Forest Biology – FOR 2210 Fall 2019 Syllabus

Instructor Info Course Info

Name:	Dr. Jess Hartshorn	Lecture:	TR 9:30-10:45
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Email:	jhartsh@clemson.edu	Office Hours:	TR 1:00-2:00 pm
Phone:	864.656.4861	Prereqs:	BIOL 1030/1050; FOR 2050
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Course Description

This course will examine the properties of trees, populations, and communities by describing the anatomy, function, and interactions of organisms in forests. Students will learn terminology, processes related to tree growth and forest succession. By the end of the course, students should be able to apply this information to identifying tree species, diagnosing tree health issues, and describe processes important in forest biology. **There is no required textbook for this course**

Course Objectives

- Define and describe parts of a tree, their functions, pests, and interactions
- Describe components of tree growth including photosynthesis, senescence, and dormancy
- Describe the processes of invasion, climate change, and interactions with other organisms

Grading System

Scale		Weight		
Α	>90%	10%	Quizzes	
В	80-89%	10%	Discussions	
С	70-79%	10%	Participation	
D	60-69%	20%	Exam 1	
F	<59%	20%	Exam 2	
		30%	Cumulative Final Exam	

^{*}Grades are final and will not be changed once posted.

Course Assignments

Quizzes

Interactive weekly quizzes will be done at the beginning of each class. You must be present at the start of class to participate and participation in quizzes counts towards your participation grade.

Participation

Attendance is required and will count towards your participation grade. You are also expected to ask and answer questions, participate in small group activities during class, and be on time.

Discussions

We will have weekly discussions on Canvas to which you are expected to contribute. Discussions may be on a standard discussion thread or will use VoiceThread. I will let you know in the discussion thread which to use. Discussions will only be open for individual weeks and you will not be able to add or edit them after that week is closed. These will also count towards your participation grade.

Exams

There will be three exams throughout the semester including a **cumulative final**. Exams will consist of multiple choice and short answer questions. Exams are closed book and independent (meaning no phones, smart watches, or any other devices are allowed).

Late/Missing Assignments

Late or missing assignments will not be accepted for credit without prior notice and proper documentation. If you know you will miss and class, discussion, or exam, you are to contact Dr. Hartshorn as soon as possible to set up alternative arrangements.

Course Schedule

Date	Tues	Thurs	Discussion
Aug 21	-	Intro	
Aug 27-29	World biomes: overview	NA biomes: forests	Forest types
Sept 3-5	Plant structure: roots	Plant structure: roots	Root systems
Sept 10-12	Plant structure: xylem, phloem	Plant structure: leaves	Leaf types
Sept 17-19	Plant structure: buds	Exam 1	-
Sept 24-26	Tree growth: germination	Tree growth: photosynthesis	Tree growth
Oct 1-3	Tree growth: respiration, transpiration	Tree growth: water relations	Water
Oct 8-10	Tree growth: hormones, dormancy	Interactions: negative	Dormancy
Oct 15-17	Fall Break	Interactions: positive	Interactions
Oct 22-24	Exam 2	Forest components	-
Oct 29-31	Forest components	Tree pathogens	Pathogens
Nov 5-7	Cambium pests	Herbivores	Cambium pests
Nov 12-14	Climate change: historical	Climate change: anthropogenic	Climate change
Nov 19-21	*Climate change: effects on forests	Invasion biology	Invasive plants
Nov 26-28	Invasion biology	Thanksgiving Break	Thanksgiving Break
Dec 3-5	Synthesis	Review	-
Dec 9-11	Cumulative Final Exam		

^{*}Guest lecture

University Policies

University Attendance Policy

The academic resources of Clemson University are provided for the intellectual growth and development of students. Class attendance is critical to the educational process; therefore, students should attend scheduled courses regularly if they are to attain their academic goals. Students with excessive absences may need academic or medical assistance. Please report instances to the Dean of Students' Office at 864.656.0935.

In the event of an emergency, the student should make direct contact with the course instructor, preferably before a class or an exam takes place. Students should speak with their course instructors regarding any scheduled absence as soon as possible and develop a plan for any make-up work. It is the student's responsibility to secure documentation of emergencies, if required. A student with an excessive number of absences may be withdrawn at the discretion of the course instructor. Course instructors must implement fair grading procedures and provide an opportunity to make up missed assignments and examinations that does not unfairly penalize the student when an excused absence is accepted. Such make-up work shall be at the same level of difficulty with the missed assignment or examination. Course instructors shall hold all students with excused absences to the same standard for making up missed assignments and examinations. While course instructors should seek to make reasonable accommodations for a student involved in Universitysponsored activities, students should understand that not every course can accommodate absences and that absences do not lessen the need to meet all course objectives. Absence from class is detrimental to the learning process, so course instructors may use reasonable academic penalties which reflect the importance of work missed because of unexcused absences. Course instructors who penalize students for unexcused absences must specify attendance requirements as related to grading in the course syllabus and must keep accurate attendance records. Course instructors are obligated to honor exceptions to the university attendance policy for students covered by the Americans with Disabilities Act, as verified through paperwork issued by Student Accessibility Services.

Notification of Absence

The Notification of Absence module in Canvas allows students to quickly notify instructors (via an email) of an absence from class and provides for the following categories: court attendance, death of family member, illness, illness of family member, injury, military duty, religious observance, scheduled surgery, university function, unscheduled hospitalization, other anticipated absence, or other unanticipated absence. The notification form requires a brief explanation, dates and times. Based on the dates and times indicated, instructors are automatically selected, but students may decide which instructors will receive the notification. This does not serve as an "excuse" from class, and students are encouraged to discuss the absence with their instructors, as the instructor is the only person who can excuse an absence. If a student is unable to report the absence by computer, he/she may call the Dean of Students Office for assistance. The Dean of Students Office also assists students in identifying appropriate methods of documenting absences and assists families in using the electronic Notification of Absence system when students are unable to do so themselves.

Statement of Accessibility

Students with disabilities or temporary injuries/conditions may require accommodations due to barriers in the structure of facilities, course design, technology used for curricular purposes, or other campus resources. Students who experience a barrier to full access to this class should let the professor know and make an appointment to meet with a staff member in Student Accessibility Services as soon as possible.

You can make an appointment by calling 864.656.6848, by <a href="mailto:emailt

Statement of Academic Integrity

Academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form. When, in the opinion of a faculty member, there is evidence that a student has committed an act of academic dishonesty, the faculty member shall make a formal written charge of academic dishonesty, including a description of the misconduct, to the Associate Dean for Curriculum in the Office of Undergraduate Studies. At the same time, the faculty member may, but is not required to, inform each involved student privately of the nature of the alleged charge.

Sexual Harassment Statement

Clemson University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender, pregnancy, national origin, age, disability, veteran's status, genetic information or protected activity in employment, educational programs and activities, admissions and financial aid. This includes a prohibition against sexual harassment and sexual violence as mandated by Title IX of the Education Amendments of 1972. You can find the policy here. Mr. Jerry Knighton is the Clemson University Title IX Coordinator. He also is the Director of Access and Equity. His office is located at 110 Holtzendorff Hall, 864.656.3184 (voice) or 864.656.0899 (TDD).