

Advance Arboriculture

HOS 6932, 4 credits

“Those with a poor understanding of history are destined to repeat it”

Spring 2016

Instructor: Edward F. Gilman, Ph.D., professor, Environmental Horticulture Department

Course communications

- 1) Course-questions discussion board - This will be used to report problems accessing materials or other non-arboriculture computer issues.
- 2) Assignment – This is your compilation of sub-assignments within each module. There are 12 modules. Weekly, students post assignments here by Thursday 11:55 pm.
- 3) Best student-assignment board – Each Sunday by 2 pm, the student assignment that represents the best effort for that module will be posted here for all students to view and discuss.
- 4) **Instructor will not** be responsible for answering emails from students about course content or technical problems. All communication shall be through the venues discussed above unless issue is of personal nature.

Required text: An illustrated guide to pruning, third edition. 2012. E.F. Gilman. Delmar Cengage Learning.

Course description:

Arboriculture is the science and art of tree care in developed landscapes. Arboricultural principles of tree structure, tree biology, and soil attributes are presented in light of techniques and treatments designed to evaluate and improve health and mechanical stability. Lectures and videos of professionals discussing their role in the arboricultural community world-wide are augmented by many applied indoor and outdoor exercises that students conduct under the direction of the instructor. Scheduled assignments and regular interaction among students and instructor ensure that all remain engaged in the topics presented in 12 modules.

Prerequisite knowledge and skills:

Basic understanding of biological principles including introductory botany or equivalent is helpful but not necessary.

Purpose of course:

Help students write effectively, argue persuasively, solve problems creatively, think critically, adapt, and learn arboriculture independently.

Course goals and objectives:

By the end of this course students will be able to:

- Evaluate tree structure and stability
- Interpret internal tree conditions from visual signs
- Articulate causes of wood decay in trees
- Grow trees with high quality roots and crown in a nursery
- Decipher the components of tree anchorage
- Evaluate and design sites to support trees
- Compose tree planting and establishment specifications
- Plant a tree
- Prescribe pruning treatments on roots, stems, and branches
- Diagnose structural and health issues
- Outline a tree risk assessment protocol

Instructional methods:

Course materials are presented to students in a wide variety of formats because there are many styles of learning. Information presented in these formats overlaps. Some students will learn best by spending considerable time with the Landscape Plants website, some will gain more by viewing all the recorded lectures, while others may find the text to be the most engaging method of learning. The required text presents many of the concepts in a complete, well-organized package together with self-assessment tools. This is augmented with video interviews with many professionals from around the world as “guest lectures”.

The outdoor exercises and techniques presented by the instructor and others will demonstrate the practicality of concepts. As a method of demonstrating your proficiency in arboriculture, students will devote considerable time to finding trees and applying treatments outdoors in the real world. The two required field days in Gainesville will introduce students to industry professionals and allow students to demonstrate their comprehension of the course material. Key evaluation strategies and treatments will be demonstrated to students during these important sessions. There is no formal paper required for this course; however, there are many short writing assignments.

How to ace this course:

- 1) Prior to attempting assignments, read the text and web site, absorb the PowerPoint lectures, view the videos, and then tackle assignments. Your success will be maximized using this approach! Do not attempt to complete assignments without preparing in this manner because you will be unfamiliar with the appropriate vocabulary. I will know when you do not use appropriate vocabulary, concepts, and approaches, and your grade will reflect this shortcoming. **Note:** To accommodate different learning styles, you will notice that concepts presented in the text, web passages, and lectures overlap to a certain extent.
- 2) Students will be outside looking at trees for a good portion of the course! Consider printing all assignments for the module you are working on (typically a page or two), and **highlight** what you need to locate and photograph. Take one trip to find as many of these as possible before returning to your computer to complete and post your assignments.
- 3) Post assignments (including images) on time.

Instructor responsibilities:

Instructor will live up to his responsibilities in a timely manner as outlined above.

Student responsibilities:

Students agree to live up to their responsibilities in a timely manner. Students will need access to tracing paper, pruning saw, digging tool, a camera or cell phone with video recording capability.

Course policies

Attendance policy/deadlines:

There is no class meeting time other than the above mentioned 2 field days; however, there are many deadlines to be met. See Due Dates.

Makeup policy for field days:

Failure to appear at a field day will result in a zero for 10% of your final grade for the course. **Students** that can provide reasonable proof of a family or medical emergency can choose to write a 10-page single-spaced research-based literature search paper on a topic of the instructor's choice. The paper will be due 10 days after the field day.

Exam policy:

There are two exams: one mid-term and one final. Both are comprehensive of material covered from the beginning of the course. Exams are multiple choice and true/false.

Course calendar of major events

January 7, Thursday 11:55 pm:	Syllabus/Handbook Quiz (not-graded)
January 14, Thursday 11:55 pm:	Module 1 assignment due
January 21, Thursday 11:55 pm:	Module 2 assignment due
January 28, Thursday 11:55 pm:	Module 3 assignment due
February 11, Thursday 11:55 pm:	Module 4 assignment due
February 18, Thursday 11:55 pm:	Module 5 assignment due
February 20, Sat. 8 am to 4 pm:	Field exercises in Gainesville
February 24, Wednesday 11:55 pm:	Module 6 assignment due
February 26, Friday 11:55pm	<u>Mid-term exam due</u>
March 10, Thursday 11:55 pm:	Module 7 assignment due
March 17, Thursday 11:55 pm:	Module 8 assignment due
March 24, Thursday 11:55 pm:	Module 9 assignment due
April 7, Thursday 11:55 pm:	Module 10 assignment due
April 9, Sat. 8 am to 4 pm:	Field exercises in Gainesville
April 14, Thursday 11:55 pm:	Module 11 assignment due
April 20, Wednesday 11:55 pm:	Module 12 assignment due
April 26, Tuesday 11:55pm:	<u>Final exam due</u>

