Bio. Sci. 001, Section 80321 - Fall 2009
General Biology

Mon. & Wed. 5:00pm-6:20pm, Sewell 117

Instructor Information:

Name: Dr. Jennifer Skillen
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Office hours: Monday & Wednesday 3:30-4:30pm
Tuesday & Thursday 2:00-3:00pm
Other times by appointment

Textbooks:

1. *Biology*, 8th edition, by Campbell & Reece. Pearson/Benjamin Cummings Publishing Company. ISBN 0-321-54325-4. **Required**
2. *Writing papers in the biological sciences*, 4th edition, by McMillan. Bedford/St. Martin's. ISBN 0-312-44083-9. **Required**
3. *Bio. Sci. 001 General Biology Lab Manual*, Revised December 2006, by Martinez & Pravosudova. Sierra College. **Required**

Other Textbook & Website Options:

If you purchase a new 8th edition textbook, it will come with an access code that will allow you to log in to the Mastering Biology website, www.masteringbio.com. Access to this website is **not** required; however, you may find it useful as it contains chapter tests, vocabulary study tools, animations, and an eBook.

Course Description & Outcomes:

This 4-credit lecture/lab course is a survey of contemporary biology topics that emphasizes basic biological principles as related to cell structure and function, levels of organization, reproduction, genetics, development, adaptation, behavior, and ecology. A list of student performance outcomes is available on the Blackboard website. The completion of Chem 1A or 3A/3B *before* enrolling in Biol 1 is recommended because you are expected to have an understanding of basic chemical principles in the beginning of the semester.

Lectures:

Students are expected to attend and participate in all lectures. Students who habitually skip lectures typically perform poorly on exams. If you miss a lecture, you are responsible for learning the material that you missed - check the syllabus, the lecture website, and talk to other students.

There will be lecture handouts available on the website for the course. These handouts will be available before class. These handouts are not required material; however, you may find it helpful to print them out and use them to take notes on during

class, or take your own notes during class and then use the handouts to supplement your notes. NOTE: these handouts should not be used as an excuse to miss lectures!!

Lecture Quizzes:

There will be 12 multiple choice quizzes, each worth 10 points. Your lowest two quiz scores will be dropped. The quizzes will be available **only** on the Blackboard website. Quizzes will be available for 1 week (Monday at 6:00am to Sunday at 11:00pm). Once you begin a quiz, you will have 2 hours to complete it. The quizzes will typically consist of 20 multiple choice questions. You will see one question at a time and you must answer that question in order to proceed to the next question. You will be able to go back and change your answers. You may use your textbook and notes during quizzes. You are responsible for making sure you have access to the internet at some point during the week. There are **no make-up quizzes**! If you have problems accessing the quiz or submitting your answers, please call/email me as soon as possible.

Lecture Exams:

There will be 2 midterms, each worth 75 points, and 1 final exam, worth 90 points. Approximately 25-30% of the final exam will cover material presented before the 2nd midterm. These exams will consist of a mixture of true/false, multiple choice, and short answer questions. No electronic devices (phones, calculators, etc.) or dictionaries of any sort are allowed during exams. Questions, problems, or challenges to exam questions must be presented to the instructor within one week of the day on which exam grades are returned. All grades are final after one week.

Please make every possible attempt to attend class on exam days! Make-up exams will only be allowed for an **excused absence** with my approval. If you miss an exam due to illness, loss of a family member, etc. you will be expected to provide documentation in order to take a make-up exam. Make-up exams are similar but not identical to regular lecture exams; they typically contain fewer multiple choice and more essay questions.

Term Paper

You will write a review paper that is 1500-2000 words in length. You must submit a topic for your term paper to me by Oct. 5, 2009. Your annotated bibliography (covering at least 5 literature sources) is due on Nov. 2, 2009 and the completed term paper is due Nov. 23, 2009. More details about the term paper can be found on the Blackboard website. The **term paper is worth a total of 60 points**.

