

# CHEM 1210 (Basics of Chemistry)

## INSTRUCTOR

**Name:** Dr. Sara Blankenship

**Phone:** 706-286-2063

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

(mailto:sara.blankenship@uga.edu)

**Office Location:** Cedar Street Building D, room 407E

**Office Hours:** Tuesdays, 1:00 - 2:00 p.m.;  
Wednesdays, 2:40 - 4:00 p.m., location TBD

### A University statement on STEM courses:

**This is a Core IMPACTS course that is part of the *STEM* area.**

Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help master course content and support students' broad academic and career goals.

This course should direct students toward a broad *Orienting Question*:

- How do I ask scientific questions or use data, mathematics, or technology to understand the universe?

The syllabus is a living document, so sometimes changes must be made. This is rare, but if I need to change the syllabus, I will tell you both in class and by email.

Completion of this course should enable students to meet the following *Learning Outcome*:

- Students will use the scientific method and laboratory procedures or mathematical and computational methods to analyze data, solve problems, and explain natural phenomena.

Course content, activities, and exercises in this course should help students develop the following *Career-Ready Competencies*:

- Inquiry and Analysis
- Problem-Solving
- Teamwork

## COURSE DESCRIPTION

Chemistry 1210 is the “Basics of Chemistry” course designed to help students develop chemistry content knowledge and problem-solving skills. It serves as a preparation for the General Chemistry sequence or as a core course, offering 4 credit hours in science without a laboratory component.

### **How can you succeed in this course?**

Research shows that students with a growth mindset are more likely to reach their academic goals. A person with a growth mindset believes they can learn, even when it's difficult, and that the key to learning is putting in the appropriate amount of effort. I will do my best to encourage a growth mindset in class, and I hope you do the same. Learning is easiest when we work together toward your goals!

I expect that you arrive to class on time regularly, focus on class content while in class, and spend an appropriate amount of time studying for this class. I understand that life can make these expectations challenging at times. I can't remove your responsibilities or lower any standards, but I will do everything I can to help, and I know about lots of resources on campus to help you both with academic and non-academic responsibilities. The key to being successful is recognizing when you need help and asking for it. Please email or talk to me before becoming overwhelmed. I'm here to help.

---

## COURSE MATERIALS

# Required Materials

The materials we will use for this course include:

- *Introductory Chemistry: A Foundation*, 7th edition, Steven S. Zumdahl, and Donald J. DeCoste, purchased through the course homepage. A print copy can be purchased through Cengage, and a .pdf is posted in the Textbook and Webassign module.
    - Webassign access is included with your online textbook purchase.
  - Any non-programmable, scientific calculator such as the TI-3x series or the Casio ClassWiz series (The TI-36x Pro is recommended).
  - An internet-connected device such as a laptop, tablet, or cell phone.
- 

## COURSE DELIVERY

This is an in-person course with a weekly required in-person recitation session.

---

## COURSE REQUIREMENTS AND GRADING

### Course Learning Outcomes

After completing this course, you will be able to:

1. Solve chemistry problems using the appropriate mathematical expressions and determine if the answer is physically reasonable.
2. Explain differences in the physical and chemical properties of ionic and covalent compounds using electrostatic interactions.
3. Explain macroscopic properties using molecular-level models.
4. Calculate reaction quantities and energies using the appropriate stoichiometric conversions.
5. Explain how the physical and chemical properties of matter are controlled by atomic and molecular structure.

6. Combine and apply chemical knowledge to solve new or unfamiliar problems.

## Course Coverage

These chapters will be covered in CHEM 1210:

- Chapter 1: Chemistry: An Introduction
  - Chapter 2: Measurements and Calculations
  - Chapter 3: Matter
  - Chapter 4: Chemical Foundations: Elements, Atoms, and Ions
  - Chapter 5: Nomenclature
  - Chapter 6: Chemical Reactions: An Introduction
  - Chapter 7: Reactions in Aqueous Solution
  - Chapter 8: Chemical Composition
  - Chapter 9: Chemical Quantities
  - Chapter 10: Energy
  - Chapter 11: Modern Atomic Theory
  - Chapter 12: Chemical Bonding
  - Chapter 13: Gases
  - Chapter 14: Liquids and Solids
  - Chapter 15: Solutions
  - Chapter 16: Acids and Bases
- 

## Course Assignments

Please review all these assignments and expectations carefully.

