



UNIVERSITY of HAWAII
WINDWARD COMMUNITY COLLEGE

Ke Kulanui Kaiāulu o ke Ko'olau

Chem 161

Fall/2025

3 Credits | CRN 64021

Windward Community College Mission Statement

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

Instructor Information

How to Contact Your Instructor

[Michael Ferguson](#)

Office: Hale ʻImiloa 130 (808) 235-7400

Office Hours: TW 9-11

Email: mferguso@hawaii.edu

ZOOM: <https://hawaii.zoom.us/j/98910339608>

About

I am a chemistry professor at Windward Community College. I have a strong interest in the physical sciences. For this class, I will return emails within one business day. If you write me over the weekend, I may not get back to you until the following business day.

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: Alaka'i 121
- Phone: (808) 235-7422

Course Information

Course Purpose

Teach the concepts of the first half of general chemistry for STEM majors.

Course Description

Basic principles of inorganic chemistry with an emphasis on problem solving. First course of a two-course sequence designed to meet the one-year General Chemistry requirement for pre-med, science and engineering majors. Topics include chemical calculations, electronic structure, chemical bonding, states of matter and solutions.

Course Content

Stoichiometry, atomic theory, gas laws, thermodynamics, introduction to quantum mechanics, periodic trends, bonding, Lewis Theory, VSEPR, Molecular Orbital Theory.

Course Communication

I will send weekly announcements to the class and I will be available via email or through laulima.

Academic Prerequisites

- *ENG 22 with grade C or better or placement at least ENG 100, and MATH 103 with grade C or better or placement at least MATH 135*
 - or consent
 - Keyboard and [basic computer skills](#)
 - Add other prerequisite skills necessary as related to your course.
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Course Learning Outcomes

The learning outcomes for General Chemistry are: to understand the molecular nature of all phases of matter, to understand the various ways of depicting chemical compounds and chemical reactions, to develop an ability to solve basic quantitative problems regarding the properties of molecules, chemical equilibria, and chemical kinetics, and to develop the ability to appropriately apply this knowledge to general scientific problems in various fields of science and engineering.

More specifically, students should understand:

1. Use the mole concept in solving stoichiometry problems involving solids, liquids, gases and solutions.
 2. Balance chemical equations, classify reactions, identify and analyze the role of the chemicals involved in chemical reactions.
 3. Predict the behavior of gases while undergoing changes in volume, pressure, temperature and quantity.
 4. Manipulate thermochemical equations and calculate the amount of energy involved in chemical reactions.
 5. Predict physical and chemical properties of elements based on electronic structure and location in the Periodic Table.
 6. Predict physical and chemical properties of compounds based on chemical bonding, geometry and intermolecular interactions.
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Program Learning Outcomes

1. Explain the natural and technological world using reflection and quantitative analysis including preparation of a plan to collect, process, and interpret data; evaluation of the plan, procedures, and findings; and communication of the conclusions;
 2. Explain scientific knowledge and understanding to different audiences for a range of purposes; and
 3. Apply scientific knowledge, skills, and understandings to problems and issues in daily life.
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Course Format

Online asynchronous 16-week course. Assignments are posted on Lulima.

Course Technology (Optional)

Lulima Learning Management System

- [Lulima \(Sakai\) Accessibility](#)
- Lulima will be unavailable daily from 3:00 am-4:00 am HST for server backup and maintenance.
- Lulima automatically logs you out *if it does not detect activity for two hours*. A warning message will appear, notifying you of the lack of activity. Activity is defined as clicking a button in Lulima, such as "Save Draft" or "Next" (in a test), clicking on a course tab, or taking an action that sends information to the server.

Regular Substantive Interaction

Online courses at Windward Community College follow these guidelines for ensuring quality instruction: [RSI Definition-WCC](#).

Other Technology

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

- [Google Sheets](#) is used to create assignment and reference worksheets ([accessibility statement](#), [privacy policy](#))
- [Google Docs](#) is used to create the Course Design Document and rubrics ([accessibility statement](#), [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](#))

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). 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.

Grading Policy

Grading Breakdown

Grades will be based on the following weighted categories (subject to change):

Assessment	% of Grade
Test 1-4	10%
Tests total	40%
Homework	35%
Final	25%
Forums	0%
Total	100%

Assessment Descriptions

Tests follow each series of chapters: test 1 for CH 1-4 (Due Sept 25); test 2 for CH 5-7 (Due Oct 23); test 3 for CH 8-9 (Due Nov 13), test 4 for CH 10-11 (Due Dec 12); comprehensive final (Due Dec 20). Homework is on Masteringchemistry. Each chapter homework is due at the same time as the tests. Final exam is due Dec 20.

Forums are optional and are not graded.

Grading Policy

Grade	Percent
A	100-90%
B	89-80%
C	79-70%
D	69-60%
F	Below 60

No late tests will be accepted. The comprehensive final score will replace any tests missed. No late submissions on homework.

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](#)

Include an AI Statement (is it ok in your class? if so, when/how?) Here are some [UH Guidelines](#) and [AI Recommendations](#). Instructors should refrain from sharing or inputting student work into online AI tools, including AI detection tools, without obtaining student consent. Uploading student work has potential FERPA implications as well as potential copyright concerns. Additionally, the uploaded content could be used as data for training of the AI, without the student's consent.

Student Responsibilities

- Expectations

Windward Community College is an equal opportunity, affirmative action institution.

- Additional policies (e.g., cell phones in the classroom, late work, attendance, missed work, extra credit, participation, netiquette)
- Any information you feel the student needs to know
- Students may check the [Student Notifications](#) page on the website for canceled classes

How to Seek Academic or Technical Support

Academic Support

- [Windward Community College Library](#)
- [Library eResources](#)
- [Ka Piko Writing Lab](#)
- [Ka Piko Speech Lab](#)
- [Ka Piko Math Lab](#)
- [Evening and Online Learning at Windward Community College](#)
- [STAR Balance](#)

Technical Support

- [UH ITS Help Desk](#) – email help@hawaii.edu or call 956-8883 (or 1-800-558-2669) for Laulima 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.
- Laulima – Click on the [Request Assistance](#) link at the bottom of any Laulima Page to fill out and submit a question and get your answer via email.
- [Information Security for Students](#)

College Policies & Support Services

Disabilities Accommodations Statement

The 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 Kako'o 106) for more information.

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 website](#).

Mental Health Counseling

Mental Health and Wellness at Windward Community College counseling services and activities on campus to support students' life goals as well as their academic goals. Information about services can be found at the [WCC Mental Health & Wellness website](#).

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 website](#) for more information.

Financial Aid

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

Student Conduct Code

Windward Community College follows the University of Hawai'i 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, the student has placed herself/himself 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 or [online](#).

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:

Leslie Cabingabang, UH System Confidential Advocate
Phone/Text: (808) 348-0432 or (808) 341-4952
Email: advocate@hawaii.edu
Office: Hale Kāko'o 107 (Wednesdays)

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

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

Karen Cho, Deputy Title IX Coordinator
Phone: (808) 235-7404
Email: kcho@hawaii.edu
Office: Hale 'Alaka'i 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, the University's Title IX resources, and the University's Policy, Interim EP 1.204, go to manoa.hawaii.edu/titleix/