

Biology 109L Fundamentals of Biology Laboratory



Instructor: Dr. Terry Lopez

Email: Lopez_Terry@sac.edu

[Please include Bio109L and your name in the email]

Office Hours: Wednesdays 2:00-3:00pm (Location: R-207)

Course: Bio109L - 40265

Lab: Monday 2:30-5:40pm (Location: R-202)

Semester: Fall 2017

College: Santa Ana College

Division: Science Mathematics & Health Sciences

Department: Biology



"Looks aren't everything. It's what's inside you that really matters. A biology teacher told me that."

Course Description:

Welcome to General Biology Lab! In this course you will be performing laboratory experiments that illustrate important biological concepts at all levels of organization, from molecules and cells, to organisms, populations, communities, and ecosystems. Content complements Biology 109/109H lecture material. Fieldtrip required.

Student Learning Outcomes: Upon completion of this course, students will develop the following skills: *Communication Skills*

- 1. Reading and Writing Students will develop their ability to comprehend readings on biological subjects.
- 2. Reading and Writing Students will learn the basics of the technical vocabulary of biology.

Thinking and Reasoning

3. Critical Thinking – Students will develop their critical thinking skills by evaluating scientific evidence to reach valid conclusions.

Required Laboratory Manual:

Lopez, Jorge. (2015). Fundamentals of Biology 3rd. Ed. (NEW)

Course Web Site: https://rsccd.instructure.com/

Canvas will be used throughout the semester to post grades, make course announcements, etc. You should check Canvas frequently.

Other Required Materials:

- Pencil
- Pen
- Colored pencils
- Basic calculator (no programmable calculator or smartphones allowed)

Assignments and Points Possible:

Lab:

	11 quizzes x 20pts each	220
	10 quizzes x 20pts each	200
	2 exams x 75 pts each	150
	Lab Manual/Participation	
	13 labs x 5 pts each	65
	12 labs x 5 pts each	60
	Total Points Possible	<u>410</u>
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^{*}Extra credit given at instructor's discretion*



Grading Scale:

≥90% (at least 392 pts) = A

≥80% (at least 348 pts) = B

≥70% (at least 305 pts) = C

≥60% (at least 261 pts) = D

<60% (less than 261 pts) = F

Lab Schedule:

Week	Date	Lab #	Laboratory Exercise	Pgs.	Quiz
1	28-Aug	Lab 1	The microscope and the metric system	1-20	
2	4-Sep	Lab 2	LABOR DAY		
3	11-Sep	Lab 3	Chemistry and the molecules of life	22-35	Quiz #1
4	18-Sep	Lab 4	Cellular respiration, fermentation and the process of science		Quiz #2
5	25-Sep	Lab 5	Cell division – Mitosis and meiosis	8	Quiz #3
6	2-Oct	Lab 6	Genetics	9	Quiz #4
7	9-Oct	Lab 7	Molecular Genetics	1 9	Quiz #5
8	16-Oct	Practicum	Lab Practicum #1 (Labs 1-7)	11	
9	23-Oct	Lab 8	Embryology and developmental biology		Quiz #5
10	30-Oct	Lab 9	Population ecology	13	Quiz #6
11	6-Nov	Lab 10	Evolution and the origin of species	15	Quiz #7
12	13-Nov	Lab 11	Plant diversity and anatomy	10-15	Quiz #8
13	20-Nov	Lab 12	Fieldtrip: Irvine Park	16	
14	27-Nov	Lab 13	Animal diversity and anatomy	17	Quiz #9
15	4-Dec	Lab 14	Environmental biology	18	Quiz #10
16	11-Dec	Practicum	Final: Practicum #2 (Labs 8-14)	20	

POLICIES

Attendance

Attendance <u>is required</u> for all laboratory sections. Students who miss three laboratory classes may be dropped from the class. If you miss two consecutive labs from your registered laboratory section or the midterm laboratory examination, you must inform your instructor to avoid being dropped from the class. Late arrivals to lab may require a make-up lab on a later date.

