

BOTANY 3015
PRINCIPLES OF PLANT SCIENCE
FALL 2018

Lecture: T, Th 1:30-2:50 MSB 360
Pre-Requisites: BSC 2011C

Credit: 3(3,0)

Instructor: Dr. Elizabeth Harris

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Office Hours: T, W, Th 10:30-12:30

Teaching Assistant: Jonathan Carr, jonathan.carr@ucf.edu

Course Description: Introduction to core botanical concepts: diversity in the Plant Kingdom, structure and function, growth and development, photosynthesis and water relations and ecology.

Objectives:

- An understanding of the major groups of land plants (Embryophyta), their evolutionary history and what distinguishes the major lineages from each other
- Competency with cell and tissue types and their basic function in vascular plants.
- Knowledge of the unique growth and development patterns and tissues seen in plants
- Understanding of basic metabolism in plants with regards to photosynthesis
- Understanding the significance of water relations, water uptake and plant macro- and micro-nutrient uptake strategies
- Overview of plants in the environment and their importance in different terrestrial habitats
- Combat Plant Blindness!

Required material:

Stern's Introductory Plant Biology, 14th edition, by McGraw-Hill Education, **with** Connect access.

Classroom Conduct: By enrolling at UCF, all students have agreed to abide by the Golden Rule.

Please become familiar with this document at: <http://www.goldenrule.sdes.ucf.edu/>

Please also use common courtesy in class by arriving and departing on time, refraining from talking during class, and silencing cell phones. Please refrain from excessive texting during class and use laptops only for note-taking, not for internet browsing. Doing so is distracting and disrespectful to other students and the instructor. Feel free to quietly slip outside if an emergency occurs that necessitates a call or copious texting.

Grading:

Pre-test (pre-req for LearnSmart!)	5
Post-test (pre-req for Final!)	5
Exams: 5 @ 100 pts each	500
Online LearnSmart homework: 20 @ 15 pts each	300
Weekly assignments: 15 @ 10 pts each	150
Final Exam (cumulative)	100
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Total	1,060

89.5-100% = A, 79.5-89.4% = B, 69.5-79.4% = C; 59.5-69.4% = D; 0-59.4% = F

If you have a valid, documented reason for missing a class (from doctor, police, judge, official UCF event, etc.), you must contact me within 24 hours of the start of the class.

Lectures: Lectures will follow the sequence of concepts given in the textbook. Additional concepts/facts/examples that are not in your textbook will also be presented. Roll will not be taken; students are not directly penalized for absences. However, if a student misses valuable information given during lecture due to their absence (whether excused or not), it is solely the student's responsibility to find out about the missed material from another student. I do not release my lecture PowerPoints under any circumstances, nor do I give hand-outs or any sort of makeups on missed lectures, but I do allow students to use cell phone cameras to take pictures of my PowerPoint slides when they are in class. Audio recording is also allowed, video recording is not.

Weekly Get Outside Assignments and Quizzes: The weekly Get Outside assignments have been designed to add an active learning component outside of the lecture setting. Each week there will be a different assignment that relates to one of the concepts presented in lecture that week. The student will be asked to get out on the UCF campus or surrounding areas and find specific examples of plant material and take a picture of the subject for that week with a cell phone (and the student's ID or student themselves, depending on the item for the week). The student will then email or download the picture to their computer and then upload the image as the first portion of the weekly quiz. They will then answer a few short questions pertaining to their subject for the week. All of the assignments are visible in WebCourses, please contact me **by noon on Wednesday** of the particular week in question if you foresee having difficulty in completing the assignment for that week and need to work out an accommodation.

LearnSmart Homework: This adaptive online homework is supported by your textbook publisher and provides valuable practice in mastering concepts from the text. It can be accessed through the course's home page on WebCourses (it appears in the left column). The first time it is used, you will be asked to enter the access code that came with your textbook. There is also an option to purchase the code then and there along with a digital version of the text. After that first time, clicking on the LearnSmart button in WebCourses will take you directly to the site. All homework assignments are due weekly on Saturdays at 11:59 p.m. and correspond to the week that that chapter is covered in lecture. The homework should be done and submitted on a computer. While it is possible to open and

access the LearnSmart site with a phone or tablet, glitches often occur when the assignments are actually submitted from those platforms resulting in no credit given even if it appears that the assignment was successfully submitted. While I am willing to troubleshoot any other issues that you may have with this learning site, because of this known bug, I will not give credit for assignments that miss the deadline due to submission on a tablet or phone. Other best practices include: using the latest version of Firefox, have a reliable internet connection and starting and finishing the assignment well before the due date and accessing the site on a different computer. If all else fails, call: McGraw-Hill Customer Experience Group for help: 1-800-331-5094. Make sure to get a case number. Let me know you will not make the deadline BEFORE the due date.

Exams: All scheduled exams are mandatory; none are dropped. Exams will be in a multiple-choice format and I will provide the scantrons. The course pre-test will be given on-line and will be given the first week of the semester. Taking the pre-test will activate the LearnSmart assignments. The course post-test will be given in class at the end of the semester and is a pre-req for the final exam.

Disability Access Statement: The University of Central Florida is committed to providing reasonable accommodations for all persons with disabilities. This syllabus is available in alternate formats upon request. Students with disabilities who need accommodations in this course must contact the professor at the beginning of the semester to discuss needed accommodations. No accommodations will be provided until the student has met with the professor to request accommodations. Students who need accommodations must be registered with Student Accessibility Services, Student Resource Center Room 132, phone (407) 823-2371, TTY/TDD only phone (407) 823-2116, before requesting accommodations from the professor.

Note that the instructor reserves the right to make changes to the syllabus or other aspects of the course at anytime. These changes will be announced in class.

Date	Lecture	Weekly Get Outside Assignments and LearnSmart Homework all due on Saturdays at 11:59 pm
August 21:	Course Intro, Ch. 1/What is Plant Bio	
August 23:	Ch. 3/Plant cells	
August 28:	Ch. 4/Plant tissues	
August 30:	Ch. 5/Roots and soils	
September 4:	Ch. 6/Stems	
September 6:	Exam 1 (1, 3, 4, 5)	
September 11:	Ch. 7/Leaves	
September 13:	Ch. 8/Flowers, fruits and seeds	
September 18:	Ch. 9/Water relations	
September 20:	Ch. 10/Photosynthesis	
September 25:	Exam 2 (6, 7, 8, 9)	

September 27: Ch. 11/Plant growth & development

October 2: Ch. 12/Meiosis & Plant Life Cycle

October 4: Ch. 16/Plant names & classification

October 9: Ch. 18/Kingdom Protista: algae

October 11: **Exam 3** (10, 11, 12, 16)

October 16: Ch. 20/Intro to Plant Kingdom: Bryophytes

October 18: Ch. 21/Ferns and fern allies

October 23: Ch. 21/Ferns & fern allies cont.

October 25: Ch. 22/Gymnosperms

October 30: Ch. 22/Gymnosperms cont.

November 1: **Exam 4** (18, 20, 21, 22)

November 6: Ch. 23/Angiosperms

November 8: Ch. 23/Angiosperms cont.

November 13: Ch. 24/Flowering plants & civilization

November 15: Ch. 25/Plant ecology

November 20: Ch. 26/Biomes

November 22: **No Class—Thanksgiving Holiday**

November 27: **Exam 5** (23, 24, 25, 26)

November 29: Post-test

Final Exam:

December 4, Tuesday: 1-3:50 pm