UNIVERSITY of HAWAIʻI
WINDWARD COMMUNITY COLLEGE
Ke Kulanui Kaiāulu o ke Koʻolau

General Chemistry Laboratory I, Chem161L

Summer 2026

1 Credit | CRN 99031

* This syllabus and/or our Course Schedule are subject to change at any time. I will notify you of any changes via email. Mahalo!

About Windward Community College

Mission Statement

ʻO keia ka wā kūpono e hoʻonui ai ka ʻike me ka hoʻomaopopo i kō Hawaiʻi mau hoʻoilina waiwai. Aia nō hoʻi ma ke Kulanui Kaiāulu o ke Koʻolau nā papahana hou o nā ʻike ʻake akamai a me nā hana noʻeau. Me ke kuleana koʻikoʻi e hoʻohiki ke Kulanui e kākoʻo a e hoʻokumu i ala e hiki kē kōkua i ka hoʻonui ʻike a nā kānaka maoli. Na mākou nō e hoʻolako, kākoʻo a paipai i nā Koʻolau a kō Oʻahu aʻe me nā hana noʻeau ākea, ka hoʻonaʻauao ʻoihana a me ka hoʻonui ʻike ma ke kaiāulu—hōʻaʻano a e hoʻoulu i nā haumāna i ka poʻokela.

Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawaiʻi and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide the Koʻolau region of Oʻahu and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

ʻĀina

Windward Community College is located in the ahupuaʻa of Kāneʻohe and Heʻeʻia in the moku of Koʻolaupoko on the island of Oʻahu. Both ahupuaʻa are directly connected to the moʻo ʻōlelo of Pāpa and Wākea, who are seen as the ancestors of the Hawaiian nation. The campus sits beneath the puʻu of Keahiakahoe, which is also connected to many moʻo ʻōlelo of this ʻāina. Because wind names and rain names are associated with specific ʻāina, the rain name of Kāneʻohe is known as the ʻĀpuakea and the rain name of Heʻeʻia is the Ulumano.

Instructor Information

About Your Instructor

I have been teaching chemistry at the UH Community Colleges since 2016. I love teaching chemistry and helping students understand the connections between science and our everyday environment. Outside of work, I enjoy cooking (and the chemistry of it), surfing and sewing.

How to Contact Your Instructor

Mrs. Martine Bissonnette

Department of Natural Sciences

Virtual office: Zoom appointments available upon request

Email: martineb@hawaii.edu

Response time: I usually respond to messages within 24 hours and can schedule Zoom meetings weekday evenings or Sunday afternoons. I usually grade submitted work on Sundays.

Asking Course Questions

Please use course Q&A in Lamakū Discussions for all general course questions about content, activities, due dates, how work will be graded, etc. I will check Q&A at the end of each day during the week and on Sundays during the weekend and provide follow-up information there. For quicker response, feel free to email me.

For specific grading questions and/or personal matters, per FERPA, send me an email to keep your information protected. Please use Lamakū Email.

Alternate Contact Information

If you are unable to contact the instructor, have questions that your instructor cannot answer, or for any other issues, please contact the Academic Affairs Office:

- Location: Alakaʻi 121
- Phone: (808) 235-7422

Contingency Plan

If there is an outage, weather situation, or family emergency on my end, I will do my best to find a way to communicate an update as soon as possible about my return to the course. Mahalo in advance for your understanding and I hope you will do the same.

Course Format & Structure

This course is offered in an asynchronous format in a 16-week time frame. Please note that this is not a self-paced course; the course schedule is provided in this syllabus.

- Content release: Most of the tasks/modules will be available at the start of the term but tasks/assignments will close according to the course schedule.
- Students are encouraged to communicate with their instructor and request online meetings when assistance is needed. Alternatively, emailing the instructor with a screenshot of the topic/question will help in obtaining a quick response.
- There are no scheduled online meetings but those can be setup upon request.

