

Syllabus for Biology 1407-45

Bio 1407: Spring 2009

<http://www.wtamu.edu/~rmatlack/bio1407.htm>

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Class Hours: TTh: 8:30-9:45 Location: ANS 101

Note: You must be enrolled in a laboratory section of this course!

Office Hours: T 11:00-1:00, W 11:00-12:00, Th 11:00-12:00 and by Appointment. I am happy to schedule an appointment to meet with you anytime I am available. You may schedule an appointment to meet with me via email or phone. I check my email and voice mail several times each day and will promptly reply to your messages.

Required Text: Biology Concepts and Connections by Campbell *et al.*, Fifth Edition.

General Information:

This class will provide an introduction to the principles and concepts of biology and biological sciences.

Course Description:

During the semester, you will continue to study the world of biology. This class will continue to provide you with a basic background of the principles of biology that you started in Biology 1406. We will examine biology at both the microscopic and macroscopic level as we study genetics, reproduction, plants, evolution and ecology. As with Biology 1406, Biology 1407 is a four credit hour course. To get credit you must also sign up and attend a section of Biology 1407 Lab. Your work in lab will contribute 25% of your final grade in this course.

Course Objectives (Student Learning Outcomes):

1. Explore the scientific method through examples and application
2. Develop the ability to think analytically and critically about information presented in class, in lab, and in readings.
3. Practice interpreting graphs and gain an understanding of other forms of data presentation
4. Develop laboratory skills and apply these skills to investigate the principles of biology
5. Develop an understanding of plant structure and general plant biology
6. Understand the cellular basis of reproduction and inheritance
7. Examine plant and animal reproduction
8. Understand the steps of meiosis and the benefits of sexual reproduction
9. Develop an understanding of the process of evolution and speciation
10. Explore community and ecosystem ecology
11. Understand biodiversity and the factors that threaten biodiversity

Tentative Schedule:

<u>Chapter</u>	<u>Topic</u>
31.1-31.8	Plant Form & Function
32	Nutrition & Transport
8.11	Review of mitosis
8.12-8.23	Meiosis and sexual reproduction
31.9-31.15	Plant Reproduction
27.1-27.8	Animal Reproduction
9	Inheritance
13	How Populations Evolve
14	The Origin of Species
34	The Biosphere: Intro to Earth's Diverse Environments
36	Communities & Ecosystems
38	Conservation Biology

Class Policies:

Grade scale: A= 90-100%
B= 80-89%
C= 70-79%
D= 60-69%
F= 0-59%

Tentative Exam Dates:

Exam 1	Thursday, 5 February
Exam 2	Tuesday, 3 March
Exam 3	Tuesday, 7 April
Final Exam	8:30 am, Tuesday, 5 May

Makeup exams – All exams must be taken at the times announced in class or in the syllabus. Make up exams will be given at the instructor's discretion unless the student has a doctor's letter or letter of absence for a school-sponsored event. If you have a serious reason for missing an exam, you must contact me **BEFORE** the scheduled exam period to notify me that you cannot take the exam. You are then responsible for arranging with me to make up the test or quiz **within two days** of your return to campus. **If you are late to an exam and students have completed their exam and left the classroom you have missed the exam.**

Note: Exams are subject to change and I reserve the right to change any and all information contained in the syllabus.

Attendance - I cannot imagine that you will find it possible to master this material without regular class attendance. Regardless of whether you are in class or not, however, you are responsible for everything which is discussed in lecture, any announcements made in class, everything which is assigned as class reading, and any handouts which are given in class. If you miss class, you must make your own arrangements for access to class notes or handouts from classes that you miss. I will not provide copies of my class notes except under very rare circumstances (serious injury, surgery, etc.) and by PRIOR arrangement only.

Grading – Your final grade will be based on your performance in lecture (3, 100-point lecture exams and a 100-point final exam, 20 points for attendance and 10 points for attending a student conference) and your lab grade. The lecture portion of the class will count for 75% of your grade and the laboratory will count for 25%. The final exam will not be cumulative. Extra credit will not be given.

Calculating your grade - Your grade in the class can be determined at any time by performing the following calculation:

$$(\text{LECTURE AVERAGE} \times 0.75) + (\text{LAB AVERAGE} \times 0.25) = \text{CLASS AVERAGE}$$

Attendance Grade– Each student will be required to make a name card and bring it with them each day to class. The name card will serve two functions, to allow me to learn your names and to allow me to quickly and easily take attendance. Attendance counts for 20 points of your lecture grade and you will receive all 20 points if you have 3 or fewer absences. If you miss 4 or 5 lectures you will receive 7 points. **If you miss more than 5 lectures, whether the absences are excused or not, you will receive 0 points for attendance.** NOTE: you will be counted absent if you are not present (or your card is not visible) when attendance is taken or if you leave class early! Be sure to avoid missing class when ever possible as a late semester illness, family emergency, or other unforeseen circumstance may cause you to miss class (in other words, don't think of the 3 absences as days off, they are to cover situations where you cannot attend class, not situations where you simply don't want to attend). You will receive an additional 5 points for perfect attendance. Be sure to read the section below on makeup exams as makeup exams will only be permitted under specific circumstances.

