Biology 3 – Spring 2014 General Biology Lecture and Lab

Sections: 3143, 3144

Lecture:

Classroom: CMS 005 M - W - 17:15 - 18:40

Lab:

Classroom: CMS 110 M -W - 18:50 - 22:00

Office Hours: M - W - 4:30 PM - 5:15 PM, CMS 110 or quiet room next to CMS 004

Advisory: English 28 or ESL 8 – College-level reading, writing and study skills

Required Materials:

Biology: Concepts and Connections, Campbell et al, 7th ed 2011

Laboratory: Biology 3 "Lab Pack" available in the bookstore or download free at:

http://www.lamission.edu/lifesciences/Biology3Laboratories.aspx

5 Scantrons (100 questions)

Last day to apply for refund - February 22 Last day to drop without a W - February 23 Last day to drop with W - May 11

Biology 3 is a comprehensive course designed to allow students to identify and describe the major concepts of modern and classical biological sciences including: 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. The relationship between STRUCTURE and FUNCTION, from atoms to ecosystems, provides a unifying theme for the course. Concepts will be reinforced by active participation in laboratory exercises, lectures, discussions, readings, and written assignments, constructed specifically to allow students to learn about the scientific process and its effect on our daily lives

Instructor: Mitch Voda

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STUDENT LEARNING OUTCOME

- 1. Biology 3 students will analyze a scientific experiment and determine the major components.
- 2. Biology 3 students will graph, interpret, and analyze data pertaining to a biological process.
- 3. Biology 3 students will analyze a genetic problem to determine the probabilities of genotypic and phenotypic outcomes.
- 4. Given a DNA sequence, Biology 3 students will apply the principles of gene expression to determine the protein product.

This is a class schedule of topics and exams for the semester. You are expected to read and study the assigned text chapters **before** coming to class. Exams will cover concepts from lecture, lab, discussions, and your text. In order to decrease distractions during class, **please TURN OFF YOUR CELL PHONES BEFORE ENTERING THE CLASS.**

Attendance

- 1. Attendance is mandatory.
- 2. It is student's responsibility to withdraw from class! You must withdraw ONLINE! Do not tell me and then expect to withdraw you! If the student(s) fail to withdraw by the date indicated in your CLASS SCHEDULE book, a grade letter will be assigned based on the work during the semester. PLEASE SAVE A COPY OF YOUR CLASS REGISTRATION!!!
- 3. Please let me know if you are going to be absent or need to leave class early, especially during the first 3 weeks when there might be students that want to add the class.

Grading

- 1. Participation You each have **25 points** when you start the course.
- 2. You will write a 2 page (double spaced) paper on any topic of interest to you from a scientific journal (Biology related subject ONLY. Astronomy is not a good subject.) The scientific journal needs to be pre-approved by instructor. Look upon this as helping your grade and spurring your interest in biology. The format for the paper is the standard MLA format. You can turn the paper in at any time all the way up to May 14, 2014.
- 3. There will be 4 unit exams during the semester and one comprehensive final, at the end. **There are no make-up exams unless you have a good excuse (please talk to me if you know you are going to miss an exam). An absence counts as 0 points.** The lowest exam score out of the four exams will be dropped when evaluating the final score.
- 4. Cheating on anything (exams, quizzes) will result in a "0" on that item. Academic dishonesty will not be tolerated. Any student caught copying from another student, reading from notes, turning in someone else's work and claiming it as their own, and other modern ways of cheating will incur severe penalties. Penalties may include expulsion from the college.
- 5. Extra Credit Announced during the semester (Zoo trip, Jeopardy, Questions in class etc.)
- 6. Your biology lecture grade will be based on:

Participation Points: 25 points Scientific Paper: 25 points 3 exams: 300 points Final exam: 200 points 550 points

7. Your overall General Biology I grade will be approximately 2/3 lecture and 1/3 lab (300 points).

Tentative Grading Scale

A: 90-100% B: 80 - 89%

C: 68 - 79% (570 points and above are guaranteed to pass the class)

D: 51- 67% F: 50% or below

Biology Lectures

Week	<u>Topics</u>
1	Introduction; scientific method Basic chemical concepts
2	President's Day – campus closed Chemistry of life Cytology - cell structures/function

16	FINAL EXAM June 4 - 5:30 PM - 7:30 PM
15	Memorial Day – Campus closed Jeopardy!!! (Extra Credit)
14	Digestive System; Immune System Immune System; Final exam Review!!!
13	Digestive System Exam IV
12	Homeostasis, thermoregulation, Osmoregulation, Hormones
11	Circulatory system Respiratory system
10	Reproduction, STDs, and development Exam III (Up to Ecology and pop dynamics)
9	Evolution; Speciation and extinction Ecology, and population dynamics
	SPRING BREAK (4/7/2014 – 4/13/2014)
8	Cesar Chavez – Campus closed Genetics Movie Day – Galapagos!!
0	
7	DNA Technology, Gene Regulation Genetics
6	DNA/Protein Synthesis Exam II (Up to Mitosis/Meiosis)
5	Photosynthesis Mitosis/Meiosis
4	Cellular respiration Exam I (up to Energy, Enzymes, Cell Transport)
3	Energy, Enzymes, Cell transport

