

# Survey of Chemistry (I) Laboratory

## CHEM1151L - Summer 2021

**Instructor:** Dr. Jyotsna Thota

### **Course Communications**

[jthota@gsu.edu](mailto:jthota@gsu.edu)

Please use this email. In the subject write the course and topic of the email. For example, "1151 lab, quiz 2 grade questions"

Please do not use iCollege for email

### **Course Format**

The laboratory will be offered in synchronous online format.

You will use icollege for accessing the course material.

### **Lab Meetings**

Online lab meetings will be held on MW at 2:00 pm – 4.55 PM via Webex. To join a meeting, click on the **Webex** tab on the course page on icollege and then click on the **Join** tab for the corresponding session under **Virtual Meetings**.

### **Office Hours**

You may sign up for a 15-minute individual Webex meeting for office hours.

To sign up for an office hour meeting, use the Webex tab on the course page on icollege -> Click on Office Hours tab -> Choose one of the available times on Monday or Wednesday -> click on Confirm Meeting.

### **Course requirements**

Installation of lockdown browser: This course will require students to use LockDown Browser with Respondus Web Monitor for quizzes, midterm and final exam. Students will need a webcam-enabled device capable of installing Lockdown Browser. Students who require a device may request one from CETL: <https://cetl.gsu.edu/resources/resources-for-learning-remotely/internet-options/>

### **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. More information about the course is provided under the Course Introduction section on icollege.

### **Course Objectives**

- Recognize and state the use of appropriate laboratory equipment.
- Define accuracy, precision, and significant digits
- Determine physical properties of substances
- Convert observable laboratory reactions to balanced equations
- Analyze a set of data related to a specific experiment
- Use stoichiometry to determine the formula of a compound, given appropriate data.
- Determine concentration of a solution using titration
- Examine the factors that affect reaction rates
- Make models based on Lewis structures, and predict the shapes of the molecules.
- Prepare solutions of assigned molarity using dilution and other methods

## Assignments

- Admin Quizzes: Roll Verification Quiz, Syllabus Quiz, General Chemistry Laboratory Safety Guidelines Agreement.
- Prelab Quizzes: open-book quiz. Once you open a quiz, you must complete it in the same session.
- Data Sheets: Use the data sheet for each experiment to show your data and calculations.
- Full Lab Report: You will choose one of the lab activities performed during the semester and type a full lab report, consult your instructor for approval of your chosen activity. You will get a chance to obtain peer feedback on your first draft (by submission in the Discussion Board) before submission to your instructor for grading. The Full Lab report is submitted as Assignment in iCollege. See due date in the schedule.
- Discussion Boards: Each module will include at least one Discussion Board on either a case study, a simulation activity or the creation of a formal lab report. Instructions for each discussion and the due dates are given in the respective module.
- Summative Quizzes: A total of 4 multiple-choice quizzes given on the dates specified in the schedule. Lockdown Browser and Webcam are required to access the quizzes. Once you start a quiz, you must complete it in the same session.
- Midterm and Final Exam: Lockdown Browser and Webcam are required for both. The Midterm Exam will be comprehensive of all topics discussed up to the time of the exam. The Final Exam will be comprehensive of all topics discussed during the semester. Once you start the exam, you must complete it in the same session.

## Grading

Admin Quizzes	1%
Pre-Lab Quizzes	4%
Data Sheets	15%
Full Lab Report	15%
Discussion Board Participation	20%
Summative Quizzes	10%
Midterm Exam	15%
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 for lab work*

<b>Opens on (8.00 AM)</b>	<b>Closes on (11.30 PM)</b>	<b>TOPIC</b>
June 7, 2021	June 8, 2021	1. Welcome + Safety
June 9, 2021	June 10, 2021	2. Chemistry and Measurements
June 14, 2021	June 15, 2021	3. Determination of Density
June 16, 2021	June 16, 2021	QUIZ #1
June 21, 2021	June 22, 2021	4. Separation of components of a mixture
June 23, 2021	June 24, 2021	5. Types of Chemical Reactions
June 28, 2021	June 29, 2021	6. Shapes of Molecules - VSEPR
June 30, 2021	June 30, 2021	QUIZ #2
July 1, 2021	July 1, 2021	Midterm Exam
July 7, 2021	July 8, 2021	7. Chemical Reactions and Equations - Stoichiometry
July 12, 2021	July 13, 2021	8. Solutions
July 14, 2021	July 15, 2021	9. Equilibrium - Le Châtelier
July 19, 2021	July 19, 2021	QUIZ #3
July 21, 2021	July 22, 2021	10. Acids, bases, buffers and pH
July 26, 2021	July 27, 2021	11. Titration
July 28, 2021	July 28, 2021	QUIZ #4
	July 28, 2021	FULL LAB REPORT DUE
July 29, 2021	July 30, 2021	Final Exam

### ***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.

### **Students Requiring Accommodation**

Students who wish to request accommodations may do so by registering with the Access & Accommodations Center (AACE). Students may only be accommodated upon issuance by AACE of a signed Accommodation Plan and are responsible for providing a copy of that plan to instructor in the first week of classes.

**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.