

# BIOL 1050 Lab

Fall 2015

**Instructor:** Jessica Rinella

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**Office Hours:** N 257 Mondays 11-11:50am, and Thursdays 12-12:50pm, or by appointment.

**Text:** Symbiosis Lab Manual for BIOL 1050 available at the campus bookstore. Photocopies not allowed.

**Blackboard:** Access required for course documents, lab report wikis, 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
Lab Write-ups (5 x 30 points)	150
Final Exam (Lab Practical)	50
<b>TOTAL POINTS</b>	<b>300</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! 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).

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. During Quiz 11, you will indicate which quiz you would like dropped. In the event that you are not able to identify which quiz you would like dropped, quiz 1 will be dropped by default. Quiz 11 cannot be dropped.

## Lab Assignments

**Lab assignments are due at the beginning of class. Be on time to earn credit. If you are late, you work is late. Late work is not accepted.** Some assignments are lab REPORTS, written the format of a scientific paper. This format will be discussed in detail in class. After each lab is conducted, you will be notified if there is an associated lab report due the following week. Some lab assignments involve answering questions from the manual, or questions assigned by the instructor during lab. 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. **Plagiarism will result in a zero for the course.**

### **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 75 seconds to answer 1-2 questions. Once the 75 seconds are up, you will not have access to that question again. The content is cumulative. Once you begin the lab practical, you may not leave the room and return to complete it.

### **Student athletes and DRS students**

Please to notify me at the first lab meeting, or during my office hours. **Recording Lectures and Special Accommodations:** Students with documented disabilities should seek special accommodations for all classes through the DRS office on campus. If DRS sends me a file on you that lists recording lectures as an acceptable accommodation, then you may record lectures. Otherwise, you have to do it the old-fashioned way with pen and paper. If you record 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.

### **Biosafety Quiz**

All students are required to pass the Biosafety Quiz (on your list of courses in Blackboard, not within the 1050 Blackboard course) with 100% in order to secure enrollment in the course. You may repeat the quiz as many times as you need to. Students who do not earn 100% by 8am on Monday, August 31<sup>st</sup> will be dropped from lab and lecture. Their seats will be given to students on the wait list.

### **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**. 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 missed lab (with an excused absence) on a day where an assignment was issued, you must contact your lab partner in order to get your groups' data. Your assignment will be due at the same time as everyone else's. No extended deadlines, even in the case of excused absences.

### **Student Conduct**

- Many labs will run the full three hours. 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 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 the group.
- Do not use cell phones, or other electronic devices during class. **After 2 requests, you will be dismissed from lab that day and any assignments pertaining to that lab session will not be graded.**

Date	Topic
Week 1 Aug 24-28	<b>Attendance in week 1 is mandatory for a place in the class.</b> Lab 1 Scientific Investigation
Week 2 Aug 31-Sept 4	Lab 2 Microscopes and Cells <span style="float: right;">Quiz 1</span>
Week 3 Sept 7-11	<b>YOUR LAB SECTION DOES NOT MEET THIS WEEK</b>
Week 4 Sept 14-18	Lab 3 Diffusion and Osmosis Set up seed germination lab <span style="float: right;">Quiz 2</span>
Week 5 Sept 21-25	Lab 4 Enzymatic Activity Collect and analyze data from seed germination <span style="float: right;">Quiz 3</span>
Week 6 Sep 28-Oct 2	Lab 5 Photosynthesis <span style="float: right;">Quiz 4</span>
Week 7 Oct 5-9	Lab 6 Respiration/Fermentation <span style="float: right;">Quiz 5</span>
Week 8 Oct 12-16	<b>YOUR LAB SECTION DOES NOT MEET THIS WEEK</b>
Week 9 Oct 19-23	Lab 7 Mitosis and Meiosis <span style="float: right;">Quiz 6</span>
Week 10 Oct 26-30	Lab 8 Solving genetics problems <span style="float: right;">Quiz 7</span>
Week 11 Nov 2-6	Lab 9 Bioinformatics, introduction to nematode worm biology Practice pipetting <span style="float: right;">Quiz 8</span>
Week 12 Nov 9-13	Lab 10 DNA extraction, PCR <span style="float: right;">Quiz 9</span>
Week 13 Nov 16-20	Lab 11 Natural Selection Predator-Prey Gel electrophoresis <span style="float: right;">Quiz 10</span>
Week 14 Nov 23-27	<b>YOUR LAB SECTION DOES NOT MEET THIS WEEK</b>
Week 15 Nov 30-Dec 4	Lab 12: Population Genetics and Evolution <span style="float: right;">Quiz 11</span>
Week 16 Dec 7-11	Comprehensive Lab Practical
Week 17 Dec 14-18	<b>ALL LAB SECTIONS DO NOT MEET THIS WEEK</b>