

# BIOL 1050 Lab

## Spring 2020

**Instructor:** Dr. Laurissa Hamilton

**Office Hours:** Monday 2:10 – 3:10pm, Tuesday 1-2pm, and by appointment

**Contact Information:** my office (N257) or after class (*best*) or lhamilton@csustan.edu (*good, but check the syllabus first!*) or (209) 667-3489 (*worst*)

**Text:** Symbiosis Lab Manual for BIOL 1050 available at the campus bookstore.

**Blackboard:** Access required for course documents, supplementary materials, and grades.

### 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 in biology.
3. To provide a broad understanding and appreciation of biology and encourage continuous inquiry and lifelong learning.

### Grading

Quizzes	100 pts
Lab Assignments	100 pts
Final Exam (Lab Practical)	50 pts
<b>TOTAL POINTS</b>	<b>250 pts</b>

### Quizzes

This lab includes 11 quizzes worth 10 points each. Questions range from background vocabulary and specific results of the previous lab to application of concepts to new scenarios. A few questions on each quiz will be from the **upcoming** lab, which you are expected to read ahead of time. These questions are general in nature. For example, if we are about to do the enzyme lab, know the definition of an enzyme! One to two questions may be review/cumulative from previous labs. This will help you succeed on the final exam. Once you begin a quiz, you may not leave the room and return to it. Quizzes begin promptly at the start of lab. If you are late, you may have less time (or none) to complete the quiz. There are no make-ups except for dire emergencies, which require documentation (doctor's note, tow truck receipt – all signed and dated on date of absence and at the time of class).

Students who have done well in the past re-read the previous lab carefully for examples of concepts. They look over all the trends in data. They practice answering questions listed under Discussion, Questions for Review and Applying Your Knowledge at the end of most labs. Although you will not be turning those in, expect to see similar questions on quizzes. Consider writing out some of those answers as you are preparing. Often what we think we know in our minds doesn't come out the way we want on paper. Don't wait till the quiz to realize that...

Your lowest quiz score (from Quiz 1-10) will be dropped from Blackboard. Quiz 11 cannot be dropped.

### Lab Assignments

**Lab reports and assignments are due at the beginning of class. Be on time to earn credit. If you are late, your work is late; 10% of the score (in addition to any deductions for content) will be deducted for each day late – including weekends (this deduction applies for printing problems; forgot the report at home / in the car, etc)!** Some lab assignments involve answering questions from

the lab manual, or questions assigned by the instructor during lab. Some assignments are lab reports, written the format of a scientific paper. This format will be discussed in detail in class. As each lab is conducted, you will be notified if there is an associated lab report or an assignment due at the end of class (a “check-out” assignment”) or the following week. Although you will be performing these labs with a partner or a group, lab write-ups are **not group activities, unless otherwise specified**. You may discuss the results with others, but do your own work and ***don't copy the answers from someone else's report or from a website***. Copying from a classmate will result in a zero for that assignment and *plagiarism (e.g. copying from a website, journal article etc.) will result in a zero for the course – and I do check.*

### **Lab Practical**

Different than a typical sit-down test, during a lab practical you will be going around the classroom, answering questions at different lab stations. At each station, you will have a pre-determined time to answer 1-2 questions. Once you begin the lab practical, you may not leave the room and return to complete it.

### **Students with Disabilities**

If you are a student with a documented disability, please meet with me privately as soon as possible so we can arrange the accommodations that will foster your success in this course.

### **Audio\Video Recording**

Recording of lectures is not permitted without written consent from your instructor.

### **Absences/Tardies**

**Attendance is required. Do not enroll in this class if you have conflicts or other commitments during your lab period. Every absence will result in one or more zero grades.**

**If you are late to class, or absent from class, you may not turn in your lab report from the previous lab. If you are late to class, or absent from class, you may not make up the quiz you missed.** The only exception to this rule is in the case of illness or death of an immediate family member, and you must provide documentation (e.g. a signed, dated doctor's note) – however, your quiz, if given, likely will be different than the quiz give to the rest of the class. Documentation must be provided at the next office hour, which is also a good time to make up your quiz and turn in your lab assignment. Do not wait until the next week during lab to begin this process. The opportunity to make up missed points will expire.

If you know you might miss a lab, please contact me in advance, as soon as possible, and we can try to arrange for you to go to another section within the week. **If you miss a lab, you cannot make it up, and you cannot earn any credit for writing up that lab activity. There are no exceptions to this rule, even in the case of illness/emergency. If you were not present, no matter what the reason, you cannot earn credit for a write-up associated with that lab.**

*\*Following the return of any graded quiz, assignment, or posting of scores, you have **seven (7)** days in which to dispute any grade discrepancies.\** To dispute the scoring of an quiz, assignment, etc. bring the exam / assignment and supporting information showing why you deserved a different grade to my office, where we can discuss the issue privately.

### **Student Conduct**

- Many labs will run the full three hours. **Please do not schedule appointments or accepts shifts at work that interfere with lab time.**
- Read the lab carefully before class to avoid mistakes that will require you to start over.
- Always contribute to your lab group.

- Practice lab safety at all times (no beverages, food, or open-toed shoes).
- As a group, help each other with clean up. Each instance of not cleaning up will result in a deduction of 5 points for each member of the group.
- **There is a “no electronics” policy in the course. All electronics (cell phones, tablets, laptops, etc) must remain in your backpack, purse, etc for the entire class period, unless you are requested to use them for class purposes by the instructor.**

**Tentative Biol 1050 Lab Schedule Fall 2020**

*(Subject to Change)*

Week	Lab	Quiz #	Write in your quiz grade in this column
1/27	<b>Attendance this week is mandatory for a place in the class.</b> Lab safety, study skills, time management		
2/3	Lab 1 Microscopes & Cells (p.33-54, Exercises 1-3, & 5A-C in lab manual)		
2/10	Lab 2 Scientific Investigation (Ex 1-2, p. 5-13; Ex 4-5, p. 18-23; & Daphnia handout)	Quiz 1	
2/17	Lab 3-1 Practice Pipetting, DNA extraction, PCR (Blackboard handout)	Quiz 2	
2/24	Lab 3-2 Restriction Digest, Running gels, Bioinformatics (BB handout; p. 154-157, parts 2 & 3) <b>BRING YOUR LAPTOP OR TABLET FOR AN IN-CLASS EXERCISE</b>	Quiz 3	
3/2	Lab 4 Enzymatic Activity (Intro p. 85-6; Ex.3 parts A, B & C p92-102) (Set up seed germination lab)	Quiz 4	
3/9	Lab 5: Diffusion and Osmosis (pg 57 – Ex. 1A, 1B, 2B, 3A ONLY)	Quiz 5	
3/16	Lab 6 Mitosis and Meiosis (pg 119 – 130 in lab manual )	Quiz 6	
3/23	Spring Break- No Lab		
3/30	Cesar Chavez No Lab		
4/6	Lab 7 Solving Genetics Problems (pg 131 - 140 in lab manual)	Quiz 7	
4/13	Lab 8 Photosynthesis (pg 109 – 111 in lab manual)	Quiz 8	
4/20	Lab 9 Respiration/ Fermentation (pg 113 – 116 in lab manual)	Quiz 9	
4/27	Lab 10: Population Genetics and Evolution (pg 159-170 in lab manual)	Quiz 10	
5/4	Review Session	Quiz 11	
5/11	Lab Practical		