

# Freshman Chemistry I

## CHEM 1211

The instructor reserves the right to make changes or corrections to this syllabus at any time. Students will be notified when any changes are made by email or eLC announcements.

## Course Overview

### Description

Chemistry 1211 is a three-credit hour online course that will be taught asynchronously. Chemistry 1211L is the companion one credit hour lab course and must be taken concurrently, unless you already have credit for the lab course. Chemistry 1211L is being taught synchronously and meets once per week. CHEM 1211/1211L are freshman chemistry courses that are comparable to similar sequences for science majors taught at major state universities in the country. This course uses an American Chemical Society Examinations Institute standardized exam as the final.

### Instructor

**DR. SARA BLANKENSHIP**

Chemistry Building, Room 503

**Office Hours:** T, W, Th; 4:00 – 5:30 p.m.

**Individual Meetings:** by appointment

[sara.blankenship@uga.edu](mailto:sara.blankenship@uga.edu)

706-389-0618

Zoom ID: <https://zoom.us/j/7065421951>

## Course Information

Recorded lectures will be delivered asynchronously on eLC. There will be a mandatory recitation session via Zoom on **Fridays** each week during the regularly scheduled class time.

## Textbook (e-text to be purchased through eLC)

General Chemistry: Principles and Modern Applications, 11<sup>th</sup> edition, Ralph H. Petrucci, F. Geoffrey Herring, Jeffry D. Madura, Carey Bissonnette

## Other Required Materials:

Any non-programmable, scientific calculator such as the Ti-3x series or the Casio ClassWiz series (The TI-36x Pro is recommended).

## Course Learning Outcomes

1. Apply, integrate, and synthesize concepts from multiple fundamental areas of chemistry to solve complex problems.
2. Explain the behavior of, and interactions between, matter and energy at the atomic, microscopic, and macroscopic domains using appropriate models and symbols.
3. Predict chemical and physical behavior from three-dimensional models of molecules and ions.
4. Distinguish between chemical and physical changes.

5. Predict macroscopic characteristics of materials based on atomic/molecular structure using appropriate models.
6. Describe how chemical reactions obey the law of definite proportions and the first and second laws of thermodynamics.
7. Demonstrate how the Bohr model of the atom relates to the modern description by quantum theory, and using terms of the quantum theory, relate atoms to the Periodic Table.

## Course Requirements and Grading

### Course Coverage

These chapters will be covered in CHEM 1211:

Chapter 1: Matter: Its Properties and Measurement

Chapter 2: Atoms and the Atomic Theory

Chapter 3: Chemical Compounds

Chapter 4: Chemical Reactions

Chapter 5: Introduction to Reactions in Aqueous Solutions

Chapter 6: Gases

Chapter 7: Thermochemistry

Chapter 8: Electrons in Atoms

Chapter 9: The Periodic Table and Some Atomic Properties

Chapter 10: Chemical Bonding I: Basic Concepts

Chapter 11: Chemical Bonding II: Valence Bond and Molecular Orbital Theories

### Course Assignments

#### Recitation Sessions

Mandatory recitation sessions will be held each **Friday** during the scheduled class time. During the recitation sessions, students will work in small groups, using the breakout room function on Zoom, and recitation worksheets will be due at the end of the session. The worksheets will be converted to a PDF file and uploaded to Gradescope. Instructions for conversion of the worksheets to a PDF file and uploading to Gradescope are in separate documents and are available on eLC. There will be **14 recitation sessions** and the one with the lowest score will be dropped. The recitation attendance and worksheets will be worth **39 points**.

#### Class Questions

Class Questions will be available in MasteringChemistry on Mondays, Wednesdays, and Fridays from midnight until noon the following day and will focus on the material listed on the class calendar and the assigned videos. **Two** attempts will be allowed for each question with a 50% question penalty for each incorrect attempt. Hints will become available after the first attempt to help you successfully answer the question.

Your written work for the Class Questions must be converted to a PDF file and uploaded to the appropriate assignment folder on eLC to receive credit for the assignment. Uploading instructions will be available.

Everyone in the course will receive a portion of the Class Question points based on your total percentage. If you score 90% of the credit for the Class Questions, you will earn 90% of 133 points (119.7 points) toward your final grade.

**Academic Honesty Expectations:** You must respond to your own questions.

## Reading Checks

Before beginning a chapter in class, you will need to complete a reading check that assesses basic mastery of the material. Reading checks will be delivered on MasteringChemistry and will be available on **Fridays at noon** and will be due on **Sundays at 11:59 p.m.** There will be a total of **fifteen** reading checks worth **four points** each. The reading check with the lowest score will be dropped at the end of the semester. The Reading Check can be turned in up to one day late for reduced credit.

**Five** attempts will be allowed for each question in the Reading Check. There is a 5% penalty for each incorrect attempt, so it is in your best interest to work the problems as you read the chapter.

**Academic Honesty Expectations:** You may work in groups on reading checks; however, each of you must do your own problems.

## Progress Checks

Progress checks are **timed** assignments designed to test your understanding of the course materials and simulate exam conditions. The point value of progress checks has been intentionally set at a low value so that you can stumble on the progress check and not severely hurt your grade in CHEM 1211. It is much better to find out what you're struggling with on the progress check instead of the exam.

Progress checks will open on **Fridays at 5:00 p.m.** and will be due on **Mondays at noon**. There will be a total of **14** progress checks worth **six** points each. The lowest two progress checks will be dropped.

**Be Aware:** Opening the progress check before it is due to look at the questions commits you to completing the assignment. The timer **cannot** be stopped or reset.

