

Spring 2008 Syllabus

Course Number, Section Number, and Course Title: Biology 3427: Plant Science

Time and Place of Lecture: TTh 9:30 a.m. – 10:50 a.m., Life Sciences 124

Time and Place of Lab: T, W, Th 2-4:50 p.m., Life Sciences 226

Name: Dr. Laura Gough

Office Number: Life Sciences 237

Email Address: gough@uta.edu

Office Telephone Number: 272-1453

Office Hours: T 11 a.m. – 1 p.m., W 10 a.m. – 11 a.m.

Laboratory Instructors: Matt Watson, cwatson@uta.edu, T lab, Office Hours TBA

David Johnson, johnsond@uta.edu, W & Th labs, Office Hours TBA

Description of Course Content: A survey of plant science including the importance of plants to people and the human side of botany; the structure, reproduction, physiology, ecology and classification of plants. The laboratory is designed to support and expand the course content of the lecture.

Student Learning Outcomes: For students to understand the importance of plants to humans and all other organisms on Earth, to review key concepts including photosynthesis and evolution of plants, and to distinguish groups of plants based on key characteristics. In lab students will conduct experiments with plants to learn about plant growth, reproduction, ecology and other relevant topics. Students will write lab reports summarizing their experiments to further their understanding of the scientific process.

Prerequisites: BIOL 1441, 1442, or equivalent.

Lecture Requirements: Students will be evaluated by two exams during the semester, a comprehensive final exam, and eight unannounced, open-note quizzes. The lowest two quiz scores will be dropped; quizzes missed for any reason cannot be made-up. There will be no extra credit opportunities.

Laboratory Requirements: Students will be evaluated through a combination of quizzes, lab reports, a lab notebook and a final practical exam.

1. Quizzes will be given at the beginning of each lab section. If you are late for lab, you will receive a zero for that quiz. The lowest two quiz grades will be dropped; there are no make-up quizzes.

2. Three lab reports will be completed throughout the semester, noted with asterisks in the lab schedule. Lab reports are to be written individually, although you will be working in groups to complete the experiments; additional instructions are included in the lab manual. Identical portions of lab reports will be handled as incidents of plagiarism following university policy.

3. Students must maintain a lab notebook that contains drawings, data, and notes taken during labs. The TA will request to see the notebook twice during the semester (dates will not be announced; 5 pts. each), and will collect and grade the notebook at the end of the course (15 pts.).

4. The final exam will be in the format of a lab practical and will include material from the entire semester. The final exam will be closed book.

Required Textbooks and Other Course Materials: *Biology of Plants*, 7th Edition, by Raven et al., 2005, W.H. Freeman and Co., and the Plant Science Laboratory Manual (sold by Phi Sigma).

Lecture Schedule:

Date	Subject	Chapter in Text
15 Jan	Introduction, course overview	1
17 Jan	Angiosperms	19
22 Jan	Angiosperm Evolution	20
24 Jan	The Plant body	22
29 Jan	Plant Cells and Tissues	23
31 Jan	Roots	24
5 Feb	Shoots and Leaves	25
7 Feb	End Shoots and Leaves, Start Secondary Growth	25,26
12 Feb	Stem Secondary Growth, review	26
14 Feb	EXAM 1	
19 Feb	Molecular Composition of Plant Cell & Cell Cycle	2,3
21 Feb	Flow of Energy	5

26 Feb	Respiration	6
28 Feb	Photosynthesis	7
4 Mar	Continue Photosynthesis	7
6 Mar	Systematics: Science of Diversity	12
11 Mar	Prokaryotes, Viruses, Fungi	13,14
13 Mar	Protista	15
18 Mar	<i>Spring Break—no class</i>	
20 Mar	<i>Spring Break—no class</i>	
25 Mar	Bryophytes	16
27 Mar	Seedless Vascular Plants	17
1 Apr	EXAM 2	
3 Apr	Gymnosperms	18
8 Apr	Continue Gymnosperms	18
10 Apr	Plant Hormones	27
15 Apr	Plant Growth	28
17 Apr	Plant Nutrition and Soils	29
22 Apr	Movement of Water & Solutes in Plants	30
24 Apr	Plant Ecology	21,31* & 32*
29 Apr	Continue Plant Ecology	21,31* & 32*
1 May	Course Wrap Up and Review	
8 May	CUMULATIVE FINAL EXAM , 8:00 a.m. – 10:30 p.m.	

*Chp. 31 & 32 are on the web at www.whfreeman.com/raven

Lab Schedule:

Week of	Subject	Lab Report
21 Jan	1. Course introduction, Plant nutrition*	
28 Jan	2. Germination* and Seedling Development	
4 Feb	3. Plant Cells and Tissues	
11 Feb	4. Plant Tissues and Roots	*Germination lab report due
18 Feb	5. Stems and Leaves	
25 Feb	6. Secondary Growth	
3 Mar	7. Photosynthesis	
10 Mar	8. Cyanobacteria, Algae and Lichens	
17 Mar	<i>No Lab—Spring Break</i>	
24 Mar	9. Seedless Plants	*Nutrition lab report due
31 Mar	10. Seed Plants: Gymnosperms	
7 Apr	11. Seed Plants: Angiosperms	
14 Apr	12. Plant Responses (Hormones*)	
21 Apr	13. Local Flora	*Hormone lab report due
28 Apr	Final Practical Exam (cumulative and closed book)	

Grading Policy: You may earn up to 600 points in lecture and laboratory, as follows.

