FNR3500C Forest Ecology

Spring, 2026
(3 credit hours)

Instructor: Dr. Victoria Donovan

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Office hours: Wednesdays 9:00-10:00 am CT. I have an open-door policy for students. Please feel free to swing by to talk with me anytime you see me in my office. For the best chances of reaching me, contact me via email to set up an appointment during the week.

Teaching Assistant: Alan Ivory

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Available by email and Teams session (by appointment)

Course Description

This course is designed to provide students with an overview of ecological principles at four major scales of biological organization (individual, populations, communities, ecosystems) with an emphasis on forests, applications of these principals to current environmental problems (biodiversity crisis, global environmental change, and others) impacting forests, how forest ecologists answer questions with observations and experiments.

Course Learning Objectives

After successful completion of this course, students will:

1. develop and practice "ecological thinking" toward a question or problem (e.g. invasive species, salvage logging), analyzing how different abiotic and biotic factors and processes might affect the question/problem under investigation
2. understand how ecological principles work across different forest types and spatial scales
3. be able to read, interpret and use scientific literature, with a focus on interpreting graphs and tables
4. learn how to make qualitative and quantitative field measurements with equipment
5. develop an ecological question to investigate with a field study – designing and carrying out data collection, analyzing the data and presenting the analysis and conclusions
6. make scientific arguments that are supported by data, logic and credible sources of information
7. improve written and oral communication skills

Course Logistics

Students will access all lectures, assignments, readings and supporting materials through the course Canvas site as they become available.

Students should check canvas regularly to keep up with weekly assignments.

Course Prerequisites

Biology or botany course (BSC 2010/2010L suggested)

Textbooks, Learning Materials, and Supply Fees

Required Readings: There will be no required textbook for this class. Required readings will be assigned when necessary for preparation for certain course activities like in-class case studies and lab exercises.

Suggested Readings: A number of course lectures will be tied to material in: D. M. Kashian, D. R. Zak, B.V. Barnes, and S. H. Spurr. Forest Ecology. 2023. 5th edition. Wiley Press.

Instructor Interaction Plan

Preferred method of communication: Canvas

Required Technology & How to Obtain the Technology

A computer or mobile device with high-speed internet connection.
Latest version of web browser. Canvas supports only the two most recent versions of any given browser.

Technical Support

UF Computing Help Desk & Ticket Number: All technical issues require a UF Helpdesk Ticket Number. The UF Helpdesk is available 24 hours a day, 7 days a week. https://helpdesk.ufl.edu/ | 352-392-4357

Weekly Course Schedule

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.

Date	Topics and Activities	Assigned Work	Assignment Due
Week 1 (1/14)	Course Introduction Syllabus Review Introduction to Forest Ecology	- Pre-class activity sheet - Forest Ecology Research Project	- In class activity sheet (3%)
LAB 1 (1/17)	Studying the Ecology of Forests (Jay Research Facility)	- Tour summary	
Week 2 (1/21)	Abiotic Factors of a Forest	-Pre-class activity sheet -In-class activity sheet	-Tour summary (2.5%) -Pre-class activity sheet (3%) -In-class activity sheet (3%)
Week 3 (1/28)	Tree Biology	-In-class activity sheet	-In-class activity sheet (3%) -Group Formation, Study Topic (2%)
Week 4 (2/4)	Forest Community Ecology	-In-class activity sheet	-In class activity sheet (3%) -Literature Review (2%)

Week 5 (2/11)	Ecological Succession; Ecological Resilience	-In-class activity sheet	- In-class activity sheet (3%) - Study design and proposed analysis (2%)
Week 6 (2/18)	Midterm Review Keep, Stop, Start		
Week 7 (2/25)	MIDTERM		-Midterm Exam (15%)
LAB 2 (2/28)	Forest Stand Sampling (Jay Research Facility)		
Week 8 (3/4)	Disturbance Ecology	- In-class activity sheet	- In-class activity sheet (3%/)
Week 9 (3/11)	Case Study: Salvage Logging	- In-class activity sheet	- In-class activity sheet (3%) -Draft report intro and methods (2%)
Week 10 (3/18)	SPRING BREAK		
Week 11 (3/25)	Nutrient Cycling	- In-class activity sheet	- In-class activity sheet (3%) -Draft report results and discussion (2%)
Week 12 (4/1)	Forest Landscape Ecology	- In-class activity sheet	- In-class activity sheet (3%) -Draft report peer review (2%)
LAB 3 (4/4)	TBD	-Tour Summary	
Week 13 (4/8)	Invasion Ecology Novel Ecosystems	- In-class activity sheet	- In-class activity sheet (3%) -Tour summary (2.5%)
Week 14 (4/15)	Student Presentations	-In-class activity sheet	- In-class activity sheet (3%) -Project Presentation (5%)
Week 15 (4/22)	Exam Review		-Final Report (10%) -Peer Assessment (3%)
Week 16 (4/29)	Final Exam		-Final Exam (20%)

Assignment Descriptions

Tour Summaries: Students will write a short summary of their experiences and what they learned during Labs 1 & 3, which will be submitted to the instructor the week after the labs are completed.

