

BIOLOGY 3-B

Introduction to Biology LAB– Section 0400

Instructor: Kareen Martin
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Office hours: Before class

Friday 9:35 am -12:15pm
Room: MSA 309

Course Description: This is a course in general biology designed to fulfill all laboratory science requirement and will also provide a foundation for advanced courses in biology, including human anatomy, physiology, and microbiology. The lecture portion of the course emphasizes the basic principles in biology, cell structure and function, and the levels of organization in the human body. Lecture topics include the scientific method, an introduction to biological chemistry, heredity, evolution, the genetic control of cellular processes, ecology, and the organ systems of the body.

This laboratory portion of the Biology course emphasizes the diverse types of organisms and their anatomy and physiology. Laboratory topics include an introduction to the microscope, study of the cell, study of enzyme activity, a survey of the microorganisms, plants, and animals that comprise the 5 Kingdoms of life, and the anatomic study of the earthworm, grasshopper, and fetal pig.

Students will perform lab manual exercises which incorporate completion of brief lab reports, mathematical computation, analytic techniques, and laboratory skills. Completion of the laboratory manual exercises requires written short answer observations, logical analysis of experimental results, and careful preparation of drawings to document observations.

Student Learning Outcomes: The general goals of the Biology 3 Lab will be to provide an understanding of:

- (1) how to measure using the metric system
- (2) how to the parts, use, & care of the light microscope
- (3) the application of the scientific method in comprehending biological problems
- (4) The importance of a controlled experiment
- (5) How to write a scientific report
- (6) The distinctions between osmosis and diffusion
- (7) The appearance of prokaryotic & eukaryotic cells when viewed through the microscope
- (8) The DNA structure and DNA function
- (9) The basic features used to distinguished members of the kingdoms Monera, Protista, Fungi, Plantae and Animalia
- (10) The appearance of mammalian tissues in the microscope
- (11) The major anatomical structure of the mouth, abdominal cavity, neck, thoracic region, and reproductive system of a typical animal

Books & Materials:**Required:****S.A. Fink; BIOLOGY LABORATORY; BioBooks Pub.; 2003**

Optional:

S. Mader; Biology; Inquiry Into Life; McGraw-Hill Publishers; 2006 (11th ed) with CD ROM [ISBN 0-07-242197-5]Student Study Guide for Mader's Biology; McGraw-Hill Publishers; [ISBN 0-07-242203-3]Thomas G. Rust; A Guide to Biology Lab; Southwest Educational Enterprises (3rd ed.); 1983

Rubber gloves (optional)

Laboratory Resources:<http://www.professorfink.com>

Virtual fetal pig dissection & review:

<http://www.biologycorner.com/pig/review.html>http://www.mhhe.com/biosci/genbio/maderbiology7/student_index.mhtml**There is a NO Eating and Drinking policy in the classroom (except for water).****Grading policy:**

120 points for 12 lab reports or exercises (10 pts each). For participation and grading purposes, it will be your responsibility to get my signature on your lab report. I will assume you never attended a lab session if you forget to have your lab report signed. **Each lab report is due at the end of the lab.** If you miss a lab, you can turn in whatever questions you can answer at home the following lab. There are **NO** make-up labs. You are responsible for reading each lab experiment before coming to the lab.

100 points for **9 QUIZ** (10 points each). Quizzes will be taken at the first 10 minutes of the class. They will consist of 10 questions covering the lab taken the week before. Extra time will not be permitted for those who are late and **no one will be accepted once a student has left the room**. There are **NO MAKE-UP QUIZ**. Quiz may consist of true/false questions, matching, multiple choices, fill-in the blank.

200 points for **2 EXAMS** (100 points each) Extra time will not be permitted for those who are late and **no one will be accepted once a student has left the room**. There are **NO MAKE-UP EXAM**. Exam may consist of true/false questions, matching, multiple choices, fill-in the blank. Purchase your scantrons (882-E) ahead of time for your quizzes.

Total points for the lab is = 420 points

A straight scale will be used for the final grade calculation (100-89%=A, 77-88%=B, 62-76%=C, 50-61%=D, and below 50% = F). A +/- system will “not” be applied to the final grade. You are responsible for keeping “all” your work in case there will be any discrepancies in your grade. No proof, no points, no exceptions.

Attendance Policy:

Attendance is mandatory. Roll will be taken. Students should arrive on time.

You are responsible for information, exam announcements, date changes, etc. presented in class, whether or not you are present

Withdrawal from Class:

You are responsible for your credit and enrollment status. Any student withdrawing from class must inform the admissions office of this decision. **Students failing to follow the correct procedure for withdrawals will receive a grade of "F" for the semester.** (see Schedule, page 31.)

