



General Chemistry II

CHEM162, CRN: 64135

Summer 2021

CLASS INFORMATION

Asynchronous class

Optional Meetings: Zoom meeting info will be provided at the beginning of the semester

INSTRUCTOR INFORMATION

Instructor: Martine Bissonnette

Office: 'Imiloa, 132

Office Hours: Zoom appointments available

E-mail: martineb@hawaii.edu

Virtual Office: email for zoom link

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

Second course of a two-course sequence designed to meet the one-year General Chemistry requirement for pre-med, science and engineering majors. Topics include thermochemistry, kinetics, acid-base equilibrium, solubility equilibrium and electrochemistry. Emphasis will be placed on problem-solving. Concurrent registration in CHEM 162L is required.

Prerequisites: A grade of "C" or better in CHEM 161, credit or concurrent registration in MATH 135, or instructor's consent. Co-requisite: Concurrent registration in CHEM 162L.

Course Learning Outcomes

Upon completion of the course, the student will be able to:

1. Predict properties (boiling point, melting point, osmotic pressure, vapor pressure) of solutions based on concentrations.
2. Determine reaction rate law and calculate rate constants and half-life based on experimental data.
3. Calculate the equilibrium concentration of chemicals in solution involved in precipitation, acid-base and redox reactions.
4. Predict spontaneous reactions based on enthalpy and entropy considerations.
5. Determine the electrochemical potential of redox reactions.

Course Format

The course will be delivered online in an asynchronous manner via the Lulima platform. Weekly optional workshops to review topics and solve problems will be offered via Zoom; recordings will be posted for students who cannot attend the meetings. Students should allocate 8-12 hours a week to complete reading and homework tasks. Assignments will be due at regular intervals during the summer session to encourage you to keep up with the material as there will be two mid-term exams at specific dates. Announcements will be posted every weekend.

Required Materials

Students must have the following:

- Computer or tablet with high-speed internet connection
- Access to Zoom
- Access to Lulima website
- Access to Clutch prep (free). Course code **BISSENETTE5**
- Google doc access or Microsoft Word and pdf reading software (Adobe)
- Access to CHEM101, <https://app.101edu.co/> **Cost \$25**. Course code **SV3UKC**, see Lulima for detailed instructions.
- OpenStax Textbook: Chemistry (Cost :Free, <https://openstax.org/details/books/chemistry-2e>)
- Scientific calculator that has Log and ln functions.

Course Policies

Communication

Participating in our Learning Community

A forum will be set up to set up study groups. Your instructor will be holding regular tutorial sessions and will send a weekly email by Monday morning to provide specific instructions about the week's tasks.

Contacting the Instructor

Students can communicate with the instructor via Lulima e-mail, or university e-mail. Messages will be answered within 24 hours during the week 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

Attendance to tutorial sessions is not mandatory.

If you anticipate being absent or are unable to take an exam, contact your instructor to determine if you can be "excused" and take the exam at a later date due to extenuating circumstances. Such circumstances include illness accompanied by a doctor's note, attending to family matter accompanied with written statement to that effect, or dealing with the passing of a family member accompanied with a link to the obituary.

Evaluation and Feedback

The instructor will attempt to grade work and provide feedback within two weeks. The Clutch Prep Assignment are graded for completion, not correctness – these are to encourage practice. The Chem 101 Assignments and Quizzes are graded for correctness.

Late Work

A 10% per day penalty will be applied to all late work, up to 30%. No work will be accepted later than one week after the due date unless there are specific circumstances and you have notified the instructor prior to the initial due date. Work can be submitted until 11:59 pm on the due date without late penalty.

Exams

Quizzes will have to be answered at the end of each chapter and there will be mid-term exams at the end of Week #2 and Week #4, and a Final Exam at the end of Week #6.

Details on how exams will be administered will be provided at a later time but they will all be online. Mid-term exams will be completed over a set period of 75 minutes and the final will be over 2 hours. Although the final will not be cumulative, concepts learned earlier during the semester will be used in later chapters and will be part of that exam. Exams will consist of a combination of multiple choice, numerical answers, matching, true/false, and short-answer questions.

Recipe for Success

- Check the Laulima homepage every Monday morning for announcements and important information.
- Check your email regularly (at least twice a week) as this will be our main communication tool
- Do not procrastinate, although it will appear that we start slow, the speed/amount of material will quickly increase and next thing you know, you're lost!
- Do your work on a regular basis, it is proven that frequent small chunks of time are more effective than cramming everything the day it's due - cramming generally will not produce a good outcome.

Grade Composition

The Final Grade will be based upon a possible total of 590 points. The lowest assignment and quiz will be dropped.

1. Chem101 chapter Assignments (best 8 out of 9 @ 25 = 200 points)
2. Quizzes (best 8 out of 9 @ 5 = 40 points)
3. Clutch prep work (90 points)
4. Chem161 review (10 points)
5. 2 mid-terms (75 points each = 150 points)
6. Final exam (100 points)

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

Final Grade

Grades of I, W, CR, CN are described in the current college catalog. 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	Date	Chapter/ Event	Topic/Event
1	5-Jul		Chem161 Review
	5-Jul	10	Liquids and Solids
2	12-Jul	11	Solutions and Colloids
	12-Jul	12	Kinetics
	18-Jul		Mid-term #1
3	19-Jul	13	Fundamental Equilibrium Concepts
	19-Jul	14	Acid-Base Equilibria
4	26-Jul	14	Acid-Base Equilibria
	26-Jul	15	Equilibria of Other Reaction Classes
	1-Aug		Mid-term #2
5	2-Aug	16	Thermodynamics
	2-Aug	17	Electrochemistry
6	9-Aug	21	Radioactivity
	13-Aug		FINAL EXAM

Institutional Information

Please review the following institutional policies:

Student Responsibilities

- Students should allocate 8-12 hours per week to review material and complete the assigned work.
- 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. Roy Inouye can be reached at (808) 235-7448, royinouy@hawaii.edu, or you may stop by Hale Kāko'o 106 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:

Kaahu Alo, Student Life Counselor & Designated Confidential* Advocate for Students

Phone: (808) 235-7354

Email: kaahualo@hawaii.edu

Office: Hale 'Ākoakoa 232

**confidentiality is limited*

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/

- 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 windward.hawaii.edu/MySuccess
 - Academic Advising
 - Financial Aid
 - Personal Counseling
- Technical Support Services