Regular Substantive Interaction (RSI)

Online courses at Windward Community College follow the college's RSI Definition for ensuring quality instruction. You can expect me to communicate with you frequently (and in a timely fashion) about our coursework in the following ways during our 16-week course:

Announcements

Your instructor will post a weekly announcement on Sundays (which is also forwarded to students via email) to provide specific instructions about the week's experiments. Students can communicate with the instructor via Lamakū email, or university email. Messages will usually be answered within 24 hours during the week or within 48 hours on weekends and holidays.

All course activity due dates are listed in Labflow or Lamakū. Please check your UH email often and set your Lamakū Notifications (both email and D2L Brightspace Pulse App) to receive course notices, such as grading updates, announcements, and activity reminders.

Attendance/Participation

This is an online course, but it is not self-paced. Students are expected to complete the work associated with each week's module within the allocated time frame.

Missing 3 or more laboratory reports triggers an automatic F grade for the course.

Lab Safety

All experiments will be performed virtually and will not involve any chemicals.

Pre-lab Quizzes

Each experiment (except the first one) will have an associated pre-lab quizzes. Allow about one hour to watch the videos and complete the pre-lab (make sure you do watch the videos as there is a tracker and you will not earn pre-lab points if you do not view videos). You must complete the pre-lab quizzes during the week they are assigned; **no extensions will be granted on quizzes.**

Assignment and reports

Each lab includes worksheet reports that will be used to record simulation data and observations during the experiment. You will get 2 or 3 attempts to get the correct answer (depending on the lab). You should allocate 2-4 hours to complete the experiment. Work must be submitted by 11:55 pm on the due date. One of the experiments will require a formal report. The report must be submitted as one pdf file (multiple pages must be scanned as one document) – no other format will be accepted. More information will be provided the week prior to the formal report being due; you will be provided with a template and a rubric. Formal lab reports must be turned in by the due date/time.

Late Work

Data and Report assignments will be accepted **up to one week** after the due date with a 10% penalty. No work will be accepted after that date unless there are specific circumstances, and you have notified the instructor prior to the initial due date. Work must be submitted by 11:59 pm on the due date to avoid late penalties. All work for this short summer session must be submitted by July 3rd, 11:59pm.

Data

You will be working by yourself for these experiments; the platform will provide individualized data and each person must present their own results. When recording data, pay attention to significant figures.

Exams

There will one final exam (120-minute duration), both administered via Labflow, it will be an open-book exam. Answer keys will NOT be released but students can request a meeting with the instructor to review the results.

Special learning needs

If you have special learning needs, inform your instructor at the beginning of the semester.

Participation Verification

Campuses are required by federal regulations to verify the participation of students in their classes. In accordance with Executive Policy 7.209, all students in the University of Hawai'i system are required to establish "participation" to ensure that they are not dropped from their class(es). Effective Fall 2021, students who fail to participate by the late registration period for a class will be administratively dropped from that class. Students may also be dropped from dependent prerequisite and/or corequisite classes if both courses do not establish participation.

Course Information

Catalog Description

Laboratory experiments illustrating fundamental principles of chemistry.

Prerequisites: Credit for or registration in CHEM 161.

Student Learning Outcomes

As a result of taking this course, students can expect to attain the following outcomes:

1. Apply laboratory safety procedures and respond to hazards.
2. Use molecular and crystal models, perform common laboratory techniques competently and computer-based experiments to verify chemistry laws on stoichiometry, thermochemistry, behavior of gases and liquids.

3. Apply and articulate the scientific method by preparing lab reports using the standard scientific format.
4. Make and record precise measurements, calculate results using significant figures, standard deviations and identify sources of error in laboratory experiments.
5. Express in writing core chemistry principles, results of experiments and do critical thinking by synthesizing conclusions based on observations and data.

Course Materials

Required

We will be using the Labflow platform which provides a way to view experimental techniques, make observations, and perform calculations used during lab experiments.

