

Biology 3 Section 0138 and 0139: Introduction to Biology  
Los Angeles Mission College Fall 2013

Instructor: Dr. Sheila Fennoy

Fall 2013: Mon Aug 26 – Dec 14

e-Mail: [espressyself@hotmail.com](mailto:espressyself@hotmail.com) Prof Fennoy's website: <http://www.lamission.edu/~fennoys>

Lecture: MW 12:25 - 1:50 AM Room CMS 004 Class includes 2 days of lecture and 1 day of lab each week.

**Laboratory: Section 0138 meets Mondays: Section 0139 meets Wednesdays 2p-5:10 p Rm CMS 110**

Office Hours: MW 11:15-12:05 PM Room CMS106; My Campus Phone Ext: 818-364-4269

Life Sc. website - <http://www.lamission.edu/lifesciences>

Advisory: *English 28 or ESL8 is a prerequisite for taking this class.*

- College-level reading, writing and study skills is essential to success in the course.

Drop Dates	Holidays
Last day to apply for refund - September 8 If you stop attending a class (or wish to drop a class), YOU MUST DROP THE CLASS YOURSELF ONLINE by iNov 17 to receive a W Final Exams: 12/9-12/14	Labor Day – Mon. September 2 Veteran's Day –Fri. November 11 Thanksgiving – Thur. November 28 – Dec 1

*It is your responsibility to drop the class by the appropriate **deadlines**, Nov 17.*

Articulation: Biology 3 articulates with CSUN 101 & 101L; CSULA 155 or 156 or 180. You are also encouraged to view articulation agreements at [assist.org](http://assist.org).

Biology 3 is a survey course that combines lectures, laboratory topics. The objective is to give students an introduction to the scientific method, topics fundamental to all living cells and diversity in living systems. Included in the content are the fundamental physical and chemical principles underlying the life sciences; the basics of cell structure and function; the underlying principles of heredity, reproduction, and development; and the intimate interplay between organisms and their environment Topics will be reinforced using the weekly lab assignments.

### STUDENT LEARNING OUTCOME

Biology 3 students will work together as a laboratory team to answer questions, in writing, on laboratory techniques learned in the course and will design a simple experiment using those methods.

### COURSE OBJECTIVES

- (1) To develop learning skills necessary for academic and professional success.
- (2) To grow as a citizen to support the academic growth of our children and our community.
- (3) To gain the knowledge to teach our children how to maintain healthy minds, bodies and ecosystems.
- (4) To learn how to be resourceful
- (5) To learn to work as a team in problem solving and the art of exchanging information for greater understanding
- (6) To learn to make informed lifestyle decisions that will allow for a sustainable future and to become responsible global citizens.
- (7) To become a critically thinking member of our democratic society, being able to read and discuss issues raised by modern advances in the life sciences

### Books required:

1. **Biology: Concepts & Connections**, Campbell et. al. (Pearson-Benjamin Cummings)  
(Online access to **Mastering Biology** – <http://www.masteringbio.com/>)
2. Laboratory: Biology 3 “Lab Pack” available in the bookstore or for free download at:  
<http://www.lamission.edu/lifesciences/Biology3Laboratories.aspx>
3. Scantron Forms (882-ES) and pencils (#2) for exams and genetics laboratory and mitosis and meiosis handouts.  
*You will be dropped from class if not obtained by first meeting of second week.*

## EXPECTATIONS:

**Academic.** You are expected to read and study the assigned text chapters before coming to class. Proficiency on exams and quizzes. You must demonstrate a proficiency in the reading and writing subject matter covered in both labs, lectures by passing weekly quizzes. There will be a number of exams covering the assigned reading at the start of class. Exams will cover your comprehension of concepts from lecture notes, lab, discussions, and your memory of terminology.

**Attendance and participation** is mandatory. You should drop the class if you know you will miss 3 classes. Continual tardiness will be looked upon as an unexcused absence. Students who attend class, take detailed notes and study those notes and the text receive passing grades. Students absent 3 or more times from class will be dropped from the roster. Points are lost for leaving lecture early.

**Discipline:** You will lose points for using cell phones in class, for having the phone on and ringing, or for texting in class. Under no circumstances are cell phone to be used in class. Leave the class when an emergency arises.

