

BIOLOGY

Bio Sci 1

Sierra College

Instructor:	Jeff Kiefer
Lecture:	pm.
Lab:	pm
Text:	<u>Biology</u> 8 th Edition by Campbell
Recommended Text:	<u>Student Study Guide for Biology</u> , by Taylor. <u>Cliff Notes Preparation for AP Biology</u>
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This course will quickly cover the major principles of the biological sciences. Bio 1 is not intended to give an in-depth coverage of any one particular principal but rather a survey of all topics involved in biology. Bio 1 is intended as a backbone (or should I say vertebral column) in which all life science disciplines are built. Therefore this course is recommended for majors in those fields such as, Biology, Pre-med, Veterinary Medicine, Molecular Biology, Environmental Sciences, Nutrition, etc. **ALL OTHER MAJORS ARE STRONGLY ENCOURAGED TO ENROLL IN BIO SCI 10, 11, OR 56.**

We will discuss the universal molecules that determine cell structure and function, including respiration and photosynthesis. We will talk about genetics in terms of how genes are passed on from one generation to the next and how those genes show up as physical characteristics. We will also touch on how genes are being manipulated to produce everything from super crops to animal clones. Evolution will cover how these genes change over time and how this change through adaptation has created the diversity of life on earth. Finally, through the study of ecology, we will discuss how all these organisms with all their genes inside all their cells interact with each other at a global level.

Expectations:

You are expected to read the relevant sections of the book PRIOR to lecture. READ THE BOOK. You are expected to be present for the entire lecture and lab as well as all class meetings. After the lecture you should study your notes, go back over the book sections, read through the review at the end of each chapter, and answer the relevant questions. Use the student study guide to structure your study time and help you learn the material. Come to the next class meeting with any questions you may have so I can answer them for you immediately. The majority of the test questions are drawn from lecture---not the book. You need to be present every class period.

There will be a quiz at the end of Monday's lecture every week covering the previous weeks lecture and text material. You must take all exams and quizzes. Your lowest quiz score will be dropped. **NO MAKEUP'S WILL BE ALLOWED FOR QUIZZES.**

Exams and Grades:

Grades are based on lab practicals, graded lab reports, two midterms, one final, one project, and approximately 11 quizzes. There are no quizzes on the first night or on test nights. There will be no quizzes on. The midterms and lab practicals are not cumulative. Each of the exams, including the lab practicals, will require a Scantron #882 of which I will supply.

Grades are based on the point system. Your grade is based on your total points earned divided by the total possible points. This decimal is then multiplied by 100 to determine a percentage. Percentage scores will be rounded up at xx.5 and rounded down at xx.4.

Point values are assigned as follows:

Weekly quizzes:	20 points each X 10 =	200 pts
Midterms:	100 points each X 2 =	200 pts
Final Exam:	100 points =	100 pts
Lab practicals:	50 points each X 2 =	100 pts
Labs:	10 points each X 15 =	150 pts
Extra Credit:	10 points each X 2 =	<u>20 pts</u>

Total Possible: 750 points

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

Extra Credit:

Please take advantage of the extra credit. Not only will it help your grade but you may enjoy it. You can read a feature article from a magazine and write a one page double spaced typed summary of it. You can choose the article from Scientific American, Science, or Nature magazine ONLY. The article must be at least two pages in length.

You must make a copy of it and attach it to your report. It must deal with a biological topic.

Each article summary is worth 10 points maximum. You may receive less. They are due anytime during the semester. You can turn in no more than two article summaries. The latest day you can turn them in is on the day of the lecture final. The sooner the better.

Policies:

You are responsible for attending ALL lectures and labs. **MAKEUP'S FOR EXAMS ARE ONLY ALLOWED WITH APPROVAL OF THE INSTRUCTOR.** Makeup's may occur only for EXTREME reasons. Verification from a doctor of severe illness is necessary. I must be notified prior to the actual exam date. All makeup's are essay only. There are no quiz makeup's. If you have any problems, please see me.

It is the student's responsibility to turn add or withdrawal forms in on time! It is my policy to not initiate withdraws beyond the first two weeks of class. Turn in any withdraws before the drop deadline.

I will not tolerate any form of cheating. I have and will assign an "F" grade to anyone who cheats.

The following is a list of other policies:

1. Students must be in their seats and quiet promptly at the start of class.
2. Do not leave class early. If this is absolutely necessary, you need to notify me at the beginning of class. Since quizzes are given at the end of class, you will lose the points for that quiz. There are no quiz makups.
3. No talking during lectures. Wait until the break.
4. **Turn off cell phones during lecture and labs.**

Consequences of violation of Policy:

1. First offense is a warning.
2. Second offense is a loss of 5 grade points.
3. Third offense is a written warning and removal from that class period.
4. Fourth offense is removal from the course.

Lab Instructions:

Labs are essential to science. Therefore I take them very seriously. Come to lab prepared to work. The following is a list of expectations for laboratory.

1. Do not miss any labs.
2. Actively participate in the lab activity. Don't make your lab partner do the entire lab. You are a team.
3. Produce quality work. Your lab should be neat and legible. If I can't read it, it's wrong.
4. Rinse all glassware well. Remove any marks with alcohol and place all materials back where you got them (on the cart, in your drawer, etc.).
5. Place all trash in the trash can or where designated.
6. Your drawers contain glass cleaner, lens tissues, slides, coverslips, and razor blades. Clean and dry your slides before you put them back in their case. Make sure all of your materials stay in your drawer.
7. Microscopes must be returned to the proper location. Make sure the cord is wrapped around the base. The objective is locked into place. The objectives have been cleaned. The mechanical stage is centered.
8. I will collect every lab and check it.

Lab procedure:

1. Do not copy any information from anyone. I will consider it cheating!
2. Do not leave lab until you are fully satisfied that you understand the material and have completed the assignment.
3. Lab reports are due at the beginning of the following Wednesday class period after the lab. I do not accept late labs.
4. There are no lab makeup's.
5. The Biology Department has an excellent web site. Check it out! Within the web site are most of the slides we look at in lab. They are listed alphabetically. Look them up to study for lab practicals. Simply click on "Alphabetical Listing" and find the slide! The web site for the slides is <http://biosci.sierra.cc.ca.us/resources/slides/index.html>