

General Chemistry Lab II

Course Syllabus

Chem 162L: General Chemistry Lab II
Spring 2023

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Welcome

Welcome to Chem 162L. This is the lab companion class to Chem 162.

Instructor Information



Instructor: Michael Ferguson, Ph.D.

Office Hours: MT 9-11:30 AM

Virtual Office: <https://hawaii.zoom.us/j/98910339608>

Email: mferguso@hawaii.edu or use Lulima Messages tool

Phone: (808) 984-3312

Email: mferguso@hawaii.edu or use Lulima Messages tool

Note: During normal week hours I will respond within a day. On the weekend or holidays I may not respond until the following business day.

Course Information

Course Purpose

This course is meant to be a companion lab class to Chem 162.

Course Description

This course introduces the fundamental Principles of chemistry. This course is to supplement the general chemistry course. Its objective is to familiarize the student with some basic laboratory techniques. The laboratory will be a regime where the scientific method will meet a practical application.

Course Content

Laboratory exercises illustrating chemical principles.

Course Communication

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

Academic Prerequisites

- Enrollment or completion in Chem 162
- or consent
- Keyboard and [basic computer skills](#)
- Add other prerequisite skills necessary as related to your course.

Course Learning Outcomes

1. Develop an appreciation for the methods of scientific inquiry through computer-based laboratory experiments showing real-time data.
2. Apply knowledge to determine molar mass of unknown substance using freezing point depression data of solution.
3. Calculate chemical reaction rate and constant using graphing analysis.
4. Predict the effects of concentration and temperature changes on equilibrium mixtures using Le Chatelier's principle.
5. Determine whether equilibrium is established and calculate equilibrium concentrations/constants and cell potentials.
6. Apply and articulate the scientific method by preparing lab reports using the standard scientific format. Express in writing core chemistry principles, results of experiments and do critical thinking by synthesizing conclusions based on observations and data.

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.

Required Materials and Technology

Textbook, OER Resources or Recommended Materials

Supplies

- Labflow online access

Required Hardware and Software

- A more recent model desktop or laptop (2014 or later model), either Windows or Mac
- Reliable high-speed (Cable or DSL) Internet connection
- An updated internet browser.

Technical Skill Requirements

Students should be able to navigate lulima (sakai learning management system).

Course Format and Outline

Course Format

There are 600 points of quizzes, tests, and lab reports on Labflow.

Grading Policies

Grading Breakdown

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

Assessment	% of Grade
600 total points for the assignments	100
total	100

Assessment Descriptions

Lab exercises and tests are carried out on Labflow's online portal.

Grading Policy

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

Student Accomodations

DISABILITIES ACCOMMODATIONS

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

SEX DISCRIMINATION AND GENDER-BASED VIOLENCE RESOURCES (TITLE IX)

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:

Jojo Miller, Confidential Advocate

Phone: (808) 348-0663

Email: advocate@hawaii.edu

Office: Hale Kāko'o 110

Desrae Kahale, Mental Health Counselor & Confidential Resource

Phone: (808) 235-7393

Email: dkahale3@hawaii.edu

Office: Hale Kāko'o 101

Karla K. Silva-Park, Title IX Coordinator

Phone: (808) 235-7468

Email: karlas@hawaii.edu

Office: Hale 'Ākoakoa 220

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/

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 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.

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**

Academic Support Services

Please see the following link to access additional services:

<https://windward.hawaii.edu/services-for-students/>

Ka Piko Services

[Ka Piko Services](#) provides FREE academic and technical support to all WCC students. Our services are available both in-person and virtually (via Zoom). Our goals are to help students succeed academically and to become independent lifelong learners. We are staffed by friendly and knowledgeable peers who are ready to assist you!

- Ka Piko Math Lab provides assistance for all math courses offered at WCC, helping to improve students' understanding of important concepts and problem solving processes.
- Ka Piko Writing Lab provides assistance with any and all aspects of the writing process, including: brainstorming, research, MLA formatting and citations, drafting, and revising.
- Ka Piko Student Tech. Support can assist students with Google@UH, Lulima, MyUH, UH accounts, and can provide best-effort support for problems or questions with personal computers and other smart devices.
- Ka Piko also provides free weekly Success Connection Workshops for students

Visit the Ka Piko webpage at go.hawaii.edu/A42 for more information about our services, to learn how to connect with our tutors and tech assistants, or to RSVP for a Success Connection Workshop. Contact the Ka Piko Coordinator, Scott Sutherland, at scottjks@hawaii.edu if you have any questions.