Students must have the following:

- Regular access to a computer with internet (desktop or laptop).
    - Windward offers free laptop and WiFi hotspot check-out to students (first-come, first-served), as well as software and other tech discounts; see Ka Piko Student Tech Support for information.
    - UH Online provides an online learning Readiness Activity and an Orientation to Online Learning that Windward CC students may take to see if online learning is a good fit.
- Access to Lamakū website and Zoom as needed
- Access to Labflow platform: www.labflow.com, the enrollment code is your class CRN – see page 1 of syllabus)
- Scientific calculator that has Log and natural log (ln) functions.
- Electronic device to take photos of written work and ability to upload images to website

Recommended

- Chem 161 class notes and OpenStax Textbook: Chemistry (Free, https://openstax.org/details/books/chemistry-2e)
- D2L Brightspace Pulse App (free download from app stores)

Lamakū Learning Management System (https://lamaku.hawaii.edu/d2l/home)

Learn about the Hawaiian meaning of the word "lamakū": Lamakū Pronunciation, Meaning, and Importance.

- UHCC Lamakū Student Resources (how-to videos)
    - Contact UH ITS for 24/7 Lamakū assistance.
- Keeping Accessibility and UDL in Mind

    - If you find any course content that needs remediation and/or updating, please kindly share and I will immediately work to make the content accessible.
- Lamakū courses will appear 5 days before the first day for the academic term and will become inactive (no longer be available to access) 3 weeks after the end of the term. Be sure to save any coursework you may need from Lamakū *during* the term.
- Lamakū automatically logs you out *if it does not detect activity for three hours*. A warning message will appear, notifying you of the lack of activity. Activity is defined as clicking a button in Lamakū, such as "Save Draft" or "Next" (in a test), clicking on a course tab, or taking an action that sends information to the server.

Other Technology

D2L Brightspace, the parent company of Lamakū, recommends users choose the latest versions of Google Chrome, Mozilla Firefox, Microsoft Edge, or Apple Safari as their internet browser.

We recommend that students update their internet browser at the start of each term, search how to allow pop-up windows, adjust their cookies, and clear device history. Also, fully restart your computer and/or device from time-to-time to optimize performance.

Review the privacy/security policies before using the technologies we may be using in this class. Contact me if you would like to discuss the use of alternate options or technologies.

- Adobe Reader is used to read course files (accessibility statement, privacy policy)
- Google Drive is UH-provided cloud storage (accessibility statement, privacy policy)
- Google Docs is used to create documents (accessibility statement, privacy policy)
- Google Sheets is used to create assignment and reference worksheets (accessibility statement, privacy policy)
- Google Slides is a presentation authoring software provided by UH (accessibility statement, privacy policy)
- Loom is used for screen recording (accessibility statement not provided, privacy policy)
- Padlet is used for some of the discussion activities (Padlet Accessibility Statement, Padlet privacy policy)
- YouTube is used for delivering some of the course content (accessibility statement, privacy policy)
- Zoom is used for the Synchronous Sessions and virtual office (accessibility statement, privacy policy)

Grading Policy

NATURAL SCIENCES DEPARTMENT POLICY ON WITHDRAWALS AND INCOMPLETE

1. WITHDRAWALS (W GRADES) –
It is the student's responsibility to know the last day of withdrawal, found on academic calendar list: https://windward.hawaii.edu/campus-life/events-calendar/academic-calendar/

Students who no longer attend class and who DO NOT OFFICIALLY WITHDRAW from the course will receive “F” grades.

2. INCOMPLETE (I GRADE) – Students must present the “Request for Incomplete” form prior to the last day of instruction. “I” grades will be given only to students who are achieving passing grades and are very close to completing the course. In addition, the student must have a very good reason for not being able to complete all the work on time. Examples of extreme or unusual circumstances are:

1. certified medical reason
2. a death in the immediate family

Grade Composition

The Final Grade will be calculated as follows. The lowest worksheet and pre-lab quiz will be dropped.

1. Experiments Worksheets (25 points each) – the lowest grade will be dropped.
2. Formal Lab Report (25 points in addition to the experiment worksheet score)
3. Pre-lab Quizzes (5 points each) -2 lowest will be dropped (5 points each)
4. Participation credit (watching videos) – 10 points
5. Final Exam– 50 points

Students can check their grades and examination scores on the Labflow platform at any time. Lamakū grades will be updated about one week after tasks close.

