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Biology 101L01 and 101L02 General Biology Laboratory
Chaminade University of Honolulu
Fall 2000

BI 101L01 Tuesdays, 11:00 am-1:50 pm
Dr. Ellen Shimakawa
Office: Henry Hall Room 3
eshimaka@chaminade.edu

BI 101 L02 Thursdays 11:00 am-1:50 pm
Mrs. Patricia Lee-Robinson
Office: Henry Hall Room 16
Office Hours: M 1-2 pm, TR 8:30-9:15, and by appointment
leerobin@hawaii.edu

Grade determination

Tentative laboratory schedule

General Biology Laboratory Syllabus and Course Outline

Text: There is no required text for this class. Handouts will be provided.

Course Description: Laboratory to accompany Biology 101 lecture.

Aims and Goals of the Course: This course is designed to fulfill the following goals:

1. To present principal methods or techniques coupled with appropriate instruments utilized in the study of cells **and organisms**;
2. To learn structure and function of cells, tissues, and organs by microscopic viewing;
3. To allow investigation and problem solving by manipulative and experimental methodology including preparation of written laboratory reports;
4. To examine applications of principles and concepts presented in lecture, such as the relationship between osmosis and kidney dialysis machines

Objectives for students: At the completion of the course, the student will be able to do the following:

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.

Laboratory preparation, outline, and attendance:

1. Preparation of laboratory assignments listed on the lab outline by the student prior to the laboratory is essential for successful completion of the laboratory. Read the lab handouts BEFORE lab.
2. The laboratory outline is a tentative outline and adjustments may be made with topics omitted or added.
3. Attendance is mandatory for the laboratory. Laboratory absences, with a valid reason to be determined by the instructor, must be made up. Unexcused absences will result in the lowering of the final grade by one letter grade level for each unexcused lab absence.

Laboratory notebook

1. All students will be required to maintain a looseleaf laboratory notebook into which all laboratory handouts and reports will be placed. Lab notebooks will be checked from time to time and graded.
2. Notebooks are turn in for grading at the time of the lab exams. Notebooks that are one day late will be penalized by one grade level and no credit will be given for lateness beyond one day. This is the Biology Department policy on late notebooks and papers.

Laboratory reports

Short lab reports will be required. Information regarding each report will be given on the lab handout. Students may be asked to submit reports electronically.

Grade determination

1. Separate grades will be given for lecture and for laboratory. It is therefore possible to receive different grades for lecture and laboratory.
2. Grades will be assigned according to a class curve.
3. There will be two lab practical examinations with each consisting of station questions. Station questions are those questions in which the student has a fixed amount of time to identify the organism under a microscope, relate a function of a structure, explain a graph, relate an objective to a specific laboratory, or demonstrate how an instrument functions. Each exam will include material completed prior to the exam; the second exam will include material covered since the midterm exam.
4. There will be both announced and unannounced quizzes. Makeup quizzes will not be given.
5. The laboratory grade will be determined in the following manner:

Two lab practical examinations@50 pts each	100 points
Lab reports and worksheets.....	100 points
Quizzes.....	50 points
Lab notebook.....	50 points

Total.....	300 points
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Class standing, office hours and extra_ help:

1. Students may obtain their grades at any time by consulting with the instructor. Students with D or F grades will receive deficiency notices. It is recommended that students receiving deficiency notices make an appointment to see the instructor.
2. Office hours are listed at the beginning of the syllabus. Students are urged to make appointments if students schedules conflicts with office hours.
3. Tutoring services are available through the Chaminade University Learning Center.

Every effort has been made to insure that the material in this syllabus and course outline is accurate and complete. However, occasionally changes must be made in the primed schedule. Thus, the instructor reserves the right to make any changes in the contents of this syllabus or in the course of study that she deems necessary or desirable. These changes, if any, will be announced as soon as the need for them becomes apparent.

Tentative laboratory schedule

Aug 29/31	Introduction to laboratory
	Data Collection
Sept 5/7	Review of Instruments and Glassware
	Metric System
	Microscopy
Sept 12/14	Microscope "i7
	<u>Biological molecules</u>
Sept 19/21	Enzyme Kinetics
Sept 26/28	Cell membranes
	Diffusion, osmosis
Oct 3/5	otosy thesis
Oct 10/12	Examination I
Oct 17/19	Mitosis and Meiosis
Oct 24/26	Drosophila lab
At	ndelian and Human Genetics
Oct 31/Nov	oratory
Nov 7/9	nt
November 13:	Last day to withdraw from classes
Nov 14/16	Laboratory
Nov 21 M	
	Field Trip: Waikiki Aquarium
Dec 5/7	Lab Practical Examination II