

TENTATIVE LECTURE SCHEDULE

DATE	TOPIC	READING
25 August	Introduction - What This Class is All About	1, 118-120
30	The Big Picture	2-3, 121-128
1 September	The Discovery of Microbes	3-17, 129-136
6	Philosophy & Science AND Science & Philosophy	42-56
8	The Size of Things and Group Presentations	18
13	Elements and the Chemistry of Life	19-21, 68-77
15	Organic Molecules	22-23, 93, 78-85
20	More on Organic Molecules	24-27, 86-92
22	Cells and Membranes	21, 27, 57-63
27	Cells, Membranes, and Organelles	28, 63-67, 193-200
29	Cells, Organelles & Organization	28-29, 137-146
4 October	Group Presentations	
6	Group Presentations	
11	Energy Production and New Molecular Construction	30-33
13	Exam 1	
18	Relationships, Yes, Organisms Do Have Relationships	155-162
20	Where Did It All Come From	110-117, 176-182
25	Explosions in Evolution	147-162, 183-193, 201-209
27	Watson & Crick, the Paper that Transformed Biology	36, 162-175
3 November	The Experiment that "Proved" the Point	35, 37
8	Divide & Conquer	33-35, 94-101
10	Sex and the Single Cell	101-109, 210-220
15	Group Presentations - Famous Experiments/Scientists or Groups of the Small World	
17	Group Presentations	
22	Group Presentations	
29	You and Your Defense	
1 December	Genetic Engineering & Bioethics	
6	Group Discussion of Genetic Engineering & Bioethics	
8	Exam 2	

TEXT - Biology 175 reader and any General Biology College Text
 also
 Material posted on the Web
 on
 Blackboard & <http://online.sfsu.edu/~antipa/biol175/>

Drops and Withdrawals - The drop period for Fall 2005 is 25 AUGUST through WEDNESDAY, 21 SEPTEMBER and students are responsible for initiating the drop either through the WEB or by touch-tone. From September 22nd to November 16th the request for withdrawal must be serious and compelling and follow the guidelines set forth by the University and the Department of Biology. All withdrawal requests during this period require written documentation from an independent third party and a current, unofficial SFSU transcript. After November 16th withdrawals are not normally permitted. Should you have further questions, please refer to the departmental withdrawal policy available in the Department of Biology office in the Franciscan Building.

BULLETIN DESCRIPTION

Biology 175 - Intended for non-biology majors. Current understanding of living systems as advanced by our knowledge of the invisible world represented by cells and microorganisms. Application of basic principles of physical and biological sciences, experimentation, and the scientific method.

Outcomes - In Biology 175 you will learn what we know about living systems and how we know it. Advances in biological sciences in the 21st century will be based on this background. The scientific method and new experimentation will be discussed in class. You will also learn the importance that chemistry, physics, math, and microbiology play in our understanding of life and their relevance to humankind.

GRADING BIOLOGY 175

Exam 1	50 points
Exam 2	50 points
Group Project 1	25 points
Group Project 2	50 points
Extra Credit	0 points
Total Points	175 points

Letter grades will be based on the total accumulation of points and assigned on a percentage basis (i.e., >90 = A, 80-89 = B, 66-79 = C, 50-65 = D, <50 = F).

Exams - Exams will be principally true and false and multiple choice with a few short answer/essay questions. Exam 2 will be comprehensive only to the extent that it will cover concepts from the beginning of the semester. It will emphasize core concepts and Group Projects covered since Exam 1. The reader and course web site will include study questions. Some exam questions will be based on those formulated by members of this semester's class. I encourage you to make use of these materials in preparation for examinations. The style of the examinations will be similar to posted sample questions.

Group Projects - Basic principles in cell biology will be "worked-up" in a web style format by small groups of students (including yourself), presented to the class, and graded for general content, clarity of organization, and presentation. All members of each group will participate and receive a grade based on the group's presentation, your participation, and your constructive comments for other groups.

Writing is an important strategy you will use to learn and understand material; it is a way to reinforce your grasp of a subject. Educators have emphasized the role writing can play in the comprehension of a subject. Victoria McMillan's *Writing Papers in the Biological Sciences* and Randy Moore's *Writing to Learn Science* and *Writing to Learn Biology* are available in the Reserve Book Room for this course. I recommend them to you, and I hope to encourage you to develop and use your language and writing skills. I believe that discipline in writing can and will help you with this course, and I will try to assist you with your writing by providing you with questions to answer. Although these writing exercises will not be turned in or graded; daily, regular use of them will solidify your understanding and help you prepare your thoughts for a general understanding of concepts we cover and for the examinations.

Extra Credit - The Literature Assignment or White Paper - One of these assignments will be graded but not assigned a point score; it can only influence your grade in a positive manner. Check the Web for basic details of the assignments; questions you may have will be clarified in class.

Policy on Make-up Examinations for Biology 175 - Only under unusually extenuating circumstance will a make-up be allowed. It is the student's responsibility to notify Dr. Antipa (by leaving a message at 338- 2951 or the Biology Office 338-1548) PRIOR to the scheduled exam to request a make-up. Written documentation in support of reason for absence (such as illness) must be in hand or forthcoming.