Class Activity Sheets: Each class, students will be given an in-class activity sheet that they will complete during lecture and class activity time. In-class activity sheets will be due at the end of each class period. Activity sheets can be completed independently or in groups (unless otherwise instructed); however, every student will need to hand in their own activity sheet. Each activity sheet is worth 3% of a student's final grade. However, only 10 of 12 activity sheets assigned will be counted towards a student's final mark in the class. The activity sheets with the lowest grades will be disregarded in the final tallying of each students' mark.

Research Project: Students will form into small groups to conduct a term-long research project tied to forest ecology. Students will learn about different field measurement techniques to quantify forest ecosystems during the first lab of the course, after which, students will choose a research question and design, conduct, and write up a research paper tied to their selected question. Students will submit mini assignments related to their final project throughout the term to ensure they are making adequate progress and receiving prompt feedback. At the end of the project, students are expected to submit a scientific research paper and present their findings to the class. They will also be asked to submit a peer-assessment, where they will grade the contributions and participation of their group mates in the project. All students are expected to contribute equally to each mini-assignment and the final report/presentation.

Exams: We will have two exams in this class that will serve as a midterm and final. The midterm exam will cover all topics covered leading up to the time of the midterm and contribute to 15% of the students' final grade. The final exam will cover all topics covered in the class and will contribute to 20% of students' final grade.

Grading Policy

Course grading is consistent with UF grading policies.

Late assignments will lose 10% for every 24 hours past the deadline unless arrangements have been made with the instructor prior to the due date for an extenuating circumstance. Computer troubles will not be considered as an excuse for late assignments unless they are accompanied by a ticket number that includes the date and time of the problem from the UF Tech Support Help Desk. You must contact the instructor as soon as possible in regard to technical difficulty that may result in a late assignment.

Course Grading Structure

Tour Summaries: 5% (2.5% each)
Class Activity Sheets: 30% (3% each x 10)
Research Project: 30%
- Group formation and study topic (2%)
- Literature review (2%)
- Study design and proposed analysis (2%)
- Draft report introduction and methods (2%)
- Draft report results and discussion (2%)

Draft report peer review (2%)
Peer assessment (3%)
Final report (10%)
Presentation (5%)

Exams: 35%

Mid-term Exam (15%)
Final Exam (20%)

Grading Scale

Grade	Percentage
A	94-100
A-	90-93
B+	87-89
B	84-86
B-	80-83
C+	77-79
C	74-76
C-	70-73
D+	67-69
D	64-66
D-	60-63
E	<60

Attendance

Attendance in regular and guest lectures is mandatory in this class. For guest lectures, students will automatically lose 2% of their overall grade if they skip a guest lecture or arrive late unless they have provided an acceptable reason ahead of class to the instructor. Acceptable reasons for absence from guest lectures can include things like illness, serious family emergencies, religious holidays, and severe weather. Note that if you do not attend at least one of the two first class sessions or the laboratory session, and you have not contacted the department, you can be dropped from the class.

Academic Policies and Resources

Academic policies for this course are consistent with university policies. See https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/

Campus Health and Wellness Resources

Visit https://one.uf.edu/whole-gator/topics for resources that are designed to help you thrive physically, mentally, and emotionally at UF.

Please contact UMatterWeCare for additional and immediate support.

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.

Privacy and Accessibility Policies

[required for online courses, list all technology used]

- Instructure (Canvas)
  - Instructure Privacy Policy
  - Instructure Accessibility
- Zoom
  - Zoom Privacy Policy
  - Zoom Accessibility

Additional information

You are expected to be honest in all academic work, consistent with the academic integrity policy as outlined in the Code of Student Conduct and any additional syllabus language. All work is to be appropriately cited when it is borrowed, directly or indirectly, from another source. Unauthorized and/or unacknowledged collaboration on any work, or the presentation of someone else's work, is plagiarism. Your writing and presentation development should not be completed with the assistance of ChatGPT or any similar generative AI tools unless you are told otherwise. The use of generative AI tools is permissible when used to assist with computer coding and finding literature. However, literature suggested by AI must always be thoroughly read before it can be cited. If there is evidence that you have used AI to complete an assignment without permission, you will receive a zero on the assignment and I will submit an Academic Integrity Violation Report to the University.