

FOR 4624C/FOR 6934 -- Forest Health Management

Spring, 2020

Instructors: J.A. Smith, Associate Professor; 212 Newins-Ziegler Hall; 846-0843 jasons@ufl.edu and J. Hulcr, Assistant Professor, hulcr@ufl.edu

Office Hours: non-class hours, M-F 8:00-5:00, by appt.

Guest Lectures will be given by: Jeff Eickwort, Dr. Ed Barnard, Stephanie Adams, Claudia Paez (and possibly others)

General Course Procedures:

Class hours and locations: Mondays, 10:40 a.m.-12:35 p.m., 1070 Weimer Hall and Thursdays, 8:30-11:30 a.m. in 219 NZ unless otherwise noted.

Occasionally we will meet earlier or go later to facilitate field trips. These class hours will variously be used for field and laboratory elements, the specific content of which will vary according to need for field trips, conventional indoor labs, tests, and lectures. Trips requiring appropriate field gear will be announced in advance. The duration of field trips can vary; prior notice of anticipated duration will be provided.

Attendance is essential. You are here to learn; my job is to facilitate that process. Classes will mostly be hands-on, lab-based or field-based experienced that cannot be made up. Lectures are pre-recorded and are to be watched on Canvas.



If you have questions, see me at any time.

Supplies: You may find a three-ring, loose-leaf notebook to be useful in aiding organization of handouts and notes.

A schedule for the topics to be covered will be given at the first day of class. We will not strictly adhere to this schedule, rather, we will use it as a general list of topics to be covered and may spend more time on certain topics than others.

Texts: There is no teaching text available to support this course. However, the following books will serve as reference texts in support of some portions of the lecture materials. While these books are not teaching texts, and are not required for the course, they are excellent professional references and as such they should be viewed as an investment in your personal library as well as items in support of this particular course.

Sinclair, Lyon, and Johnson. 2005. Diseases of Trees and Shrubs. 2nd Ed., Cornell University Press.

Johnson and Lyon. 1988. Insects that Feed on Trees and Shrubs. 2nd Ed., Cornell University Press.

Reading assignments will be given from materials distributed in class and posted on the Canvas website for the class. Please become familiar with the Canvas website as we will use it often to post assignments, readings, lecture notes and class announcements.

Evaluation of Learning/Performance:

Grading: A= 90-100, B = 80-89, C = 70-79, D = 60-69, E = < 60

Tests: Two exams will be given, a midterm exam and a final exam. The exams will include factual, conceptual, and problem solving components. Laboratory and field trip material will be included in each exam. Each exam will comprise 30% of the course grade.

'Assigned' Invasive White Paper and Report:

To be assigned and detailed approximately mid-way through the term. The paper and presentation will comprise 20% of the course grade (10% each).

Landscape Level Forest Health Risk Assignment: This will involve using the USDA-FS Forest Health Portal Website to provide a synopsis of forest health conditions and problems in a state. Exact details TBA. Worth 10% of course grade FOR GRADUATE STUDENTS ONLY.

Sick tree scavenger hunt and diagnosis: This assignment will involve searching for, photographing and providing a diagnosis for sick trees and will account for 5% of the class grade.

Participation:

Participation will comprise 5% of the course grade (FOR 4624C students only). Participation points are earned according to attention and constructive, positive involvement in the course. DAILY quizzes will be given during the semester and will contribute to this portion of the grade. There are no opportunities for make-ups on these.

Course Administration:

Please plan to arrive at class on time late arrivals are disruptive to the class and inconsiderate of those who have made the effort to be on time. The course has a website in canvas. Presentations, papers for reading and other pertinent information will be posted there. Be sure to check it often.

Important Dates:

24 February: **Midterm Exam**

20 February: **Sick Tree Visitation Assignment due**

6 April: **Statewide Forest Health Monitoring Project due (GRADUATE STUDENTS)**

16 April: **Invasive Paper Due**

13 and 16 April: **Invasive Presentations**

29 April: **Final Exam 3-5:00 p.m.**

Helpful Hints:

This course may appear to start off very slowly, don't be lulled into a false sense of academic security. Study as we go. As soon as possible after each class, thoughtfully review the material we have just covered and list any points that need clarification. Seek to answer the questions yourself, it will reinforce the learning process. If you still have questions, please see me as soon as possible, while the material is still fresh. This relatively minor investment each week will increase long-term retention, reduce the time needed to specifically prepare for tests, and will improve your testing performance.