Missing 3 or more reports grants an automatic F grade for the course.

Final Grade

Calculated grades will be rounded to nearest whole number. You will receive a letter grade based on the following scale:

A = 90-100%
B = 80-89%
C = 70-79%
D = 60-69%
F = 0-59%

Course Schedule

The schedule is subject to change. Should changes occur, you will be notified by email and in announcements. The due dates are Monday evenings at 11:55, except for exams, which have specific times.

Week	Due Date	Module/Lab	Topic
1	1 June	Intro & Lab 1	Lab Safety - Part A Chemistry Math and Labware -Part B
	3 June	Lab 2A and Lab 2B	Basic Lab Techniques Part A Intro to Lab Measurements Part B
2	8 June	Lab 3	Quantitative Separation of a Solids Mixture
	10 June	Lab 4	Soluble and Insoluble Salts
3	15 June	Lab 5	Types of Chemical Reactions
	18 June	Lab 6	Empirical Formula
4	22 June	Lab 7	Beer's Law and Spectrophotometry
	24 June	Lab 8	Titration: Determining the Concentration of an Acid
5	29 June	Lab 9 & Formal Report	Ideal Gas Law
	1 July	Lab 10	Constant Pressure Calorimetry
6	3 July	Lab 11	Modeling Geometry and Polarity
--	3 July	Exam	Final Exam - Cumulative

Academic Integrity

Work submitted by a student must be the student's own work. The work of others should be explicitly marked, such as through the use of quotes or summarizing with reference to the original author.

In this class, students who commit academic dishonesty, cheating, or plagiarism will have the following consequence(s):

- Students will receive a failing grade for plagiarized assignments.
- All cases of academic dishonesty are referred to the Vice Chancellor for Student Affairs.

Windward CC Student Conduct Information

UH System Student Conduct Policy EO 7.208

AI Statement – students will be allowed to use AI to write their formal report. Students will learn to craft precise inquiry questions and modify the results to answer the requirements of the report.

Student Kuleana

- Please review our Hawai'i-Style Netiquette, which blends the values of ALOHA with approaches to how we should consider treating each other online.
- Check your email or weekly announcements regularly (at least twice a week).
- Read all information and view all provided videos
- Contact your instructor if you don't understand something or need help
- Submit your work on time.
- Windward CC has Grievance Procedures in place, but I encourage us to try to work together first to see if we can work through any troubles. Mahalo!

Academic and Technical Support

Academic Support

- Windward Community College Library
- Library eResources
- Library Research Units (LRUs)
- Ka Piko Tutoring Services: Math Lab, Speech Lab, Writing Lab, 'Ōlelo Hawai'i Lab
- Online Learning at Windward Community College
- STAR Balance

Technical Support

- UH ITS Help Desk: email help@hawaii.edu or call (808) 956-8883 (or 1-800-558-2669) for Lamakū and most technology support. Available 24 hours a day, 7 days a week, including holidays.
- Student Tech Support: email winhelp@hawaii.edu, call (808) 235-7437, or stop by in person at Hale La'akea 228. Available Monday–Friday from 8:00 am–4:00 pm.
- Lamakū: Click on the Lamakū Help link in the menu bar at the top of the Lamakū homepage to fill out and submit a question and get your answer via email.
- Information Security for Students

College Policies & Support Services

Your instructor may also provide additional resources in your Lamakū course.

Basic Needs

Basic needs include food and housing, childcare, mental health, financial resources, and transportation. Student basic needs security is critical for ensuring strong academic performance,

persistence and graduation, and overall student well-being. If you or someone you know is experiencing basic needs insecurity, please see the UH System Basic Needs.

Disabilities Accommodations Statement

Windward Community College's Disability Student Services Office (WCC-DSSO) is committed to providing equal access to qualified students with disabilities.

