

FNR6505 – Forest Ecosystem Health

1 Course Overview

Course description:

This online course is designed to expose students to invasive and native forest and tree health issues and their management in the southeastern U.S. For each forest health topic, students will learn the biology, ecology, and management strategies. Modules include pre-recorded lectures, videos, and/or webinars followed by a brief quiz. Additional assignments such as online discussions, fact sheets, and a scientific review paper will expose students to various forms of technology transfer regarding these issues.

- Credits: 3
- Fall 2025
- Format: online, asynchronous
- <http://elearning.ufl.edu/>

Course Prerequisites: N/A

Instructor: Jeffrey Eickwort

- Contact instructions –Please use the Canvas message/Inbox feature for fastest response, or email me at eickwort@ufl.edu. I will typically respond to messages or emails within 24 hours.
- Office hours: By appointment – phone, Zoom, or in-person (for on-campus students).
- Phone, if urgent: 352-792-5357 (text is okay).

Textbook(s) and/or readings: There is no required text for the course. Required readings will be provided.

2 Learning Outcomes

By the end of this course, each student will be able to:

- Discuss and evaluate concepts of forest and ecosystem health; Explore roles of “pests” and pathogens in ecosystems and conceptualize their conservation in ecological and evolutionary frameworks.
- Understand and recognize interactions between pathogens, insects, and tree hosts in a forest system.
- Synthesize the biology, history and impacts from and management of pests and diseases in forests in North America.
- Hypothesize how future pests and disease impacts could be avoided or managed.

3 Course Logistics

This course is asynchronous in that the lectures will be pre-recorded and remain available after posting, and the deadlines on weekly quizzes and participation are relaxed. However, the lectures and other materials will be posted on a weekly schedule (rather than all at once), to encourage discussion and engagement by promoting a similar timing for most students through the semester. A typical week’s materials will include one or more video lectures, a brief online quiz, and a discussion prompt on

Canvas, along with related readings and other materials. Major course assignments will be introduced through the semester but will also be posted in advance on Canvas. Semi-weekly live Zoom sessions will also be announced where we can have relaxed and informal discussion on related topics, we can go over any questions, and I will bring up current real-world cases and issues. Participation in these is optional and ungraded, but encouraged.

Technology Requirements:

- A computer or mobile device with high-speed internet connection.
- A webcam, headset and/or microphone, and speakers.
- Latest version of web browser. Canvas supports only the two most recent versions of any given browser.
- Installation of proctoring software may be required and will be provided if so.

Synchronous online sessions may be recorded. By sharing your video, screen, or audio during any synchronous online class sessions, you are consenting to being recorded for the benefit of students who cannot attend live as well as for class review during the current semester. If you have special circumstances or concerns about privacy, it is your responsibility to discuss it with your instructor.

3.1 Description of Assessments & Activities

Introduction: 5 points. Please introduce yourself in the Canvas Discussion set up for that purpose.

Quizzes: 10 points each, 130 points total. Quizzes will be administered (on Canvas) with each weekly lecture. Quizzes will consist of a combination of formats including multiple choice, short answer, and short essays, related to the subject matter covered in the lecture and associated materials. Questions will be “open notes” but will require critical thinking, integration, and application of interdisciplinary concepts. **Quizzes will open when weekly lectures are posted each Monday and will remain open until 11:59pm on December 7th.** There will be no separate Midterm or Final Exam.

Discussions: 10 points each, 130 points total. With each week’s segment, I will post a discussion thread on Canvas, with a question or prompt related to the week’s lecture topics. Each student should post a substantive comment of their own (7 points possible), and also respond substantively to at least one other student’s comment (3 points possible). This will also count as part of your participation grade in the class. **Discussions will open when weekly lectures are posted each Monday and will remain open until 11:59pm on December 7th.**

“Sick Tree” Scavenger Hunt, 150 points. This assignment will involve searching for, photographing, and suggesting a diagnosis for sick trees in your area and will account for 15% (150 points) of the class grade. **This is due November 1.**

“Favorite Invasive” Report, 150 points. For this assignment, you will select an exotic pest or pathogen that is currently threatening North American forests or could do so in the future. You will research and summarize its biology, observed and potential impacts, and management. **This is due November 16. Your proposed topic should be submitted by October 5.**

Dueling Paper Reviews: 50 points each, 150 points total. There will be three sets of peer-reviewed papers that present two contrasting viewpoints on a topic related to forest health you will be expected to read these and write a short (1 page) summary of your assessment of the papers, and which made a better case. These will be announced at three separate points in the course when we are covering relevant topics. **The final deadline for all three papers will be 11:59pm on November 30.**

Fact Sheet Final Assignment: 200 points. This final project will take the place of a final exam. You will

develop an Extension-style “fact sheet” regarding a pathogen or pest (native or invasive) that represents a threat to US forests, written and presented in a way that is accessible to a non-specialist audience. More details will be provided within Canvas. **This is due December 12th. Your proposed topic should be submitted by November 9.**

3.2 Grades & Grading Scale

Introduction	5 points	Grading Scale (%)
Quizzes	130 points	A 100% to 93%
Discussions	130 points	A- 92.99% to 90%
Sick Tree Hunt	150 points	B+ 89.99% to 87%
Favorite Invasive Report	150 points	B 86.99% to 83%
Dueling Paper Reviews	150 points	B- 82.99% to 80%
Fact Sheet Final Project	200 points	C+ 79.99% to 77%
Total	915 points	C 76.99% to 73%
		C- 72.99% to 70%
		D+ 69.99% to 67%
		D 66.99% to 63%
		D- 62.99% to 61%
		E 60.99% to 0%