Cheating/Academic Dishonesty:

Each student is expected to do his/her own work on all assignments, reports, examinations, etc. **CHEATING ON AN EXAM WILL RESULT IN DISCIPLINARY ACTION.** The WLAC Standards of Student Conduct will be enforced. The Standards of Student Contact can be found on pages 142-143 in the Fall 2009 schedule of classes and on pages 41-45 in the 2008-2010 college catalog.

Here is a list of some actions that are considered cheating:

NO TALKING DURING THE EXAM.

KEEP YOUR EYES ON YOUR OWN EXAM.

USING NOTES OF ANY KIND (ON CARDS, STRIPS OF PAPER, DESK TOP, ETC.) DURING AN EXAM IS NOT PERMITTED.

- Showing a fellow student your exam, or passing information in any way is not permitted.
- Place your answer sheet(s) directly in front of you.
- If you have a question, quietly walk up to the instructor and whisper your question.
- Translation dictionaries are not permitted.
- Turning in someone else's work.
- Exiting the room during the exam is not permitted.
- Providing your work for someone else to copy.

Recommendations for Succeeding in Class:

1. Expect to Work. This is not supposed to be easy.

2. Get to class on time, every time, and stay the whole time.

- Never miss class unless you're dead, & take good notes.

3. Find someone in the class to contact if you miss a meeting.

4. Be organized! Use a daily calendar to set times for regular studying for each of your classes.

5. Study & Review each night the class is given.

- Learning is easier if you schedule time daily to read, to think & review.
- Every time you study. spend at least 10 minutes reviewing previous lessons. (These "refresher shots" are the secret for long-term memory.)
- Read the relevant chapters in your textbook; hi-lite pertinent lines, & add these notes to your class notes (never read without writing).
- Use associations to help you remember things.
- Prepare note cards and carry them with you to review.

6. Begin preparing for your exams at least 1 week in advance.

7. Anything you turn-in (exams, lab reports) should look neat.

WEST LOS ANGELES COLLEGE**Science Division Policy on Student Conduct in Classroom**

1. Be honest and ethical; follow the rules described in the college's policy on academic honesty.
2. Arrive before the start of class; wait until the previous class has been dismissed before entering the classroom.
3. Whenever you arrive to class late, open the door *quietly*, enter *quietly*, and close the door *quietly* so as not to disturb the class in session. Then, take a seat near the door, on the side or at the back of the classroom. Never walk in front of the instructor.
4. Do not eat or drink beverages in the classroom.
5. No gum chewing.
6. Sharpen pencils before class starts. Do not sharpen pencils during lecture.
7. Listen carefully when directions and announcements are being given. You are responsible for all information announced whether or not you were absent, tardy, or not paying attention.
8. Turn off or mute cell phones before entering the classroom.
9. Do not answer cell phones during class.
10. Do not leave the classroom during the lecture. Wait until the class is dismissed.
11. No talking during lecture. Do not chat with your classmates at any time during lecture, including during the time your instructor is putting information on the chalkboard.
12. Raise your hand and wait for recognition by the instructor to ask a question during lecture.
13. During the class, do not interrupt the instructor with personal questions. Wait until the class has been dismissed.

Consequences of Misconduct

Violators of these rules are subject to disciplinary action under Board Rule 9803.15 of the Los Angeles Community College District. Depending upon the seriousness of the conduct, the student disciplinary procedures may range from a warning to removal from the class with a referral to the Vice President of the College.

BIOLOGY 3B LAB TOPIC SEMESTER SCHEDULE

WEEK	DATES	LABORATORY TOPIC	LAB MANUAL SECTION
1	Aug 30	Lab Orientation	
2	Sept 6	Measurement in Biology	A
3	Sept 13	QUIZ 1 The Microscope & Its Uses	B
4	Sept 20	QUIZ 2 The Cell	D
5	Sept 27	QUIZ 3 Cell Division	F
6	Oct 4	QUIZ 4 Cell Division & Identification of Organic Molecules	F, C
7	Oct 11	QUIZ 5 Introduction to Graphing, Diffusion, Osmosis	X,E
8	Oct 18	QUIZ 6 Enzymes	CC
9	Oct 25	MIDTERM	
10	Nov 1	Classification of Organisms; Viruses, Kingdom Monera & Protista	G, H, I, J
11	Nov 8	QUIZ 7 Kingdoms Protista, Fungi & Plants	J,K, L
12	Nov 15	QUIZ 8 Vegetative Organs & Repro in Angiosperms, Dichotomous Keys	M, N, MM
13	Nov 22	QUIZ 9 Invertebrate Animals	O, P
14	<i>No CLASS</i>	<i>THANSGIVING</i>	<i>R, S, T</i>
15	Dec 6	QUIZ 10 Fetal Pig	U
	Dec 13	FINAL EXAM PERIOD (No lab exercise class meetings)	