

## Tree Biology - FOR 3342C - Fall 2023 Syllabus

**Instructor:** Dr. Tim Martin (pronouns: he/him, 359 N-Z, 846-0866, [tamartin@ufl.edu](mailto:tamartin@ufl.edu))

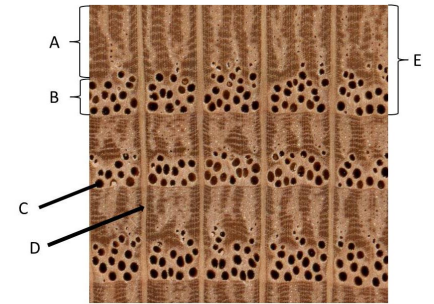
**Student Hours:** Before class on Tuesdays or by appt.; Otherwise, open door policy - If my office door is open and I'm not meeting with someone else, please feel free to drop in. Feel free to e-mail as well.

**Course web resources:** UF Canvas Site

**Lectures:** Tuesday, Periods 8-9 (3:00 p.m. – 4:55 p.m.), 219 Newins-Ziegler

**Lab/Lecture:** Friday, 9:15 a.m. (unless otherwise indicated) – 11:30 a.m., 3108 McCarty B

**Objectives:** After completing this course, students should be able to (1) Describe fundamental structural and functional attributes of forest trees; (2) Apply tree physiology knowledge to better understand and predict the responses of trees and forests to their environment and to management.



Cross section of red oak wood, characteristic of ring porous xylem anatomy (Hoadley).

**Supplemental Text (not required – available on UF ARES electronic reserve) :** Pallardy, S.G. 2007. *Physiology of Woody Plants*, Third Edition. Academic Press, San Diego. 480 p.

**Lecture Outlines:** Lecture outlines will be handed out at the beginning of each lecture. Lecture outlines will also be available for downloading from the Canvas web site, usually by the evening before each lecture. I strongly encourage you to use these outlines to take notes from lectures. These outlines with your notes will be your primary resources to study for quizzes and exams.

## Evaluations and Expectations

**IMPORTANT:** This course has a number of quizzes, assignments, and exams. Please pay careful attention to Canvas to review what needs to be done, when assignments and quizzes are due, etc.

**Outside-of-class Quizzes:** Quizzes will be given on Canvas covering information from the previous week's lecture OR from assigned materials that you watch or read prior to class. Read Canvas carefully so that you understand what each quiz covers. Quizzes typically open on Friday, and right before class starts on Tuesday. You may use your notes during individual quizzes, but you may NOT work with other people when taking the quiz. Do NOT copy text from the internet or other sources for free response questions. The lowest individual quiz score will be dropped when calculating final grades.

**During-class quizzes:** During lectures and before lab sessions, quiz questions will periodically be posed on the I-clicker Student application. Because these quizzes are intended to help me gauge your understanding during lectures, and to provide a check on attendance, in-class quizzes are graded for response rather than for correctness. The lowest in-class quiz score will be dropped when calculating final grades. *You will need to download the software to your phone or laptop, create an account, and log in to this class at the beginning of each class session.*

**Exams:** There will be four non-comprehensive exams during the semester, administered on Canvas outside of class time. Exams will be open book, but will have relatively strict time limitations, so make sure to study prior to the exam. You may NOT work with other people when taking the exams. Do NOT copy text from the internet or other sources for free response questions – use your own words.

**Lab reports:** Lab reports are turned in on Canvas as a Word document. Pay careful attention to due dates and times as listed on the lab handouts, lecture schedule in the syllabus, and on Canvas. *No late lab reports will be accepted.* It is not possible to make up a missed lab, but the lowest lab report score will be dropped when calculating final grades.

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## Assignments, quizzes and exams Summary Table

Assignment	Total number	% of total course points
Non-Comprehensive Exams	4	40
Lab Reports	5 (drop lowest score)	30
In-class Quizzes	~15 (drop lowest score)	10
Out-of-class Quizzes	~10 (drop lowest score)	20

Final grades will be assigned as: 89.5-100% A, 86.7-89.4% B+, 83.4-86.6% B, 79.5-83.3% B-, 76.7-79.4% C+, 73.4-76.6% C, 69.5-73.3% C-, 66.7-69.4% D+, 63.4-66.6% D, 59.5-63.3% D-, < 59.5% E

**Attendance:** Please make an effort to attend and arrive promptly for all class meetings. If you must miss a lecture, you may download the handout from the course Canvas site or copy a colleague's notes. Keep in mind that in-class Iclicker quizzes are a part of your grade, and you cannot receive credit for these unless you are in class.

**Classroom Atmosphere:** I strive to develop an atmosphere of mutual courtesy and respect in class, so that everyone is comfortable and free to learn. Please help me in this effort by refraining from distracting activities in class like reading the newspaper, using electronics including phones, and having side conversations. On the other hand, I heartily encourage you to ask questions or provide comments in class. I promise that all comments and questions will be handled respectfully and as thoroughly as I can. Healthy classroom discussion helps us all learn from each other.