---

## Class Activities

I will provide class activities to help you learn important skills during the semester, and they will be worth 70 points. The activities include worksheets, problem sets, hands-on activities, or learning games. You will work in groups on Class Activities because peer learning helps you understand content better. Class activities are submitted to assignment dropboxes on eLC before the end of class. Because there are a lot of assignments to grade, emailed submissions are not accepted. Late assignments are not accepted

without permission, so please talk to me before you leave class if you have trouble submitting an assignment.

**Absences:** *You must be in class* to receive credit for class activities. You can be excused from two weeks of Class Activities. Missing more than this will make it challenging to succeed. You do not need to send documentation; you will be excused from any missing Class Activity up to two weeks (that's six in this class). You will receive 1 bonus point toward your final grade in the course for any unused excused Class Activity. That's worth up to six total bonus points on your grade, so use your excused assignments wisely!

**Academic Honesty Expectations:** Class Activities are completed in groups. However, you must submit your own assignment. You can't submit someone else's assignment with your name on it or one group assignment with all of your names on it unless instructed. You can't submit a Class Activity unless you are in class to complete it. Submitting a Class Activity when you are absent is a violation of the Academic Honesty Policy.

---

## Reading Checks

Before beginning a chapter in class, you will complete a Reading Check that introduces you to the material. Reading Checks will be available on Webassign at 8:00 a.m. each Thursday and will be due at 10:00 p.m. each Sunday. There will be a total of 14 Reading Checks worth **four** points each. ***The lowest three Reading Check grades will be dropped.*** Because three Reading Checks are dropped, late Reading Checks will not receive credit and extensions can't be granted.

Five attempts will be allowed for each question in the Reading Check. There is a 10% penalty for each incorrect answer starting with the third attempt, so it is in your best interest to work the problems as you read the chapter and the notes. A tutorial will become available for certain questions on the third attempt.

**Academic Honesty Expectations:** You may work in groups on Reading Checks; however, each of you must do your own problems. You can use your textbook and resources provided on eLC but can't use AI or websites like Chegg to complete the problems.

---

## Readiness Quizzes

Readiness Quizzes are given the week before an exam to help you practice problems under timed conditions. The quizzes cover exam content and will be timed the same as an exam with a similar number of questions. ***You will have two attempts to take each Readiness Quiz, and the lower of the two grades will be dropped.*** Late Readiness Quizzes can't be accepted and extensions can't be granted. There will be a total of five Readiness Quizzes worth 10 points each.

**Important:** Opening the Readiness Quiz 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 ***must*** work alone when completing the Readiness Quizzes. Remember that these are quizzes, so you should not use ***any*** resources (notes, book, websites, etc.) or work with others. This is your opportunity to see what you need to study before the exam. You are allowed a periodic table, any equations or constants I provide, and your exam-approved calculator. Sharing Readiness Quiz questions with other students while the assignment is open violates the Academic Honesty policy.

---

## Recitation Sessions

Recitation is an opportunity for us to review each week's material using worksheets, case studies, learning games, and other activities. Attendance is required and will be recorded using your UGA ID for each recitation session. Recitation activities will be turned in on eLC or in-person with a paper submission at the end of the session. You will work in groups like you do in class. There will be 15 Recitation sessions worth **three** points each. ***The lowest three recitation grades will be dropped.*** Because three recitations are dropped, late recitations will not be accepted.

**Academic Honesty Expectations:** You will work in groups on recitation activities but must complete your own problems and submit your own work. You can use resources provided on eLC but can't use outside resources (Google searches, other websites, AI) unless instructed.

---

## Exams

**Four 90-minute, 200-point examinations will be given.** All four exams will be administered in person on a Thursday evening. Make-up exams will be given on a case-by-case basis and require official documentation that excuses you specifically on exam day. You must contact me before 3:00 p.m. on exam day to request a make-up exam. Emergencies are handled on a case-by-case basis.

**Regrade Requests:** Exam questions will be answered on Gradescope answer sheets. Regrade requests can be made through Gradescope if your answer exactly matches the posted answer key but is marked as incorrect. You have three days after the exam answer key posts to submit regrade requests. No regrade requests can be accepted after the request deadline for each exam.

