

BIOL 1020-005 World of Biology Lab

Wednesdays 11:00 am to 1:50 pm, N223

Fall 2014

Instructor: Aricia Martinez

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Office Hours: Wednesdays 3:30 to 5:30 or by appointment N257

Text: *World of Biology 1020 Laboratory Workbook, 6th ed. by Stevens and Fleming. (2014).* Bring this each week.
Photocopies are not allowed.

Course Description: World of Biology is intended to provide students with laboratory experience in various biological contexts. We will explore topics covered in BIOL 1010 with the added luxury of actually performing some of the experiments discussed in lecture. Note that this class is graded separately from BIOL 1010.

Learning Goals:

1. To provide an overview of basic knowledge, principles, methodologies, theories, and perspectives in biology.
2. To offer opportunities to work in groups with other students to practice effective communication about concepts and issues in biology.
3. To provide a broad understanding and appreciation of biology and encourage continuous inquiry and lifelong learning.
4. To provide the framework to critically evaluate and use information from various scientific sources to answer questions relevant to biology.
5. To understand the relationship between the fields of biology, chemistry, physics, geology and other sciences.
6. To appreciate the interdependence of humans, natural ecosystems, and diversity of life on earth.
7. To develop more informed and responsible citizens with respect to issues concerning the living world.
8. Use math as it applies to biology. This mostly includes making and interpreting graphs, and may also include calculating averages and variation around an average. I will help you and there will be chances to practice.

Lab Policies:

1. **Arrive to class on time and ready to learn.** You should expect to work productively both in groups and alone. Please demonstrate proper care and use of lab materials and supplies. Most importantly, please do not disrupt the learning environment, rights, and property of others. Disrespect towards the instructor, other students, or the lab equipment will not be tolerated and students that become disruptive or disrespectful will be dismissed from lab and any assignments pertaining to that lab will not be graded.
2. All cell phones/etc. should be turned off and stored during class. After 2 warnings, the student will be dismissed from the lab, and any assignments pertaining to that lab will not be graded.
3. **In-class quizzes will begin promptly at the start of lab.** If you are late you will have less time (or none) to complete the quiz, so please make every effort to arrive on time. Out of the 11 quizzes for the semester, the

lowest score will be dropped. Quizzes cover the lab material from the previous week. Once you start a quiz, you may not leave the room and return to complete it.

4. Unexcused absences will result in no points for the week. You are required to actively participate each week. It will be impossible to pass this course without regular, on-time attendance. As per university regulations, students with excessive absences or who are consistently late will be dropped from the course. Since the lab set-up changes each week, it will not be possible to make up missed labs. You may not turn in a lab write-up for a lab you did not attend. If an assignment is due during your unexcused absence, you may not turn it in, even if you were present to do the lab.

5. Absences are excused if they are documented medical or traffic emergencies. Please contact the instructor to schedule a make-up time for your quiz, and to turn in any assignments that were due during your absence. If you are not able to make up the lab you have missed because you cannot attend another section that week, or you are in the last lab section of the week, unfortunately, there will be no other make up, and therefore, you will not be able to turn in any assignments that are related to the lab you are missing. Students who find themselves in this unfortunate situation can drop one assignment grade instead of dropping their lowest quiz grade. Bring your documentation with you during your quiz make up.

6. Students are expected to be prepared for the lab by reading the lab ahead of time. Groups who have read the lab ahead of time are more efficient, make fewer mistakes, and don't have to start over. Sometimes I will post videos or other additional materials pertaining to the upcoming on the blackboard to review prior to lab, so watch for that.

7. Zero tolerance for cheating/plagiarism. The consequence of either is an F for the course and being reported to the Dean of Students. More information on the school's academic honesty policy may be found at: <http://www.csustan.edu/english/policy-plagiarism>

8. In most labs you will work in small groups of 2-4 people, but each student is required to hand in their own work! These will be due at the beginning of the next lab meeting.

