

BSC 1411 – Botany, 4 hours.

Syllabus (Fall 2015)

Instructor: John K. Hemphill, PhD

9:00 AM – 9:50 AM, Mon, Wed, Fri

Office: 241 McFarland Science Building (STC)

Lecture Classroom: STC 127

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Office Hours: by appointment (Rm 241 - STC)

Resources. Text is **not required**; however, students are encouraged to read the following:

Mauseth, J.D., PhD. UT of Austin, Texas. *Botany, An Introduction to Plant Biology*. 4th or 5th Ed.

Mader & Windelspecht. *Biology*. 11th Ed. 2013.

Buchanan, Gruissem & Jones, PhDs. *Biochemistry & Molecular Biology of Plants*. 2000 or Sept 2015.

Grotewold, Chappell & Kellogg, PhDs. *Plant Genes, Genomes and Genetics*. 2015.

Jones, Thomas, Ougham & Waaland, PhDs. *The Molecular Life of Plants*. 2013.

Laboratory Guide: _____

Course Meeting Time/Place: MWF 9 AM – 9:50 AM (STC 127); Lab _____ (STC 205)

Course Description: This course is designed for students majoring in Agricultural Science, Plant and Soil Science, Wildlife and Conservation Science and the Environmental Sciences. Students are introduced to the structure and function of plants as well as their diversity and ecology. Topics covered will include the plant cells and tissues, anatomy, morphology, plant physiology (photosynthesis), plant biochemistry (macromolecules & ATP), genetics, evolution and classification. This course is designed to complement BSC 1413 Zoology with a minimum of overlap, but does include enough genetics and other basics to prepare students for subsequent courses in biological and environmental sciences.

Semester Hours: Four Lecture Lab/ clock Hours (3 lectures, 2 labs)

Laboratory: You must be enrolled in a BSC 1411 laboratory section in order to receive credit for the course. The laboratory will account for 25% of your final grade. The laboratory sessions will begin the first week of classes. Be sure to attend all labs. You will receive a complete schedule, syllabus, and further instructions from you Lab Instructor at the first meeting.

Attendance: Attendance is mandatory and roll will be taken each lecture period. Attendance will be recorded for each lab. Repeated unexcused absences or disruptive behavior such as talking during lecture or repeated tardiness will affect grades as follows. One letter grade reduction will occur for every two **unexcused absences**. One letter grade reduction for every third tardy. One letter grade reduction for every **second disruption**. Good attendance and behavior will be rewarded via attendance-participation as extra credit. Note that Labs have similar attendance and courtesy policies.

Material: This course is intended as a foundation-building course for several disciplines. You are expected to read all handouts and to allot adequate time to study the material on your own. If you miss a lecture, you are still responsible for that day's material – read the chapter, get notes from someone in class, and see the lecture/lab instructor(s) for any clarification. If you have difficulty with the material,

feel free to contact us *as soon as you can* for advice on how best to improve your understanding of the material.

Classroom Policy:

- For successful course completion, your presence and participation is essential. Your attendance grade will be determined by your presence, your participation in class discussion, and your attention to the class discussion.
- Students should arrive **ON** Time. Late arrivals are **NOT** acceptable as noted above.
- Students are expected to read the assigned textbook material prior to the class.
- To create a pleasant learning environment, students **MUST** turn off their cell phones and other potentially disruptive electronic devices. Only laptop computers and recorders are allowed to take class notes. Those laptop computers should be operated with **MUTE** function on (i.e. sound off). You give up the privilege of using your laptop computer in class, if you are caught using your computer for other activities such as reading emails, chatting, etc. If you anticipate a phone message and must leave the class, please let me know before class starts. When it comes in, just get up and leave the classroom.

Important Dates:

[HTTP://WEB.TAMUC.EDU/ADMISSIONS?REGISTRAR/DOCUMENTS/20132104/ACADEMICCALENDER.PDF](http://web.tamuc.edu/admissions?registrar/documents/20132104/academiccalendar.pdf)

Exams and Grading: Grades will be computed based on a total score of 500 points. You will take 4 lecture exams (100 points each) and, if necessary, a comprehensive exam at the end of the semester. This comprehensive exam can be used to replace a low score of one of the lecture exams (1 – 4). Extra credit is possible (20 points). The laboratory grade will equate 100 points from the best scores of 12 quizzes or more.