Student conferences - Each student is required to attend a short meeting with me during the semester. **The meeting** must be scheduled and conducted before the end of the third week of school (29 January). You must be on time to your meeting and must cancel by email or voice mail at least 12 hours before your scheduled meeting time if you cannot attend. If you must cancel your meeting, be sure to reschedule as you will still need to meet during the assigned dates. The conferences are informal and are designed to allow me the chance to get to know you and to allow you to ask questions of me.

Honors enrichment – Students in the honors section of this course will be expected to complete enrichment activities in addition to the standard class work. Enrichment activities may include the following and will be determined for each student during a conference with the instructor: lab tours with biology faculty, volunteering on research with biology faculty, leading a study session for students in Biol1406, written summaries describing current research in biology, and regularly scheduled meetings with the instructor to discuss current research in biology. **Students in the honors section are responsible for scheduling a meeting with the instructor within the first 2 weeks** of class to discuss enrichment and to tailor enrichment activities to best meet each student's interests.

Dropping the class – If you decide to drop the class you should consult your advisor and, if you receive financial aid or scholarships, contact the financial aid office to determine the effect of dropping on your financial aid. **You must drop the class - I will not drop you!** If you drop the class before the last day to drop the class with a guaranteed X (see the University calendar for date) you will receive an X. If you drop after this period, I assign you a grade of X or XF. I will assign an X if you were passing the course ($\geq 60\%$) at the time you dropped or if you have made special arrangements with me **PRIOR** to the last day to drop with a guaranteed X. I reserve the right to assign a grade of XF despite any previous agreement if you fail to attend class or lab, are late to class regularly, etc.

Behavior – Please be considerate of the other students in the classroom. Remember that each student pays to take this class and most students are here to learn the material. Disruptive behavior such as talking, using cell phones (including texting), listening to music, passing notes, leaving the class early or regularly, or other behaviors that reduce the quality of the educational experience for others **WILL NOT** be tolerated during lecture. If you engage in disruptive behavior you will be assigned a seat at the front of the classroom. If you continue to behave in a disruptive manner you will be reported to the Behavioral Intervention Team and, if necessary, removed from the classroom.

Academic dishonesty - If you are uncertain about what constitutes academic dishonesty, please read the appropriate sections in the Code of Student Life. I will have zero tolerance for academic dishonesty. Instances of dishonesty will be punished to the fullest extent possible, including the receipt of a failing grade for the course. Take care to avoid the appearance of cheating! During exams keep your eyes on your own paper, keep books and bags closed, and put all paper away.

Students with Disabilities:

WTAMU seeks to provide reasonable accommodations for all qualified persons with disabilities. This University will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to register with Disability Support Services and to contact the faculty member in a timely fashion to arrange for suitable accommodations.

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Safety:

Safety is everyone's responsibility. Material Safety Data Sheets (MSDSs) are provided for all chemicals used in this class. MSDSs provide information about physical properties, health risks, fire and explosion data, and other important information associated with these chemicals. Before handling or using a chemical, you should refer to the MSDS for that chemical. It is your responsibility to inform the instructor in writing of any health conditions that may prevent you from safely using a chemical (pregnancy, auto immune deficiency, etc.). It is also the responsibility of the student to report any spills

or problems found while storing or using a chemical. If you are unsure about a chemical, always ask. If you see any unsafe condition, notify your instructor immediately. If you are unsure about the proper and safe operation of any piece of equipment, ask your instructor for proper instruction. All injuries, spills of materials and unsafe conditions must be reported to the instructor immediately.

Evacuation:

When you receive notice to evacuate the building, please evacuate promptly but in an orderly manner. Evacuation routes are posted in various locations indicating all exits, outside assembly area, location of fire extinguishers, fire alarm pull stations, and emergency telephone numbers (651-5000 or 911). In the event an evacuation is necessary, evacuate immediately; do not use elevators; take all personal belongings with you; report to outside assembly area and wait for further information; students needing assistance in the evacuation process should bring this to the attention of the instructor at the beginning of the semester.

Scholastic Dishonesty:

It is the responsibility of students and instructors to help maintain scholastic integrity at the University by refusing to participate in or tolerate scholastic dishonesty. Commission of any of the following acts shall constitute scholastic dishonesty. This listing is not exclusive of any other acts that may reasonably be said to constitute scholastic dishonesty: acquiring or providing information for any assigned work or examination from any unauthorized source; informing any person or persons of the contents of any examination prior to the time the examination is given in subsequent sections of the course or as a makeup; plagiarism, submission of a paper or project that is substantially the same for two courses unless expressly authorized by the instructor to do so. (2008-2009, CODE OF STUDENT LIFE, Rules and Procedures for Students, West Texas A&M University).

A complete statement regarding scholastic dishonesty can be found in the Student Code of Life at <http://www.wtamu.edu/administrative/ss/code/code.html#procedures>.