Course Syllabus
Chaminade University Honolulu
3140 Waialae Avenue - Honolulu, HI 96816

Course Number: CH 254L-01 and 03
Course Title: Survey of Organic and Bioorganic Chemistry for Nursing Laboratory
Department Name: Natural Sciences and Mathematics
College/School/Division Name: NSM, Division of Chemistry and Biochemistry
Term: Fall 2024
Course Credits: 1

Section 01
Class Meeting Days: Tuesday
Class Meeting Hours: 6:30PM – 9:20PM
Class Location: Henry Lab 8

Section 03
Class Meeting Days: Thursday
Class Meeting Hours: 6:30PM – 9:20PM
Class Location: Henry Lab 8

Instructor Name: Seongjin Kim, Ph.D.
Email: seongjin.kim@chaminade.edu
Office Hours: TBA, or by appointment

University Course Catalog Description

Laboratory to accompany CH 254. One three-hour laboratory per week will include introduction to the fundamental principles and models of chemistry and related exercises and experimentation.
Prerequisites: BI 151L, BI 152L
Corequisite: CH 254

Course Overview

This laboratory course is designed to be taken in conjunction with the CH 254 lecture course. The purpose of this course is that students will develop practical lab skills and will be able to observe many of the principles discussed in lecture. This laboratory class aims to provide students with an introductory laboratory experience, establishing competence in basic chemistry laboratory techniques. These skills will be valuable in future science laboratory courses and will enhance their understanding of chemistry through hands-on experience with various techniques.

Chemistry Mission Statement

Chemistry has justifiably been labeled 'The Central Science'. Training in this discipline is therefore beneficial for all citizens of the modern world. All materials in the universe are made up of chemicals; a knowledge of chemistry is indeed a knowledge of ourselves.

The mission of this program is to:

-Promote molecular literacy (i.e., awareness of the importance of physical, chemical, and biological changes on the atomic and molecular scale)

-Provide hands-on laboratory training using modern chemical techniques and instrumentation

-Engage students in an undergraduate research program

-Enable students to integrate knowledge of the physical world

-Educate about the entry requirements, career pathways, and progression into advanced education in the chemical sciences

Program Learning Outcomes in Chemistry

Upon completion of the undergraduate program in Chemistry, students will be able to:

- Apply the scientific method as it is used in organic chemistry, inorganic chemistry, analytical chemistry, physical chemistry, and molecular sciences
- Recognize and explain chemical theory as it applies to the physical world
- Visualize, evaluate, validate, and interpret results of chemical analyses as part of an integral and quality education
- Solve problems using analytical reasoning, professional resources, professional conduct, and ethical behavior
- Communicate chemical information effectively in oral and written formats

Course Learning Outcomes	**PLO 1**	**PLO 2**	**PLO 3**	**PLO 4**	**PLO 5**
1. Distinguish between qualitative and quantitative chemical analysis.	x		x	x	
2. Interpret experimental results and draw reasonable conclusions. Identify sources of error in chemical experiments.	x	x	x	x	
3. Perform the importance of performing accurate and precise quantitative measurements and keep legible and complete experimental records.	x	x	x	x	x
4. Collaborate with peers in obtaining and interpreting data.			x	x	x

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 ʻOlelo Noʼeau (Hawaiian proverbs) and Marianist core beliefs:

1. Educate for Formation in Faith (Mana) E ola au i ke akua (ʻŌlelo Noʻeau 364) May I live by God
2. Provide an Integral, Quality Education (Naʼauao) Lawe i ka maʻalea a kūʻonoʻono (ʻŌlelo Noʻeau 1957) Acquire skill and make it deep
3. Educate in Family Spirit (ʻOhana) ʻIke aku, ʻike mai, kōkua aku kōkua mai; pela iho la ka nohana ʻohana (ʻŌlelo Noʻeau 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 noʻeau (ʻŌlelo Noʻeau 1430) Education is the standing torch of wisdom
5. Educate for Adaptation and Change (Aina) ʻAʻohe pau ka ʻike i ka hālau hoʻokahi (ʻŌlelo Noʻeau 203) All knowledge is not taught in the same school

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.

Required Learning Materials

- Laboratory coat
- scientific calculator.
- computer and/or smartphone with web/app online access.

Course Website:

Section 01
https://chaminade.instructure.com/courses/35875

Section 03
https://chaminade.instructure.com/courses/35878

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 ʻIke: 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 ʻIke'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 ʻIke at tutoring@chaminade.edu or 808-739-8305.

Assessment

Lab Notebooks

The lab notebook is where all notes, raw data and calculations for experiments will be documented as well as who participated in the experiment and when the experiment occurred. Lab notebooks must be bound, written in blue or black ink, and have pages numbered (you may number the pages manually). Mistakes happen and are expected; however, they still need to be readable, thus mistakes are only to be crossed out with a single line and NO correction tape/white out should be used. Lab notebooks should not be rewritten to make it look prettier. Scanned or photographed notebooks will be submitted at the beginning of next lab meeting.

Your lab notebook should have the following information:

Each entry for a LAB experiment should include:

- Title
- Name
- Date experiment performed
- Abstract (short paragraph, should be less than about 150 words)
- Introduction (Summarize important **background information** needed by the reader to understand your experiment)
- Procedure Notes / Data Collected (actual data recorded from instruments)
- Calculations (show your work for any calculations here)
- Results/Conclusion

Lab Report Sheets

The lab report sheets will be evaluated for completion and accuracy of the information required. They should be brief and concise, and contain the following:

- Any relevant chemical equations
- Sample calculations
- Sources of error and statistical treatment of data

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 %
Laboratory Report Sheet and Lab Notebooks	50 %
Quizzes	40 %
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

Course Schedule Fall 2024

The Professor may modify elements of this syllabus according to the operational needs of the class. Changes to the schedule will be announced in class and via CANVAS or email.

Week	Dates (Tu, Th)	Experiment/Activity
1	08/20, 08/22	Introduction and Lab Safety
2	08/27, 08/29	Density and Measurements
3	09/03, 09/05	Chemical Nomenclature
4	09/10, 09/12	Separation of a Mixture
5	09/17, 09/19	Hydrates
6	09/24, 09/26	Physical and Chemical Reactions
7	10/01, 10/03	Acid-Base Titration
8	10/08, 10/10	pH Indicators
9	10/15, 10/17	Organic Nomenclature
10	10/22, 10/24	Molecular Models
11	10/29, 10/31	Simple Organic Synthesis
12	11/05, 11/07	Soap Synthesis
13	11/12, 11/14	Polymer
14	11/19, 11/21	**Catch up**

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 ʻIke: 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 ʻIke 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

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, 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.