General Chemistry Lab II

CHEM - 1225 402

Course Description

Graded laboratory. It is recommended that students take CHEM 1220 in the same semester as this course.

Prereq: CHEM 1210

Semester: All

Required Text or Materials



Title: ANSI (American National Standards Institute) or OSHA (Occupational Safety and Health Administration) approved splash-guard safety goggles.

Subtitle: Approval is usually stamped on the goggles or the packaging.



Title: Lab coat or protective apron

Subtitle: This is optional, but will protect your body and your clothing.

For more information on textbook accessibility, contact Accessibility & Disability Services at ads@slcc.edu.

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
4/20/20	111C Postlab Questions	Quiz	0
8/27/25	101A Attendance	Assignment	5
9/2/25	101B Safety Quiz	Quiz	10
9/10/25	Experiment 11: Prelab Questions	Quiz	5
9/17/25	111B Lab Report	Assignment	5
9/17/25	Experiment 11: Postlab Questions	Quiz	5

Engagement Plan

- I will respond to email within 2 busness days. The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.
- I will grade and offer feedback on major assignments within 2 weeks.
- I will provide a short pre-lab lecture to review what you have already covered in the pre-lab quiz and identify challenging or difficult parts of the lab.
- I will be present and engaged during class, and available for questions regarding the lab material.
- Students are expected to engage with the introductory material and take the pre-lab quiz before coming to the lab session.
- Students are expected to attend session on-time, and may not be able to work with a partner if they arrive late.

- Students who cannot make their registered lab session may attend a different faceto-face session within the same week.
- Students are expected to respond to email within 2 business days.
- Students must attend all labs and interact with introductory modules for the first three weeks or email their instructor otherwise to inform them of their plans failure to do so may result in being dropped from the course.

Brief Description of Assignments/Exams

Pre-lab work is due before the lab period starts, and the completed data sheet and post-lab questions are due the week after the lab. You can see the dates on the Canvas calendar. Late work may be subject to points penalties. Please reach out to me if you will not be able to be prepared for the lab class on time.

Extra credit may be given at different points throughout the semester. Pay attention in lab so you know what/when these are!

As this course is teaching and assessing your skills with hands-on procedures, you must be present and engaged to receive points for lab coursework. If you are unable to attend a regularly scheduled lab due to illness, unavoidable business trip or a major life trauma you must notify me ASAP. Class periods which fall on holidays or during the finals period may necessitate a virtual lab option for those days - but they must still be completed for credit. One virtual lab is allowed per semester. Lab work for days that you were not in attendance in your regular lab period will not be accepted unless you have proof of attending a different section - a signature and date from the lab instructor of a different section is required.

All other 1225 labs are available for students to attend if they must miss a lab. However, you must attend the same lab in the same week. The Chemistry 1225 lab schedule for the semester can be found posted on the lab door: your best option when you know you will miss a lab is to use it to arrange for a make-up of the same lab you are missing.

Student Learning Objectives

Course learning objectives are consistent with the college-wide learning outcomes of acquiring substantive knowledge, communicating effectively, developing quantitative literacies, thinking critically and creatively, being community-engaged learners, and working in a professional manner with others:

College Wide Learning Outcome

Course Learning Objective

Course-level learning objectives map to College-wide learning objectives

Acquire Substantive Knowledge	 Students will demonstrate competence in basic laboratory skills including good laboratory hygiene, laboratory safety and hazardous waste disposal. Students will demonstrate competence in basic laboratory techniques, including titration
Communicate Effectively	 Students will demonstrate competence in reading and applying basic laboratory instructions Students will record observations of qualitative laboratory results appropriately, including physical and chemical properties
Develop Quantitative Literacies	 Students will be able to make chemical measurements using electronic balances, volumetric glassware, thermometers and burets Students will demonstrate competence in reading and understanding data tables, graphs, and charts used to describe phenomena studied in the laboratory Students will report quantitative laboratory results appropriately, including raw data and data analysis

Think Critically & Creatively	 Students will be able to identify unknown samples based on physical and chemical properties observed in the laboratory Students will be able to identify and correct mistakes made during a laboratory session by analyzing results obtained
Be Community- Engaged Learners	Students will properly handle and dispose of chemical waste.
Work in a Professional & Constructive Manner	Students will prioritize safe handling of chemicals and laboratory glassware while working around others.

Grading Scale

Grading Scale:

A = 94 -	B+ = 87 -	B - = 80 -	C = 73 -	D+ = 67 -	D- = 60 - 62
100	89	82	76	69	
A- = 90 -	B = 83 -	C+ = 77 -	C- = 70 -	D = 63 - 66	E = 59 &
93	86	79	72		below

Safety & Laboratory Rules

Students are required to know the location of laboratory safety equipment. The equipment found in the chemistry laboratory includes the following: eyewash and shower station, fire blanket, first aid kit, first aid procedures, emergency phone numbers, fire extinguisher, fire exit, broken glass container, and the closest fire alarm to the room.

Students must be aware of the evacuation plan for the building. Basic evacuation guidelines are: leave the building immediately, do not use elevators, and once out of the building, regroup with your instructor. Do not re-enter the building until administrative personnel indicate the building is safe to re-enter.

The following safety rules are crucial to prevent students from the sad consequences of accidents. These consequences may include loss of sight, severe skin burns, poisoning, and death. You must wear safety goggles at all times when you are in the laboratory and especially when performing an experiment. You must wear the goggles on your eyes, not wrapped around your head or neck. Contact lenses are strongly recommended against, even under goggles.

You will not be allowed to perform the experiment if you come to the lab improperly dressed. Proper clothing means:

- Close toed shoes. NO sandals, flip flops, etc.
- Long pants or skirts
- Long sleeved shirts are recommended. Short sleeves are okay. NO tank-tops, croptops, or sleeveless tops.

These further guidelines are to protect you from spills that happen frequently:

- No clothing that is loose or unbuttoned. Loose fabric can catch on fire or knock down bottles.
- Long hair must be tied back. It can easily catch on fire or be dipped in chemical solutions.
- Food and Drinks are not allowed in the lab. They can be easily contaminated with chemical dust or vapors.

Students who refuse to abide by the rules will be asked to leave the lab.

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

For more information, navigate to the Institutional Policies tab on the <u>Institutional Syllabus</u> page.

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, visit the <u>Institutional Syllabus</u> page under the Tutoring and Learning Support tab. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, visit the <u>Institutional Syllabus</u> page under the Advising and Counseling Support Services tab. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

SLCC Student Academic Calendar

How to Navigate to Canvas