

## **Biology 101L – General Biology Laboratory Spring 2017**

**Instructor:** M. McDermott (mindy.mcdermott@chaminade.edu)  
**Office Hours:** By appointment or via email.  
**Course Location:** Henry Hall, Room L1  
**Course Meeting Time:** Mondays, 2:30PM – 5:20PM

**Course Description:** Biology 101L is a one-semester credit introductory biological science laboratory for those students enrolled in Biology 101 - General Biology. The laboratory course is for students desiring to fulfill lab science requirements for non-science majors. Concurrent registration in Biology 101 and Biology 101L is necessary for science credit.

This class will give the student an overview of basic laboratory practices and biological principles, environmental pollution, genetic engineering, evolutionary principles, global warming, and other related topics in biology.

### ***Goals:***

1. Present principal methods and techniques coupled with appropriate instruments used in the study of cells and organisms.
2. Allow investigation and problem solving by manipulative and experimental methodology.
3. Examine the applications of principles and concepts in lecture, such as the relationship between humans and their environment.
4. Work collaboratively to accomplish a common goal, i.e. lab experiment.
5. Learn structure and function of cells, tissues, and organs by microscopic viewing.

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

1. Be familiar with the use of and measurement with microscopes.
2. Identify and use specific biological equipment and methods.
3. Present scientific work both orally and in writing.
4. Develop an appreciation of working collaboratively in groups.
5. Learn how to collect field data.

**Laboratory Preparation and Attendance:** Preparation of laboratory assignments and attendance is essential in the successful completion of the laboratory and for the safety of your fellow students.

**Attendance for the Lab is Mandatory:** Laboratory absences must be documented by valid excuses, such as a physician's excuse. Grade penalties will be imposed for unexcused absences by the instructor. Please inform me (preferably beforehand) if you are unable to attend a lab, but note that only documented absences will be excused. Due to limited lab space, equipment, and personnel, no lab make-up labs are available. Field trips will be discussed in class.

**Grade Determination:** Separate grades will be given for lecture and laboratory. It is possible to receive different grades for lecture and laboratory.

Grades will be determined according to the scales used in lecture.  
There will be two lab examinations.  
The laboratory grade will be determined in the following manner:

Exam 1:	25%	Scale
Exam 2:	25%	A = 90 – 100%
Presentations/Lab Team Assignments:	30%	B = 80 - 89%
Other Lab Assignments:	20%	C = 70 - 79%
		D = 60 - 69%
		F = below 60%

\*Tutoring services are available through Chaminade's AAP program.

**Lab Safety:** While in the laboratory, for lecture or lab, students must wear closed toe shoes. Laboratory safety practices include the use of lab coats, safety glasses, and gloves when appropriate. No food or drink is allowed in the laboratory at any time.

**Participation in Discussion:** Your learning depends, in part, on your cognitive participation. Participation includes helping other students, handing in written assignments, sharing information, providing information from a web search, and contributing in an academic fashion to class discussions.

***After completing this course, the student will be able to:***

1. Understand the scientific method.
2. Understand and make conversions using the metric system.
3. Understand the importance of microscopes as a biological tool; know the parts of a microscope and how they function; preparation of slides and staining technique.
4. Demonstrate the ability to perform bacterial isolation using sterile technique.
5. Understand the process of cell division.
6. Demonstrate a basic understanding of the concepts of genetics, and patterns of inheritance.
7. Demonstrate a basic understanding of photosynthesis and plant anatomy.
8. Demonstrate an understanding of animal anatomy and physiology.
9. Demonstrate an understanding of the process of evolution and natural selection.
10. Demonstrate an understanding of principles of ecology and environmental conservation.

***Policy Reminders and Notices.***

1. Attendance is mandatory for each lecture and laboratory. Attendance for the laboratory is especially important and unexcused absences for both lecture and laboratory will result in penalties to be determined by the instructor. It is university policy that any student who stops attending a course without officially withdrawing may receive a failing grade (SH, p. 34).
2. You 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 (SH).
3. 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 cell phones and music devices in laboratories is a safety issue. In addition, use of cell phones 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. Please refer any questions to the Dean of Natural Sciences and Mathematics.

4. You may bring and use your laptops or tablets to lecture for the purpose of taking notes. However, on exam days, you may not use any electronic devices including smartphones, tablets, or laptops.

5. You may not record audio, images, or video in the classroom without expressed permission of the instructor.

6. 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](mailto:helpdesk@chaminade.edu).

7. You are encouraged to work together; however, all graded material must be your own. Cheating in the form of plagiarism (offering of work of another as one's own, SH, p. 33) and deception 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/prohibited 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 of Honolulu (CUH) catalog for further information).

8. Title IX Declaration: CUH recognizes the inherent dignity of all individuals and promotes respect for all people. Sexual misconduct, physical abuse, and/or psychological abuse will NOT be tolerated at CUH. If you have been the victim of sexual misconduct, physical abuse, 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 abuse, 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 at 808-735-4845, any priest serving as a religious confessor, or any ordained religious leader serving in the sacred confidence role.

9. Pursuant to several federal and state laws, including the Americans with Disabilities Act (ADA) 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 the 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 who meet criteria for the Americans with Disabilities Act provisions must provide written documentation from CUH Counseling Center (Dr. June Yasuhara, 808-735-4845) by the end of the third week of classes. Failure to provide written documentation will prevent your instructor from making necessary accommodations.