# ENVIRONMENTAL PLANT IDENTIFICATION AND USE HORTICULTURAL PLANT MORPHOLOGY

ORH3513C, ORH5117C FALL 2024

#### **INSTRUCTOR:**

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This course is a combination of synchronous and asynchronous elements. The E-Learning (Canvas) site will be used to give you instructions for each week, including links to the online video modules, online module PowerPoint slides, module transcripts, plant lists in PDF format, links to plant videos, and access to the plant image library. The Plant Image Library is an important resource within your Canvas site.

Please email me through UF email (bart@ufl.edu). Office hours are before class (please notify me), and you are also welcome to arrange for a phone call, meeting at another time, or a Zoom meeting. Live labs meet at the PSF complex or other stated location (by Canvas announcement and/or in class) at the stated class time. Except for weekly live lab meetings and printed handouts distributed there, all other course materials are online and asynchronous.

# **CATALOG DESCRIPTION:**

Lecture - Identification, growth characteristics, culture and use of common landscape and greenhouse plants. Materials include trees, shrubs, vines, ground covers, floriculture crops. Emphasis is on temperate and subtropical plants, but some tropical plants are covered and often are grown in temperate areas as houseplants or in greenhouses or conservatories.

Laboratory - Introductory, upper-division environmental laboratory course. Identify commonly used landscape plants, their uses and characteristics. Employ morphological terminology learned in lecture.

# **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
- 2) Learn approximately 200 plants online, 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 relevant terminology.

# **REQUIRED READING**

The following textbooks are required:

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.

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:**

Both the undergraduate (ORH3513C) and graduate course (ORH5117C) consists of live and online laboratory (1/2) materials, and lecture portions (online, 1/2)

Lectures are in the form of modular video presentations. They are asynchronous and Canvas-based. All exams are in Canvas and will use proctoring by Honorlock. Questions about lecture materials can be addressed to the professor before and after the live lab period, or by appointment. The lecture consists of 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.

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 learned plant materials will build on lecture material and expose students to other plant materials also related to lecture topics.

All terminology is important, but in this course, the most crucial terms are the vegetative features, in this course largely focused on leaves and stems. A flashcard deck will be distributed at the beginning of the course, and you are required to recall all the terms on the flash cards without any word banks, clues, or special hints. Many other vegetative, floral or fruit terms will be tested using multiple choice, T/F, or matching with word banks. However, you are responsible for any terms and conceptual materials mentioned in lectures (live before lab or online) with all the above methods of testing as well as with fill-in-the-blank questions. You will be asked to commit terms other than those presented in the flashcard deck to memory. Handouts will be made available for study before the midterm and final exams are entitled "Concepts and Terms" and can serve as a study guide.

Lab consists of approximately 200 plants and are handled in the following manner:

- 1) Live labs are held each week, and most or all the week's plants are shown to you.
- 2) Everyone is responsible for watching the online plant videos. Some of the week's plants are shown in ten "Plant Focus Modules" each of which has a single video and covers a specific plant group, discussing 4-6 plants per group. You are responsible for the identification of these, as well as the individual species listed on the weekly plant list. The Plant Focus Modules are: Orchids, Aroids, Cacti, Cycads, Ferns, Ficus, Houseplants, Landscape Plants, Palms, and Succulents.
- 3) An online plant library will allow you to view additional photos of class plants.
- 4) A weekly assignment, known as the Scavenger Hunt, requires you to locate a portion of each week's plant list, photograph each as a "selfie", and submit in PowerPoint through Canvas for credit and possible extra credit. The scavenger hunt is <u>much</u> easier <u>after</u> viewing the plant videos. These photographs are NOT to be taken during the plant tour. You must revisit these or locate other specimens for the assignments.

The way you should learn plant names and what is required is spelled out on the 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.

#### **E-LEARNING SITE**

Sign onto the E-Learning site (Canvas) with your Gatorlink credentials. If at any time you experience problems with the site, 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:**

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available

at: <a href="https://gatorevals.aa.ufl.edu/students/">https://gatorevals.aa.ufl.edu/students/</a>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <a href="https://ufl.bluera.com/ufl/">https://ufl.bluera.com/ufl/</a>. Summaries of course evaluation results are available to students at: <a href="https://gatorevals.aa.ufl.edu/public-results/">https://gatorevals.aa.ufl.edu/public-results/</a>.

#### **ASSESSMENT AND GRADING:**

Midterm Exam

<u>Lecture Assessments (1/2 of course):</u> <u>Lab Assessments (1/2 of course):</u>

40% of lecture grade

Weekly Quizzes 20% of lecture grade Weekly Quizzes

(lowest quiz dropped) & Scavenger Hunts

(lowest quiz dropped)

40% of lab grade

Final Exam 40% of lecture grade Midterm Exam 30% of lab grade Final Exam 30% of lab grade

The graduate section (HOS5117C) will have an additional graduate assignment (TBA) that will be added to the above and will constitute 20% of the course grade. In other words, 80% of the course will be divided up as stated above, and the additional 20% will come from the graduate assignment.