**Academic Honesty Expectations:** You are expected to work on your own when completing the progress checks. You should not use **any** outside resources. This is your opportunity to see what you need to work on before the exam. You should not share or post progress check questions for other students while the progress check is open.

## Practice Quizzes

There are practice quizzes in your Study Area. These are a great way to test yourself without the pressure of earning points. I highly recommend that you do the practice quizzes without any resources to prepare for Progress Checks and exams.

## Exams

Four (5) 90-minute, 200-point examinations will be given on Tuesday evenings. **There will be no makeup exams.**

- Exams will be administered on eLC.
- Your exam grade with the lowest percent value will be replaced with your final exam percentage value if it is higher.

### Exam Schedule:

Exam 1	Tuesday, 7:00-8:30 p.m.	September 1
Exam 2	Tuesday, 7:00-8:30 p.m.	September 15
Exam 3	Tuesday, 7:00-8:30 p.m.	October 13
Exam 4	Tuesday, 7:00-8:30 p.m.	November 3
Exam 5	Tuesday, 7:00-8:30 p.m.	December 1

## Final Exam

The final exam will be administered on **Monday, December 14**. The final exam will be the First-Term General Chemistry Exam from the American Chemical Society (ACS) Examinations Institute. This multiple-choice exam has a total value of **400 points** in the course. If your percentage grade on this exam is higher than your lowest exam percentage grade, this percentage grade will replace it. It is in your best interest to do as well as you can on this exam.

## Course Grades

Course grades in CHEM 1211 will be calculated based on these components:

Assignment	Points
Five exams	1000
Final Exam (ACS)	400
Reading Checks	56
Progress Checks	72
Class Questions	133
Recitation Worksheets and Attendance	39
<b>Total</b>	<b>1700</b>

If you score below 50% on the final exam, you will receive an 'F' for the course. If you score 50% or higher on the final exam, your final grade will be based on the total points earned out of **1700** total possible points:

A	= 1530 to 1700	90%
A -	= 1496 to 1529.9	88%
B+	= 1462 to 1495.9	86%
B	= 1360 to 1461.9	80%
B-	= 1326 to 1359.9	78%
C+	= 1275 to 1325.9	75%
C	= 1105 to 1274.9	65%
D	= 850 to 1104.9	50%
F	= 0 to 849.9	

**Final grades will not be adjusted (i.e., "curved") at the end of the semester.** Course letter grades are delivered via Athena and appear when they are posted and released by the Registrar's Office.

## Policies and Procedures

### Communication

The instructor will communicate with the class in two ways: (1) email and (2) news post on the course eLC site. You may login to eLC at <http://elc.uga.edu> using your UGA myID and password. It is highly recommended that you forward your eLC e-mail to your preferred e-mail address. Remember that official communication is through eLC e-mail and/or UGA mail. It is your responsibility by UGA policy to check both on a daily basis.

The eLC site will also be used to store and deliver lecture videos, lecture slides, exam resources, general handouts and other documents. You will also find instructions covering Gradescope and MasteringChemistry.

## Email Etiquette

The course instructor receives a large number of student emails per day. To ensure your email is answered as quickly as possible:

- Do not send email to eLC accounts. Instructors may be reached via their primary email addresses.
- Instructors will not respond to questions that are answered in the course syllabus or postings on eLC.
- Please allow at least **48 hours** for a response due to the high volume of emails.
- Your emails must be both courteous and coherent. If you would not say it in person, don't write it in an email.

## What about lab (CHEM 1211L)?

CHEM 1211 and 1211L are individual courses that are administered and graded separately. You will receive separate and independent grades for these two courses. However, CHEM 1211 and 1211L must be taken concurrently. All students must be registered for both lecture and lab. (A small number of students may have already completed the lecture or lab when rules allowed that. Students who have taken CHEM 1211 and 1211L previously, and received grades of "I", should not register for the course(s) a second time because the earlier "I" grade will automatically be changed to an "F".)

## Withdrawal Policy

The last day to withdraw from CHEM 1211 is **Tuesday, October 27<sup>th</sup>, 2020**. A grade of 'W' is assigned to all withdrawals made prior to the withdrawal deadline, irrespective of performance in the course. Withdrawal is accomplished through Athena. Go to the withdrawal section of Athena and follow the instructions.

CHEM 1211 and CHEM 1211L are corequisite courses. You **may not** remain enrolled in CHEM 1211L if you withdraw from CHEM 1211. There are no exceptions to this policy. After the withdrawal deadline, no student may withdraw from CHEM 1211/1211L except in the case of an approved hardship withdrawal that is authorized by the Office of Student Services (<http://reg.uga.edu/policies/withdrawals>).

## Incomplete Policy

An incomplete grade, "I", may be assigned to students that are passing CHEM 1211 but are unable to complete all university coursework during the current semester due to unforeseen personal and/or medical circumstances. An incomplete grade is not assigned to students who are able to complete their university coursework but choose not to complete chemistry due to poor performance. In order to receive an incomplete in the class you must meet with your instructor and sign a contract which stipulates the terms and conditions of all university sanctioned incompletes.

## Disability Accommodations

Students with a disability that are seeking classroom or testing accommodations must register with the Disability Resource Center (DRC). More information can be found at [https://drc.uga.edu/site/content\\_page/register-for-services](https://drc.uga.edu/site/content_page/register-for-services).

## Academic Honesty

As a University of Georgia student, you have agreed to abide by the University's academic honesty policy, "A Culture of Honesty," and the Student Honor Code. All academic work must meet the standards described in "A Culture of Honesty" found at: [www.uga.edu/honesty](http://www.uga.edu/honesty). Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. Questions related to course assignments and the academic honesty policy should be directed to the instructor.