

General Biology II

Biology 7 L.A. Valley College Spring 2012

Sections: 8007, 8008 lab MW 1:00pm – 4:10 pm AHS 248, lecture TTh 1:00pm – 2:25pm AHS 239

Instructor: Dr. Gary Kovnat

Office: AHS 222

Office Hours: MW 10:00am – 11:30am, TTh 11:15am – 12:45pm AHS 222

Phone: (818) 947-2881

Email: kovnatgd@lavc.edu

Web Site: <http://www.lavc.edu/kovnatgd/TEC>

COURSE DESCRIPTION:

Laboratory study for majors and pre-professionals including taxonomy, evolution, physiology and ecology. Includes field trips.

COURSE OBJECTIVES:

- Define and interpret the terminology of biology.
- Apply concepts from the textbook to principles demonstrated in the laboratory.
- Identify unifying themes in biology.
- Utilize modern laboratory techniques.

STUDENT LEARNING OUTCOMES:

- Students will have acquired skills necessary to explain evolutionary processes.
- Students will distinguish various forms of organismal diversity.

BOOK LIST:

Campbell Biology 9th edition (Reece) 2011
Photo Atlas for Biology (Perry) 1996

IMPORTANT DATES:

Last day to add: 2/20/12

Last day to drop with no record: 3/4/12

Last day to drop with a "W": 5/6/12

EVALUATION:

Your grade will be determined by points earned on class activities, and is based on the following standard grading scale: A \geq 90%, B \geq 80%, C \geq 70%, D \geq 60%. A curved scale will not be utilized, because I do not wish to create an environment in which outstanding students are perceived as “setting the curve”.

Lecture Exams - There will be 5 objective exams, which will consist of 45 multiple-choice questions, 30 matching questions, 15 completion questions, and 1 essay question (10 points). Each exam will be worth 100 points, and will cover material only from the preceding unit of the semester. *You are expected to purchase Scranton answer sheets (form #882-ES) for all exams.*

Labs - There will be 15 laboratory investigations and 3 field trips. Students are expected to write up a lab report for each laboratory investigation in a bound lab notebook, according to criteria established in an instruction sheet provided in the lab manual.

Lab Practicals - There will be 2 lab practical exams, which will consist of 50 questions related to the identification of laboratory specimens. Each lab practical will be worth 50 points, and will cover material only from the preceding section of lab. Answer sheets will be provided in class.

Insurance - Up to 1% of the total class points may be invested in an “insurance policy”. These points will not be included in the cumulative point total during the semester, but may be applied at the end of the semester to raise a marginal grade (9th percentile only).

POLICIES:

Make-ups - A 50 question multiple choice exam will be provided to replace a missed exam, if the absence was verified as an emergency with appropriate documentation. The make-up exam must be arranged at least one week in advance, during posted office hours. The final exam cannot be made-up. *Only one missed exam may be replaced during the semester.*

Accommodation - Students who miss class due to religious observance or who require special assistance under ADA guidelines will be accommodated if validated with appropriate documentation. However, I must be informed of the need for accommodation in writing prior to the second week of class.

Attendance - You may be excluded from the class when absences exceed the number of hours the class meets per week; this will depend on the circumstances of your absence and an evaluation of your academic performance. *It is your responsibility to drop this course if you so decide – I am not obligated to exclude students who stop showing up to class. Be aware that all students on my roster at the end of the semester will receive a grade!*

Academic Dishonesty - I expect my students to exhibit the highest ethical standards. Even the *appearance* of dishonesty will set into motion events that may prevent you from receiving credit for that exam (or assignment), and could possibly lead to academic dismissal.

