

BIOLOGY 182, Spring 2012 COURSE SYLLABUS

Lecture Schedule: Tuesday and Thursday, 12:00-1:15PM, MUR101

Instructors:

Beginning Jan 5th : Dr. Stuart Newfeld
Office: LSA L1-64
Phone: 965-6042; Email: newfeld@asu.edu
Office Hrs: 10:00AM-11:00AM Tu and Th, by appointment.

Beginning Feb 28th : Dr. Kevin Gurney
Office: LSA, Rm 364
Phone: 965-4556; Email: kevin.gurney@asu.edu
Office Hrs: Tu and Th 2-3 pm.

Please schedule and/or confirm office hour appointments by email in advance. This is the best way to avoid waiting in a long line of students to talk to us.

Lab Coordinator: Kim Michel (Kim.Michel@asu.edu). Your primary contact for anything related to the lab is your TA. Contact Kim for unusual lab situations such as lab switching. Kim will also be in charge of lecture exam grade postings and lecture quiz operations and should be contacted with questions in these areas.

Lecture TA: Nancy Tran (Nancy.Tran@asu.edu). Nancy's primary job is to assist the instructors by preparing materials for the class, interfacing with testing services, disability services etc. She will also run a review session before each exam and answer questions via email. Her office hours will be announced.

Lab TAs (16 sections):

Elizabeth Cash	Christina Burden
Owen McKenna	Robert Wildermuth
Laureano Gherardi	Taylor Goett
Charles Rolsky	Zakary Hambsch
Jesse Senko	Cherie Lynch
Josh LaMontagne	

Office hours and additional contact information are available on your TA's lab syllabus

Supplemental Instruction/Peer-led study sessions: SI sessions and SI leaders will be introduced in the first class.

Textbooks and other requirements:

Sadava et al; Life: The Science of Biology, 9th edition
(6 copies are on reserve at Noble library)
BIO182 Lab Manual available at the ASU Bookstore
Additional materials for the course will be made available on Blackboard

Course Goals:

- (1) Learn about the major theories and principles currently underlying the fields of: Biodiversity, Evolution and Adaptation, Mendelian Genetics and Ecology
- (2) Develop the ability to use the scientific method
- (3) Develop the ability to critically evaluate and analyze biological information, including proficiency in interpreting biological data graphically

These goals require a combination of lecture attendance, where you will be introduced to the major ideas in these fields, and the additional work outside of the classroom. Outside work facilitates understanding and using the ideas presented in lecture – i.e. to help you learn them.

Grading

Course grades are based on a total of 750 lecture and lab points. We will use the following guaranteed grading scale:

88% and above (>660 points)	A-
78% - 87% (>585 points)	B-
68% - 77% (>510 points)	C
60% - 67% (>450 points)	D
Below 59.9% (<449 points)	E

The above ranges identify a minimum grade cut-off for that grade. Final cut-offs are dependent on exam averages, and the final curve will not be determined until all grades are in (after the last exam). We will determine “plus” and “minus” grades within each letter grade distribution according to point distributions. Please **DO NOT ASK** for letter grades during the course. They are **NOT** determined or assigned until after the final exam.

Course Point Distributions

Lecture points total 500, and are distributed as following:

- 4 Lecture exams, 100 points each: 400 pts
- 6 Lecture quizzes, 5 will be counted at 20 pts each, lowest score dropped: 100 points
- Quizzes will be given on blackboard

Laboratory points total 250, and are distributed as outlined in your laboratory syllabus.

Total points for this course: 750 pts

Laboratory

Lecture sections and laboratory sections are connected by the ASU administration to insure reasonable accessibility for all students. If you are registered for a lab it is because that lab is associated with your lecture. The system will not allow you to register for a lab section not associated with your lecture. No one (Instructor, Lab Coordinator or TA) can get around this.

Your laboratory syllabus serves as the document of contract for the laboratory component of the course; it will be handed out and discussed in your first lab and will be posted on Blackboard. All points for the laboratory component of the course are given by your TA. Each TA is responsible for the content of their lab syllabus and has authority in determining the number of points earned for each assignment. Drs. Newfeld or Gurney will serve as the final arbiter of any disputes over laboratory assignments attendance or grading, but you must make any requests first to your assigned TA. Please note that all laboratory assignments turned in must be your own independent work unless otherwise explicitly stated by your TA.