### Final Exam

The final exam will be administered in person at 7:00 p.m. on Thursday, May 1st. This multiple-choice exam is worth 250 points. ***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.

University policy states that you must have attended at least 50% of the total classes to be admitted to the final exam. This is because attendance is very important to your learning, and we want you to be successful!

| Exam       | Day/Time                   | Date          |
|------------|----------------------------|---------------|
| Exam 1     | Thursday, 5:30 - 7:00 p.m. | January 30th  |
| Exam 2     | Thursday, 5:30 - 7:00 p.m. | February 27th |
| Exam 3     | Thursday, 5:30 - 7:00 p.m. | March 27th    |
| Exam 4     | Thursday, 5:30 - 7:00 p.m. | April 17th    |
| Final Exam | Thursday, 7:00 - 8:50 p.m. | May 1st       |

## Course Grades Summary

**Total Score:**1250 points

| Assignment            | Possible Points |
|-----------------------|-----------------|
| Four Exams            | 800             |
| Final Exam            | 250             |
| Reading Checks        | 44              |
| Readiness Quizzes     | 50              |
| Class Activities      | 70              |
| Recitation Activities | 36              |
| Total Points          | 1250            |

## Grading Criteria

Your final grade will be based on the following:

| <b>Letter Grade</b> | <b>Points</b>       | <b>Percentage Equivalent</b> |
|---------------------|---------------------|------------------------------|
| A                   | 1125 to 1250 points | 90 - 100%                    |
| A-                  | 1100 to 1124 points | 88 - 89.9%                   |
| B+                  | 1075 to 1099 points | 86 - 87.9%                   |
| B                   | 1000 to 1074 points | 80 - 85.9%                   |
| B-                  | 975 to 999 points   | 78 - 79.9%                   |
| C+                  | 950 to 974 points   | 76 - 77.9%                   |
| C                   | 850 to 949 points   | 68 - 75.9%                   |
| C-                  | 813 to 849 points   | 65 - 67.9%                   |
| D                   | 688 to 812 points   | 55 - 64.9%                   |
| F                   | 0 to 687 points     | <55%                         |

---

## Special Note on Grading



Final grades will not be adjusted (i.e., “curved”) at the end of the semester because there is a built-in curve that is shown in the percentage grades.

Course letter grades are delivered via Athena and appear when they are posted and released by the Registrar’s Office.

---

# **POLICIES AND PROCEDURES**

---

## **Communication**

I will communicate through in-class announcements, by email, or by announcements posted to eLC. You may log in to eLC at <http://elc.uga.edu> (<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 written communication is through eLC e-mail and/or UGA mail. It is your responsibility by UGA policy to check both daily. The eLC site will also be used to store and deliver chapter slides and notes, exam resources, general handouts, and other documents. You will also find instructions covering Gradescope and Webassign.

---

## **Email Etiquette**

I receive a lot of emails per day and would love them all to be polite! Here are some guidelines to help you write the best emails:

- 1.** Please send emails to my UGA email address, which is posted on the course homepage. Don't send them through eLC or I won't see them.
  - 2.** Please review eLC postings and the syllabus before sending your email. Your question may already be answered in available course materials, and you'll have your answer faster!
  - 3.** Please allow at least 24 hours for a response. If it has been longer than 48 hours, send a reminder or ask me in class.
  - 4.** Your emails must be both respectful and coherent. Please include a proper greeting and signature.
  - 5.** Remember that emails are a conversation between us, and I want it to be a successful conversation. Don't type anything that you wouldn't say in person.
- 

## **Withdrawal Policy**

The last day to withdraw from CHEM 1210 is Thursday, April 3rd. A grade of 'W' is assigned to all withdrawals made before 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.

---

## **Incomplete Policy**

An incomplete grade, "I" may be assigned to students who are passing CHEM 1210 but are unable to complete all coursework during the current semester due to unforeseen personal and/or medical circumstances. An incomplete grade is not assigned to students who can complete their coursework but choose not to due to poor performance. To receive an incomplete in the class you must meet with me and sign a contract that stipulates the terms and conditions of the university-sanctioned incomplete.

