

Chemistry and Society Laboratory CHEM100L, CRN: 64074

Spring 2023

CLASS INFORMATION

INSTRUCTOR INFORMATION

Asynchronous online

Instructor: Martine Bissonnette

Course Site on Laulima

Email: martineb@hawaii.edu

Virtual Office Hours: Zoom appointments available upon request

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.

SYLLABUS CHANGE POLICY:

Information contained in the course syllabus may be subject to change with reasonable advance notice, as deemed appropriate by the instructor. Updates to the syllabus will be communicated via email.

About This Course

Laboratory experiments illustrating fundamental principles of chemistry.

Pre-Requisite(s): Credit for or registration in CHEM 100.

Course Learning Outcomes

After successfully completing this course, you will be able to:

- 1. Identify/locate laboratory safety equipment and apply laboratory safety procedures
- 2. Construct molecular models to determine molecular shape and properties.
- 3. Assemble apparatus to perform common laboratory techniques to verify fundamental chemistry principles in everyday life.
- 4. Make and record accurate observations and precise quantitative measurements.
- 5. Synthesize conclusions based on observations and data in a formal laboratory report.
- 6. Identify sources of error in laboratory experiments.

Course Format

The course consists of 12 experiments, one mid-term, and one final exam. Exams are not cumulative. Each weekly lab will be conducted in an asynchronous manner – students can select their own time to perform their tasks as long as the work is turned in by the due date each week. Tasks don't have to be completed in one sitting and can be spread out throughout the week. However, students should allocate at least 3-5 hours to complete each lab experiment and submit related assignments within the timeframe indicated in the course schedule. Some experiments required a few days to proceed, therefore, it is advisable to read the experiment at the beginning of the week to ensure enough time is allowed for timely completion.

Tasks will be available on Monday mornings at 8:00 am and the related work must be submitted by 11:59 pm the following Monday. Each experiment will consist of the following tasks.

- 1. Background information reading and viewing of videos.
- 2. Online simulation activities and/or hands-on experiment with photographic evidence posted online (details provided for each experiment).
- 3. Assignment worksheet or formal lab report.

Required Materials

Students must have the following:

- Computer or tablet with high-speed internet connection
- Access to Laulima website.
- Access to Google Classroom
- Chemistry 100L Notes will be provided by instructor via Laulima
- Chem 100 class notes (from co-requisite class)
- Scientific calculator, and optional safety goggles and gloves.
- Basic supplies to conduct experiments (see detailed list under Orientation tab estimated cost no more than \$40, depending on what you already have at home).
- Phone, camera or tablet to take photographs and upload to Laulima

Course Policies

Communication

Participating in our Learning Community

A forum will be set up to share information which will benefit everyone in the class. Students will use the forum to share comments and thoughts. Your instructor will usually send a weekly email to provide specific instructions about the week's experiment.

Contacting the Instructor

Students can communicate with the instructor via Laulima e-mail, or university e-mail. Messages will be answered within 24 hours during the week (usually during the evening) or within 48 hours on weekends and holidays.

Alternative Contact

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: Alakai 121 Phone: 808-235-7422 Email: wccaa@hawaii.edu

Attendance & Grading

Attendance/Participation

Students are expected to complete the work associated with each week's experiment within the allocated time frame.

Evaluation and Feedback

The instructor will attempt to grade work and provide feedback in a timely manner.

Late Work

A 5% per day penalty may be applied to late work (maximum 30% penalty). No work will be accepted later than one week after the due date unless there are specific circumstances, or you have made specific arrangements with your instructor. Work must be submitted by 11:59 pm on the due date to avoid a late penalty.

Exams

There will be two exams, each covering about half of the course. Each exam will be administered online over a set period of 90 minutes. The final exam will not be cumulative.

Weekly Experiments - Recipe for Success

- Check the Laulima homepage every Monday morning for announcements and important information.
- Check your email regularly as this will be our main communication tool.
- Do not try to complete the experiment without reviewing the background information, it is rarely a good strategy.
- Although you will not be using hazardous chemicals, some substances may splash and cause irritation (for example, vinegar). Thus, you should take adequate precautions and wash your hands thoroughly with soap and water after each experiment.

Grade Composition

The Final Grade will be based upon a possible total of 585 points.

- 1. 11 Experiments with photo evidence and worksheet submittal (25 points for worksheet, 10 points for photo evidence/forum participation) 385 points
- 2. 1 Experiment with Formal Lab Report (50 points) 50 points
- 3. 2 Exams (75 points each) 150 points

Students can check their grades and examination scores on the Laulima Gradebook at any time.

