

## General Chemistry Lab I

# Course Syllabus

Chem 161L: General Chemistry Lab I  
Fall 2022

You are at the syllabus page for the course.

## Welcome

Welcome to Chem 161L. This is the lab companion class to Chem 161.

## Instructor Information



**Instructor:** Professor Michael Ferguson

**Office:**

**Office Hours:** MW 9-11:30 AM (in person by appointment only)

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

**Phone:**

**Email:** mferguso@hawaii.edu or use Laulima 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 161.

### 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

Twenty laboratory exercises illustrating chemical principles.

### 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,
- MATH 103, OR Placement in MATH 135

• or consent

- Keyboard and [basic computer skills](#)
- Add other prerequisite skills necessary as related to your course.

### Course Learning 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. Express in writing core chemistry principles, results of experiments and do critical thinking by synthesizing conclusions based on observations and data.
4. Make and record precise measurements, calculate results using significant figures, standard deviations and identify sources of error in laboratory experiments.
5. Use computer competently, word-processing, spreadsheet and graphing.
6. Prepare chemical solutions, perform dilutions, calculate solution concentrations and generate a calibration curve.

### 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

- Labster online access
- Mastering Chemistry 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 laulima (sakai learning management system).

### Course Format and Outline

#### Course Format

There are twelve lab simulations to perform from Labster, seven assignments in Mastering Chemistry, and an experimental design forum. Students may work with other students on the lab simulations.

#### Grading Policies

#### Grading Breakdown

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

Assessment	% of Grade
20 lab Exercises (5% each)	100
total	100

#### Assessment Descriptions

Lab exercises are carried out on Labster's online portal, Mastering chemistry, and a forum topic.

#### Grading Policy

Grade	Percent
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A 100-90%

B 89-80%

C 79-70%

D 69-60%

F Below 60

#### Student Accommodations

#### 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](mailto: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](mailto:advocate@hawaii.edu)

Office: Hale Kāko'o 110

Desrae Kahale, Mental Health Counselor & Confidential Resource

Phone: (808) 235-7393

Email: [dkahale3@hawaii.edu](mailto:dkahale3@hawaii.edu)

Office: Hale Kāko'o 101

Karla K. Silva-Park, Title IX Coordinator

Phone: (808) 235-7468

Email: [karlas@hawaii.edu](mailto: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/](http://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, Laulima, 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](http://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](mailto:scottjks@hawaii.edu) if you have any questions.