Laboratory:

Each week you will have a lab, split between Monday and Wednesday evenings. The lab portion of this course comprises ~30% of your total course grade. You must read each lab before coming to lab on Monday. Beginning with the second lab, you must type a ½ – 1 page pre-lab report before the lab. I will initial your pre-lab at the beginning of each lab. Each initialed **pre-lab is worth 2.5 points**. A pre-lab example is posted on the Blackboard website.

Starting with the second lab, each lab will begin with a short quiz (3-5 questions) over the previous week's lab. You will need a piece of regular note paper to complete the quiz. Each **quiz is worth 2.5 points**.

Many labs require you to make a drawing or a graph. If space is provided in the lab, the drawings and graphs may be recorded there. Otherwise, please be sure that you have some unlined drawing paper and graph paper in your lab binder. Both drawings and graphs should be done in pencil and have a title. With drawings, you should also indicate the magnification and clearly label any identifiable structures. You may put 2-4 drawings on each side of a paper.

Keep all pre-labs, labs, graphs, drawings, and quizzes organized in a binder with dividers separating each lab. Your lab binder will be turned in twice (on lab exam days) and graded for completeness, neatness, and overall organization. Each **lab binder check is worth 10 points.**

There will be 2 lab practical exams during the semester. During a lab practical you will rotate to various stations around the room. Questions at each station may involve using a microscope, making a graph, identifying a lab specimen or piece of lab equipment, or simply answering a question about a lab experiment or process. Each **lab practical is worth 50 points**.

Grading:

2 midterm exams	150 pts (75 pts each)
1 final exam	90 pts
10 lecture quizzes	100 pts (10 pts each)
1 term paper	60 pts
2 lab binders	20 pts (10 pts each)
13 labs	65 pts (5 pts each for pre-lab and lab quiz)
2 lab exams	100 pts (50 pts each)
	585 pts total for course

Grade	%	Points needed
A	90-100	527-585
B	80-89	468-526
C	70-79	410-467
D	60-69	351-409
F	0-59	0-350

Add/Withdrawal Policy:

It is your responsibility to turn in add/withdraw forms on time. September 12, 2009 is the deadline to add or drop with a full refund. November 10, 2009 is the withdrawal deadline. After this date, you will receive a letter grade (A-F) for the course.

Academic Integrity:

Scholastic dishonesty (including cheating and plagiarism) will not be tolerated and will be prosecuted to the fullest extent. You are expected to have read and understood the current issue of the *Sierra College Student Rights and Responsibilities Handbook* regarding academic dishonesty (pages 21-22).

Class Policies:

Phones/beepers/iPods/etc. must be turned off during class. Please arrive on time, and avoid coming and going during class. During exams, **no notes, books, dictionaries, or electronic devices** are permitted. Please be courteous to your fellow students and respect their right to learn.

Extra Credit

A total of 20 extra credit points will be allowed during the semester. You must complete a project to earn the points. You must get my approval **before** beginning a project. Extra credit can be earned by completing one of the following projects:

- Complete 4 hours of field or lab research and write a short report
- Complete 5 hours of biology-oriented community service (volunteering)
- Complete 5 hours of volunteer work in our Museum
- Complete 5 hours of volunteer work in our Arboretum
- Re-write any lab protocol
- Come up with your own – but remember to get it approved first!

Blackboard:

I will use Blackboard to post course documents, provide you with online quizzes, record grades, etc. Your Blackboard username is the same as your MySierra username. Your default password is "stu" followed by your first name initial and your last name initial. For example, Bart Simpson would login with the password "stubs". There is a link to Blackboard from the bottom of the Sierra College homepage.