---

## **Disability Accommodations (The Americans with Disabilities Act Statement)**

The first step to success in any class is understanding how you learn. I wish that I had used my college's resources when I was an undergraduate to help with my learning disability (feel free to ask me about it!). Students with a disability who need 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) ([https://drc.uga.edu/site/content\\_page/register-for-services](https://drc.uga.edu/site/content_page/register-for-services)). The DRC will send me your accommodations once you are approved.

---

## **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) (<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.

# **MENTAL HEALTH AND WELLNESS RESOURCES**

---

UGA Well-being Resources promote student success by cultivating a culture that supports a more active, healthy, and engaged student community.

Anyone needing assistance is encouraged to contact Student Care & Outreach (SCO) in the Division of Student Affairs at 706-542-8479 or visit [sco.uga.edu](https://sco.uga.edu). Student Care & Outreach helps students navigate difficult circumstances by connecting them with the most appropriate resources or services. They also administer the Embark@UGA program which supports students experiencing, or who have experienced, homelessness, foster care, or housing insecurity.

UGA provides both clinical and non-clinical options to support student well-being and mental health, any time, any place. Whether on campus, or studying from home or abroad, UGA Well-being Resources are here to help.

- [Well-being Resources](https://well-being.uga.edu/) (<https://well-being.uga.edu/>)
- [Student Care and Outreach](https://sco.uga.edu/) (<https://sco.uga.edu/>)
- [University Health Center](https://healthcenter.uga.edu/) (<https://healthcenter.uga.edu/>)
- [Counseling and Psychiatric Services](https://caps.uga.edu/) (<https://caps.uga.edu/>) or CAPS 24/7 crisis support at 706-542-2273
- [Health Promotion/ Fontaine Center](https://healthpromotion.uga.edu/) (<https://healthpromotion.uga.edu/>)
- [Disability Resource Center and Testing Services](https://drc.uga.edu/) (<https://drc.uga.edu/>)

Additional information, including free digital well-being resources, can be accessed through the UGA app or by visiting <https://well-being.uga.edu> (<https://well-being.uga.edu>).

# COURSE SCHEDULE

| Date                   | Reading                                      | Reading Check |
|------------------------|--|---------------|
| January 6th-10th       | Ch. 3, Ch. 2                                 | No RC         |
| January 13th-17th      | Ch. 2  | RC 1          |
| <b>January 20th</b>    | <b>No class - Martin Luther King Jr. Day</b> |               |
| January 22nd-24th      | Ch. 4  | RC 2          |
| January 27th-31st      | Ch. 4 and 5                                  | RC 3          |
| <b>January 30th</b>    | <b>Exam 1 (Ch. 2-4)</b>                      |               |
| February 3rd-7th       | Ch. 5 and 8                                  | RC 4          |
| February 10th-14th     | Ch. 8  | RC 5          |
| February 17th-21st     | Ch. 6 and 7                                  | RC 6          |
| February 24th-28th     | Ch. 7 and 9                                  | RC 7          |
| <b>February 27th</b>   | <b>Exam 2 (Ch. 5-8)</b>                      |               |
| <b>March 3rd-7th</b>   | <b>Spring Break!</b>                         |               |
| March 10th-14th        | Ch. 9 and 10 (enthalpy)                      | RC 8          |
| March 17th-21st        | Ch. 15 and 11                                | RC 9          |
| March 24th-28th        | Ch. 11                                       | RC 10         |
| <b>March 27th</b>      | <b>Exam 3 (Ch. 9-11, 15)</b>                 |               |
| March 31st - April 4th | Ch. 12                                       | RC 11         |
| April 7th-11th         | Ch. 12 and 14                                | RC 12         |

| Date              | Reading                                 | Reading Check |
|-------------------|---|---------------|
| April 14th-18th   | Ch. 14 and 10 (specific heat)           | RC 13         |
| <b>April 17th</b> | <b>Exam 4 (Ch. 10-12, 14)</b>           |               |
| April 21st-25th   | Ch. 13                                  | RC14          |
| April 28th        | Flex day                                | No RC         |
| <b>May 1st</b>    | <b>Final exam, Start time 7:00 p.m.</b> |               |