If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to participate fully in this class, you are encouraged to contact the Disability Specialist Counselor, Roy Inouye, to discuss reasonable accommodations that will help you succeed in this class. The Disabilities Counselor can be reached at (808) 235-7448, wccdsso@hawaii.edu, or stop by the office (Hale Kakoʻo 106) for more information.

Financial Aid

If you are receiving financial aid and are contemplating not completing the course it is highly recommended that you contact the Financial Aid Office at (808) 934-2712 or email them at wccfao@hawaii.edu ***BEFORE*** you withdraw to discuss the impact this decision may have on your financial aid eligibility.

LGBTQ+

The University of Hawaiʻi system and Windward Community College are committed to building an inclusive community that supports and advocates for all students, staff, and faculty. We welcome all members of our campus community to our campuses: transgender, māhū, and people of all gender identities. All members of our campus community deserve a work and educational environment free from harassment or bullying based on their sexual orientation, gender identity, or expression. For more information, see the University of Hawaiʻi Commission on LGBTQ+ Equality. Windward Community College Commissioner: Scott Sutherland, scottjks@hawaii.edu

Mental Health Counseling

Mental Health and Wellness at Windward Community College provides counseling services and activities on campus to support students' life goals as well as their academic goals. Information about services can be found at WCC Mental Health & Wellness.

Student Conduct Code

Windward Community College follows the University of Hawaiʻi Code of Student Conduct which defines expected conduct for students and specifies those acts subject to University sanctions. Students should familiarize themselves with the Code of Student Conduct since, upon enrollment at Windward Community College, they have placed themselves under the policies and regulations of the University and its duly constituted bodies. The disciplinary authority is exercised through the Office of the Vice Chancellor for Student Affairs. Copies of the Student Conduct Code are available at the Office of the Vice Chancellor for Student Affairs.

TRiO Program

The Federal TRiO Programs are educational opportunity outreach programs designed to motivate and support students from disadvantaged backgrounds. TRiO includes six outreach and support programs targeted to serve and assist low-income, first-generation college students and students with disabilities in progressing through the academic pipeline from middle school to post-baccalaureate programs. Information about services can be found at Windward CC TRiO.

Title IX - Sex Discrimination and Gender-Based Violence Resources

Windward Community College is committed to providing a learning, working, and living environment that promotes personal integrity, civility, and mutual respect and is free of all forms of sex discrimination and gender-based violence, including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence, and stalking.

If you or someone you know is experiencing any of these, WCC has staff and resources to support and assist you. To report an incident of sex discrimination or gender-based violence, as well as receive information and support, please contact one of the following:

Desrae Kahale, UH System Confidential Advocate
Phone: (808) 235-7393
Email: advocate@hawaii.edu
Office: Hale Kākoʻo 101

Desrae Kahale, Mental Health Counselor & Confidential Resource
Phone: (808) 235-7393
Email: dkahale3@hawaii.edu
Office: Hale Kākoʻo 101

Mykie E. Menor Ozoa-Aglugub, J.D., Title IX Coordinator
Phone: (808) 235-7468
Email: mozoa@hawaii.edu
Office: Hale Kākoʻo 109

Karen Cho, Deputy Title IX Coordinator
Phone: (808) 235-7404
Email: kcho@hawaii.edu
Office: Hale ʻAlakaʻi 120

As a member of the University faculty, I am required to immediately report any incident of sex discrimination or gender-based violence to the campus Title IX Coordinator. Although the Title IX Coordinator and I cannot guarantee confidentiality, you will still have options about how your case will be handled. My goal is to make sure you are aware of the range of options available to you and have access to the resources and support you need.

For more information regarding sex discrimination and gender-based violence, refer to the University's Title IX resources, and the Universityʻs Policy, EP 1.204.

UH Alerts

The UH Alert emergency notification system alerts the university community in the event of a natural, health or civil emergency. The information you provide will only be used in the event of an emergency that impacts the health and safety of the UH community or the closure of whole campuses. It will not be shared with others or used for routine UH communications or announcements. To sign up, visit UH Alerts for more information.