My Grades

Lecture	Points Possible	My Score
Quiz #1	10	
Quiz #2	10	
Quiz #3	10	
Quiz #4	10	
Quiz #5	10	
Quiz #6	10	
Quiz #7	10	
Quiz #8	10	
Quiz #9	10	
Quiz #10	10	
Quiz #11	10	
Quiz #12	10	
Midterm #1	75	
Midterm #2	75	
Lit Cited	5	
Peer Review	5	
Term Paper	50	
Final Exam	90	
Subtotal	420	
Subtract Lowest 2 Quizzes	-20	
Total Lecture Pts	400	

Lab	Points Possible	My Score
Lab #2	5	
Lab #3	5	
Lab #4	5	
Lab #5	5	
Lab #6	5	
Lab #7	5	
Lab #8	5	
Lab #10	5	
Lab #11	5	
Lab #12	5	
Lab #13	5	
Lab #14	5	
Lab #15	5	
Lab Binder #1	10	
Lab Binder #2	10	
Practical #1	50	
Practical #2	50	
Total Lab Pts	185	

Biology 1 – Fall 2009 – Tentative Lecture Schedule

Date	Lecture Topic	Chapter	Quiz (Mon 6am – Sun 11pm)
Aug. 31 – M	Intro., Biol. Principles, Biochemistry	1-3	Quiz #1 - Ch. 1 & 2 & 3
Sept. 2 – W	Intro., Biol. Principles, Biochemistry	1-3	
Sept. 7 – M	HOLIDAY		Quiz #2 - Ch. 4 & 5
Sept. 9 – W	Biochemistry	4-5	
Sept. 14 – M	Cell structure, Membranes	6-7	Quiz #3 - Ch. 6 & 7
Sept. 16 – W	Cell structure, Membranes	6-7	
Sept. 21 – M	Membranes, Metabolism	7-8	Quiz #4 - Ch. 7 & 8
Sept. 23 – W	Membranes, Metabolism	7-8	
Sept. 28 – M	Cellular Respiration, Photosynthesis	9-10	Quiz #5 – Ch. 9 & 10
Sept. 30 – W	Cellular Respiration, Photosynthesis	9-10	
Oct. 5 – M	Photosynthesis, Cell signaling *Term paper topic due*	10-11	Quiz #6 – Ch. 10 & 11
Oct. 7 – W	Photosynthesis, Cell signaling	10-11	
Oct. 12 – M	**Midterm #1**	**1-10**	
Oct. 14 – W	DNA structure/replication	16	
Oct. 19 – M	Mitosis, Meiosis	12-13	Quiz #7 – Ch. 12 & 13 & 16
Oct. 21 – W	Mitosis, Meiosis	12-13	
Oct. 26 – M	Lab Practical 5:00-7:50pm; *Lab binder due*		
Oct. 28 – W	Genetics lecture 5:00-7:50pm	14-15	
Nov. 2 – M	Protein synthesis, Biotechnology *Annotated bibliography due*	17 & 20	Quiz #8 – Ch. 14 & 15 & 17
Nov. 4 – W	Protein synthesis, Biotechnology	17 & 20	
Nov. 9 – M	Genomes, Evolution	21-22	Quiz #9 – Ch. 20 & 21 & 22
Nov. 11 – W	Genomes, Evolution	21-22	
Nov. 16 – M	**Midterm #2**	**11-21**	
Nov. 18 – W	Evolution, Selection	23 & 51	
Nov. 23 – M	Selection, Origin of Species *Term paper due*	51 & 24	Quiz #10 – Ch. 23 & 24 & 51
Nov. 25 – W	History of Life, Phylogeny	25-26	
Nov. 30 – M	History of Life, Phylogeny	25-26	Quiz #11 – Ch. 25 & 26
Dec. 2– W	Ecology	52-56	
Dec. 7 – M	Ecology	52-56	Quiz #12 – Ch. 52-56
Dec. 9 – W	Ecology	52-56	
Dec. 14 – M	Lab Practical 5:00-7:50pm; *Lab binder due*		
Dec. 16 – W	**FINAL EXAM (Lecture) 5:00-7:50pm**		