SE99 Instructor: Lisa Nagal phone #: 255-4244

GENERAL BIOLOGY SYLLABUS & COURSE OUTLINE
Biology 101 (3 credits)

Required Text: Audesirk, Teresa and Audesirk, Gerald. BIOLOGY: LIFE ON EARTH. Fifth Edition. 1999. Prentice Hall Publishing Company.

A. Introduction

Biology 101 is 3-credit introductory biological science course. Concepts of cellular and molecular biology are stressed in this one-semester course. The accompanying second semester (Biology 102) is devoted to organisms, stressing phylogenetic, ecological, and genetic relationships in plants and animals.

Goals of this course:

- To provide the student with a solid foundation of the basic concepts and principles of biology.
- To learn general concepts in the study of cells, genetics, and evolution.
- To learn how cells use matter and energy in order to sustain their life and growth.

  To examine and analyze specific areas, such as molecular and cellular biology, evolution, physiology, and related areas of biochemistry and biophysics.
- To develop critical thinking skills (versus pure memorization).
- To have students gain an appreciation of biology.

At the completion of this course, the student will be able to:

1. Analyze a scientific problem with methods Used in the sciences.
2. Use biological science terminology and communicate principles and concepts in written form.
3. Provide examples and applications of principles and concepts to daily life and in the biology field.

B. Grade determination

In-class lecture exams	90 % of grade
Writing assignments	10 % of grade

1. In-class lecture exams

There will be 3 in-class lecture exams which will be primarily multiple choice. However, here may be some questions that require short answers.

2. Writing assignments

A total of 3 writing assignments will be required. The purpose of the writing assignments is to enhance the material covered in lecture. (refer to page entitled "Instructions for Writing Assignments")

GENERAL BIOLOGY LAB SYLLABUS
Biology 101L (1 credit)
Spring 1999

A. Introduction

Biology 101 lab is a 1 credit course designed to accompany Biology 101 lecture. This course is designed to fulfill the following goals:

- **To apply the principles and concepts presented in lecture.**
- **To learn the structure and function of cells, tissues, and organs.**

  To have hands-on experience in conducting simple scientific experiments.
- **To gain a greater appreciation for biology.**

Objectives for students:

1. **Explain the scientific method as a mode of inquiry;**
2. **Demonstrate the use of various scientific tools and techniques;**
3. **Identify and describe plants and animals at the microscopic and macroscopic levels;**
4. **Design, conduct, interpret, and report experimental data in written form.**

B. Grade Determination

Lab notebook	**20% of your grade**
Lab reports & worksheets	**20% of your grade**
In-lab exams	**40% of your grade**
Pre-lab quizzes	**15% of your grade**
Attendance & Instructor evaluation	**5% of your grade**

1. LAB NOTEBOOK

You will be required to maintain a laboratory notebook. The purpose of the lab notebook is to keep a complete record of your laboratory experiments and investigations. The lab notebook should be a bond composition book. You will turn in your notebook twice in the semester.

YOU SHOULD ALWAYS BRING YOUR LAB NOTEBOOK TO CLASS.

Your instructor will only grade the RIGHT-HAND pages of your lab notebook. You may use the left-hand pages of your lab notebook to scribble notes, etc. The lab notebook should be written in blue or black ink ONLY. If you are drawing pictures, you may use pencil. Points will be deducted if these guidelines are not followed.

2. LAB REPORTS AND WORKSHEETS

Short lab reports will be required. Information regarding each report will be given on the lab handout.

3. IN-CLASS LAB EXAMS

There will be two in class lab exams for Biology 101 L.

4. PRE-LAB QUIZZES

There will be a pre-lab quiz prior to the beginning of almost every lab (see "The biology 101 and 101 lab course outline"). The

pre-lab quizzes will be only be on the material covered for that day. The purpose of the pre-lab quizzes is to help you to be prepared for the lab.

5. ATTENDANCE & INSTRUCTOR EVALUATION

Attendance is mandatory. There will be no opportunity for you to make up missed labs. Your instructor will evaluate you based on the following criteria:

- practices good lab safety
- helps clean up after lab
- prepared for lab
- having a good rapport with other students
- willing to participate actively in lab
- attitude

LATE ASSIGNMENTS

ALL assignments are due AT THE START OF CLASS. Ten percent of your grade for that assignment will be deducted for every class period that it is late.

Date	Lecture	Lab	Reminders
week 7 May 17 Mon	EXAM #2: 5, 7, 8, 9, 11		
May 19 (Wed)	Chapter 10		WRITING ASSIGNMENT #3 DUE
week 8 May 24 Mon	Chapter 12	Lab # 9: Genetics	
May 26 (Wed)	Chapter 13	La b #10: Biotechnology	✓ pre-lab quiz: biotechnology
week 9 May 31 Mon	HOLIDAY: Memorial Day		
June 2 (Wed)	Chapter 14	La b #11: video: Galapagos: Beyond Darwin	
week 10 June 7 **Mon**	Chapter 15	**LAB** EXAM #2: turn in your lab **notebook**	Trip to the zoo???
June 9 (Wed)	Chapter 16		
week 11 June 14 Mon	FINAL EXAM		

Biology 101 and 101 lab Course Outline

Date	Lecture	Lab	Reminders
week 1 April 5 Mon	Introduction/Ch. 1	Introduction	
April 7 (Wed)	Chapter 2	Lab #1: Amazon: Journey to a Thousand Rivers	
week 2 April 12 Mon	Chapters 3 & 4	Lab #2: Conversions	✓ Pre-lab quiz: conversions
April 13 (Wed)	Chapter 4 cont.	Lab #3: Biological Molecules	✓ Pre-lab quiz: biological molecules. ✓ Bring two food items from home to test. ***Meeting Chaminade, Hen Hall,***
week 3 April 19 Mon	Enzymes	Lab #4: Enzymes/Microscope	✓ Pre-lab quiz: enzymes ***Meeting @ Chaminade, Henry Hall.***
April 21 (Wed)	Chapter 6	Lab #5: Cell Structure	✓ Pre-lab quiz: cell structure ***Meeting @ Chaminade, Henry Hall.*** WRITING ASSIGNMENT #1 DUE
week 4 April 26 Mon	EXAM #1: 1, 2, 3, 4, 6		
April 28 (Wed)	Chapter 5	Lab #6: Osmosis and Cell Membrane	✓ Pre-lab quiz: osmosis and cell membrane
week 5 May 3 Mon	Chapter 8	LAB EXAM #1: turn in your lab notebook	
May 5 (Wed)	Chapter 7	Lab #7: Photosynthesis	WRITING ASSIGNMENT #2 DUE
week 6 May 10 Mon	Chapter 9		
May 12 (Wed)	Chapter 11	Lab #8: Mitosis	Pre-lab quiz: mitosis ***Meeting Chaminade, Hen Hall.***