

Survey of Chemistry (I) ---- Online Laboratory Course

CHEM 1151 Laboratory Fall 2020

Due to COVID 19 quarantine and in accordance with instructions from the University System of Georgia, CHEM 1151 Laboratory will be delivered fully online during the Fall 2020 semester.

The university has created the [Keep Learning website](#) to walk you through the steps to prepare for your online classes, with instructions for logging on to iCollege, submitting assignments, taking quizzes, and so forth.

Instructor: Dr. Jie Jiang

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Email is the best way to communicate and solve problems.

Laboratory sections: CRN 93027, 93028

Office hours (Virtual Meeting)

Friday 9:00-10:30 am through Webex.

Students should sign up for meetings using the Webex tab on the course page in icollege, so check iCollege often. If you cannot make office hours, please send an email to the instructor for any questions or make an appointment for another time to meet.

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 course includes watching prelab lectures, reading the experiment description, and completing various assignments.

Course Learning Outcomes: Students will learn how to apply scientific and laboratory experimental methods to develop critical thinking in scientific data analysis and grow problem solving skills in the health care area and medicine.

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

- Create a Labflow account using the instructions sheet posted on icollege.
- A nonprogrammable scientific calculator

- 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.

Students will use **iCollege and Labflow** for accessing the course material.

Prelab lecture **videos** will be posted on the course page on icollege. More details will be informed through email when the class starts.

Lab course enrollment and participation in Lab Flow:

- Enroll Lab Flow online. When you register for lab flow, your key to enter is your CRN. Make sure that you are in the **correct CRN section**.
- Become familiar with the lab course structure and **pay attention to the due date**.
- Study all the PDF and videos before working on the assignments and make sure submit your work. Stay connected to your other course assignments via iCollege.

Assignments

- **Prelab Quizzes and Lab reports (in Labflow)**

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. Students will have 2 submission attempts at no penalty, the attempt with the highest score will be counted for scores. It is due on Sunday at 8:00pm.

Lab report: It has the duration of the experiment. You will have 1 submission attempt. It is due on Sunday at 8:00pm in the same week when the lab is open.

- **Course quizzes (in iCollege)**

There will be 4 quizzes given throughout the semester (check the date in the Lab Schedule Table below). The quizzes will be accessible through iCollege -> Assessments -> Quizzes. Quiz details will be posted on iCollege before it is open.

- **Midterm and Final Exams (in iCollege)**

Each exam 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. Exam details will be posted on iCollege before it is open.

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 counted as your dropped one.
- The other 4 quizzes, midterm, and final exam will all be in iCollege and counted towards your total grade.

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

Grading Scale (Note: No grade will be revealed through email or phone calls)

| 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+ | | |

Lab Schedule

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| Week 1 (08/24) | Lab Safety |
| Week 2 (08/31) | Chemistry glassware and measurement |
| Week 3 (09/07) | Chemical and physical properties Quiz 1 in iCollege |
| Week 4 (09/14) | Separating a mixture of solids |
| Week 5 (09/21) | Energy and specific heat Quiz 2 in iCollege |
| Week 6 (09/28) | Midterm in iCollege 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) October 13 is the last day to withdraw with a "W" | Chemical reactions and equations |
| Week 9 (10/19) | Solutions, electrolytes, and concentrations Quiz 3 in iCollege |
| Week 10 (10/26) | Qualitative Analysis |
| Week 11 (11/02) | Le Chatelier's Principle |
| Week 12 (11/09) | Acids, bases, buffers, pH Quiz 4 in iCollege |
| Week 13 (11/16) | Class Review |
| Week 14 (11/23) | Thanksgiving Break |
| TBA | Final Exam in iCollege |

Withdrawal Policy:

A grade of W will be assigned if the student officially withdraws by midpoint. After midpoint, withdrawal will result in a WF grade.

Incomplete:

An incomplete (I grade) is available only if the course has been essentially completed. If the student misses the final exam due to illness, injury, or other special circumstance, he/she may request an I grade. Documentation will be required confirming the illness or other difficulty. The I grade must be made up within one semester. If not made up within one semester, the I grade automatically reverts to an F. Note that the student may receive an I grade only if he/she is passing the course but is unable to take the final exam only.

The policy on grades of "I" http://www2cas.gsu.edu/docs/oaa/incomplete_policy_and_form.pdf

Academic Honesty 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: Students who wish to request accommodation for a disability may do so by registering with the 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 instructors of all classes in which accommodations are sought. please seek assistance through the Access and Accommodation Center <https://access.gsu.edu/>. Students with AACE accommodations should then contact their instructor during the first week of classes to discuss any accommodations that need to be made.

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.