**Plagiarism:** Using another's work or writing without giving credit is one definition of plagiarism. Plagiarism is a serious offense and will be dealt with harshly. If you have any questions about plagiarism, feel free to ask the instructor.

## UNIVERSITY OF FLORIDA POLICIES YOU NEED TO KNOW:

This course plan and syllabus are subject to change in response to student and instructor needs. Any changes will be clearly communicated in advance.

### Grades and Grade Points

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

### 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: <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>.

For online course with recorded materials a statement informing students of privacy related issues such as:

Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

### Online Course Evaluation Process

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:

<https://gatorevals.a.ufl.edu/students/>. 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 <https://ufl.bluera.com/ufl/>.

Summaries of course evaluation results are available to students at: <https://gatorevals.a.ufl.edu/public-results/>.

## 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/process/student-conduct-honor-code>.

## 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.

## 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/>

## 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](http://www.counseling.ufl.edu)*

### Counseling Services

Groups and Workshops

Outreach and Consultation

Self-Help Library

Wellness Coaching

- *U Matter We Care, [www.umatter.ufl.edu/](http://www.umatter.ufl.edu/)*
- *Career Connections Center, First Floor JWRU, 392-1601, <https://career.ufl.edu/>.*
- *Student Success Initiative, <http://studentsuccess.ufl.edu>.*

## The Hitchcock Field & Fork Pantry

is a free resource to support UF undergraduate and graduate students, faculty, and staff experiencing any level of food insecurity. Experiencing food insecurity may mean you have faced challenges to meeting your needs in quantity and nutritional quality of food. For example, food insecurity may look like eating ramen because you can't afford foods you consider healthy, nutritious, or appropriate for yourself, to outright skipping meals or eating smaller meals. If you're not sure about whether you fit the criteria, come anyway! You only need to bring your UFID; you do not need to prove that you are in need. The Pantry is located between Marston Science Library and McCarty Hall, behind the HUB, on the University of Florida Gainesville campus. [pantry.fieldandfork.ufl.edu](http://pantry.fieldandfork.ufl.edu)

## Student Complaints:

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

**Tree Biology - Fall 2023 Syllabus - COURSE SCHEDULE at a glance - See Canvas for detail**

Week # Week Of	Tuesdays  3:00-4:55 219 Newins-Ziegler	Fridays  9:15 – 11:30 NOTE 9:15 START 3108 McCarty B	Quizzes complete by Tues. 2:59 p.m.	Exams Available Friday at 11:59 p.m., complete by Tuesday 2:59 p.m. of following week
1 Aug 21		<b>8:30 Start today!</b> Course Introduction; Syllabus; Woody plant structure Introduction to labs and How to write a lab report		
2 Aug 28	Primary growth	Lab Exercise: Vegetative shoot development <i>Lab report due September 12</i>	<b>Quiz 1</b>	
3 Sep 4	Secondary growth and wood development	Lab Exercise: Lumber biology: stem anatomy <i>Lab report due September 19</i>		<b>Exam 1</b> (Structure through Secondary growth)
4 Sep 11	Photosynthesis I – Biochemistry Photosynthesis II – Biological and Environmental Controls	Photosynthesis II - Biological and Environmental Controls	<b>Quiz 2</b>	
5 Sep 18	Respiration Carbohydrates	Lab Exercise: Measuring photosynthesis and respiration <i>Lab report due October 3</i>	<b>Quiz 3</b>	
6 Sep 25	Mineral nutrition and nutrient cycling	Water relations I: water potential; uptake, transport and loss of water		<b>Exam 2</b> (Photosynthesis through Mineral nutrition)
7 Oct 2	Water relations I (finish)	<b>HOMECOMING – No Class</b>	<b>Quiz 4</b>	
8 Oct 9	Water relations II: Control of transpiration; tree and stand water balance	Lab Exercise: Water potential <i>Lab report due October 31</i>	<b>Quiz 5</b>	
9 Oct 16	Water relations III: Water stress and xylem cavitation	Water relations III: Water stress and xylem cavitation	<b>Quiz 6</b>	
10 Oct 23	<b>NO CLASS SAF CONVENTION</b>	<b>NO CLASS SAF CONVENTION</b>	<b>Quiz 7</b>	
11 Oct 30	Radiation effects on tree morphology and physiology	Radiation effects on tree morphology and physiology		<b>Exam 3</b> (Water relations I- III, Radiation effects)
12 Nov 6	Reproductive biology	<b>VETERANS DAY – No Class</b>	<b>Quiz 8</b>	
13 Nov 13	Energy balance	Lab Exercise: Energy Balance <i>Lab report due December 5</i>	<b>Quiz 9</b>	
14 Nov 20	<b>ONLINE LECTURE:</b> Genetics of forest trees	<b>THANKSGIVING – No Class</b>		
15 Nov 27	Tree improvement	<b>Field trip: Austin Cary Forest, details TBA</b>	<b>Quiz 10</b>	
16 Dec 4	Tree responses to pathogens and injury	<b>READING DAY – No Class</b>		<b>Exam 4</b> (Reproductive Biology through Tree Responses to Pathogens)

