45-72.44 |
| D+ | 66.45-69.44 |
| D | 62.45-66.44 |
| D- | 59.45-62.44 |
| E | <=59.44 |

ABSENCES AND MAKE-UP WORK

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

ACADEMIC HONESTY

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/honorcodes/honorcode.php>.

*****NOXE PLEASE*****

ALL EXAMS ARE CLOSED NOTE / BOOK. DISHONESTY WILL NOT BE TOLERATED 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

Health and Wellness 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.

- **U Matter We Care**, <http://www.umatter.ufl.edu>. If you or a friend are in distress, please contact umatter@ufl.edu or 352 294-2273 so that a team member can reach out to the student
- **Counseling & Wellness Center**, 3190 Radio Road, 352 392-1575, <http://www.counselina.ufl.edu/cwc/default.aspx>
 - Counseling Services
 - Groups and Workshops
 - Outreach and Consultation
 - Self-Help Library
 - Training Programs
 - Community Provider Database
- **University Police Department**: 352 392-1111 or 9-1-1 for emergencies

Academic Resources

E-learning technical support, 352 392-4357 (select option 2) or <http://helpdesk.ufl.edu>. **Career Resource Center**, Reitz Union, 352 392-1601. Career assistance and counseling, <http://www.crc.ufl.edu>

Library Support, <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources

- **Teaching Center**, Broward Hall, 352 392-2010 or 392-6420. General study skills and tutoring. <http://teachingcenter.ufl.edu>.
- **Writing Studio**, 302 Tigert Hall, 352 846-1138. Help brainstorming, formatting, and writing papers. <http://writing.ufl.edu/writing-studio>.

Services 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

0001 Reid Hall, 352-392-8565, <http://www.dso.ufl.edu/drc/>

STUDENT COMPLAINTS

Each online distance learning program has a process for, and will make every attempt to resolve, student complaints within its academic and administrative departments at the program level. See <http://distance.ufl.edu/student-complaintsformore> details.

INFORMATION SOURCES: Lecture and lab schedule is presented below. NOTE: Visual nature and memorization requirements of this course make it imperative that students view all lectures and read all handouts.

LAB AND LECTURE SCHEDULE (Subject to change at the instructor's notice):

| <u>WK DATES</u> | <u>WEEKLY MODULES</u> |
|---|---|
| <u>2 8/27-8/31</u> Plant List 1 PSF* | Welcome and Introduction The Whole Plant Plant Nomenclature I |
| <u>3 9/3-9/7</u> Plant List 2 Lecture Quiz 1 Lab Quiz 1 NZ** | Plant Nomenclature II,III Leaf Arrangement and Attachment Online Plant Module: Palms |
| <u>4 9/10-9/14</u> Plant List 3 Lecture Quiz 2 Lab Quiz 2 PSF | Stipules Leaf Complexity and Venation Orchids Online Plant Module: Orchids |
| <u>5 9/17-9/21</u> Plant List 4 Lecture Quiz 3 Lab Quiz 3 NZ | Leaf Shape Leaf Apices Leaf Bases Online Plant Module: Aroids |
| <u>6 9/24-9/28</u> Plant List 5 Lecture Quiz 4 Lab Quiz 4 PSF | Leaf Margins Leaf Textures and Surfaces Modified Structures I Succulents Online Plant Module: Succulents |
| <u>7 10/1-10/5</u> Plant List 6 Lecture Quiz 5 Lab Quiz 5 PSF | Modified Structures II Plant Forms Plant Life Cycle and Persistence Online Plant Module: Cacti |
| <u>8 10/8-10/12</u> Lab Midterm PSF | LECTURE MIDTERM in Canvas, opens Thursday Oct 11 at 11:59 PM and closes Sunday, Oct 14 th at 11:59 AM (NOT Sunday night!). |
| <u>9 10/15-10/19</u> Plant List 7 (No Lect. Quiz) Online Pl. Quiz PSF | Plant Variation Flowers I, II (No online plant module this week) |
| <u>10 10/22-10/26</u> Plant List 8 Lecture Quiz 6 Lab Quiz 6 NZ | Flowers III Inflorescences I, II The genus <i>Ficus</i> Online Plant Module: <i>Ficus</i> |
| <u>11 10/29-11/2</u> Plant List 9 Lecture Quiz 7 Lab Quiz 7 PSF | Fruits I, II, III Online Plant Module: Landscape Plants |
| <u>12 11/5-11/9</u> Plant List 10 Lecture Quiz 8 Lab Quiz 8 NZ | Plant Taxonomy I, II Plant Groups; Online Plant Module: Houseplants |
| <u>13 11/12-11/16</u> Plant List 11 Lecture Quiz 9 Lab Quiz 9 PSF | Ferns and Allies Gymnosperms Angiosperms Online Plant module: Ferns |
| <u>14 11/19-11/23</u> | HOLIDAY WEEK - Happy Thanksgiving! |

| WK DATES | WEEKLY MODULES |
|--|--|
| 15 11/26-11/30 Plant List 12 Lecture Quiz 10 Lab Quiz 10 NZ | Cycads Dichotomous Keys Online Plant Module: Cycads |
| 16 12/3-12/7 Lab Final TBA | Climate and Phytogeography I, II Landscaping Principles |

Lecture Final: Week of 12/10-12/14 -TBA

*PSF = Plant Science Facility Room 5

**NZ = Newins-Ziegler Hall breezeway