



Chaminade
University
OF HONOLULU

Course Syllabus

[Chaminade University Honolulu](http://www.chaminade.edu)

3140 Waiialae Avenue - Honolulu, HI 96816

www.chaminade.edu

Course Number: BI-101L-01-1

Course Title: General Biology lab.

Department Name: Biology

College/School/Division Name: NSM

Term: Fall

Course Credits: 1

Class Meeting Days: Monday

Class Meeting Hours: 02:30PM -
05:20PM,

Class Location: Henry Hall, Room L0

Instructor: Gang-Ming Zou, PhD.

Email: gang-ming.zou@chaminade.edu

Phone: TBA

Office Location: Henry Hall 123C

Office Hours: Tuesday 11am to 12:01pm and by appointment.



University Course Catalog Description

Biology 101L is a 1-credit introductory biological science course for those students desiring to fulfill credits leading to a non-science bachelor's degree. Concurrent registration in Biology 101 Lab (1 credit) is required. There are no science pre-requisites for this course.

This is an accelerated introductory course to general biology with major emphasis on cellular biology. We will be looking at the cell as the basic unit of life and the biochemical processes that occur within the cell in order to ensure its survival. We will also investigate basic genetics and the fundamental concepts of evolution.

Course Overview

Marianist Values

This class represents one component of your education at Chaminade University of Honolulu. An education in the Marianist Tradition is marked by five principles and you should take every opportunity possible to reflect upon the role of these characteristics in your education and development:

1. **Education for formation in faith**
2. **Provide an integral, quality education**
3. Educate in family spirit
4. Educate for service, justice and peace
5. Educate for adaptation and change

Native Hawaiian Values

Education is an integral value in both Marianist and Native Hawaiian culture. Both recognize the transformative effect of a well-rounded, value-centered education on society, particularly in seeking justice for the marginalized, the forgotten, and the oppressed, always with an eye toward God (Ke Akua). This is reflected in the 'Olelo No'eau (Hawaiian proverbs) and Marianist core beliefs:

1. Educate for Formation in Faith (Mana) E ola au i ke akua ('Olelo No'eau 364) May I live by God
2. Provide an Integral, Quality Education (Na'auao) Lawe i ka ma'alea a kū'ono'ono ('Olelo No'eau 1957) Acquire skill and make it deep
3. Educate in Family Spirit ('Ohana) 'Ike aku, 'ike mai, kōkua aku kōkua mai; pela iho la ka nohana 'ohana ('Olelo No'eau 1200) Recognize others, be recognized, help others, be helped; such is a family relationship
4. Educate for Service, Justice and Peace (Aloha) Ka lama kū o ka no'eau ('Olelo No'eau 1430) Education is the standing torch of wisdom
5. Educate for Adaptation and Change (Aina) 'A'ohe pau ka 'ike i ka hālau ho'okahi ('Olelo No'eau 203) All knowledge is not taught in the same school

Laboratory Biology program learning outcome

1. Apply the scientific method, including drawing testable hypotheses from observations and data.
2. Examine abiotic influences on enzymatic activity.
3. Examine cellular respiration, photosynthesis, mitosis, and meiosis.
4. Predict patterns of inheritance according to Mendelian genetics.
5. Demonstrate proficiency in techniques such as DNA isolation and gel electrophoresis.
6. Operate compound and dissecting microscopes, including the preparation of wet mounts and staining of specimens.
7. Classify organisms according to basic principles of taxonomy, including the use of a taxonomic key.
8. Explain the structure of prokaryotic cells, as well as differences between major groups of prokaryotes.
9. Describe the structure and function of macroscopic fungi, including dissection and labeling of important anatomical features.
10. Describe the structure and function of invertebrates and vertebrates, including the dissection and labeling of important anatomical features.

COURSE STRUCTURE:

This course is taught in correlation with the laboratory portion. Lectures will be formal and full attendance is required. In the event of an absence, lecture information will not be provided by the instructor. It is the student's responsibility to network with peers to get the relevant information.

Office hours: I will not have formal office hours. In lieu of office hours, you may contact me via email or cellular phone (text: anytime or call: during normal business hours). In addition, I strongly encourage you to ask as many questions as you'd like, via text/phone or by email.