#### **GRADES AND GRADE POINTS**

For information on current UF policies for assigning grade points, see <a href="https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/">https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/</a>.

Remember that grades posted under Canvas grades are ONLY 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:

92.45 - 100.00 Α A-89.45 - 92.44 B+ 86.45 - 89.44 82.45 - 86.44 В B-79.45 - 82.44 C+ 76.45 - 79.44 С 72.45 - 76.44 C-69.45 - 72.44 D+ 66.45 - 69.44 62.45 - 66.44 D 59.45 - 62.44 D-Ε <= 59.44

#### ATTENDANCE 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: <a href="https://catalog.ufl.edu/ugrad/current/academic-regulations/attendance-policies">https://catalog.ufl.edu/ugrad/current/academic-regulations/attendance-policies</a>.

#### **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 possible disciplinary action. For more information regarding the Student Honor Code, please see: <a href="http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code">http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code</a>.

#### 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**

<u>Health and Wellness</u> 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*, <a href="http://www.umatter.ufl.edu">http://www.umatter.ufl.edu</a>. 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, www.counseling.ufl.edu
  Counseling Services
  Groups and Workshops
  Outreach and Consultation
  Self-Help Library
  Wellness Coaching
- Career Connections Center; First Floor JWRU, 352-392-1601; https://career.ufl.edu/
- Student Success Initiative; http://studentsuccess.ufl.edu/

#### **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, <a href="http://cms.uflib.ufl.edu/ask">http://cms.uflib.ufl.edu/ask</a>. 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, https://disability.ufl.edu/

# STUDENT COMPLAINTS

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

Online Course: https://pfs.tnt.aa.ufl.edu/state-authorization-status/#student-complaint

**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):

WK	DATES	WEEKLY MODULES	Assessments
	22-8/23 ant List	<u>Terminology Week</u> Read/Follow Flash Card Announcement Read Intro. Handouts	NO QUIZZES THIS WEEK
	26-8/30 t List 1 MODULE	Welcome; Introduction The Whole Plant Plant Nomenclature 1	NO QUIZZES THIS WEEK
Plan	9/2-9/6 t List 2 s: <i>Ficus</i>	Plant Nomenclature 2 Plant Nomenclature 3 The genus <i>Ficus</i>	Lect. Quiz 1 Lab Quiz 1
	/9-9/13 t List 3 MODULE	Leaf Arrangement and Attachment Stipules Leaf Complexity and Venation	Lect. Quiz 2 Lab Quiz 2 Terminology #1
Plan	16-9/20 t List 4 s: Ferns	Leaf Shape Leaf Apices Leaf Bases	Lect. Quiz 3 Lab Quiz 3
Plan	2 <u>3-9/27</u> t List 5 s: Cacti	Leaf Margins Leaf Textures and Surfaces Modified Structures 1	Lect. Quiz 4 Lab Quiz 4
	80-10/4 t List 6 culents	Modified Structures 2 Plant Forms Succulents	Lect. Quiz 5 Lab Quiz 5
8 <u>10/7</u>	7-10/11	MIDTERMS - TBA - no new materials	Lect. & Lab MT
	I <u>-10/18</u> t List 7 ıseplants	Plant Life Cycle and Persistence Plant Variation Flowers 1	Terminology #2 no quizzes
Plan	I <u>-10/25</u> t List 8 dscape Plants	Flowers 2, 3 Inflorescences 1	Lect. Quiz 6 Lab Quiz 6
Plan	28-11/1 t List 9 :: Palms	Inflorescences 2 Fruits 1, 2	Lect. Quiz 7 Lab Quiz 7
	/4-11/8 List 10 Orchids	Fruits 3 Plant Taxonomy 1, 2 Orchids	Lect. Quiz 8 Lab. Quiz 8
Plant	-11/1 <u>5</u>  List 11 : Aroids	Plant Groups Ferns and Fern Allies Angiosperms	Lect. Quiz 9 Lab Quiz 9 Terminology #3
	3-11/22 List 12 Cycads	Cycads Gymnosperms Dichotomous Keys	Lect. Quiz 10 Lab Quiz 10
15 11/25	5-11/29	HOLIDAY WEEK – Happy Thanksgiving!!!!!	
16 <u>12</u> NO PLA	<u>/2-12/6</u> NT LIST	Climate and Phytogeography 1, 2 Landscaping Principles	NO QUIZZES THIS WEEK
17 <u>12/9</u>	<u>)-12/13</u>	LECTURE AND LAB FINAL – TBA	