Botany 3015-0001 (83747) Principles of Plant Science Fall 2019

Lecture: T, Th 12-1:20, HEC 0125

Pre-Requisite: BSC 2011C Credit: 3(3,0)

Instructor: Dr. Elizabeth Harris

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Office Hours: T, W, Th 10:00-11:30
Teaching Assistant: Kimberly Guilvezan

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.
- -TopHat app for smart phone/tablet or laptop (be prepared to bring one of these devices to each class).

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
In class Top Hat questions	100
Exams (no drops): 5 @ 100 pts each	500
Online LearnSmart homework: 20 @ 15 pts each	300
Weekly Get Outside assignments & online quizzes:	
15 @ 10 pts each	150
Final Exam (cumulative)	100
Total	1155

~~~Extra credit attendance: +50 possible~~~

89.5-100% = A	10341155 points
79.5-89.4% = B	918—1033.4
69.5-79.4% = C	803—917.4
59.5-69.4% = D	687—802.4
0-59.4% = F	0-686.4

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 and make arrangements to provide me with appropriate hard copy documentation. After that, I will then schedule a make-up exam if it was an exam date or waive the points for the in class questions (in which case you will receive a prorated percentage grade based on a smaller amount of total possible points at the end of the semester). There will be no make-ups given for the extra credit points based on attendance for excused absences.

Lectures: Lectures will begin with announcements and then a recap of the previous week. Lectures generally follow the sequence of the concepts given in the textbook. Additional concepts/facts/examples that are not in your textbook will also be presented. Attendance will be taken via a log in with a unique code through Top Hat at the beginning of lecture. Class announcements are generally made at the beginning of class, 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. 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.

Top Hat: We will be using the Top Hat (www.tophat.com) classroom response system in class for attendance tracking and in class quizzes (for credit). You will be able to use Apple or Android smartphones and tablets, or laptops. **PLEASE only login and use 1 device in the classroom at a time** (you don't have to use the same device for each class). Set-up your Top Hat account **before** you come to class, we will start using it for attendance and in class questions on September 3 and then use it for every class period.

You can visit the Top Hat Overview (https://success.tophat.com/s/article/Student-Top-Hat-Overview-and-Getting-Started-Guide) within the Top Hat Success Center which outlines how you will register for a Top Hat account, as well as providing a brief overview to get you up and running on the system.

An email invitation will be sent to you by email, but if don't receive this email, you can register by simply visiting our course website and entering our Unique Course URL: https://app.tophat.com/e/880910

Our Course Join Code is **880910**

Top Hat requires a paid subscription of \$29. If you have already purchased Top Hat to use in another class, you will not need to purchase again, simply enter the Course Join Code. Should you require assistance with Top Hat at any time, due to the fact that they require specific user information to troubleshoot these issues, please contact their Support Team directly by way of email (support@tophat.com), the in app support button, or by calling 1-888-663-5491.

<u>Top Hat Questions in lecture</u>--Top Hat questions during lecture will be worth a total of 100 points by the end of the semester (I'm not sure how many I'll be offering, exactly, but you'll get a percentage reported on however many it ends up being).

Attendance extra credit points—Top Hat will be used to take attendance during the first 10 minutes of each lecture. During that time you will be able to sign in on your device with the unique code projected on the

screen. After 12:10, I will disable that code. Note that the code cannot be entered remotely; you must be present in the classroom. There are 50 points possible for attendance, beginning with week 2. Each **ON TIME** attendance check in will be worth 2.5 points (capped at 50 maximum) and will be added to the total of the student's raw points at the end of the semester (i.e. they will **NOT** be added as percentage points).

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 you have problems with the first one. 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 questions will be embedded in 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 any time. These changes will be announced at the beginning of class. It is the student's responsibility to be on time for these announcements.

August 27: Course Intro, Ch. 1/What is Plant Bio

August 29: Ch. 3/Plant cells

September 3: Ch. 4/Plant tissues September 5: Ch. 5/Roots and soils

Lecture

September 10: Ch. 6/Stems

September 12: **Exam 1** (1, 3, 4, 5)

September 17: Ch. 7/Leaves

September 19: Ch. 8/Flowers, fruits and seeds

September 24: Ch. 9/Water relations* September 26: Ch. 10/Photosynthesis

October 1: **Exam 2** (6, 7, 8, 9)

October 3: Ch. 11/Plant growth & development

October 8: Ch. 12/Meiosis & Plant Life Cycle October 10: Ch. 16/Plant names & classification

October 15: Ch. 18/Kingdom Protista: algae

October 17: **Exam 3** (10, 11, 12, 16)

October 22: Ch. 20/Intro to Plant Kingdom: Bryophytes

October 24: Ch. 21/Ferns and fern allies

October 29: Ch. 21/Ferns & fern allies cont.

October 31: Ch. 22/Gymnosperms

November 5: Ch. 22/Gymnosperms cont. November 7: **Exam 4** (18, 20, 21, 22)

November 12: Ch. 23/Angiosperms

November 14: Ch. 23/Angiosperms cont.

November 19: Ch. 24/Flowering plants & civilization

November 21: Ch. 25/Plant ecology

November 26: Ch. 26/Biomes

November 28: No Class—Thanksgiving Holiday

December 3: **Exam 5** (23, 24, 25, 26)

Final Exam:

December 5: 10-12:50 pm