GRADING:

Your grade will be determined based on your scores on three exams (One midterms and a cumulative final exam) and five quizzes. Each of the three semester exams will be worth 100 points. The Five quizzes will be worth 20 points each for a potential total of 100 points.

	<u>% Of Grade</u>	<u>Due Date</u>
Assignments/Quizzes	30	Weekly
Midterm	30	03/21/2021 (tentative date)
Final	30	05/02/2022
Attendance/discussions	10	Ongoing evaluation
Total	100	

A: 90 - 100%;

B: 80 – 89%;

C: 70 – 79%;

D: 60 – 69%;

F: 0-59%.

Exam dates and quiz due dates are clearly listed on the class schedule in BOLD type below. If you know you are to miss an exam date, you must notify the instructor before the exam session in order to obtain an extension. Once corrected exam papers are returned to the class, no exams will be accepted, regardless of the excuse.

Grading Scale

Letter grades are given in all courses except those conducted on a credit/no credit basis. Grades are calculated from the student's daily work, class participation, quizzes, tests, term papers, reports and the final examination. They are interpreted as follows:

A Outstanding scholarship and an unusual degree of intellectual initiative

B Superior work done in a consistent and intellectual manner

C Average grade indicating a competent grasp of subject matter

D Inferior work of the lowest passing grade, not satisfactory for fulfillment of prerequisite course work

F Failed to grasp the minimum subject matter; no credit given

Course Prerequisites

Prerequisites: priority will be given to students accepted in the CUH Nursing Major.

Course Website:

<https://chaminade.instructure.com/courses/17367>

Technical Assistance for Canvas Users:

- Search for help on specific topics or get tips in [Canvas Students](#)
- [Live chat with Canvas Support for students](#)
- Canvas Support Hotline for students: +1-833-209-6111
- Watch this [video to get you started](#)
- [Online tutorials](#): click on “Students” role to access tutorials
- Contact the Chaminade IT Helpdesk for technical issues: helpdesk@chaminade.edu or call (808) 735-4855

Tutoring and Writing Services

Chaminade is proud to offer free, one-on-one tutoring and writing assistance to all students. Tutoring and writing help is available on campus at Kōkua ‘Ike: Center for Student Learning in a variety of subjects (including, but are not limited to: biology, chemistry, math, nursing, English, etc.) from trained Peer and Professional Tutors. Please check Kōkua ‘Ike’s website (<https://chaminade.edu/advising/kokua-ike/>) for the latest times, list of drop-in hours, and information on scheduling an appointment. Free online tutoring is also available via TutorMe. Tutor Me can be accessed 24/7 from your Canvas account. Simply click Account – Notifications – TutorMe. For more information, please contact Kōkua ‘Ike at tutoring@chaminade.edu or 808-739-8305.

Course Policies**Late Work Policy**

Assignments must be submitted by the due date. In case of issues, contact the instructor as soon as possible.

Grades of "Incomplete"

As per catalog policy, under exceptional circumstances the instructor can grant an incomplete grade. The work will have to be completed within 90 days.

Instructor and Student Communication

Please use your Chaminade email or canvas to communicate with the instructor via email outside the class. Response time will be within four business days. In-person and Zoom conferences can be arranged.

Cell phones, tablets, and laptops

Out of consideration for your classmates, please set your cell phone to silent mode during class. Students are encouraged to bring laptops or tablets to class as the instructor will assign online

activities and readings that will require the use of a laptop or tablet. Laptops and tablets should not be misused, such as checking distracting websites. Use your best judgment and respect your classmates and instructor.

Disability Access

If you need individual accommodations to meet course outcomes because of a documented disability, please speak with me to discuss your needs as soon as possible so that we can ensure your full participation in class and fair assessment of your work. 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 Kōkua 'Ike: Center for Student Learning by the end of week three of the class, in order for instructors to plan accordingly. If a student would like to determine if they meet the criteria for accommodations, they should contact the Kōkua 'Ike Coordinator at (808) 739-8305 for further information (ada@chaminade.edu).

Title IX Compliance

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. If you or someone you know has been harassed or assaulted, you can find the appropriate resources by visiting Campus Ministry, the Dean of Students Office, the Counseling Center, or the Office for Compliance and Personnel Services.

