

BI215L -- Cellular and Organismal Biology Laboratory

Fall 2015

Syllabus

Instructor: Dr. Michael Weichhaus
Address: Wesselkamper, Room 107
Phone: 440-4286
Email Address: michael.weichhaus@chaminade.edu
Office Hours: Tue: 13:00-17:00, Wed: 13:00-17:00
Class Hours: Friday 02:30PM - 05:20PM, Henry Hall, Room L1

COURSE DESCRIPTION AND GOALS: BI215L is a 1 semester credit introductory biological science laboratory for those students enrolled in BI215 - Cellular and Organismal Biology I. This laboratory course is for students desiring advanced studies in the sciences, e.g., biology, forensic science, medicine, dentistry, environmental health, and other areas.

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

1. To present principal methods and techniques coupled with appropriate instruments utilized in the study of cells and organisms;
2. To allow investigation and problem solving by manipulative and experimental methodology including preparation of written laboratory reports;
3. To examine applications of principles and concepts in lecture, such as the relationship between;
4. To work collaboratively in order to accomplish a common goal, i.e., lab experiment;
5. To learn structure and function of cells, tissues, and organs by microscopic examination of preserved specimens, and dissection.

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

1. apply the Scientific Method to observable phenomenon;
2. identify specific biological equipment;
3. distinguish between quantitative and qualitative chemical tests;
4. identify biological specimens;
5. identify cellular and tissue types and structures;
6. identify different techniques;
7. identify parts of a scientific laboratory report;
8. understand and set-up an experimental procedure;
9. develop an appreciation of working collaboratively in groups;

Laboratory preparation, outline, and attendance:

1. Preparation of laboratory assignments listed on the lab outline and presented in lab handouts are essential in successful completion of the laboratory and safety of your fellow students.
2. Handouts in the laboratory outline refer to assignments not in the lab manual. Lab handouts will be given to students prior to the laboratory exercise and include procedures and instructions for the laboratory.
3. Attendance for the laboratory is mandatory. Laboratory absences must be documented by valid excuses, such as a physician's excuse. Grade penalties may be imposed for unexcused absences by the instructor.

Laboratory notebook:

1. All students will be required to maintain a bound laboratory notebook into which ALL laboratory information and data is to be entered. Lab notebooks will be graded twice and are to be handed in on exam days.
2. Notebooks must be bound with non-tear out pages. No spiral notebooks, as are three holed folder paper.
3. Additional formatting information is available on the google drive

Laboratory Summaries:

1. A written report will be required on two lab exercises. The report should be written so that it could be understood by another student in a similar biological course, but who has not done the same lab exercise. Points will be taken for spelling and grammar. Lab work can be done in groups, but lab reports must be done individually.
2. Late lab reports will receive deductions on the grade.

Grade Determination:

1. Separate grades will be given for lecture and laboratory. It is possible to receive different grades for lecture and laboratory.
 2. The instructor does not curve grades or grade scores. Grades will be determined according to the scale below.
 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 specified period of time to identify the organism under a microscope, relate a function of a structure or explain a graph. The first exam will include material completed **prior** to the exam; the second exam will include material covered since the midterm exam, it is not cumulative.
2. The laboratory grade will be determined in the following manner:

Attendance & Participation	10%
Lab Summaries	10%
Homework	10%
Presentation	5%
Lab Notebook	15%
<u>2 Exams</u>	<u>50%</u>
Total	100%

Grading scale:

A	90 – 100%
B	80 – 89%
C	70 – 79%
D	50 - 69%
F	less than 50%

Class standing 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 verbal notification and/or deficiency notices. It is mandatory that students receiving deficiency notices make an appointment to see the instructor.
2. Tutoring services are available through the Chaminade University Learning Center. The Biology Department provides upper class students majoring in biology as tutors. Please contact the AAP regarding availability of tutoring services.

Situations to avoid:

1. Tardiness and Absences:
Arriving late will cause you to miss important information and instructions given at the beginning of each class session. Please be on time as a mark of respect for your instructor and classmates, and be discreet in entering the lab if you must come late. Avoid skipping class and contact me if you cannot attend a class.
2. Turning in assignments late:
There are no make-ups for exams, unless a physician's note documents your absence during exams. Lecture presentations CANNOT be made-up. Assignments turned in late will be assessed a penalty: a half-letter grade if it is one day late, or a full-letter grade for 2-7 days late. will not be accepted if overdue by more than seven days.

