

Botany 4223C: Plant Anatomy, Spring 2020 (19945)
Lecture: T & Th 9:00-10:20 NSC rm. 102
Lab: Th 11:00-1:50 BIO rm. 104

Instructor: Dr. Elizabeth Harris

Office: Biology 102a **Phone:** 823-1538 **email:** elizabeth.harris@ucf.edu

Office Hours: T: 11-1

Pre-requisite: BOT 3015, Principles of Plant Science

Required books/media:

--Plant Anatomy by James D. Mauseth. 2008. Blackburn Press. (This is a reprint edition. You could also obtain the original 1988, Benjamin/Cummings edition. They are both the same.)

Dr. Mauseth maintains a website with many of the images from the text (and more!) at:
<http://www.sbs.utexas.edu/mauseth/weblab/>

--Plant Structure: a color guide by Bryan G. Bowes and James D. Mauseth. 2008. 2nd ed. Jones and Bartlett Publishers

--Drawing paper and graphite pencils mandatory (no drawings shall be made in ink). Colored pencils optional.

In order to document that you began this course, please complete the following academic activity by the end of the first week of classes, or as soon as possible after adding the course, but no later than January 12. Failure to do so will result in a delay in the disbursement of your financial aid. Your online assignment is: the **Syllabus Quiz**. It can be found in Webcourses.

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.ucf.edu/goldenrule/>

Grading:

Syllabus Quiz	5
4 lecture exams @ 100 pts each	400
Final exam @ 100 pts	100
2 Lab practical exams @ 100 pts each	200
Best 12 out of 13 lab activities @ 25 pts	295
<u>(First lab = 20 pts)</u>	<u> .</u>
Total	1,000

A = 90% or greater; 900+ pts

B = 80-89%; 800-899

C = 70-79%; 700-799

D = 60-69%; 600-699

F = 59% or less; 599 or fewer points

Note: I do not assign + or - grades

Exams: Lecture exams will be of a mixed format including multiple choice, short answer, matching etc. and 2 **essay questions to be written in class**. The lab practical exams will consist of multiple microscope stations set up with slides, each with 2-4 questions. If you have a valid, documented reason for missing a lecture exam (from doctor, police, judge, official UCF event, etc.), you must contact me within 24 hours of the start of the exam and provide me with the appropriate documentation. Makeups for the lecture exams will only then be scheduled at a mutually agreed on time. There will be **no** makeups for the lab practical exams due to their unique nature.

Laboratories: The labs are a crucial part of this course and you are required to attend and complete **ALL** laboratory sessions. You will be examining microscope slides and making detailed, labeled drawings of what you see as well as answering some questions on the lab handouts. If you have a valid, documented reason for missing a laboratory session (from doctor, police, judge, official UCF event, etc.), you must contact me within 24 hours of the start of the lab and provide me with the appropriate documentation and then you will be allowed to make up the lab. Missed laboratory sessions can be made up with prior notification and arrangements (other classes use the room, so we will have to work around them.) Closed-toe shoes are required by OSHA regulations. There will be no smoking, eating or drinking in the laboratory.

Accessibility 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 and arrange for needed accommodations. Students who need accommodations must be registered with Student Accessibility Services, Ferrell Commons 185, phone (407) 823-2371, TTY/TDD only phone (407) 823-2116, before requesting accommodations from the professor.

Tentative Lecture and Lab Schedule (subject to change, announced in class):

Please read the assigned readings listed below *before* coming to lecture.

	LECTURE T & Th 9-10:20		LAB Th 11-1:50
Jan. 7 T	Course intro/overview	Ch. 1	
Jan. 9 Th	1. The Cell	Ch. 2	1. Intro lab/ review plant body Cell inclusions/walls
Jan. 14 T	2. The Cell/ 3. Parench & Collench	Ch. 2, 3 & 4	
Jan. 16 Th	3. Parench & Collench/4. Sclerench	Ch. 3 & 4, 5	2. Parenchyma/Collenchyma Sclerenchyma
Jan. 21 T	4. Sclerenchyma	Ch. 5	
Jan. 23 Th	5. Meristems	Ch. 6	3. Meristems
Jan. 28 T	EXAM 1 (Chapters 1-5)		
Jan. 30 Th	6. Xylem	Ch. 7	4. 1° Xylem
Feb. 4 T			
Feb. 6 Th	7. Phloem	Ch. 8	5. 1° Phloem
Feb. 11 T	8. Secretory Cells and Tissues	Ch. 9	
Feb. 13 Th	9. Epidermis/10. 1° plant body: Stem	Ch. 10	6. Epidermis
Feb. 18 T	EXAM 2 (Chapters 6-10)		
Feb. 20 Th	Class cancelled	Ch. 11	MID-TERM LAB PRACTICAL
Feb. 25 T	10. 1° Stem/ 11. 1° plant body: Leaf	Ch. 11 & 12	
Feb. 27 Th	12. 1° plant body: Root	Ch. 13	7. Stems, Roots & Leaves
Mar. 3 T	13. Vascular Cambium	Ch. 14	
Mar. 5 Th	14. 2° plant body: Xylem	Ch. 15	8. 2° Xylem in stems
Mar. 10 T	Spring Break		
Mar. 12 Th	Spring Break		
Mar. 17 T	EXAM 3 (Chapters 11-15)		
Mar. 19 Th	15. 2° plant body: Phloem	Ch. 16	9. 2° Phloem/Vasc. Camb.
Mar. 24 T	16. 2° plant body: Periderm and bark	Ch. 17	
Mar. 26 Th	17. 2° plant body: Anomalous 2° growth	Ch. 18	10. Periderm/11. Anom 2° Gr.
Mar. 31 T	18. Flower and strobilus	Ch. 19	
Apr. 2 Th	19. Gametogenesis	Ch. 21/Esau	11. Anom 2° Gr./12. Fls etc.
Apr. 7 T	20. Seeds	Ch. 20	
Apr. 9 Th	21. Fruits	Ch. 21	12. Fls etc./13. Fruits & seeds
Apr. 14 T	EXAM 4 (Chapters 16-21; both 21s)		
Apr. 16 Th	Class cancelled		FINAL LAB PRACTICAL
Apr. 23 Th	Final Exam—7:00 – 9:50 (cumulative over entire semester)		