Attendance Policy

The following attendance policy is from the 2022-2023 Academic Catalog (p. 54-55). Faculty members should also check with their divisions for division-specific guidelines.

Students are expected to attend regularly all courses for which they are registered. Student should notify their instructors when illness or other extenuating circumstances prevents them from attending class and make arrangements to complete missed assignments. Notification may be done by emailing the instructor's Chaminade email address, calling the instructor's campus extension, or by leaving a message with the instructor's division office. **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.**

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.

Students with disabilities who have obtained accommodations from the Chaminade University of Honolulu Tutor Coordinator may be considered for an exception when the accommodation does not materially alter the attainment of the learning outcomes.

Federal regulations require continued attendance for continuing payment of financial aid. **When illness or personal reasons necessitate continued absence, the student should communicate first with the instructor to review the options.** Anyone who stops attending a course without official withdrawal may receive a failing grade or be withdrawn by the instructor at the instructor's discretion.

Academic Conduct Policy

From the 2021-2022 Undergraduate Academic Catalog (p. 39):

Any community must have a set of rules and standards of conduct by which it operates. At Chaminade, these standards are outlined so as to reflect both the Catholic, Marianist values of the institution and to honor and respect students as responsible adults. All alleged violations of the community standards are handled through an established student conduct process, outlined in the **Student Handbook**, and operated within the guidelines set to honor both students' rights and campus values.

Students should conduct themselves in a manner that reflects the ideals of the University. **This includes knowing and respecting the intent of rules, regulations, and/or policies presented in the Student Handbook**, and realizing that students are subject to the University's jurisdiction from the time of their admission until their enrollment has been formally terminated. Please refer to the Student Handbook for more details. A copy of the Student Handbook is available on the Chaminade website.

For further information, please refer to the Student Handbook: <https://chaminade.edu/wp-content/uploads/2019/08/NEW-STUDENT-HANDBOOK-19-20-Final-8.20.19.pdf>

Credit Hour Policy

The unit of semester credit is defined as university-level credit that is awarded for the completion of coursework. One credit hour reflects the amount of work represented in the intended learning outcomes and verified by evidence of student achievement for those learning outcomes. Each credit hour earned at Chaminade University should result in 45 hours of engagement. This equates to one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester, 10-week term, or equivalent amount of work over a different amount of time. Direct instructor engagement and out-of-class work result in total student engagement time of **45 hours for one credit**.

The minimum 45 hours of engagement per credit hour can be satisfied in fully online, internship, or other specialized courses through several means, including (a) regular online instruction or interaction with the faculty member and fellow students and (b) academic engagement through extensive reading, research, online discussion, online quizzes or exams; instruction, collaborative group work, internships, laboratory work, practice, studio work, and preparation of papers, presentations, or other forms of assessment. This policy is in accordance with federal regulations and regional accrediting agencies.

Schedule (Draft).

Week 1	01/10/2022	Introduction to the lab. Safety briefing, and Syllabus, Training in Pipet use
Week 2	01/17/2022	Martin Luther King Day
Week 3	01/24/2022	Measurement of Biology: Metric system and data analysis

Week 4	01/31/2021	Use of the microscope.	Quiz 1
Week 5	02/07/2022	Protein assay (Chapter 3)	
Week 6	02/14/2022	DNA extraction (Chapter 3)	Quiz 2
Week 7	02/21/2022	President day	
Week 8	02/28/2022	Total Carbohydrate Assay (Chemical analysis of food) (Chapter 3)	
Week 9	03/07/2022	Cell structure/Prokaryote/Microscope (Chapter 4)	Quiz 3
Week 10	03/14/2022	Cell structure/Eukaryote/Microscope. (Chapter 4)	
Week 11	03/21/2022	REVIEW AND MIDTERMS	
Week 12	03/28/2022	PCR (Chapter 17)	Quiz 4
Week 13	04/04/2022	Enzyme analysis. (Chapter 4 & 17)	
Week 14	04/11/2022	Plasmid analysis (Chapter 17)	
Week 15	04/18/2022	Stem cell analysis (Microscope) (Chapetr17.5.4)	Quiz 5
Week 16	04/25/2022	Study guide review and preparation for final exam	
Week 17	05/02/2022	LAB FINAL EXAM	

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