

## Survey of Chemistry (I) Laboratory

CHEM1151L - Fall 2020

**Instructor:** Dr. Jyotsna Thota

### **Class Office hours**

How to sign up for office hours? On iCollege, click on webex, then office hours, then pick the most convenient slot that is available. Sign up 24 hours before the time slot.

If none of the slots work for you OR slots are not available, email me with 3 possible time slots (email should be sent 48 hours before the first time slot) and alternative time will be arranged for you.

If you formed student group and you would like to have group discussion with me, one member of the group should email me with 3 possible time slots (email should be sent 48 hours before the first time slot) and group discussion will be arranged for you.

Note: Office hours will be recorded.

### **Course Communications**

1. Email: [jthota@gsu.edu](mailto:jthota@gsu.edu)
2. Announcements on iCollege

### **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, and fundamental principles of chemistry. For successfully completing this course, the following steps should be followed

1. Sign up for notifications on iCollege  
How to sign up for notifications? On the top right corner of iCollege, you will see initials of your name. When you click and click on notifications, you will see several ways to get notifications. In the past, students have given feedback in my class that the app works best for them but please choose what works best for you.  
The idea is that you should get reminders as soon as an update is made on iCollege
2. Read the announcement about the Week's experiment in detail
3. Watching prelab lectures on iCollege (these will consist of checklist for the week and useful recommendations and tips)
4. Reading the experiment description on labflow (pdf files)
5. Watching all the videos on labflow
6. Completing prelab quiz
7. Completing data and report submission

Tip: At the start of the week, log into lab flow and download the pdf file, read it and make notes. Then watch the videos and make notes. Read through all your notes and make a list of things to memorize. Think about practical applications and types of questions you could be asked on a quiz/exam. Attempt pre-lab quiz, data and report submission. Attend office hours.

### **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
- Register for a Labflow account using the instructions sheet.
- Installation of lockdown browser: This course will require students to use LockDown browser with Resonus Web Monitor for all course **exams as well as quizzes**. 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. Students will use icollege and Labflow for accessing the course material.

### PreLab Lectures

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

### Assignments

**Week begins Monday 8.00 AM and ends Sunday 8.00 PM**

**After 8.00 PM on Sunday, students will not be able to access the lab quizzes or report. So all the work needs to be completed well before time to avoid any last minute problems.**

- Every week is associated with a prelab quiz and data and lab report submission  
Prelab quiz: Students will have 2 submission attempts at no penalty.  
Lab report: Students will have 1 submission attempt
- Course quizzes  
There will be 4 quizzes given throughout the semester. 1 submission attempt. The quizzes will be accessible through icollege -> Assessments -> Quizzes.
- Midterm and final examinations  
Each exam will consist 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 pre-lab quiz score and the lowest lab report score will be dropped.  
Note: Lab safety quiz is mandatory, and it will not be dropped.
- If you miss a pre-lab 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. They will not be dropped

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 <b>Quiz 1</b>
Week 4 (09/14)	Separating a mixture of solids
Week 5 (09/21)	Energy and specific heat <b>Quiz 2</b>

<b>Week 6 (09/28)</b>	<b>Midterm Opens on 10/02 at 8:00am and closes on 10/04 at 8:00 pm.</b>
Week 7 (10/05)	Modelling geometry and polarity
Week 8 (10/12)	Chemical reactions and equations
Week 9 (10/19)	Solutions, electrolytes, and concentrations <b>Quiz 3</b>
Week 10 (10/26)	Qualitative Analysis
Week 11 (11/02)	Le Chatelier's Principle
Week 12 (11/09)	Acids, bases, buffers, pH <b>Quiz 4</b>
Week 13 (11/16)	Review
<b>Week 14 (11/23)</b>	<b>Thanksgiving Break</b>
<b>TBA</b>	<b>Final exam</b>

### ***Class policies***

1. We honor each class member's experiences, beliefs, perspectives, and backgrounds, regardless of race, religion, language, immigration status, sexual orientation, gender identification, ability status, socio-economic status, national identity, or any other identity markers. If you ever have any concerns about the (virtual) classroom climate, please let Dr. Thota know. Your suggestions about how to reinforce the values of diversity and inclusion are encouraged and appreciated.
2. When posting on discussions, please post **only on the topic** asked by the Dr. Thota. Do not comment on other's discussion post unless instructed by the Dr. Thota.

### **3. 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.

- Selling, sharing, publishing or distribution of course material for any purpose is strictly prohibited. This includes posting any materials on websites such as Chegg, Course Hero, OneClass, Stuvia, StuDocu and other similar sites. In case group work is needed for the class, instructor will inform you of that as need arises.
  - 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.
  - <https://gastate.view.usg.edu/d2l/le/content/2060908/viewContent/36242700/View?ou=2060908>
4. **Americans with Disabilities Act Statement:** Students who wish to request accommodation for a disability may do so by registering with the Access and Accommodations Center. Students may only be accommodated upon issuance of accommodation documentation by AACE and students are responsible for providing a copy of that documentation to instructor. Students with AACE accommodations should then contact the instructor during the first week of classes.
  5. **Affirmative Action Statement:** Georgia State University adheres to affirmative action policies designed to promote diversity and equal opportunity for all faculty and students.
  6. **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.