Lab Topics

Chapter Topic/Exercise Week Date

Week 1: Scientific Method

Week 2: Metric System (Monday – NO LAB)
Week 3: Molecules and pH
Week 4: Microscope Week 5: Macromolecules Week 6: Enzymes

Week 7: Cellular Respiration

Week 8: Photosynthesis (Monday – NO LAB)

Week 9: Mitosis and Meiosis

Week 10: Genetics I

Week 11: DNA & Gene Expression

Week 12: Natural Selection Week 13: Cardio health Week 14: Practical Exam

Week 15: Flower (Monday - NO LAB)

Your lab grade will be based on:

Lab Reports: 140 points
Quizzes: 140 points
Lab Practical: 20 points
Total: 300 points

Before coming to lab:

Please read the lab before coming to class and be prepared. This is very important since some questions in the quiz may be from the same day lab and at the same time you will be prepared to perform the experiment.

Missed Quizzes:

Quizzes will be given at the beginning of each class. Each quiz will last approximately 5-10 minutes and I'll test from the material taught in previous lab. Make-up quizzes will not be provided. A missed quiz will be graded as zero points. ATTENDANCE IS REQUIRED. For 100% attendance in the lab you can earn at the end of the lab extra credit points.

LAB SAFETY AND GENERAL RULES WILL BE ENFORCED

New policy regarding students repeating a course in any one Community College District:

- (1) There is a new enrollment limit at California community colleges. The limit is now three times to take a class in any one District and includes both non-passing grades and withdrawals.
- (2) It is the responsibility of the student to drop the class on or before May 5 or the student is subject to receiving a failing grade in the class.

Code of Honor and Integrity

Los Angeles Mission College Department of Life Sciences

Students at Los Angeles Mission College, because they are members of an academic community dedicated to the achievement of excellence and the pursuit of honor, are expected to meet high standards of personal, ethical, and moral conduct. These standards require personal integrity and a commitment to honesty without compromise. Without the ability to trust in these principles, an academic community and a civil society cannot exist. Los Angeles Mission College students and faculty are as committed to the development of students with honesty and integrity as they are to the academic and professional success of its students.

The Code of Honor and Integrity is an undertaking of the students, first and foremost, both individually and collectively, that they will:

- 1. not give or receive dishonorable aid during exams, quizzes or assignments
- 2. do their share and take an active part in seeing to it that fellow students, as well as themselves, uphold the spirit and letter of the Code of Honor and Integrity.

Some examples of conduct that are regarded as being in violation of the Honor Code include:

- * Copying from another's examination or quiz, or allowing another to copy from one's own papers
- * Using any unpermitted source of information, human or other, during an exam, quiz or assignment that influences the grade; this includes the use of technological devices
- * Any student-to-student collaboration that is unpermitted
- * Plagiarism (plagiarism is defined as the use, without giving reasonable and appropriate credit to, or acknowledging the author or source, of another person's original work)
- * Representing as one's own work as the work of another
- * Giving or receiving aid on an academic assignment under circumstances in which a reasonable person should have known that such aid is not permitted

As a part of the effort to promote an environment of honesty and integrity during quizzes and examinations, the following guidelines will apply for any courses in the Department of Life Sciences:

- 1. Students will leave all books and all other non-essential items (e.g. paper, electronic devices) on the floor so that they are not useable nor block the sight line between professor and student. No electronic devices will be in reach.
- 2. Students will not communicate in any way that will dishonorably assist themselves or another student.
- 3. Students will leave the room during an exam only if permitted by the professor's policy. If permitted, only one student may leave the room at any time and be gone for only the average length of time needed for the stated purpose. Students will leave all purses, bags, books, phones, jackets, etc., in the classroom during the absence.
- 4. Students will promote the spirit and letter of the Code of Honesty and Integrity by dissuading fellow students from dishonest activity and, when such casual persuasion does not work, informing the professor of the possible dishonest activity, either anonymously, or otherwise.
- 5. Students will make every effort to avoid even the appearance of dishonesty or lack of integrity Violation of this policy will not be tolerated and violators will be subject to severe penalties. The success of the Code of Honor and Integrity is based upon the collective desire of students, faculty and the community to live in an environment that embraces respect for that which is right both in the college and in society as a whole.