

Fall 2018 Syllabus

Course Code: BI-430L



I. Instructor Information

Dr. Frederique Kandel
Assistant Professor
Office: Henry 123B
Office hours: M:11:00-Noon & 2:30pm-5:30pm; W:11-Noon;
and by appointment
frederique.kandel@chaminade.edu

II. Course Information

TH 2:30PM - 5:20PM
Henry Hall lab 3

III. Text: There is no text for this lab course but your class manual is a good reference.(ISBN-13: 978-0-13-460518-0 Microbiology: An Introduction, By Gerard J. Tortora, Berdell R. Funke, Christine L. Case, Derek Weber, 13th edition.)
Material will be supplied as needed using canvas posts or hard copies.

IV. Course Title: BI-430-01-1 Microbiology Laboratory.

V. Course Description: BI 430L is the laboratory corresponding to BI 430. This laboratory is designed to allow the student to experience hands-on applications of the concepts explored in class.

VI. Learning Outcomes.

Departmental learning outcomes:

1. An understanding of the scientific method and the ability to design and test a hypothesis;
2. The ability to visualize, statistically evaluate, validate and interpret scientific data, and to communicate science effectively both orally and in writing;
3. The ability to acquire and comprehend information from published scientific literature and to employ computational resources in the resolution of biological problems;
4. An understanding of the chemical and physical principles that unite all life forms, and of biological organization at the molecular, cellular, tissue, organ, organism and system levels;
5. The ability to define the components and processes of genetic and epigenetic information transmission, and their determinant effects on the adaptive and evolutionary processes that they drive;
6. An understanding of the etiology of major human disease burdens in terms of pathophysiological mechanisms, epidemiology within populations and possible therapeutic approaches
7. An understanding of the entry requirements, career pathways and progression for the major post-graduate fields of research, education and the health professions.

BI 250L learning outcomes:

<i>Upon Completion of this course, students will be able to:</i>		Program outcome link.
1	Apply safe laboratory practices	1, 2
2	List, explain and experience the steps of the scientific method	1, 2, 3,
3	Use microscopy techniques to observe the main types of microorganisms discussed in class.	1, 2, 4, 6
4	Experiment with various methods of microbial culture	1, 2, 4, 5, 6
5	Make use of various techniques to identify microorganisms	1, 2, 4, 5, 6
6	Apply laboratory techniques to quantify microorganisms	1, 2, 3, 4, 6
7	Conduct experiments and write clear reports of experimental findings	1, 2, 3, 4, 5, 6

VIII. Grading Scale

A	Excellent	>90%
B	Good	≥80% <90%
C	Average	≥70% <80%
D	Below Average	≥60% <70%
F	Failure	<60%

IX. Assignments and Grading

	<u>Points</u>	<u>% Of Grade</u>	<u>Due Date</u>
Homework/Reports/Presentation/Quizzes	90	30	Weekly
Midterm	90	30	10/11/2018 (tentative date)
Final	90	30	11/29/2018 (tentative date)
Attendance/participation	30	10	Ongoing evaluation
Total	300	100	

XI. Additional Departmental and University Policies

1. Electronic Devices

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. ADAA Statement

2.1 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.

3. Attendance

3.1 Students are expected to attend regularly all courses for which they are registered but this is particularly crucial for laboratory courses. Generally there are no make-up laboratory sessions but in certain exceptional circumstances it might be possible for a student to attend one of the other lab sessions that week, with permission of the instructor(s). Students should notify their instructors when illness or other extenuating circumstances prevents them from attending lab and make arrangements to complete missed assignments. Notification may be done by emailing the instructor's Chaminade email address. It is the instructor's prerogative to modify deadlines of course requirements accordingly. Any student who stops attending a course without officially **withdrawing** may receive a failing grade.

3.2 Unexcused absences equivalent to more than a week of classes may lead to a grade reduction for the course. Any unexcused absence of two consecutive weeks or more may result in being **withdrawn** from the course by the instructor, although the instructor is not required to **withdraw** students in that scenario. Repeated absences put students at risk of failing grades.

4. Policy on Make-Up Tests

Generally there are no make-up laboratory Tests but in certain exceptional circumstances it might be possible for a student to attend one of the other examination that week, with permission of the instructor.

5. Policy on Communication

5.1 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.

6. Laboratory Safety Information

The following guidelines are established to provide instructions in maintaining safety for students, staff, and faculty while using any of the science laboratories at Chaminade University. The Division of Natural Sciences and Mathematics (NSM), along with the University Environmental Safety Office are responsible for enforcing the regulations set forth in the current Student Handbook. Queries should be addressed to: Dean of Natural Sciences and Mathematics (808) 440-4204; Environmental Safety Officer (808) 739-4811

7. 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.

8. 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.

9. The instructor may modify elements of this syllabus according to the operational needs of the class.

10. Tentative schedule:

8/30/2018	Microscopy/simple staining
9/6/2018	The five Is of microbiology/gram staining
9/13/2018	Differential and selective media preparations tests
9/20/2018	Differential and selective media results/bacterial count setup
9/27/2018	Bacterial count results/ Antibiotic sensitivity testing prep
10/4/2018	Antibiotic sensitivity testing results/review lab/Guest speaker (tentative)
10/11/2018	MIDTERM EXAM
10/18/2018	Eukaryotic microorganisms observation and culture 1
10/25/2018	Eukaryotic microorganisms observation and culture 2
11/1/2018	Marine Plankton/Isolating bioluminescent bacteria 1
11/8/2018	Isolating bioluminescent bacteria 2
11/15/2018	Isolating bioluminescent bacteria 3
11/22/2018	Thanksgiving holiday. No Class
11/29/2018	FINAL-Isolating bioluminescent bacteria results/Student presentations