#### **BOTANY**

BIOLOGY 161 section 02 or 04 TT 11:00 – 12:20 a.m. or TT 9:30 – 10:50 a.m. Lee Drain Building - Room 215 or 220 Spring 2008

Instructor:Tim TrippOffice Hours:MWF 10-11TT 8-9Office:100A LDBor by appointmentPhone:294-4850Email:tnt012@shsu.edu

## **COURSE OBJECTIVES**

## Learn about:

- $\sqrt{}$  Basic plant chemistry
- $\sqrt{}$  Plant cells and their function
- $\sqrt{\text{Seed morphology and germination}}$
- $\sqrt{}$  Morphology of roots, stems, and leaves
- $\sqrt{}$  Energy conversions
- $\sqrt{\text{Plant reproduction and genetics}}$
- $\sqrt{\text{Taxonomy}}$  and life cycles
- $\sqrt{\text{Plant hormones and nutrition}}$
- √ Plant ecology

# **REQUIRED MATERIALS:**

TEXTBOOK: Raven, Peter H. 2005. *Biology of Plants*. Freeman and Company.

7<sup>th</sup> edition.

ISBN: 0716710072

# **METHODS OF INSTRUCTION:**

Lectures will consist of material from the text *Biology of Plants* as well as from materials from other sources presented during lecture.

### **GRADING:**

TOTAL 400 PTS.

Note: Four of these five exams will be given during regularly-scheduled class-times spaced throughout the semester; the 5<sup>th</sup> of these exams will be a non-comprehensive final exam, taken during finals week! I will allow you to drop the lowest of the 5 exam grades. Refer also to the **MAKE-UP POLICY** discussed below.

The letter grade you receive will be fixed by the percentage of points you accumulate for the entire class:  $A \ge 90\%$ ;  $B \ge 80\%$ ;  $C \ge 70\%$ ;  $D \ge 60\%$ ; F < 60%. These standards may be adjusted downwards based on class performance, but never upward. Notice that these are absolute, rather than relative ("curve") standards, and any student who gets 90% or above will receive an "A". You are not in competition with each other; rather, your challenge is to learn the material and to participate actively in the course.

Your exam grades will be posted on Blackboard as soon as they are graded. If you feel the posted grade is in error, you have two weeks after posting to challenge the grade. With so many students in a class, errors are made occasionally. Do not hesitate to challenge the grade or ask a question about it. To do so either send an e-mail, call me at my office, or come by the office. Do not wait until 2 days before the final to ask about an exam in February.

Note: there will be **NO EXTRA CREDIT** available in this course; i.e., no additional points beyond those you earn on the quizzes and exams.

#### TENTATIVE EXAM DATES

Exam #1 (Feb. 7 <sup>th</sup> )	100 pts.
Exam #2 (Feb. 28 <sup>th</sup> )	100 pts.
Exam #3 (Mar. 27 <sup>th</sup> )	100 pts.
Exam #4 (Apr. 17 <sup>th</sup> )	100 pts.
Final Exam (Week of May 12 <sup>th</sup> - see university final exam calendar)	100 pts.

Note: exam dates listed above are tentative, with the exception of the final. I will give you at least one week's notice if any of the exam dates need to be changed.

### MAKE-UP POLICY

Students are required to take examinations at the instructor-scheduled times. Make-up exams will not be given; if you miss an exam, for whatever reason, that will be the exam grade you will drop. Remember that your grade for the course will be based on your best 4 out of 5 exams (including the final). If you miss more than one exam, the grade you earn will reflect your absences.

## TENTATIVE LECTURE SCHEDULE

WEE	CK OF:		<u>CHAPTER</u> :
Jan.	14	Administrative details	
Jan.	21	Intro to science & Botany, Chemistry	1
Jan.	28	Macromolecules	2
Feb.	04	Plant Cells, Cell Types	3
Feb.	11	Cell function, Energy	4,5
Feb.	18	Photosynthesis	7
Feb.	25	Photosynthesis, Respiration	6
Mar.	03	Plant genetics	8
Mar.	10	Spring break	
Mar.	17	Plant DNA and Biotechnology	9,10
Mar.	24	Plant tissue and organs	23
Mar.	31	Plant organs: Roots and stems	24,25
Apr.	07	Leaves, Flowers, Seeds	25,19,20
Apr.	14	Hormones, Tropisms	27,28
Apr.	21	Nutrition, Transport	29,30
Apr.	28	Plant ecology and ecosystems	31,32
May	05	Taxonomy	12

The lecture schedule is subject to change, depending on how fast or how slow material is covered. I will always keep you posted of where we are in the schedule and where we are headed.

**CLASS ATTENDANCE:** Regular and punctual class attendance is expected of each student. To do well, you must be an equal and active participant in your education - therefore it is your responsibility to attend class. Most quiz and test material will be based on class lectures and assigned readings. It should be no surprise, therefore, that to do well on exams you must attend lectures and read (and assimilate!) the assignments! Per University policy, attendance will be taken regularly. Excessive absences (≥ 3) from class will influence your final grade for the course.