Assignment Details and Grade Distribution

10% of grade

Best Student Assignment Discussion Board:

Instructor will post to this board the “Best student assignment”, along with my comments, for each week on Sundays by 2:00 pm. They are numerically titled by module number. All students will be able to access this. **Students** (except for the student that submitted the post) are required to post a relevant response of 100 words or more which includes a comment, critique, or other creative or persuasive argument that advances the discussion of one titled topic in the assignment. If you cannot add meaningfully to the discussion without repeating another person’s post, then respond to my comments on the same discussion board. Compose your thoughts carefully in word processing software prior to posting in order to present a meaningful, well thought out persuasive comment or argument with no spelling errors. Student posts are due by Tuesday at 11:55 pm, and are graded using the Best Student Assignment Discussion Board Grading Rubric. **NOTE:** Comments such as “Great job, I really liked the way you presented the soil drainage concept” are not appropriate. A comment such as “Water drained much slower than it did in my soil; therefore many trees are likely to develop a more shallow root system when planted in your soil than in mine” would be more appropriate.

40% of your grade

Assignments: **Students** will submit all assignments by Thursday at 11:55 pm. Essentially, this is the lab portion of the course. This will be a very important method for us to discuss your comprehension of arboriculture. Assignments can be used as a showcase for a potential employer, and can serve as a technical resource for you in the future.

Students may choose to not post one of the listed assignments for each module; however, you **MUST** complete ALL assignments that include my posted photographs! You will be responsible for learning the material you omit, and it will be included in the two exams. Include the title of each sub-assignment above your response so I know which you are addressing. Following submission of your completed Word file, **instructor** will post comments/questions/suggestions on your Word file through “Track changes” along with one grade for the entire module. These comments are meant to make you think more critically about your assignments.

Students should compose 4 multiple choice questions each with 4 answers for each module. Please use the multiple choice questions in the text as a guideline to format. There should be one correct answer for each question; please indicate which is the correct answer. Your distractors (incorrect or less correct answers) should be designed to make students think, not be so incorrect that the correct answer is obvious. Your questions should be original, not modifications of those in the text.

Due dates and grade points

- 1) Each Thursday by 11:55 pm - **Students** post completed assignments (preferably in a Word document) for the current module. Modules submitted by Friday 11:55 pm will be accepted, but 4 points (out of 10) will be subtracted from the grade. Modules submitted after that will not be graded and will receive a zero.
- 2) Sunday by 2 pm – **Instructor** posts your Word file with comments and a grade for that module. Up to 10 points will be awarded according to the Assignments Grading Rubric for a total of 10 x 12 assignments = 120 points for the course.

- 3) Sunday by 2 pm - **Instructor** posts “best student assignment”. That student will receive a grade of 10 plus an extra point for a total of 11 for that module. There are a total of 12 “best student assignment” points awarded in the course.
- 4) **Your lowest grade** (i.e., 1 of 12) will be dropped from calculation of your final grade for the course! However, you will be responsible for this material on exams and at the field day.

Be sure to read assignments completely well in advance of due date because many of them have an outdoor component (consider the weather in your planning) and some of them have a 3 to 4 page written report requirement. Grading rubric includes grammar, spelling, and punctuation components. **Hint:** *Grammar, spelling, and punctuation are difficult to get just right the first time you write a passage, so do not wait until the last minute to perform your assignments (Those speaking English as a second language will be accommodated accordingly).*

Note: Students are welcome to use the Landscape Teaching Laboratory which is a 20 acre outdoor facility located in Gainesville. It is open most days 8 to 4. The site contains many trees of different species and sizes and is available for digging into soil; selected tools are available to help complete some assignments. Make an appointment well in advance (several days) with Chris Harchick (cell: 352 262 9239).

20% of grade

On-campus field days:

There will be two mandatory (students more than an 8 hour drive from Gainesville may negotiate for special accommodations) outdoor field days conducted in Gainesville, one in mid-February and one in late-April. Each will begin Saturday morning at 8 am and finish by 4 pm Saturday. There will be periodic breaks including a 60 minute lunch break. These will each be a combination of skills assessment and field instruction and will focus on arboriculture observational and field skills of material covered in past modules. Representatives from the industry will participate in these sessions. Failure to appear at a field day will result in a zero for 10% of your final grade for the course. **Note:** *Students located more than an 8 hour drive from Gainesville Florida will not be required to come to Gainesville (however attendance is recommended); they will demonstrate arboriculture competence through a mechanism mutually agreed upon with instructor.*

30% of grade

Written examinations:

Two tests are planned, one February 25-26 (13% of final grade) and one final exam (17% of final grade). These will be timed tests designed to be “closed book”. They will be multiple choice, fill in the blank, matching, and/or true/false with many questions so students will be challenged to think quickly. Tests are designed to ask questions not covered in other assignments, primarily from the reading material.

Course grade

94-100% A
90-93% A-
87-89% B+
83-86% B
80-82% B-
77-79% C+

73-76% C
70-72% C-
67-69% D+
63-66% D
60-62% D-
≤59% E

UF Policies

Grades and Grade Points

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

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>.

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 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
 - Training Programs
 - Community Provider Database
- *Career Resource Center, First Floor JWRU, 392-1601, www.crc.ufl.edu/*

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, www.dso.ufl.edu/drc/