For information on current UF policies for assigning grade points, see

Undergraduate: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Graduate: <https://gradcatalog.ufl.edu/graduate/regulations/>

4 Learning Content

Schedule			
Week	Date	Topic	Assignment
1	8/21	Introduction to the Course	Discussion: Introduce yourself!
2	8/25	Broad Concepts in Forest Health & Ecosystem Health	
3	9/1	Human impacts on forest health: -anthropogenic forest stressors -invasive species.	
4	9/8	-Review of tree physiology -Intro to forest pathology & forest health management	
5	9/15	Intro to fungi, foliar diseases	
6	9/23	Stem diseases	
7	9/29	Root diseases	Submit proposed “Favorite Invasive” topic by 10/5.
8	10/6	-Intro to forest entomology -Integrated pest management (IPM)	

9	10/13	Bark beetles & Wood-borers	
10	10/20	Defoliators & Sap-suckers	
11	10/27	Abiotic Disorders & Declines	Sick Tree Scavenger Assignment Due 11/1.
12	11/3	Climate change & forest ecosystem health	Submit proposed final Fact Sheet topic by 11/9.
13	11/10	Invasive Plants	"Favorite Invasive" Paper Due 11/16
13	11/17	Epiphytes, parasitic plants, root-feeders, gall-formers	
15	11/24	Holiday – No New Lecture, Quiz, or Discussion	11/30: Final Deadline for "Dueling Paper" assignments
16	12/1	Case Studies	12/7: Last chance to submit all outstanding quizzes, discussions, and assignments!
17	12/8	No lecture or quiz.	Final Fact Sheet Assignment Due 12/12

5 Policies and Requirements

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

5.1 Attendance, Late Submissions & Make-up Requests

It is the responsibility of the student to access on-line lectures, readings, quizzes, and exams and to maintain satisfactory progress in the course. 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>

- Computer or other hardware failures, except failure of the UF e-Learning system, will not excuse students for missing assignments. Any late submissions due to technical issues **MUST** be accompanied by the ticket number received from the Helpdesk when the problem was reported to them. The ticket number will document the time and date of the problem. You **MUST** e-mail your instructor within 24 hours of the technical difficulty if you wish to request consideration.
- For computer, software compatibility, or access problems call the HELP DESK phone number—352-392- HELP = 352-392-4357 (option 2).

5.2 Communication Courtesy and Professionalism

Just as in any professional environment, meaningful and constructive dialogue is expected in this class and requires a degree of mutual respect, willingness to listen, and tolerance of opposing points of view. **Respect for individual differences and alternative viewpoints will be maintained in this class at all times.** All members of the class are expected to follow rules of common courtesy, decency, and civility in all interactions. Failure to do so will not be tolerated and may result in loss of participation points and/or referral to the Dean of Students' Office.

5.3 Semester Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning. **At approximately the mid-point of the semester**, the School of Forest, Fisheries, & Geomatics Sciences will request anonymous feedback on student satisfaction on various aspects of this course. These surveys will be sent out through Canvas and are not required but encouraged. This is not the UF Faculty Evaluation!

At the end of the semester, 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/>.

5.4 Academic Honesty Policy

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 or 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>.

5.5 Inclusive Learning Environment

This course embraces the University of Florida's Non-Discrimination Policy, which reads,

The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. The University is committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status as protected under the Vietnam Era Veterans' Readjustment Assistance Act.

If you have questions or concerns about your rights and responsibilities for inclusive learning

environment, please see the instructor or refer to the Office of Multicultural & Diversity Affairs website: <http://multicultural.ufl.edu>.

5.6 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, disability.ufl.edu

5.7 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.

6 Campus Helping Resources

For issues with technical difficulties for e-learning in Canvas, please post your question to the Technical Help Discussion in your course, or contact the UF Help Desk at:

- Learning-support@ufl.edu | (352) 392-HELP - select option 2 | <http://elearning.ufl.edu>
- Library Help Desk support <http://cms.uflib.ufl.edu/ask>
- SFFGS Academic Hub <https://ufl.instructure.com/courses/303721>

6.1 Student Life, Wellness, and Counseling Help

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.

- Counseling and Wellness resources <http://www.counseling.ufl.edu/cwc/>
- U Matter, We Care <http://www.umatter.ufl.edu/>
- Career Connections Center <http://career.ufl.edu/>
- Other resources are available at <http://www.distance.ufl.edu/getting-help> for online students.

6.2 Student Complaint Process

The School of Forest, Fisheries, & Geomatics Sciences cares about your experience and we will make every effort to address course concerns. We request that our online students complete a course satisfaction survey each semester, which is a time for you to voice your thoughts on how your course is being delivered. You can also [submit feedback anytime](#).

If you have a more urgent concern, your first point of contact should be the Academic Coordinator or the Graduate/Undergraduate Coordinator for the program offering the course. You may also submit a complaint directly to UF administration:

- <https://distance.ufl.edu/getting-help/>
- <https://registrar.ufl.edu/complaint.html>