Make-up labs

Make-up labs are permitted only with written documentation of extenuating circumstances. Students may make up a maximum of 2 labs. Lab can be made up ONLY during the same week as the missed lab. Your registered lab instructor and the instructor from which you will be attending to make-up the lab must be notified.

Make-up exams

To take a practicum in a laboratory section other than the one you are registered, you must: (1) obtain written permission from BOTH your registered instructor and the instructor in whose class you wish to take the examination at least 24 hours before you are to take the examination, (2) present at least one photo ID to the instructor administering the test, and (3) leave the signed permission slip with the examination. No instructor except your registered instructor is required to give you a practicum.

Withdrawals

If you want to withdraw from the course, it is your responsibility to drop the course. If you fail to drop the course, you will get a failing grade.

Student behavior in class

Students are expected to act in accordance to Santa Ana College Student Code of Conduct. Behave in a manner that is respectful to both your instructor and your classmates. This means your actions should not interfere with the work of anyone – this includes talking in a distracting manner, texting, being disrespectful, and coming in late or leaving early. If you engage in disruptive behavior, you will be asked to first stop, then leave, and if repeated, dropped from the class.

Safety

- i. No open toed shoes are allowed in the lab
- ii. Approved goggles are required
- iii. No eating or drinking allowed

Lab Cleanliness

After each laboratory section, the lab must be left as it was first found, clean and ready for following sections. Before and at the end of each lab, you are required to wipe your desk with disinfectant.

Electronic Devices

The use of cell phones, cameras, or any video device at any time during the laboratory course is not allowed. Please silence your phones prior to coming to class and do not take them out during the lab. Use of any electronic devices is prohibited. If you need to use a calculator any point during lab, please bring a basic calculator to lab with you. You will not be permitted to use your phone as a calculator.

<u>Fieldtrip</u>

One lab will require a field trip to the Irvine Park. This field trip will occur during our usual laboratory scheduled time.

Grades

All grades will be posted on Canvas. If there is an error with your grades, you NEED to bring it the instructor's attention within 2 weeks of the posted date. Do not wait until finals week to say something.

Email Policy

For any questions, comments, or concerns regarding the course or any assignments, please feel free to email me at Lopez_Terry@sac.edu under the subject BIO109L. Expect for me to reply back to your emails within a 24-hour time period. If you emailed me and did not receive a response, chances are your answer can be found in another class email, the syllabus, or the website, so be sure to check there first.

DSPS

A student with a disability, who would like to request an academic accommodation, is responsible for identifying himself/herself to the instructor and to the Disabled Student Programs and Services (DSPS). To make arrangements for academic accommodations, contact the Physical Disability Center in Johnson Center, U-103, or phone (714) 564-6264, TTY (714) 564-6284 for a referral to the appropriate DSPS Department.

Academic Dishonesty

There is ZERO tolerance for academic dishonesty. In this course, we will strictly enforce Santa Ana's Policy on Academic Honesty.

ACADEMIC HONESTY POLICY STATEMENT

Students at Santa Ana College are expected to be honest and forthright in their academic endeavors. To falsify the results of one's research, to steal the words or ideas of another, or to cheat on an examination, corrupts the essential process by which knowledge is advanced. Academic dishonesty is seen as an intentional act of fraud, in which a student seeks to claim credit for the work or efforts of another without authorization, or uses unauthorized materials or fabricated information in any academic exercise. As institutions, we also consider academic dishonesty to include forgery of academic documents, intentionally impeding or damaging the academic work of others, assisting other students in acts of dishonesty or coercing students into acts of dishonesty.

PROCEDURES

In cases where a violation of academic honesty is discovered, the faculty member is encouraged to file an "Academic Misconduct Incident Report" form and distribute the form to the appropriate offices listed.

There are two categories of sanctions: Limited and College-wide. Limited sanctions include an academic action such as assigning a lower grade or a grade of "F" for the assignment, project, or test. College-wide sanctions include any sanction that will affect a student's standing with the college-at-large, up to and including suspension or expulsion from the college. Simply put: JUST DON'T DO IT.

Academic Accommodations Statement

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