Final Grade

Grades of I, W, CR, CN are described in the current college catalog. The last day for withdrawals (W, CR, CN) is March 24, 2023, after that date, the instructor will sign withdrawals only in cases of extreme or unusual circumstances, such as 1) a certified medical reason, or 2) a death in the immediate family. Grade-related excuses are unacceptable. Students who no longer attend class and who DO NOT OFFICIALLY WITHDRAW from the course will receive "F" grades.

Students must present the "Request for Incomplete" form to their instructor 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. Only serious reasons will be accepted (listed under the withdrawal policy).

You will receive a letter grade based on the following scale:

Letter Grades and Percentage Ranges

A = 90-100%

B = 80-89%

C = 70-79%

D = 60-69%

F = 0-59%

Tentative Course Schedule

The following schedule is subject to change. Should changes occur, you will be notified by email. Please note the highlighted entries for the mid-term and final exams.

Week	Start Date	Due Date	Experiment	Topic/Event
1	9-Jan	16-Jan	1	Safety Procedures
2	16-Jan	23-Jan	2	Scientific Method
3	23-Jan	30-Jan	3	Elements and Compounds
4	30-Jan	6-Feb	4	Taking Measurements
5	6-Feb	13-Feb	5	Chromatography
6	13-Feb	20-Feb	6	Molecular Models and Balancing Reactions
7	20-Feb	27-Feb	7	Stoichiometry of a Precipitation Reaction
8	27-Feb	6-Mar	Mid-term Exam	Mid-term Exam Labs 1-6 - exact date TBD
9	6-Mar	13-Mar	8	Acids, Bases, pH indicators and Neutralization
10	13-Mar			Spring Break
11	20-Mar	27-Mar	9	Oxidation-Reduction
11	27-Mar	3-Apr	10	Antacids and Sunscreen
12	3-Apr	10-Apr	11	Polymers
13	10-Apr	17-Apr	11	Polymers (continued)
14	17-Apr	24-Apr	12	Substances in Everyday Life
15	24-Apr	1-May	12	Substances in Everyday Life (continued)
16	1-May	5May	Final Exam	Final Labs 7 to 12

^{*} Experiment in bold requires a formal lab report

Institutional Information

Please review the following institutional policies:

Student Responsibilities

• Students should allocate 3-5 hours per week to complete each experiment.

• UH Policy on Email Communication

The electronic communications policy adopted in December 2005 establishes the University of Hawai'i Internet service as an official medium for communication among students, faculty, and staff. Every member of the system has a hawaii.edu address, and the associated username and password provide access to essential Web announcements and email. You are hereby informed of the need to regularly log in to UH email and Web services for announcements and personal mail. Failing to do so will mean missing critical information from academic and program advisors, instructors, registration and business office staff, classmates, student organizations, and others.

Academic Honesty

In cases of suspected or admitted academic dishonesty, the instructor involved shall attempt to discuss the matter with the student. The instructor may bring the matter to the attention of the departmental chairperson for consultation. The instructor may require the student to redo the assignment, give a failing or reduced grade for the course, and/or refer the student to the Vice Chancellor for Student Affairs or designee through the Department Chair for possible college action under the Student Conduct Code. The Vice Chancellor for Student Affairs or designee shall pursue such cases to determine appropriate disciplinary actions if, after a preliminary investigation, it is his/her determination that probable cause exists to establish that an act of academic dishonesty took place.

College Policies

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 Disability Specialist Counselor to discuss reasonable accommodations that will help you succeed in this class. Jodi A.-K. Asato can be reached at (808) 235-7472, wccdso@hawaii.edu, or you may stop by Hale Kākoʻo 105 for more information. You shall also inform your instructor at the beginning of the semester; that information will remain confidential.

• 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:

UH Confidential Advocate Phone: (808) 348-0432 Email: advocate@hawaii.edu

Desrae Kahale, Mental Health Counselor & Confidential Resource

Phone: (808) 235-7393 Email: dkahale3@hawaii.edu Office: Hale Kākoʻo 101 Jojo Miller, Title IX Coordinator

Phone: (808) 348-0663

Email: jojo.miller@hawaii.edu

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 mana.hawaii.edu/titleix/

• Covid-19 policies: https://windward.hawaii.edu/campus-life/safety-security/campus-emergency-preparedness-and-evacuation-procedures/coronavirus/

How to Get Help https://windward.hawaii.edu/services-for-students/

- Academic Support
- Student Support Services <u>windward.hawaii.edu/MySuccess</u>
 - Academic Advising
 - o Financial Aid
 - o Personal Counseling
- Technical Support Services