Departmental and University Policies:

1. *Music Devices and Cellular Phones:* Use of music devices and cell phones is prohibited during all Natural Science and Mathematics classes at Chaminade, unless specifically permitted by your instructor. Use of cellphones and music devices in laboratories is a safety issue. In addition, use of cellphones and music devices in any class is discourteous and may lead to suspicion of academic misconduct. Students who cannot comply with this rule will be asked to leave class and may be subject to laboratory safety violation fines. You will be asked to leave class and marked absent if you do not comply. This will negatively affect your grade. Please refer any questions to the Dean of Natural Sciences and Mathematics.
2. *ADA Accommodations:* Pursuant to several federal and state laws, including the Americans with Disabilities Act of 1990, as amended by the ADA Amendments Act of 2008, and Section 504 of the Rehabilitation Act of 1973, all qualified students with disabilities are protected from discrimination on basis of disability and are eligible for reasonable accommodations or modifications in the academic environment to enable them to enjoy equal access to academic programs, services, or activities. If a student would like to determine if they meet the criteria for accommodations, they should contact the

Counseling Center at 808-735-4845 for further information. Students with special needs who meet criteria for the Americans with Disabilities Act (ADA) provisions must provide written documentation of the need for accommodations from CUH Counseling Center (Dr. June Yasuhara, 735-4845) by the end of the third week of classes. Failure to provide written documentation will prevent your instructor from making necessary accommodations.

3. *Policy on Communication:* The University provides a Chaminade email address for all students. Official Chaminade communications will be sent to the students' Chaminade email address and instructors will use only this email to communicate with students. It is the responsibility of the student to check their email frequently. Report email-related problems to the Helpdesk at 808-735-4855 or helpdesk@chaminade.edu.
4. *Title IX Declaration:* Chaminade University of Honolulu recognizes the inherent dignity of all individuals and promotes respect for all people. Sexual misconduct, physical and/or psychological abuse will NOT be tolerated at CUH. If you have been the victim of sexual misconduct, physical and/or psychological abuse, we encourage you to report this matter promptly. As a faculty member, I am interested in promoting a safe and healthy environment, and should I learn of any sexual misconduct, physical and/or psychological abuse, I must report the matter to the Title IX Coordinator. Should you want to speak to a confidential source you may contact the following:
Chaminade Counseling Center 808 735-4845;
Any priest serving as a sacramental confessor or any ordained religious leader serving in the sacred confidence role.
5. *Academic Honesty:* Students are expected to have read and to abide by the "Student Rules of Conduct" which are available in your copy of Chaminade University's Student Handbook. Cheating in the form of plagiarism, collusion, deception and will not be tolerated and will negatively affect your grade.

Because the university is an academic community with high professional standards, its teaching function is seriously disrupted and subverted by academic dishonesty. Such dishonesty includes, but is not limited to, cheating, which includes giving/receiving unauthorized assistance during an examination; obtaining information about an examination before it is given, using inappropriate/unallowed sources of information during an examination; altering answers after an examination has been submitted; and altering the records on any grade. (Refer to the Chaminade University catalog for further information).

Tentative Course Outline (subject to change as instructor sees fit)

Week	Date	Lab topic	Assignments
1	08/27	Lab Safety Intro to Scientific Method	Journal Article due next week
2	09/03	Scientific Method	Journal Article Discussion of Figures
3	09/10	Phylogenetics	Lab Summary due next week
4	09/17	Plant Diversity & Microbiomes – prep for upcoming field trip labs	Homework due next week
5	09/24	Lyon Arboretum Field Trip	Homework due next week
6	10/01	Kaloko Cove Field Trip	Powerpoint presentation due next week
7	10/08	Field Trip Data Analysis	Data analysis homework due next week
8	10/15	EXAM 1	
9	10/22	Invertebrate Dissections	Data analysis homework due next week
10	10/29	Vertebrate Dissections	Compare and Contrast observational paper due next week
11	11/05	Anatomy and Physiology	Homework due next week
12	11/12	Veterans Day Holiday – All labs cancelled this week	Homework due next week
13	11/19	Anatomy and Physiology	
14	11/26	Thanksgiving Day Holiday – All labs cancelled this week	
15	12/03	EXAM 2	