**Laboratory:** The laboratory will reinforce fundamental concepts related to lecture topics and the scientific method. During every lab emphasis is placed on measuring, graphing, recording and interpreting experimental results. There will be a lab quiz at the start of *every* lab. Each quiz is worth 10 points. Quizzes cover information from the current and previous lab as well as information from lecture. A lab practicum worth 50 points is given on the last day of on campus lab. You will lose 2 points each time you are reminded that there is No Eating in lab. Lab reports are worth 10 points each. No credit can be given on assignments or reports from a student who did not attend the class.

**Examinations:** Several exams worth 100 points are taken during the semester and a *comprehensive* final, at the end. There are no make-up exams. The lowest exam score will be dropped when evaluating the final score. Students caught cheating will automatically receive a zero "0" on that exam. Cheating is grounds for dismissal from *the college*.

Written Assignments:

Your Biology Grade is based on: TOTAL POINTS

950

<b>40% LAB</b>	<b>60 % EXAMS AN LECTURE PRESENTATION</b>
Laboratory practicum 100	Your Biology Grade is based on:
Laboratory reports 150	3 lecture exams (100 points each) 300 pts
Quizzes 100	Final examination 200
	Online 1 25
	Human Evolution Article Review 50
*Extra Credit can be used in special circumstances, <u>to replace up</u> to 20 lab pts.	

Grade Scale: Letter grades are based on the following

A:90-100%

B: 80-89%

C:70-79%

D:60-69%

F:59% or less

## Lab Schedule

**Week 1** *Scientific Inquiry and Tools for Investigation - A Lab Topic 1A*

**Week 2** *Scientific Inquiry and Tools for Investigation - B Lab Topic 1B*

**Week 3** *Molecules, Water and pH Lab Topic 2*

**Week 4** *Use of the Microscope Lab Topic 3*

**Week 5** *Macromolecules Lab Topic 4*

**Week 6** *Enzymes Lab Topic 5*

**Week 7** *Cellular Respiration and Photosynthesis Lab Topic 6*

**Week 8** *Mitosis and Meiosis Lab Topic 7*

**Week 9** *Genetics Lab Topic 8*

**Week 10** *DNA and Gene Expression Lab Topic 9*

**Week 11** *Natural Selection Lab Topic 10*

**Week 12** *Kingdoms of Life Lab Topic 11*

**Week 13** *Circulation Lab Topic 12*

**Week 14** *Laboratory Final Practical Exam*

**Week 15** *Plants and Flowers Lab Topic 13*

## TENTATIVE UNIT LECTURE TOPICS

**Unit 1** Lect 1. Introduction To Biology And The Scientific Method: Scientific Inquiry Metric System, Graphing  
Lect 2: Chemistry Of Life. Atomic Structure, Ions, Bonds And Properties Of Water  
Lect 3: Molecules Of Cells. Buffers and pH, Mono And Polysaccharides and Proteins  
Lect 4: Molecules Of Cells. Lipids And Nucleic Acids  
Lect 5: Cells. Prokaryotes And Eukaryotes Cell Structure. The 5 Kingdoms of Life.  
Lect 6: Intro To The Plasma Membrane

### **Exam for Unit 1**

**Unit 2** Lect 7: Cellular Work: Enzymes, Membrane Transport, Osmosis, Passive And Active  
Lect 8: The Digestive & Nutrition  
Lect 9: Transport in Plants and Animals.  
Lect 10: Cell Respiration and making Cell Energy  
Lect 11: Photosynthesis  
Lect 12: The Role of Mitosis & Meiosis in Sexual Repro of Plants and Animal

### **Exam for Unit 2**

**Unit 3** Lect 13: Genetics and Principles of Inheritance  
Lect 14: DNA and RNA Replication.  
Lect 15: Transcription And Translation  
Lect 16: Regulation Of Gene Expression. Promoter, Enhancer, Gene Sequences  
Lect 17: Biotechnology  
Lect 18: Principles Evolution: Evidence for Evolution How Natural Selection Works.  
Overview of Evolution of Plant and Animal Migration to Land

### **Lecture Exam #3**

**Unit 4:** Structure And Function In The Human Body :  
**Lect 19:** Cells, Tissues And Organs and the Integumentary System  
**Lect 20:** The Nervous System  
Lect 21: The Endocrine & Reproductive System In Animals And Plants  
**Lect 22:** The Cardiovascular and Respiratory Systems.  
Lect 23: The Immune System  
Lect 24: The Excretory System; Salt and Water Balance  
Lect 25: The Skeletal And Muscular System

**FINAL EXAMINATION Mon, Dec 9, 2013 12:30pm to 2:30pm.**