If you are unable to come to class due to illness or unexpected circumstances, it is your responsibility to obtain the class notes. You may contact me in my office if you have specific questions about a given lecture; however, I cannot repeat lectures for students who have missed them.

#### TIPS AND RULES

## I. Studying Strategies

The key to doing well is to KEEP UP WITH THE MATERIAL. Read the assignments prior to coming to class. Take good notes during class (write down the main points, don't worry about prepositions, conjunctions, etc.), leaving a wide left-hand margin. Review your notes that same day, writing down (in a different color of pen or pencil) things you remember from lecture that did not make it into your notes (you will be surprised how much you WILL remember, but you MUST review your notes soon after class, not the next day or the next week). Reread the assigned material, adding yet another set (in a third color of pen or pencil) of points/examples/comments to the margin NEXT to similar points/concepts/examples that we discussed in class. Taking notes in this manner does two things. First, studies show that such repetition helps most of us take stuff from short-term memory and put it into long-term memory. Second, this technique will provide you with a very complete set of notes from class and from your reading that will be your BEST guide in helping you study for quizzes and exams.

Bring your textbook, a notebook, and a writing tool to all classes. Many of the figures in the texts will be used in lecture and you should feel free to make notes in the margins of your textbook. Additional handouts will be provided periodically, either as hardcopy or posted on BlackBoard. Do not lose or ignore them. If I take the time to make the handouts, they are important and you should study and understand their content.

# II. Academic Honesty $\Box$

You may find that your performance in this class will benefit from discussions with your classmates and from working in small, motivated study groups. I encourage you to work with others to help clarify concepts and understand the class material. However, on exams and during quizzes, you must rely on your **own** reasoning, your **own** memory, and your **own** answers. Cheating is a violation of the Honor Code and will not be tolerated. Regulations and responsibilities put forth in the *Student Code* and in the *Faculty Handbook* will be followed in the event of academic dishonesty.

### III. Student Absences on Religious Holy Days□□

Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student desiring to absent himself/herself from a scheduled class in order to observe a religious holy day(s) must present to their instructor(s) a written statement concerning the religious holy day(s). This request must be made in the *first fifteen days of the semester* in which the absence(s) will occur. The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed.

## **IV. Disabled Student Policy** □

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may adversely affect your work in this class, you are encouraged to register with the SHSU Counseling Center and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: no accommodation can be made until you register with the Counseling Center.

### V. Classroom Rules of Conduct

Students will refrain from behavior in the classroom that intentionally or unintentionally disrupts the learning process and, thus, impedes the mission of the University. All electronic equipment including cellular telephones, pagers, MP3 players, and laptop computers must be turned off and put away before the start of class. Reading of newspapers or anything other than class-related materials is not allowed. No talking is allowed during the class except during appropriate contexts. Students engaging in inappropriate behavior may be asked to leave the class and may be reported to the Dean of Students for disciplinary action.

#### VI. Visitors in the Classroom

Visitors to class must have prior approval by the instructor to be present in the classroom. Visitors must adhere to the same rules of conduct as outlined above for students.

## Additional hints for success in Contemporary Biology

- 1. Take personal responsibility to learn the material. Set a goal for yourself, both in terms of mastering the class material, and perhaps as well regarding the grade you want to earn. If you find that you are not achieving your goal, come by and talk with me -- together we might identify the best ways for you to succeed in this course. Do not wait until the Final Exam to start worrying about your grade!
- 2. If you are a full time student you should consider studying for your courses as your FULL TIME "job". When you add it all up, going to college is really more than a full time job! If you take this "job" seriously and plan the hours of your day wisely, you will succeed. Any additional employment and extracurricular activities should not detract from this time.
- 3. Study without distractions. It is difficult for most students to study in a noisy dorm or distracting library.
- 4. Read the textbook and other assignments before the material is covered in class and again afterward. For most of us, a single reading of difficult material is insufficient.
- 5. Take good notes during lectures. Let me encourage you again to look back over your notes soon after class you will be surprised how many more details you will remember that you can add to your notes. If you do not understand a concept covered in class, deal

with it *immediately*. Go back to the texts and assigned readings and review the topics. There are also many other good texts in the library - use them to your advantage.

- 6. Keep on top of the material. Do not wait until the week before an exam to learn everything.
- 7. Participate in active studying. When you study, do not simply read your notes and the book. Active studying may involve outlining the material, drawing diagrams, discussing concepts with classmates, etc.
- 8. You should begin reviewing (NOT studying the material for the first time) at least a week prior to each exam. The best way to review for midterms and the final exam is to study your class notes which, if you follow my suggestions above, will provide you with a detailed summary of the important concepts and examples. The best way to study for the quizzes is to stay on top of the material!
- 10. Get adequate sleep the night before each exam. Most students will not reach their goal by pulling "all-nighters" before tests there is simply too much material to cram!!
- 11. Take all of you work seriously! Learning should be enjoyable, but it is surprisingly hard work.