

**World of Biology Lab
Biology 1020 - Section 4
Spring 2012**

Instructor: Reyn Akiona

Office: 251

Office Hours: Thursday 8:00am – 10:30pm

Email: rakiona@csustan.edu

Class Time and Place: Tuesday, 6:00PM to 8:50PM in N223

Credits: 1 unit

Lab Workbook: *World of Biology: Biology 1020*, 4th Edition, by Stevens et al (2009)

*You are required to purchase this workbook and bring it with you to every lab. *If you do not bring this book to our second lab meeting you will be dropped from the course.*

Fall 2011 Lab Schedule

| <u>Date</u> | <u>Topic</u> |
|-------------|---|
| Jan 31 | Attendance and Safety Lecture; Video: “Here be Dragons” |
| Feb 7 | Nature of Science |
| Feb 14 | Cells, Microscopes |
| Feb 21 | Transport |
| Feb 28 | Metabolism |
| Mar 6 | Mitosis |
| Mar 13 | Genetics (bring calculator) |
| Mar 20 | Human Physiology |
| Mar 27 | Plant Biology |
| Apr 3 | Animal Adaptations |
| Apr 10 | No Lab |
| Apr 17 | Evolution |
| Apr 24 | Populations (bring calculator) |
| May 1 | Ecology |
| May 8 | Final Exam |

This schedule is tentative and may be changed at the instructor’s discretion.

Purpose: To explore various topics covered in BIOL 1010 in an effort to gain better understanding of biological concepts and mechanisms.

Grading: Your grades will be based upon points earned for laboratory write-ups, quizzes, a comprehensive final, and microscope care.

| <u>Activities</u> | <u>Points</u> |
|---|---------------------|
| Laboratory Worksheets (10 @ 10 pts each) lowest score dropped | 100 |
| Lab Reports (6 @ 10 pts each) | 60 |
| Quizzes (12 @ 5 pts each) | 60 |
| Comprehensive Final Exam | 50 (60pts possible) |
| Total | 270 |

Quizzes

A quiz will be administered at the beginning of each class period. Quizzes will be based on questions from the previous lab write up as well as the required reading for that day's scheduled lab exercise.

Final Exam

The final exam will stress concepts addressed in all labs throughout the semester. It will be worth 50 points; however, it will contain additional extra credit questions worth a total of 10 points.

Lab Write Ups

A lab write up will be turned in for every lab, and each is due by the start of class at the next meeting. The write up sheets in the lab manual will be sufficient for the majority of lab write ups, but any submitted graph should be built in excel.

Written reports will be required for many of the labs, and will follow basic standards for scientific writing

Microscopes

We will use microscopes in four labs. During these labs, up to **5 points per lab may be deducted** if microscopes are not handled or stored properly.

Please do not be afraid to speak up if you are having problems with microscopes, or microscope slides.

Grading Scales

Grades will be based on the percentage of points earned (90-100% = A, 80-89% = B, 70-79% = C, 60-69% D, 0-59%).

For credit/no credit option: 70-100% = CR, <70% = NC

February 22nd is the last opportunity to change your grading option to credit/no credit. To do so you must have your instructor sign a yellow add/drop form. It is your responsibility to turn this form into Admissions and Records **by 5:00PM that day**.

Consult your advisor before making your decision. Grades will not be changed once they have been submitted.

Adding/Dropping

The last day to add the course is February 2nd and adds will be done online once a permission number has been granted. If a student is absent for the first lab meeting, he or she has 24 hours to contact the instructor, otherwise, that student will be dropped from the course.

Laboratory Policies and Expectations

World of Biology is a laboratory course and as such requires your presence.

Please note:

- 1) You can only get points for lab write-ups and quizzes if you attend lab.
- 2) Because the laboratory setups change from class to class, it is not possible to make-up missed laboratories. Unexcused absences will result in no points for lab write-ups and also in no points for the quiz given that day.
- 3) **Each student should turn in his/her own write-up for each laboratory.** Do not simply write the same answers as your lab partner.
- 4) **Duplicate answers on multiple students' assignments will be given no credit.** Instead, synthesize results and put your answers in your own words. Write-ups will be graded based on completeness, accuracy, and legibility.
- 5) **Quizzes will begin promptly at the beginning of lab.** If you are late you will have less time to complete your quiz. If you arrive after a quiz has been collected you will not be able to take that quiz.

The 7 Goals of Biology GE Courses:

1. Provide an overview of basic knowledge, principles, methodologies, theories, and perspectives in biology.
2. Offer opportunities to work in groups with other students to practice effective communication about concepts and issues in biology.
3. Provide a broad understanding and appreciation of biology and encourage continuous inquiry and lifelong learning.
4. Provide the framework to critically evaluate and use information from various scientific sources to answer questions relevant to biology.
5. Understand the relationships between the fields of biology, chemistry, physics, geology and other sciences.
6. Appreciate the interdependence of humans, natural ecosystems, and the diversity of life on earth.
7. Develop more informed and responsible citizens with respect to issues concerning the living world.

-Food and drinks are not permitted in the lab at any time. Turn off cell phones during lab.

-Closed-toed shoes are required. Anyone with open-toed shoes (sandals for example) will not be permitted in the lab.

-The above schedule and procedures in this course are subject to change in the event of extenuating circumstances.

-We are not the only class that uses this lab; as a courtesy, please keep the lab as clean as possible.