

BIOL 1050 Laboratory

Instructor: Dr. S. Steve Arounsack

Office: Bizzini 215-F (Anthropology Dept), Office Hours: Tues: 11:15-12:20pm, Wed. 10:10-11:15am

Contact Information: sarounsack@csustan.edu or (209) 667-3556

Lab time: Tuesdays 6:30-9:38pm

Required Texts: "Symbiosis" (available in CSUS bookstore)

Online lab manual available at <http://www.silencinggenomes.org/>

Dates to Remember

Monday, Mar. 15- Last day to drop a course

Tuesday Mar. 30- No Lab, Furlough Day

Apr. 5 - Apr. 9- No classes, Spring Break

Friday May 14- No afternoon classes, Warrior Day

Monday May 24- Last Day of Classes

Lab Schedule: We will do two exercises each week. Plain text below refers to the Silencing Genomes Labs. *Italics* refers to Symbiosis Lab Manual:

Date	Topic
Feb 16, 17	We will meet to take roll and go over important preliminary information. Be sure you attend class if you want to keep your seat! Purchase Lab Manual before Lab starts next week!
Feb 23, 24	Week 1 Introduction to Worm Biology <i>Use of Dissecting Microscope, Scientific Investigation</i>
Mar 2, 3	Week 2 Bioinformatics <i>Microscopes and Cells</i>
Mar 9, 10	Week 3 Pipetting, DNA Isolation, PCR , <i>Osmosis</i>
Mar 16, 17	Week 4 Agarose Gel Electrophoresis, Ligation <i>Enzymes</i> Journal Due for weeks 1,2,3
Mar 23, 24	Week 5 Bacterial Transformation, <i>Photosynthesis</i>
Mar 30, 31	No Class: Furlough Day and Holiday
Apr 6, 7	No Class: Spring Break
Apr 13, 14	Week 6 Verification, Single Colony PCR <i>Respiration</i>
Apr 20, 21	Week 7 Agarose Gel Electrophoresis <i>Mitosis, Meiosis, How do they Differ?</i> Journal Due for Weeks 4,5,6
Apr 27, 28	Week 8 Plasmid DNA Isolation <i>Mendelian genetics</i>
May 5, 6	Week 9 Rapid Colony Transformation <i>Evolution (dress for outdoors)</i>
May 11, 12	Week 10 Select worm larvae <i>Population Genetics: Hardy -Weinberg</i> Journal Due for Weeks 7,8,9
May 18, 19	Week 11 Observe RNAi phenotypes Complete worksheet on results from Worm Lab and today's lab activities for 10 points. <i>Organisms in the Environment (not yet available in Symbiosis Manual, we will give you a handout, or make it available online) dress for outdoors</i>
May 25, 26	Lab Practical 100 points

Quizzes./Exams:

There will be a 10 point quiz every week, starting week of Mar. 2/3. Each quiz will cover the previous week's lab exercises. Your lowest quiz score will be dropped.

Journals (lab write-ups) due every 3 weeks. Journals are due at the beginning of class. Format to be discussed in class.

May 25 or 26: 2:30 p.m., Final Lab Exam (practical): 100 pts

Points possible:

Quizzes- 90 pts.

Journals- 90 pts.

Week 11 worksheet- 10 pts.

Perfect Attendance- 10 pts.

Lab Final Exam- 100 pts.

Points Possible- 300 pts.

Make-up:

If you know you can not be in class on the day of the final exam, please see me beforehand so we can discuss the situation. I may allow you to take the exam at a later date. If something comes up unexpectedly on the day of the exam, please call me. If you a leave a message, leave a phone number and I will contact you (to schedule a make-up or an incomplete or a withdrawal). Don't 'let it ride' and plan on discussing it with me later. If I don't hear from you promptly, you get a 0.

Lab Reports/Write-ups:

(30 pts. each x 3 = 90 pts.)

Lab Reports/Write-ups are due at the beginning of the lab. See the lab schedule for the due dates. Late lab reports are penalized 5 pts. per day. Lab reports are not group activities. Do your own work and don't copy the answers from someone else's report. Save your lab reports. They are valuable study guides.

All work will be done in pairs. There are 12 sets of equipment and will be 24 students in this class.

Student Conduct:

Most labs will run the full three hours. Attendance is required. Do not enroll in this class if you have conflicts or other commitments during your lab period. Be on time for class. During the first few minutes of each class period we will discuss the day's activities. Students are awarded **10 points** for attending all labs from start to finish. Do not leave the classroom in the middle of a discussion. Do not use cell phones, ipods, or other electronic devices during class. Computers are only allowed in class as a tool for note taking or class exercises. Even one instance of "browsing" the web or checking email will result in the banning the use of computers for everyone in class.