

LECTURE COURSE OUTLINE AND SYLLABUS

TEXT

Audesirk, Gerald and Teresa Audesirk. 1999. BIOLOGY: LIFE ON EARTH. 5th Ed., Macmillan Publishing, Co.

COURSE DESCRIPTION:

The mission of the Biology Department is to provide students with "knowledge of living organisms and their environment and an appreciation of the scientific method." In order to accomplish this the department has made a commitment to providing a quality education that embraces measurable student outcomes, presents material in the most technologically advanced manner possible, and recognizes the diversity of its student body.

BI 101 - General Biology is the traditional non-majors biology course one expects to find in all university general education curriculums. What will make this course **different** from most is the small class size, **student/peer assistance**, and the utilization of up to date technologies, including computer software programs and other sophisticated pieces of equipment and assay kits. It is the intention of the Biology Department to provide the student with a course that is informative, current, highly motivational, and thought provoking.

GOALS OF THE COURSE: At the end of the course each student should:

1. know and understand the molecular and cellular basis of life;
2. know and understand basic Mendelian and molecular genetics;
3. know and understand the scientific method and how it applies to research analysis and evaluation;
4. have the opportunity for theoretical and practical biological experiences;
5. have an understanding of the accomplishments, failures, vagaries, and future of the biological sciences drawing on examples and applications of principles in all areas of science.

OBJECTIVES FOR STUDENTS: At the completion of the course the student will be able to:

1. Understand the scientific method;
2. Analyze a scientific problem with methods used in the sciences;
3. Use scientific terminology, specifically in the life sciences;
4. Perform Mendelian genetic crosses and problems;
5. Demonstrate a working knowledge of the chemistry of life;
6. Understand energy needs and transformations in living systems;
7. Understand cellular structure and function;
8. Understand cellular balance and exchange mechanisms, and;
9. Understand evolutionary theory and concepts.

LECTURES:

1. Text assignments and lecture topics are listed in the lecture outline. Examination dates and other important dates are also listed in the outline.
2. Supplemental readings may be assigned during the course.
3. The instructor reserves the right to add or omit materials as he feels are necessary.

GRADE DETERMINATIONS:

1. Separate grades will be given for lecture and laboratory. It is possible, therefore, to receive different grades for lecture and laboratory.
2. The instructor does not curve exam or grade scores. Grades will be given **according** to the scale below.
3. The final lecture exam is a comprehensive examination including topics from the first week of instruction..
4. The lecture grade will be determined in the following manner:

POINT SPREAD:

PARTICIPATION	50 POINTS
FIRST EXAM	100 POINTS
SECOND EXAM	100 POINTS
QUIZZES	100 POINTS
FINAL LECTURE EXAM	<u>150 POINTS</u>
TOTAL POINTS	400 POINTS

SCALE:

A = 90%
B = 80%
C = 70%
D = 60%

5. The lowest grade from the first exam, second exam or cumulative quizzes will be dropped. Therefore, your grade in lecture will be based on the two remaining scores and the final lecture exam. The final exam cannot be dropped.
6. Any quiz or exam the student fails to take at the appointed time cannot be made up unless a doctor's excuse is presented.
7. Incompletes are not normally given for any reason.

ABSENCES

Do not miss this class without an excuse. If you present some form of a document signed by your doctor then an absence can be excused. If you are experiencing some genuinely stressful situation other than illness (death in the family, pregnancy, etc.) let your instructor know and we'll see what we can do about it. Athletes - if you have to miss for a game or travel inform the instructor prior to your absence.

COURSE OUTLINE

WEEK	DATE	TOPIC	ASSIGNMENT
1	8/28/00	INTRODUCTION/MECHANICS	SYLLABUS
	8/30/00	INTRODUCTION TO LIFE	CH. 1
	9/1/00	THE ATOM	CH. 2
2	9/4/00	HOLIDAY - LABOR DAY	
	9/5/00	LAST DAY TO ADD/DROP	
	9/6/00	MOLECULES	CH. 2
	9/8/00	LIFE	CH. 2
3	9/11/00	AND MORE LIFE	CH. 3
	9/13/00	AND DEATH	CH. 3
	9/15/00	ENERGY FLOW	CH. 4
4	9/18/00	TO THE CELL	CH. 4
	9/20/00	TO THE CELL	CH. 4
	9/22/00	THROUGH THE MEMBRANE	CH. 5
5	9/25/00	THE PROS	CH. 6
	9/27/00	AND EUS	CH. 6
	9/29/00	AND CONS	CH. 6

6	10/2/00	FIRST LECTURE EXAM	
	10/4/00	PHOTOSYNTHESIS	CH. 7
	10/86/00	PHOTOSYNTHESIS	CH. 7
7	10/9/00	HOLIDAY - DISCOVERER'S DAY	
	10/11/00	AND	CH. 7
	10/13/00	YEAST	CH. 8
8	10/16/00	AND CELLULAR RESPIRATION	CH. 8
	10/18/00	AHHH! MID-SEMESTER EVALUATIONS	CH. 8
	10/20/00	THE SEARCH FOR D	CH. 9
9	10/23/00	-N-	CH. 10
	10/25/00	-A	CH. 10
	10/27/00	BACTERIA	CH. 11
10	10/30/00	AND FUNGI AND...	CH. 11
	11/1/00	OTHERS	CH. 11
	11/3/00	SECOND LECTURE EXAM	
11	11/6/00	MENDELIAN	CH. 12
	11/800	GENETICS	HANDOUTS
	11/10/00	GENETICS LAST DAY TO WITHDRAW FROM CLASSES	HANDOUTS

12	11/13/00	BIOTECHNOLOGY	CH. 13
	11/15/00	BIOTECHNOLOGY PRE-REGISTRATION BEGINS FOR SPRING, 2001	CH. 13
	11/17/00	CLONING	CH. 13
13	11/20/00	AND OTHERS	CH. 13
	11/21/00	LAST DAY TO WITHDRAW/ LAST DAY FOR CREDIT/NO CREDIT	
	11/22/00	EVOLUTION	CH. 14
	11/24/00	HOLIDAY -THANKSGIVING	
14	11/27/00	HISTORY	CH. 14
	11/29/00	PRESENT	CH. 14
	12/1/00	FUTURE	CH. 14
15	12/4/00	EVOLVING POST-COURSE ASSESSMENT SURVEY	CH. 15
	12/6/00	EVOLVING AND ADAPTATION	CH. 16
	12/8/00	EVOLUTION LAST DAY OF INSTRUCTION	CH. 16
16	12/11/00	FINAL EXAM, 10:30-12:30, HENRY HALL, RM. 17	
	12/15/00	CLEARANCE FOR 2001 MAY GRADUATION DUE	
	12/16/00	BACCALAUREATE SERVICE AND AWARDS CEREMONY	
	12/18/00	FALL COMMENCEMENT	