Cell Phones - Please disengage the sound on cell phones during class, and turn off cell phones during exams. *Cell phones must not be accessible or visible during exams, due to the potential misuse of this technology for cheating.*

Lecture/Lab Schedule

Week	Date	Topic	Reading
1	2/6	Course Introduction <i>Lab Notebooks, Safety Protocols</i>	
	2/7	Microevolution	Chapter 23
	2/8	<i>Introduction to Lab – The Scientific Method</i>	
	2/9	Microevolution	Chapter 23
2	2/13	<i>Microevolution</i>	<i>Lab 1</i>
	2/14	Macroevolution	Chapter 24
	2/15	<i>Microscopy</i>	<i>Lab 2</i>
	2/16	Phylogeny	Chapter 26
3	2/20	No Class – President’s Day	
	2/21	Systematics	Chapter 26
	2/22	Field Trip 1 – Wildlife Reserve	
	2/23	Exam 1	23, 24, 26
4	2/27	<i>Constructing a Phenogram</i>	<i>(Handout)</i>
	2/28	Prokaryotes	Chapter 27
	2/29	<i>Bacteria</i>	<i>Lab 3</i>
	3/1	Protists	Chapter 28
5	3/5	<i>Protists</i>	<i>Lab 4</i>
	3/6	Protists	Chapter 28
	3/7	<i>Protists</i>	<i>Lab 4</i>
	3/8	Fungi	Chapter 31
6	3/12	<i>Fungi</i>	<i>Lab 5</i>
	3/13	Exam 2	27, 28, 31
	3/14	<i>Seedless Plants</i>	<i>Lab 6</i>
	3/15	Seedless Plants	Chapter 29
7	3/19	<i>Gymnosperms</i>	<i>Lab 7</i>
	3/20	Seed Plants	Chapter 30
	3/21	<i>Angiosperm Anatomy</i>	<i>Lab 8</i>
	3/22	Seed Plants	Chapter 30
8	3/26	Field Trip 2 – Franklin Canyon	
	3/27	Plant Structure	Chapter 35
	3/22	<i>Angiosperm Reproduction</i>	<i>Lab 9</i>
	3/29	Plant Growth	Chapter 35

Week	Date	Topic	Reading
9	4/2	No Class – Spring Break	
	4/3	No Class – Spring Break	
	4/4	No Class – Spring Break	
	4/5	No Class – Spring Break	
10	4/9	No Class – Spring Break	
	4/10	<i>Practical Practice</i>	
	4/11	Lab Practical 1 (Lab Notebooks Due)	3-9
	4/12	Exam 3	29, 30, 35
11	4/16	<i>Protostomes</i>	<i>Lab 10</i>
	4/17	Invertebrate Animals	Chapter 33
	4/18	<i>Protostomes</i>	<i>Lab 10</i>
	4/19	Invertebrate Animals	Chapter 33
12	4/23	<i>Deuterostomes</i>	<i>Lab 11</i>
	4/24	Invertebrate Animals	Chapter 33
	4/25	<i>Introduction to Vertebrate Anatomy</i>	
	4/26	Vertebrate Animals	Chapter 34
13	4/30	<i>Vertebrate Anatomy I</i>	<i>Lab 12</i>
	5/1	Vertebrate Animals	Chapter 34
	5/2	Field Trip 3 – Malibu Lagoon (low tide 1:12)	
	5/3	Animal Development	Chapter 47
14	5/7	<i>Vertebrate Anatomy II</i>	<i>Lab 13</i>
	5/8	Animal Development	Chapter 47
	5/9	<i>Vertebrate Anatomy III</i>	<i>Lab 14</i>
	5/10	Exam 4	33, 34, 47
15	5/14	<i>Vertebrate Anatomy IV</i>	<i>Lab 15</i>
	5/15	Population Ecology	Chapter 53
	5/16	<i>Practical Practice</i>	
	5/17	Community Ecology	Chapter 54
16	5/21	Lab Practical 2 (Lab Notebooks Due)	10-15
	5/22	Ecosystem Ecology	Chapter 55
	5/23	Presentation of Modules	
	5/24	Presentation of Modules	
17	5/28	No Class – Memorial Day	
	6/4	Exam 5 (Final Exam) 12:30-2:30	53-55
		Note: Syllabus subject to change	