

Arboriculture

ORH 4242, 4 credits

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

Spring 2014

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) Arboriculture discussion board – This is used for communication between instructor and all students. The instructor will provide discussion prompts for each module.
- 3) Assignment board – This is your personalized discussion with the instructor that can be viewed only by the instructor and the individual student. Weekly, students post assignments here by Thursday 11:59 pm.
- 4) 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.
- 5) **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.

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

Course description: Arboriculture is the care of trees 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. Assignments are due every Thursday by 8 pm.

Several days are provided for all students to respond to my posts to the Arboriculture discussion board by Tuesdays at 10 am. **Students** have one day to respond to the “Best student post” also by Tuesdays at 10 am.

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 7 days after the field day.

Exam policy: There are two exams, a mid-term and a final. Both are comprehensive of material covered from the beginning of the course. Exams are multiple choice, short answer, and scenario based.

Course calendar of major events

January 9, Thursday 11:59 pm:	Practice assignment due (feedback provided, but not graded)
January 16, Thursday 11:59 pm:	Module 1 assignment due
January 23, Thursday 11:59 pm:	Module 2 assignment due
January 30, Thursday 11:59 pm:	Module 3 assignment due
February 13, Thursday 11:59 pm:	Module 4 assignment due
February 20, Thursday 11:59 pm:	Module 5 assignment due
February 22, Sat. 8 am to 4 pm:	Field exercises in Gainesville
February 27, Thursday 11:59 pm:	Module 6 assignment due
February 28:	<u>Mid-term exam</u>
March 13, Thursday 11:59 pm:	Module 7 assignment due
March 20, Thursday 11:59 pm:	Module 8 assignment due
March 27, Thursday 11:59 pm:	Module 9 assignment due
April 10, Thursday 11:59 pm:	Module 10 assignment due
April 17, Thursday 11:59 pm:	Module 11 assignment due
April 19, Sat. 8 am to 4 pm:	Field exercises in Gainesville
April 23, Wednesday 11:59 pm:	Module 12 assignment due
	<u>Final exam given at listed time for the course</u>

Assignment details and grading rubrics

5 % of grade

Arboriculture discussion board:

- 1) This will be used by the **instructor** to regularly communicate relevant and timely information to the entire class including reminders.
- 2) This will be used by the **students** to ask clarifying questions of the instructor regarding assignments and arboriculture topics in general.
- 3) **Instructor** will initiate a new thread (numerically titled by module number) for discussion on Fridays relevant to the current or the following week’s topics when appropriate. **Students** will post at least one relevant response by Monday at 2 pm. A relevant response (more than 100 words) includes a comment, critique, suggested research study, or other creative or persuasive argument that advances the discussion of the topic. 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 graded according to the rubric below.

- 4) Please check this discussion board prior to embarking on assignments because there might be a post that clarifies an issue.

Arboriculture discussion board grading rubric:

- 1) posting a relevant response of 100 words or more (33%)
- 2) addressing the issue(s) accurately using appropriate arboriculture vocabulary and concepts (33%)
- 3) writing in complete sentences using appropriate grammar, spelling, and punctuation (where writing text passages are appropriate) (3%)

5% of grade

Best student-assignment 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 (the ones in CAPITAL LETTERS) in the assignment. Student posts are due by Tuesday at 2 pm, and are graded by the rubric shown below.

Best student assignment board grading rubric:

- 1) posting a relevant response of 100 words or more (33%)
- 2) addressing the issue(s) accurately using appropriate arboriculture vocabulary and concepts (33%)
- 3) writing in complete sentences using appropriate grammar, spelling, and punctuation (where writing text passages are appropriate) (33%)

40% of your grade

Assignment board: **Students** will post all assignments to their individual assignment board by Thursday at 11:59 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 (titled with CAPITAL LETTERS) 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. Before starting the assignments for a module, please copy and paste the entire assignment document for the module into a Word file. Include your response to the assignments directly underneath the text written for each assignment. Following submission of your completed Word file, **instructor** will post comments/questions/suggestions on your Word file through “Track changes” along with one grade to the entire module. These comments are meant to make you think more critically about your assignments.

Due dates and grade points

- 1) Each Thursday by 11:59 pm - **Students** post completed assignments for the current module. Modules submitted by Friday 11:59 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 board 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).*

Assignments board grading rubric: One grade will be assigned to each module based on

- 1) completing all titled (those in CAPITAL letters) assignments (20%)
- 2) answering the question(s) accurately using appropriate arboriculture vocabulary and concepts (20%)
- 3) labeling or identifying relevant parts clearly and accurately (20%)
- 4) writing in complete sentences using appropriate grammar, spelling, and punctuation (where writing text passages are appropriate) (20%)
- 5) comprehension of arboriculture subjects relevant to the module (20%)

For each student, there is a total of 12 assignment grades for the semester. The rigor of grading will increase during the semester because the **student** will be expected to improve in all aspects of the grading rubric throughout the semester.

Note: Students are welcome to use the Landscape Teaching Laboratory which is a 10 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; they will demonstrate arboriculture competence through a mechanism mutually agreed upon.*

Grading rubric: Grades will be assigned to students during field days by the following:

- 1) attendance
- 2) completing all assessments
- 3) answering question(s) accurately
- 4) labeling or identifying parts appropriately

30% of grade

Written examinations:

Two tests are planned, one February 28 (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/