

Survey of Chemistry (I) Laboratory

CHEM1151L - Fall 2020

Instructor: Dr. Zahra Alghoul

Course Communications

Please use icollege for course communications.

To send me an email through icollege, select *Classlist* -> *Instructors/TAs* -> *Send email* (dropdown button next to my name)

Course Description

This is the first lab in the Survey of Chemistry lab series for non-science majors. It introduces students to basic lab skills such as lab safety, use of glassware and measurement equipment, observing physical and chemical changes of matter, and use of various lab techniques in separating mixtures and determining unknown chemical samples. Studying for the lab includes watching prelab lecture videos, reading the experiment description, and completing various assignments.

Course Objectives

- To learn about the types of glassware and measurement tools used in a chemistry lab
- To perform calculations using rules for significant figures and rounding
- To perform unit conversions for different measurements
- To identify chemical reactions through physical and chemical changes
- To write balanced equations of chemical reactions
- To determine energy exchange during a physical or chemical transformation
- To practice drawing shapes and geometries of chemical compounds
- To learn the calculations and techniques used in preparation and characterization of solutions
- To observe chemical and physical properties of acids and bases
- To use the pH scale in classifying solutions

Course requirements

- A nonprogrammable scientific calculator
- Create a Labflow account using the instructions sheet posted on icollege.
- Installation of lockdown browser: This course will require students to use LockDown browser with Resonus Web Monitor for all course Exams. Students will need a webcam-enabled device capable of installing Lockdown Browser. Students who require a device may request one from CETL here: <https://cetl.gsu.edu/resources/resources-for-learning-remotely/internet-options/>

Course Format

The laboratory will be offered in an asynchronous online format.
You will use icollege and Labflow for accessing the course material.

PreLab Lectures

Prelab lecture videos will be posted every Monday in the content section on the course page on icollege.

Assignments

- **Prelab Quizzes and Lab reports**
Each experiment on Labflow consists of a description of the procedure, demonstration videos, a prelab quiz, and a lab report.
Each experiment will open on Monday at 8:00am and close on Sunday at 8:00pm.
Prelab quiz: It is a 2-hr long quiz. You will have 2 submission attempts at no penalty. It is due on Sunday at 8:00pm.
Lab report: It may be attempted anytime during the week of the experiment. You will have 1 submission attempt. It is due on Sunday at 8:00pm.
- **Course quizzes**
There will be 4 quizzes given throughout the semester. Each is a 20-minute quiz with 1 submission attempt. The quizzes will be accessible through icollege -> Assessments -> Quizzes.
- **Midterm and final**
Each is a 50-minute exam that consists of multiple choice and free response questions. You may use a blank scratch paper during the exam. You will be required to show the paper on the camera at the beginning and end of the exam. Exams will be accessible through icollege -> Assessments -> Quizzes.

Grading

- The lowest prelab quiz score and the lowest lab report score will be dropped. This excludes the lab safety quiz which is mandatory.
- If you miss a prelab quiz or lab report submission it will be your dropped score.
- The other 4 quizzes, midterm, and final exam will all count towards your grade.

Prelab Quizzes (10 of 11)	10 %
Lab reports (9 of 10)	40.5 %
4 Quizzes	9.5 %
Midterm	20 %
Final Exam	20 %

Grading Scale

Letter grade	Range %	Letter grade	Range %
A+	97+	C+	77+
A	93+	C	73+
A-	90+	C-	70+
B+	87+	D	60+
B	83+	F	< 60
B-	80+		

Schedule

Week 1 (08/24)	Lab Safety
Week 2 (08/31)	Chemistry glassware and measurement
Week 3 (09/07)	Chemical and physical properties Quiz 1
Week 4 (09/14)	Separating a mixture of solids
Week 5 (09/21)	Energy and specific heat Quiz 2
Week 6 (09/28)	Midterm Opens on 10/02 at 8:00am and closes on 10/04 at 8:00 pm.
Week 7 (10/05)	Modelling geometry and polarity
Week 8 (10/12)	Chemical reactions and equations
Week 9 (10/19)	Solutions, electrolytes, and concentrations Quiz 3
Week 10 (10/26)	Qualitative Analysis
Week 11 (11/02)	Le Chatelier's Principle
Week 12 (11/09)	Acids, bases, buffers, pH Quiz 4
Week 13 (11/16)	Review
Week 14 (11/23)	Thanksgiving Break
Week 15 (11/30)	Final exam Opens on 12/04 at 8:00am and closes on 12/06 at 8:00 pm.

Academic Honor Code

All students are expected to respect the academic honor policy and to contribute their own effort into their academic achievements. Graded assignments should reflect every student's effort. Violation of the academic honor policy will result in an F on the course, according to University regulations.

- Unauthorized sharing/collaboration on examinations or other assignments using any means including social media like GroupMe constitutes academic dishonesty.
- KNOWING about such sharing and not reporting it also constitutes academic dishonesty and will be reported as such.
- Please remember that there is no statute of limitations on academic dishonesty, so if it turns out after grades are reported that there was cheating or knowledge of cheating that was unreported, grades can be changed after the fact.

Americans with Disabilities Act Statement: If you are a student who requires special accommodations as defined under the Americans with Disabilities Act and require assistance or support services, please seek assistance through the Access and Accommodations Center at GSU.

Affirmative Action Statement: Georgia State University adheres to affirmative action policies designed to promote diversity and equal opportunity for all faculty and students.

Statement of Non-Discrimination: Georgia State University supports the Civil Rights Act of 1964, Executive Order #11246, Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act. No person shall, on the basis of age, race, religion, color, gender, sexual orientation, national origin or disability, be excluded from participation in, or be denied the benefits of, or be subjected to discrimination under any program or activity of the college.