Academic Honesty, Software Use, UF Counseling Services, Services for Students with Disabilities

In 1995 the UF student body enacted and voluntarily committed itself to the highest standards of honesty and integrity. When students enroll at the university, they commit themselves to the standard drafted and enacted by students.

In adopting this honor code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the university community. Students who enroll at the university commit to holding themselves and their peers to the high standard of honor required by the honor code. Any individual who becomes aware of a violation of the honor code is bound by honor to take corrective action. The quality of a University of Florida education is dependent upon community acceptance and enforcement of the honor code.

The Honor 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.

On all work submitted for credit by students at the university, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The university requires all members of its community to be honest in all endeavors. A fundamental principle is that the whole process of learning and pursuit of knowledge is diminished by cheating, plagiarism and other acts of academic dishonesty. In addition, every dishonest act in the academic environment affects other students adversely, from the skewing of the

grading curve to giving unfair advantage for honors or for professional or graduate school admission. Therefore, the university will take severe action against dishonest students. Similarly, measures will be taken against faculty, staff and administrators who practice dishonest or demeaning behavior. Students should report any condition that facilitates dishonesty to the instructor, department chair, college dean or Student Honor Court. (Source: 2010-2011 Undergraduate Catalog)

It is assumed all work will be completed independently unless the assignment is deemed as a group project, in writing by the instructor. This policy will be vigorously upheld at all times in this course. 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, provides: Counseling Services, Groups and Workshops, Outreach and Consultation, Self-Help Library, Training Programs, Community Provider Database

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.

Tentative Course Schedule (subject to change)

Field trip (i.e. plan on it), lab exercise (cannot be made up)

Date	Topic	Assignment Due?	Reading
January 6	Intro to class and forest health (Smith)		
January 9	Refresher on tree biology, function & tree communication (Smith)		Kolb et al., 1994 Barnard, 2002

January 13	How to recognize sick trees - Signs and symptoms of		http://www.forestpathology.org/concepts.html
January 16	Introduction to fungi (Paez)		Boddy et al., 2010 Kupferschmidt, 2012
January 23	Laboratory exercise on fungi Koch's Postulates Lab 1		<u>Watch TED talk on "6 ways fungi save the world" by Paul Stamets</u>
January 27	Root and Stem diseases of trees		TBA
January 30	Root and Stem diseases of trees field trip		TBA
February 3	Foliar diseases of trees		TBA
February 6	<u>Foliar diseases field trip</u>		
February 10	Disease samples lab - Koch's Postulates Continued		
February 13	Nursery pests and diseases (Barnard)		
February 17	Nursery Disease Field Trip		
February 20	Tree health diagnostics: Lecture and lab (Adams)	Sick tree visitation assignment due	
February 24	**Midterm Exam**		
February 27	Insect pests of forests: an introduction (Hulcr)		TBA
March 9	Insect pests of forests continued (Hulcr)		TBA
March 12	Bark beetles in pine forests field trip (Hulcr)		TBA

March 16	Insect pest identification lab (Hulcr)		TBA
March 19	SPB Prevention Program (Eickwort)		TBA
March 23	Introduction to exotic species and forest health (Smith)		
March 26	Invasives Field Trip		Hulme, 2009; Lovett et al., 2006
March 30	Demonstration of laurel wilt treatment/ Hazard tree assessment lab (Adams/Spence)		Ploetz et al., 2013; Mayfield et al, 2008
April 2	Genetic solutions to forest health problems		Anagnostakis, 1987; Brasier et al., 2001; Schoettle et al., 2007
April 6	Final Field Trip (Torreya State Park ?)	State wide forest health monitoring project due	
April 9	TBA		
April 13	Invasive Presentations		
April 16	Invasive Presentations	Invasive Pest/ Pathogen Paper Due	
April 20	Review Session		
April 29	**Final Exam** 3:00 PM - 5:00 PM		