THIS IS IMPORTANT - Laboratory attendance and assignments: Attendance at labs is mandatory and will have a large impact on your grade. If you miss a lab without an approved excuse then you will receive a zero for the assignment associated with that lab. Documentation must be turned in to your TA and approved by the TA in order to be excused from a lab. Late assignments will lose point value or be deemed unacceptable as decided by your TA. Students that do not show up for lab in weeks 1 and 2 will be dropped from the course. **Students missing 3 or more labs, excused or unexcused, will receive a zero for the Lab. Being tardy to lab counts as a .5 absence.** As Lab points equal one-third of the grade for the course even a perfect score on all lecture exams/quizzes will still earn a D ($500/750 = 66\%$; see grade scale above)

In unusual circumstances you may be able to attend a different lab than your regular lab time. To do this you must obtain permission ahead of time both from the TA whose lab you are planning to attend and from your regular TA. Your TA will establish a limit on the number of other labs attended, and you must follow the lab syllabus for assignments and grading.

We have been careful in developing labs for General Biology to strike a balance between the considerations of ethical animal use and requirements for effective learning. Because of our required topics we have limited animal use to studies with invertebrates. There will be no requirements to kill any invertebrates or vertebrates. However, if you still have concerns after reviewing the scheduled labs with your TA, you should discuss them with your instructor. You must do this in the next 3 weeks, to allow for the option of withdrawal from the course.

Blackboard

The course will use Blackboard for posting course information, administering quizzes, discussing course content and communicating online with the instructors. Blackboard works both as a course website and as an interactive forum. It is easy to navigate. Access Blackboard at <http://my.asu.edu>. *You are responsible for any materials or information posted on the site.*

All students pre-registered for the course have been enrolled and have been sent emails to their ASU email accounts. If you have not received an email, check to make sure that BIO 182 shows up on your Blackboard listing. Emails from Blackboard can only be sent to your ASU email; if you regularly use a different email account please set up your ASU email to forward to the account you check most regularly.

Log in to Blackboard every day (especially around quizzes due to the possibility of IT problems) to view Announcements for the course. The syllabus is posted under Course Information. You will be able to download lecture outlines and related information under Course Materials, and to ask and answer questions in the Discussion boards. Your lecture grades throughout the semester will also be posted on Blackboard; however, at any given time they may not reflect your updated scores. Be aware of this when checking your grades.

Exams

Exams are based on material and concepts presented in lecture, as well as any material in the textbook that is relevant to lectures. Use the book and its website to help understand the material covered in class and to test your understanding of the relevant concepts. Any additional materials (journal articles, etc) will be posted on Blackboard.

Exams will be multiple choice with 25 questions worth 4 points each. There will be multiple versions of each test and you will have an assigned seat. You will need to bring a number two pencil (and eraser) to the exam. Please **DO NOT** bring to the exam any electronic devices that can store information, including phones, calculators, ipods or other similar devices. Your brain, your ASU ID and a pencil are all you need. No course material may be used during the exam.

Because of time limits, you should arrive promptly to the exam. Students arriving more than 10 minutes late may not be allowed into the room, and *NO students will be allowed to enter the room after the first student has turned in their exam.*

THIS IS IMPORTANT - Missed lecture exams: **There are NO make-up exams.** Unexcused absences for exams will be given a zero. Excused absences will be given only for documented emergencies. Vacations, weddings, other exams and work conflicts are NOT considered valid emergencies. If you miss an exam due to a medical or personal emergency bring documentation (doctor's note, police report, funeral director note, etc) to either Dr. Newfeld or Dr. Gurney immediately. Final determination of whether you will be excused for a missed exam is made by

the instructor administering that exam. *Do not assume* you will automatically be excused from missed exams if you turn in a document. For documented excused exams you will receive a score for that exam which is the average of your other lecture exams. There is no possibility of alternative exam times (before or after the scheduled time). It is either excused or unexcused. There are NO EXCEPTIONS TO THESE RULES.

Quizzes

Quizzes are intended to insure you are keeping up with the readings. This is for your benefit as trying to read 5 or 6 chapters of 50 pages each on the night before the test is a recipe for disaster.

Quizzes are based on material presented in the textbook and lecture. Each of the six Quizzes will be 10 multiple choice questions chosen at random from a bank of over 50 questions and the answers for each question (a,b,c,d or e) will also be randomized. Quizzes are available on Blackboard for 24 hours on the specified date (12:30AM to 12:30AM). You will have 30 minutes for each quiz and may take it only once. Scores and correct/incorrect answers will be available immediately. We will drop your lowest quiz score. If you have problems taking your quiz, immediately contact Kim Michel (kim.michel@su.edu). If your problem occurs outside of business hours (9 am to 5 pm) DO NOT EXPECT A RESPONSE OR RESOLUTION until 9 am the following day.

Grade disputes and/or questions: Any questions on exams or exam grading should be directed to Dr. Newfeld or Dr. Gurney, according to who administered the exam. Questions on laboratory grades should be directed to your individual laboratory TA. The lab coordinator instructor should be consulted only if you and your TA are unable to resolve the grading issue. In all cases, questions and concerns about grades or grading procedures must be filed within one week of grades being posted.

