

BIOL 1050 Lab

Fall 2018

Instructor: Dr. Laurissa Hamilton

Office Hours: Monday 1-3pm & by appointment

Contact Information: my office (N257) or after class (best) or lhamilton@csustan.edu (good) 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
TOTAL POINTS	250 pts

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! 1-2 questions will 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).

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 still applies for printing problems; forgot the report at home, 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 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 traffic emergency, 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 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.

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.**

Week	Lab	Quiz #	Write in your quiz grade in this column
8/27	Attendance this week is mandatory for a place in the class. Lab safety, neurophysiology of learning, study skills, time management		
9/3 No Mon	Lab 1 Scientific Investigation (pg 5 in lab manual) **Monday labs attend any other lab**		
9/10	Lab 2 Microscopes and Cells (pg 33 in lab manual)	Quiz 1	
9/17 Exam 1	Lab 3-1 Practice Pipetting, DNA extraction, PCR	Quiz 2	
9/24	Lab 3-2 Restriction Digest, Running gels, Bioinformatics BRING YOUR LAPTOP OR TABLET FOR AN IN-CLASS EXERCISE	Quiz 3	
10/1	Lab 4 Enzymatic Activity (pg 85 in lab manual)	Quiz 4	
10/8 No wed	No Lab		
10/15 Exam 2	Lab 5 Mitosis and Meiosis (pg 119 and 125 in lab manual)	Quiz 5	
10/22	Lab 6 Solving Genetics Problems (pg 131, 137, 139, 157 in lab manual)	Quiz 6	
10/29	Lab 7 Photosynthesis (pg 109 in lab manual)	Quiz 7	
11/5	Lab 8 Respiration/ Fermentation (pg 113 in lab manual)	Quiz 8	
11/12 No Mon Exam 3	Lab 9: Population Genetics and Evolution (pg 159 in lab manual) (Set up seed germination Lab?) (No Monday)	Quiz 9	
11/19	Thanksgiving (Only Monday Labs Meet: Pop Gen Lab)		
11/26	Lab 10: Diffusion and Osmosis (pg 57 in lab manual)	Quiz 10 +Quiz 11	
12/3	Lab Practical (Lab Assignment Due-Last Day of Class (Dec 12th)?)		