4 Lecture exams (100 points each, lowest score may be dropped*)	400
1 Comprehensive exam (100 points)	100
Extra Credit possible	20
<u>Laboratory points</u>	<u>100*</u>
Total BSC 1411 course grade	500**

*In lab, the student will take at least twelve, 10-point quizzes with ten (10) highest scores being counted. **Note that lecture counts for 70% of the total course points, whereas the laboratory counts for the other 30%. The lowest lecture exam will be dropped, if the comprehensive score is greater. Lecture exams will be closed book but one (3x5) card will be allowed. Other aids like a copy of the period table can be brought into class by the student.

Lecture exams will be a mixture of multiple choices, matching, labeling, short answer questions, and short essay-type questions. These exam questions will cover key topics, which were presented in lecture.

Grading Scale: The final course grade will be assigned based on the following break-down;

- 90 – 100% = A
- 80 – 89% = B
- 70 – 79% = C
- 60 – 69% = D
- 59% or below = F

Makeup: The student is responsible for requesting a makeup when they are unable to take the regularly scheduled exam. The request should be made within 7 days of the absence. Makeup exams will be scheduled only in the event of **EXCUSED** absence (as defined in the Student’s Guidebook). If the test is **NOT** made-up, the student will receive a Zero for that exam. The comprehensive exam can take the place of one of the lecture exams.

Teaching/exams Aids: Classroom lectures consisting of the slides presented in class will be posted via e-College (Bb). Supplemented materials will also be posted. Students are strongly encouraged to print lecture slides (3 slides per page) prior to the class and bring them to class. Periodically, check course homepage as well as your email for course announcements.

Tentative Schedule of Topics*:

Week	Start Date	Lecture Topic(s)	Exams
1	Aug/Sept 31-4	Syllabus & Chapt. 1. Introduction to Plants and Botany Chapt. 2. Introduction to the Principles of Chemistry Plant Macromolecules (Mader, 2013)	
2	Sept 7-11	Chapt. 3. Cell Structure/ Chapt. 4. Growth & Division of Cell	
3	Sept 14-18	Chapt. 5. Tissues and Primary Growth of Stems	
4	Sept 21-25	Exam1. Chapt. 6. Leaves / Chapt. 7. Roots	
5	Sept/Oct 28-2	Chapt. 8. Woody Plants / Chapt. 9. Flowers& Reproduction	
6	Oct 5-9	Chapt. 10. Energy Metabolism: Photosynthesis (Mader, 2013)	
7	Oct 11-12	Chapt. 11. Energy Metabolism: Respiration (Mader, 2013)	
8	Oct 19-23	Exam2. Chapt. 12. Transport Processes / 13. Soils & Mineral Nutrition	
9	Oct 26-30	Chapt. 14. Development and Morphogenesis Chapt. 15/16. Plant Genes, Genomes & Genetics/ Others	
10	Nov 2-6	Chapt. 17. Population Genetics and EvolutionChapt. 18. Classification and Systematics	
11	Nov 9-13	Chapt. 19. Algae and the Origin of Eukaryotic Cells	

12	Nov 16-20	Exam3. Chapt. 20. Nonvascular Plants: Mosses, etc.
13	Nov 23-25	Chapt. 21. Vascular Plants without seedsChapt. 22. Seed Plants I: Gymnosperms
14	Nov/Dec 30-4	Chapt. 23. Seed Plants II: Angiosperms
15	Dec 7-11	Chapt. 24 & 25. Exam4.
16	Dec 14-18	Final Week (Comprehensive Exam5 - TBA)

*This schedule is a **general outline** for your reference and is subject to change. Any changes will be announced in class and/or at the course website(s): you will be responsible for keeping up with them. Each exam will be announced one week before their scheduled time.

University Statements - Academic integrity:

As members of Texas A&M University-Commerce academic community, we all are responsible to underpin the principles of academic integrity expressed by this community. We are expected to watch these principles to be kept and appreciated by others.

The first instance of cheating will result in an automatic Zero on the exam. A second instance will result in Zero course grade (automatic F).

Plagiarism is a serious academic activity. You must cite all sources of the information with properly accredited. Copying material, whether parts or whole, will result in a Zero for any academic activity and can incur further University disciplinary consequences.

Accommodations: The American with Disability Act (ADA) is a federal anti-discrimination status that provides comprehensive civil rights protection for persons with disabilities. Among other aspects, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability which requires accommodation, please contact:

Office of Student Disability Resources or Services

Texas A&M University-commerce

Gee Library, Room 132

Tel: 903-886-5150, 903-886-5835

Fax: 903-468-8148

E-mail: StudentDisabilityService@tamu-commerce.edu