Code of Conduct

You and your fellow students are expected to follow the code of conduct for Academic Integrity as established by Arizona State University: <http://students.asu.edu/srr/code>. Please keep in mind that cheating on exams, whether in lecture or in laboratory, damages you and the class as a whole. When one individual cheats to raise their grade dishonestly, all other students in the course lose. The cheater also ultimately loses, because they do not acquire the skills that they have avoided by this act. Academic dishonesty is not tolerated; the offender will automatically receive a grade of 'E', and we will file for sanctioning of that student by the College. Be especially aware that all assignments and exams are to be your own work, unless you are explicitly given permission to hand in work as a team.

As an extension of this policy, courteous behavior is expected in lecture and lab. Please do NOT talk in class (except when invited), do NOT walk in late, or walk out early (without letting me know in advance), do NOT read newspapers in class, and do NOT use your cell phones in class (including text-messaging). Laptop use is permitted only in the last 10 rows of the classroom, as it is disruptive to any students behind you (and yes, they will be reading your Facebook page). All of these activities distract your fellow students and also indicate that, although you may be there physically, you are not actually paying attention.

Lecture and Lab Schedule

Below is a summary schedule of lecture and lab topics. It is possible that lecture topics will not fit the schedule exactly. Text chapters associated with each lecture are shown. Lab assignments and due dates are determined by your TA and given in your Lab Syllabus.

Date	Lecture topic	Readings	Labs
5-Jan	Course introduction	Syllabus	No labs this week
10-Jan	What is science	Ch 1: section 1.3	1/9-1/13 Scientific Method
11-Jan	Drop-Add Deadline		
12-Jan	Biodiversity - Cells	Ch 5: all	
17-Jan	Biodiversity - Prokaryotic cells	Ch 26: all	1/16-1/20 Plagiarism & Microscopes
19-Jan	Biodiversity - Eukaryotic cells	Ch 27: all	
20-Jan	Quiz 1 (lectures 10-Jan to 17-Jan)	Blackboard	
24-Jan	Genetics - Mitosis	Ch 11: 11.1 to 11.4	1/23-1/27 Mitosis & Meiosis
26-Jan	Genetics – Meiosis	Ch 11: section 11.5	
30-Jan	Quiz 2 (lectures 19-Jan- to 26-Jan)	Blackboard	1/30-2/3 Mendelian Genetics
31-Jan	Genetics - Mendelian Inheritance	Ch 12: section 12.1	
2-Feb	Genetics - Genes and Chromosomes	Ch 12: section 12.4	
7-Feb	EXAM 1 (lectures 10-Jan to 26-Jan)	in class	2/6-2/10 Hardy Weinburg
9-Feb	Genetics - Individuals to populations	Ch 21:section 21.1	2/13-2/17 Scientific Literature
14-Feb	Genetics - Variation in populations	Ch 21:21.2 to 21.4	
16-Feb	Evolution – Speciation	Ch 23: all	
17-Feb	Quiz 3 (lectures 31-Jan to 14-Feb)	Blackboard	
21-Feb	Evolution – Phylogenies (last Newfeld lecture)	Ch 22: all	2/20-2/24 Field Ecology
23-feb	EXAM 2 (lectures 31-Jan to 21-Feb)	in class	
28-Feb	Evolution and adaptation: The plants (first Gurney lecture)	Ch 28-29	2/27-3/2 Plant Adaptations
1-Mar	Evolution and adaptation: The animals	Ch 31, 32-33	
6-Mar	Adaptation and behavior	Ch 53	3/5-3/9 Animal Behavior
8-Mar	Population Patterns	Ch 55	
12-Mar	Quiz 4: lectures 28-Feb to 8-Mar	Blackboard	3/12-3/16 Community Succession
13-Mar	Population Demography	Ch 55	
15-Mar	Biogeography	Ch 54	
25-Mar	Last day to Withdraw		

27-Mar	Species interactions	Ch 56	3/26-3/30 Population Dynamics
29-Mar	Community change over time	Ch 56	
2-Apr	Quiz 5: lectures 13-Mar to 29-Mar		4/2-4/6 Adaptive Radiation/ EE
3-Apr	Exam 3: lectures 28-Feb to 29-Mar	In class	
5-Apr	Food webs	Ch 57	
10-Apr	Global energy and material cycles	Ch 58: sections 1-2	4/9-4/13 Presentations
12-Apr	Global change & sustainability	Ch 58: sections 3	
17-Apr	Climate change	Ch 58: section 4,5	4/16-4/20 Lab Finals
19-Apr	Climate change	Ch 58: section 4,5	
23-Apr	Quiz 6: lectures 13-Mar to 19-Apr	Blackboard	
24-Apr	Conservation Biology	Ch. 59	
26-April	Exam 4	9:50-11:40 am	

*** THE SYLLABUS MAY BE SUBJECT TO CHANGES UPON NOTICE ***