

Tree Biology - FOR 3342C – Section 13036 & 26751 - Spring 2021 Syllabus

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Teaching Assistant: Makayla Rutski (pronouns: she/her)

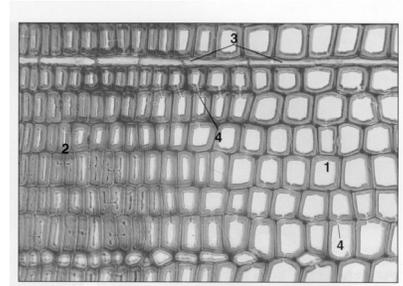
Student Hours: Before class on Wednesdays or by appt.; Otherwise, open door policy - If my office door is open and I'm not meeting with someone else, please feel free to drop in. Feel free to e-mail as well.

Course web resources: UF Canvas Site

Lectures: Wednesday, Periods 2-3 (8:30 a.m. – 10:25 a.m.), 219 N-Z Hall

Lab: Friday, 9:15 a.m. – 11:30 a.m., 219 N-Z

NOTE: This class is being taught “hyflex”, which means students in the online section should plan to be in class virtually during the class meeting times.



Cross-sectional view of a conifer stem showing earlywood (1) and latewood (2) tracheids, a ray (3) and inter-tracheid pits (4). Magnified 275 X.

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.

Supplemental Text (not required) : 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.

Individual Quizzes: Individual 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 open on Canvas at 12:01 a.m. on Tuesday, and close at 8:30 a.m. on Wednesday. You may use your notes during individual quizzes, but you may NOT work with other people when taking the quiz. The lowest individual quiz score will be dropped when calculating final grades. *Make-up quizzes will be given only under extreme circumstances.*

Group Quizzes: Group quizzes are similar or identical to the individual quiz over the same material, but are taken cooperatively during class with your assigned small group so that you can discuss answers with each other. You must be present to receive credit for a group quiz.

During-class quizzes: During synchronous lectures, quiz questions will periodically be posed on Zoom or a similar response system. These quizzes will help you engage with lectures, and help me to tell how well you are understanding the material. Partial credit (75%) will be given for any answer, full credit (100%) will be given for each right answer.

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. *Make-up exams will be given only under extreme circumstances.*

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.* 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	25
	(drop lowest score)	
In-class Quizzes	~12	10
Individual Quizzes	~10	15
	(drop lowest score)	
Group Quizzes	~10	10

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.

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 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 syllabus represents current plans and objectives for this course. As the semester progresses, changes may need to be made to accommodate timing, logistics, or to enhance learning. Such changes, communicated clearly, are not unusual and should be expected.

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/>. Details for this course can be found above and on Canvas.

COVID Policies

We will have face-to-face instructional sessions to accomplish the student learning objectives of this course. In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.

You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.

- This course has been assigned a physical classroom with enough capacity to maintain physical distancing (6 feet between individuals) requirements. Please utilize designated seats and maintain appropriate spacing between students. Please do not move desks or stations.
- Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.
- Follow your instructor's guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.
- If you are experiencing COVID-19 symptoms ([Click here for guidance from the CDC on symptoms of coronavirus](#)), please use the UF Health screening system and follow the instructions on whether you are able to attend class. [Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms](#).

Class Recordings

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. I do give you permission to record audio in course meetings to use for your own reference, without sharing.

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

Student Complaints:

- Residential Course: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>.
- Online Course: <http://www.distance.ufl.edu/student-complaint-process>

UF/IFAS Field and Fork Food Pantry, <http://pantry.fieldandfork.ufl.edu>

- The Pantry is a resource on the University of Florida campus committed to eradicate food insecurity. Food insecurity is not having a reliable access to nutritious foods for yourself on a regular basis. If you, or anyone you know is experiencing food insecurity, the Pantry is a resource to visit. They offer non-perishable food, toiletries and fresh vegetables grown at the Field and Fork Gardens to provide a well-balanced diet. Protecting the privacy of its guests and providing food to those in need within our campus community is a priority. Guests do not need any proof of need to use this resource, all that is needed is a Gator 1 ID to prove you are a current Student, Faculty or Staff at the University of Florida.

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Week	Wednesdays Period 2-3 (8:30-10:25) 219 Newins-Ziegler Hall or Online	Fridays Periods 2-4 (9:15 – 11:30) NOTE 9:15 START 219 Newins-Ziegler Hall or Online	Individual Quizzes Available Tues. at 12:01 a.m., complete by Wed. 8:30 a.m.	Exams Available Friday at 11:59 p.m. of previous week, complete by Wednesday 8:30 a.m. of current week Time limit of approximately 1.5 hrs
Jan 13-15	Course Introduction; Syllabus; Woody plant structure	Woody plant structure (finish) Introduction to labs and How to write a lab report		
Jan 20-22	Primary growth	Lab Exercise: Vegetative shoot development <i>Write-up Due January 29</i>	Quiz 1	
Jan 27-29	Secondary growth and wood development	Lab Exercise: Lumber biology: stem anatomy <i>Write-up Due February 12</i>	Quiz 2	
Feb 3-5	Photosynthesis I - Biochemistry	Photosynthesis II - Biological and Environmental Controls		Exam 1 (Structure through Secondary growth)
Feb 10-12	Photosynthesis II - Biological and environmental controls	Lab Exercise: Measuring photosynthesis and respiration <i>Write-up Due February 26</i>	Quiz 3	
Feb 17-19	Respiration Carbohydrates	Mineral nutrition and nutrient cycling	Quiz 4	
Feb 24-26	Water relations I: water potential; uptake, transport and loss of water	Water relations I (finish)		Exam 2 (Photosynthesis through Mineral nutrition)
Mar 3-5	Water relations II: Control of transpiration; tree and stand water balance	Lab Exercise: Water potential <i>Write-up Due March 19</i>	Quiz 5	
Mar 10-12	Water relations II: Control of transpiration; tree and stand water balance	Water relations III: Water stress and xylem cavitation	Quiz 6	
Mar 17-19	Water relations III: Water stress and xylem cavitation	Radiation effects on tree morphology and physiology – ONLINE LECTURE – view on Canvas lecture page	Quiz 7	
Mar 24-26	Flex Day	Energy balance ONLINE LECTURE – view on Canvas lecture page		Exam 3 (Water relations I-III, Radiation effects)
Mar 31 – Apr 2	Reproductive biology	Lab Exercise: Energy Balance <i>Write-up Due April 16</i>	Quiz 8	
Apr 7-9	Genetics of forest trees		Quiz 9	
Apr 14-16	Tree improvement	Field trip: Austin Cary Forest, details TBA	Quiz 10	
Apr 21	Last day UF classes			Exam 4 (Energy balance, Reproductive Biology through Tree Improvement)