

Botany 4223: Plant Anatomy, Fall 2014
Lecture: T & Th 9:00-10:20 BIO rm. 212
Lab: Th 11:00-1:50 BIO rm. 104

Instructor: Dr. Elizabeth Harris

Office: Biology 301C **Phone:** 823-1538 **email:** elizabeth.harris@ucf.edu

Office Hours: M,W: 10-11, T: 12-2 or by appointment

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 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

As of Fall 2014, all faculty members are required to document students' academic activity at the beginning of each course. 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 August 27. Failure to do so will result in a delay in the disbursement of your financial aid. Your online assignment is: the **Syllabus Quiz**.

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:

4 lecture exams @ 100 pts each	400
Final exam @ 100 pts	100
2 Lab practical exams @ 100 pts each	200
<u>Best 12 out of 13 lab activities@ 25 pts</u>	<u>300</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**. 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 an 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.

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. This constitutes an excused absence. 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.

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 Disability Services, Student Resource Center Room 132, 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):

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

	LECTURE		LAB
Aug. 19 T	Course intro/overview	Ch. 1	
Aug. 21 Th	1. The Cell	Ch. 2	1. Intro lab/ review plant body Cell inclusions/walls
Aug. 26 T	2. The Cell/ 3. Parench & Collench	Ch. 2, 3 & 4	
Aug. 28 Th	3. Parench & Collench/4. Sclerench	Ch. 3 & 4, 5	2. Parenchyma/Collenchyma Sclerenchyma
Sept. 2 T	4. Sclerenchyma	Ch. 5	
Sept. 4 Th	5. Meristems	Ch. 6	3. Meristems
Sept. 9 T	EXAM 1 (Chapters 1-5)		
Sept. 11 Th	6. Xylem	Ch. 7	4. 1° Xylem
Sept. 16 T			
Sept. 18 Th	7. Phloem	Ch. 8	5. 1° Phloem
Sept. 23 T	8. Secretory Cells and Tissues	Ch. 9	
Sept. 25 Th	9. Epidermis/10. 1° plant body: Stem	Ch. 10	6. Epidermis
Sept. 30 T	EXAM 2 (Chapters 6-10)		
Oct. 2 Th	Class cancelled	Ch. 11	MID-TERM LAB PRACTICAL
Oct. 7 T	10. 1° Stem/ 11. 1° plant body: Leaf	Ch. 11 & 12	
Oct. 9 Th	12. 1° plant body: Root	Ch. 13	7. Stems, Roots & Leaves
Oct. 14 T	13. Wood sections/ 14. Vascular Cambium	Ch. 14	
Oct. 16 Th	15. 2° plant body: Xylem	Ch. 15	8. 2° Xylem/Vascular Cambium/
Oct. 21 T	EXAM 3 (Chapters 11-15)		
Oct. 23 Th	16. 2° plant body: Phloem	Ch. 16	9. 2° Phloem
(Oct. 27 M	Withdrawal deadline 11:59 p.m.)		
Oct. 28 T	17. 2° plant body: Periderm and bark	Ch. 17	
Oct. 30 Th	18. 2° plant body: Anomalous 2° growth	Ch. 18	10. Periderm/11. Anom 2° Gr.
Nov. 4 T	18. Anomalous 2° Growth	Ch. 18	
Nov. 6 Th	19. Flower and strobilus	Ch. 19	11. Anom 2° Gr./12. Fls etc.
Nov. 11 T	Holiday – Veteran’s day – No class		
Nov. 13 Th	20. Gametogenesis	Ch. 21/Esau	12. Fls etc./13. Fruits & seeds
Nov. 18 T	21. Seeds	Ch. 20	
Nov. 20 Th	22. Fruits	Ch. 21	FINAL LAB PRACTICAL
Nov. 25 T	EXAM 4 (Chapters 16-21; both 21s)		

Nov. 27 Th **Class Cancelled – THANKSGIVING HOLIDAY--**

Dec. 4 Th **Final Exam – 7:00 - 9:50 (cumulative over entire semester)**