



Chaminade University

OF HONOLULU

Course Syllabus

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

3140 Waiālae Avenue - Honolulu, HI 96816

Course Number: BC/CH 323L-03

Course Title: Organic Chemistry Lab I

Department Name: Natural Sciences and Mathematics

College/School/Division Name: NSM, Division of Chemistry and Biochemistry

Term: Fall 2023

Course Credits: 1

Class Meeting Days: Tuesday

Class Meeting Hours: 6:30PM – 9:20PM

Class Location: Henry Lab 7

Instructor Name: Seongjin Kim

Email: seongjin.kim@chaminade.edu

Phone: 808.739. _____

Office Location:

Office Hours:

University Course Catalog Description

Separation and purification techniques such as distillation, recrystallization, and liquid-liquid extraction are introduced. Having performed several functional inter-conversion reactions, students are competent enough to carry out multistep syntheses by the end of the semester.

Corequisite: BC 323 or CH 323

Course Overview

In this practical and hands-on laboratory experience, students will be introduced to modern organic chemistry laboratory techniques that reinforce and expand upon the concept learned in the Organic Chemistry lecture course. Students will learn how to set-up and conduct a range of experiments, as well as develop critically thinking skills for analyzing experimental results. This will be achieved through a combination of guided exercises, independent investigations, and collaborative group work. Proper laboratory safety and etiquette will also be taught. This course is intended for chemistry, biochemistry, and other students on scientific or professional career paths.

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

Course Learning Outcomes

By the end of our course, students will be able to:

1. Apply theoretical knowledge of organic chemistry to the practical application and synthesis of organic molecules
2. Perform the basic laboratory techniques of organic chemistry
3. Follow laboratory safety guidelines and procedures and Work safely in a laboratory environment
4. Properly record procedures, observations, and results into a laboratory notebook
5. Effectively communicate scientific data and results through written reports
6. Enhance collaboration skills and work effectively in teams

Safety Requirements

Students are required to practice safety precautions while performing experiments, including wearing safety glasses, closed-toe full-coverage shoes, and lab coats. Long pants are recommended. In addition, it is recommended you tie it back away from your face if you have long hair. For your safety, food and drink including chewing gum or candy are not allowed in the lab.

Alignment of Course Learning Outcomes

	CLO1	CLO2	CLO3	CLO4	CLO5	CLO6	CLO7
MVs	2 & 4	2, 4 & 5	2, 4 & 5	2, 4 & 5	2, 4 & 5	2, 3, 4 & 5	2, 3, 4 & 5
NHVs	2 & 4	2, 4 & 5	2, 4 & 5	2, 4 & 5	2, 4 & 5	2, 3, 4 & 5	2, 3, 4 & 5
PLOs	1, 2 & 5	1, 2, 3, 4 & 5	1, 2, 3 & 4	1, 3, 4 & 5	1, 3, 4 & 5	1, 2, 3, 4 & 5	1, 2, 3 & 5

Course Prerequisites

Successful completion with a letter grade of C or better in BC/CH203/L & 204/L (General Chemistry I & 2 with their laboratory courses).

Required Learning Materials

- Laboratory coat
- scientific calculator.
- computer and/or smartphone with web/app online access.
- Download the ChemDraw software online (Student/Trial version).
- Your own personal safety specs (OPTIONAL as communal safety specs are available in the laboratory).

Course Website:

<https://chaminade.instructure.com/courses/30187>

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](#) 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.

Assessment

Laboratory reports. You are required to write-up in a formal scientific format your experiments and turn them in at the beginning of the next laboratory class for grading. You must write your experimental write-up in a numbered composition notebook (you may number the pages manually) and in black ink pen (optionally, you may printout your report from a computer document that you have prepared or scan/photo). You must include the following sections in chronological order for each experiment:

- 1 Title
- 2 Name(s) of Scientist
- 3 Date Experiment Performed
- 4 Objective(s)
- 5 Introduction
- 6 Experimental Procedures
- 7 Data and Calculations
- 8 Results
- 9 Discussion
- 10 Conclusion
- 11 References

Quizzes: You may have quizzes at the beginning of labs from topics related to the previous laboratory experiment. Students who arrive late will not be allowed to take the quiz and no makeup quiz will be available; however, students will be allowed to drop their lowest quiz grade.

Final Exam: There is no final exam for this laboratory course.

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

The course grades will be based on the following point total and scale.
Any changes will be announced in class.

Attendance and Participation	10 %
Lab Reports	50 %
Quizzes	<u>40 %</u>
Total	100 %

GRADE	PERCENTAGE
A	90-100 %
B	80-89 %
C	65-79 %
D	45-64 %
Fail	below 45 %

Credit Hours: Based on 5 Experiments

- 2.5 hours per laboratory experiment every other week (Subtotal = 20)
- 1 hour review/repeat review/memorization per class lab expt. (Subtotal = 5)
- 2 hour laboratory report with literature research (Subtotal = 10)
- 2 hour quiz preparation/practice per quiz (5 quizzes) (Subtotal = 10)

Total Hours = 45

TENTATIVE Schedule:

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

Week	Topic
1	How to Draw Structures (Dry Lab)
2	Resonance Structures and Mechanisms using curvy arrows (Dry Lab)
3	Basic Handling of Synthetic Organic Chemistry glassware
4	TBD for the rest of the semester. This semester will be the first to perform experiments that are classified as Green Chemistry.

The general schedule for experiments will be:

Day 1 – The instructions followed by experiment

Day 2 – Q and A on Laboratory Report for the experiment and quiz preparation/study session

Day 3 – Final Q and A on Laboratory Report due by midnight and Quiz due in lab.

Course Policies

Late Work Policy

All overdue assignment not completed or anticipated to be late must have approval from the instructor along with a valid excuse.

Grades of "Incomplete"

Students and instructors may negotiate an incomplete grade when there are specific justifying circumstances. When submitting a grade, the "I" will be accompanied by the alternative grade that will automatically be assigned after 90 days. These include IB, IC, ID, and IF. If only an "I" is submitted the default grade is F. The completion of the work, evaluation, and reporting of the final grade is due within 90 days after the end of the semester or term. This limit may not be extended.

Writing Policy

Plagiarism will not be tolerated and will be checked.

Instructor and Student Communication

Questions for this course can be emailed to the instructor at seongjin.kim@chaminade.edu. Online, in-person and phone conferences can be arranged. Response time will take place up to [number of hours or days].

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 2019-2020 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.

Student Conduct Policy

Campus life is a unique situation requiring the full cooperation of each individual. For many, Chaminade is not only a school, but a home and a place of work as well. That makes it a community environment in which the actions of one students may directly affect other students. Therefore, each person must exercise a high degree of responsibility. Any community must have standards of conduct and rules 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 under Student Life.

For further information, [please refer to the Chaminade Catalogue](#).

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 a minimum of 45 hours of engagement, regardless of varying credits, duration, modality, or degree level. 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. Terms that have alternative lengths, such as 10 week terms, should have an equivalent amount of faculty instruction and out-of-class student work to meet each credit hour. Direct instructor engagement and out-of-class work result in total student engagement time of 45 hours for one credit. The number of engagement hours may be higher, as needed to meet specific learning outcomes.

Specific Credit Situations

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, practica, studio work, and preparation of papers, presentations, or other forms of assessment. This policy is in accordance with federal regulations and regional accrediting agencies.