Lecture:	Exam 1:	115 pts.
	Exam 2:	115 pts.
	Final Exam:	140 pts.
	Quizzes:	30 pts. (5 pts. each, lowest 2 dropped)
	Lecture Total	400 pts.

Laboratory:	Quizzes:	50 pts. (5 pts. each, lowest 2 dropped)
	Lab Reports:	75 pts. (25 pts. each)
	Lab Notebook:	25 pts. (two 5 pt. spot checks; 15 pts. at end of semester)
	Final Exam:	50 pts.
	Lab Total	200 pts.

Grading Scale: Based on 600 total possible points.

100-89.5	A
89.4-79.5	B
79.4-69.5	C
69.4-59.5	D
<59.5	F

Attendance and Drop Policy: Attendance is required. If you must miss a laboratory for a legitimate, documented reason, contact your instructor before that day and time to make alternate arrangements. If the instructor does not hear from you, you will not be able to make up the lab. University drop policy will be followed.

Laptop Policy: Laptops and other wireless internet devices will not be allowed during lecture or lab. If you use such a device you will be asked to leave class. If you need special accommodation, please see section below.

Make-up Exam Policy: The instructor must be notified prior to your missing an exam for a legitimate, documented reason. If we have not heard from you prior to the exam, you will not be able to make it up. The make-up exam will be in essay format.

Grade Grievance Policy: I am always willing to discuss a question you may have about grading of a particular answer on a quiz or exam in either the lecture or lab section. However you must see me regarding a grading question within one week of the quiz or exam being returned; after that, no grades will be changed. If the dispute is regarding a laboratory grade, I recommend you discuss it with your TA first. If you and your TA cannot solve the disagreement please let me know within one week after the quiz, assignment or exam was returned. If after that you do not feel your grievance was adequately addressed, you should contact Dr. Formanowicz, Associate Chair, Department of Biology.

Important University Policies:

Americans With Disabilities Act: The University of Texas at Arlington is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 92-112 - The Rehabilitation Act of 1973 as amended. With the passage of federal legislation entitled *Americans with Disabilities Act (ADA)*, pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens.

As a faculty member, I am required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty of their need for accommodation and in providing authorized documentation through designated administrative channels. Information regarding specific diagnostic criteria and policies for obtaining academic accommodations can be found at www.uta.edu/disability. Also, you may visit the Office for Students with Disabilities in room 102 of University Hall or call them at (817) 272-3364.

Academic Integrity: It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University.

"Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents' Rules and Regulations, Series 50101, Section 2.2)

Instances of plagiarism include inappropriate, uncited use of internet sources on lab reports as well as turning in work that is not entirely your own. Please see the lecture or lab instructor if you have questions about this before you turn in your first lab report.

Student Support Services Available: The University of Texas at Arlington supports a variety of student success programs to help you connect with the University and achieve academic success. These programs include learning assistance, developmental education, advising and mentoring, admission and

transition, and federally funded programs. Students requiring assistance academically, personally, or socially should contact the Office of Student Success Programs at 817-272-6107 for more information and appropriate referrals.

Final Review Week: A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabi. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. Classes are held as scheduled during this week and lectures and presentations may be given.

Drop for non-payment of tuition: Payment must be received by the term due date of January 9, 2008 or your registration will be cancelled. If your registration is cancelled for non-payment, you may reregister for classes but only if seats are available.

Bomb Threats: If anyone is tempted to call in a bomb threat, be aware that UTA will attempt to trace the phone call and prosecute all responsible parties. Every effort will be made to avoid cancellation of presentations/tests caused by bomb threats. Unannounced alternate sites will be available for these classes. Your instructor will make you aware of alternate class sites in the event that your classroom is not available.

E-mail Communication: The University of Texas at Arlington has adopted the University email address as an official means of communication with students. Through the use of email, UT-Arlington is able to provide students with relevant and timely information, designed to facilitate student success. In particular, important information concerning registration, financial aid, payment of bills, and graduation may be sent to students through email.

After Hours Safety Escort: The Sam Mav Escort service provides a service to assist students, faculty, staff and campus visitors to reach their destinations after regular business hours. The hours of service are 7:00 p.m. to 1:00 a.m., Sunday through Saturday. 817-272-3381

MavMail: All students are assigned an email account and information about activating and using it is available at www.uta.edu/email. New students (first semester at UTA) are able to activate their email account 24 hours after registering for courses. There is no additional charge to students for using this account, and it remains active as long as a student is enrolled at UT-Arlington. Students are responsible for checking their email regularly.

This course outline is tentative and subject to change.