9. Assignments are due at the beginning of class. No credit for late work. If you are late, your work is late.

10. The final exam for this class is optional. It will be comprehensive, and will be structured similar to lab quizzes. If you sign up to take the final and don't show, you will receive a zero on it. I will follow up with the how/when to sign up for that.

11. Biology Lab Safety Quiz on Blackboard. All students must complete this online safety quiz by the next lab session in order to secure their enrollment in lab. Students who do not pass this quiz are not allowed to be in the lab room at any time. You may take the quiz as many times as you need to. You do not need to purchase a lab coat or goggles for this lab, but do dress appropriately.

Student athletes and DRS students: please to notify me at the first lab meeting, or during my office hour.

Recording Lectures and Special Accommodations: Students with documented disabilities should seek special accommodations for all classes through the Disability Resource Services office on campus. If DRS sends me a file on you that lists recording lectures as an acceptable accommodation, then you may record my lectures. Otherwise, you have to do it the old-fashioned way with pen and paper. If you record my lectures in any form (video, audio, still pictures, etc.) without accommodation from DRS, that constitutes intellectual property theft,

will result in a zero in participation points, and preclude you from turning in any assignments related to the lab session.

Any student that needs specific accommodations to be successful in this lab should visit DRS in MSR 210, or at 209-667-3159.

Important Dates: Census Date is September 18th. This is the last day to add/drop the course or change your grading option; it is your responsibility to submit the grade change form to the Admissions and Records Office by 5pm that day.

Grading: All assignments will be graded and returned to you the following lab period. Graded quizzes will be discussed the following week, but must be returned to the instructor. You may not use phones or cameras of any sort to take photos of quizzes. Grades are based on the percentage of points earned out of points possible on assignments, quizzes, participation, and the optional final exam. Categories are not weighed. As a habit, keep all passed back work and check your progress on Blackboard.

1. In-class quizzes: 11 @ 10 points each. Lowest score will be dropped. = 100 points.
(All 11 quizzes count in the case of an excused absence where a make-up could not be scheduled.)
 2. Participation and assignments: sharing group data, presenting answers to observation and group study questions, displaying graphs, typed lab reports, individual completion of study questions from the lab manual, graphs, etc. Specific expectations of participation and details of assignment will be discussed during each lab. 5-10 points each lab session.
 3. Optional comprehensive final exam. 30 points. Opting in is a commitment. Students who opt to take the final will receive a zero if they are not present at the final.
- Grading scale: A=90-100% B= 80-89% C= 70-79% D= 60-69% F<60% No fractional grades awarded.
 - For those who change their grading option before census date: CR≥70% NC≤69%
 - No other points are available.
 - Late work will not be accepted except in dire emergencies where **you must provide documentation of hardship** (a note from a doctor, a tow truck receipt, etc). All submitted work must be original; no photocopies will be accepted.

Week of	Tentative Lab Schedule
August 25	Attendance, Syllabus Intro to Critical Thinking (10 red flags)
September 1 <i>Online Biology Safety Quiz must be passed with a score of 100% in order to secure your enrollment.</i>	Cells & Microscopes
September 8	In-Class Quiz 1 Scientific Method and Daphnia Lab
September 15	In-Class Quiz 2 Transport
September 22	In-Class Quiz 3 Metabolism
September 29	In-Class Quiz 4 Cell Cycle & Mitosis
October 6	In-Class Quiz 5 Genetics & Meiosis
October 13	In-Class Quiz 6 Phylogenetic Trees
October 20	In-Class Quiz 7 Evolution
October 27	In-Class Quiz 8 Plant Adaptations
November 3	In-Class Quiz 9 Animal Adaptations
November 10 <i>No Tuesday labs. Make up is Nov 25th</i>	In-Class Quiz 10 Population Parameters
November 17	In-Class Quiz 11 Central CA Ecology Last day to opt-in to take the final exam
November 25 th Tuesday labs only	Make up Population parameters lab
December 1	OPTIONAL Final Exam