

CHEM 1210 (Basics of Chemistry)

INSTRUCTOR

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Office Location: Chemistry Building Annex, Room 407C

Group Office Hours: M 3:00 - 4:00 PM; W 10:30 - 11:30 AM

Individual Office Hours: By appointment (for discussion of grades or private matters, not content)

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 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 Freshman Chemistry sequence or as a core course, offering 4 credit hours in science without a laboratory component.

COURSE MATERIALS

Required Materials

The materials we will use for this course include

- *Introductory Chemistry: A Foundation*, 9th edition, Steven S. Zumdahl and Donald J. DeCoste, purchased through the course homepage. A print copy can be purchased through the bookstore.
 - 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).
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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. Interpret and explain graphical and tabular data.
2. Solve chemistry problems using the appropriate mathematical expressions and determine if the answer is physically reasonable.
3. Predict atomic structure and chemical properties of elements using their positions on the periodic table.
4. Predict physical and chemical properties using molecular structure.
5. Calculate reaction quantities and energies using the appropriate stoichiometric conversions.
6. Explain the physical properties of solids, liquids, gases, and solutions using microscopic behavior.
7. Explain reaction rates and equilibrium positions using kinetic principles.
8. Explain the behavior of acids and bases using molecular structure and chemical equilibria.
9. Describe how chemistry relates to other disciplines using real-world examples.
10. Describe how chemistry relates to current local and global events using real-world examples.

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
 - Chapter 17: Equilibrium
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Course Assignments

Please review all these assignments and expectations carefully.

Class Activities

The instructor will provide class activities to accompany the in-person discussions during the semester, and they will be worth 100 points. The activities can be worksheets, hands-on activities, clicker questions, or other activities.

Everyone in the course will receive a portion of the Class Activities points based on your total percentage. If you score 90% of the credit for the lecture questions, you will earn 90% of 100 points (or 90 points) toward your final grade.

Academic Honesty Expectations: You can work in groups but you must answer your own questions.

Reading Checks

Before beginning a chapter in class, you will complete a Reading Check that assesses basic understanding of the material. Reading Checks will be available on Webassign each Thursday at 5:00 p.m. and will be due on Sunday at 11:59 p.m. There will be a total of **fifteen** Reading Checks worth **three** points each. **The lowest reading check will be dropped.** Late Reading Checks will not receive credit.

Five attempts will be allowed for each question in the Reading Check. There is a 5% 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. 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.

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 learn from your mistakes on the Progress Check and not severely hurt your grade in CHEM 1210. It is much better to find out what you're struggling with on the Progress Check instead of the exam.

Progress Checks will be available on Webassign each Friday at 5:00 p.m. and will be due on Sunday at 11:59 p.m.

Important: Opening the Progress Check before it is due to look at the questions commits you to complete the assignment. The timer **cannot** be stopped or reset. There will be a total of **fourteen** Progress Checks worth **five** points each. **The two lowest Progress Checks will be dropped.**

Academic Honesty Expectations: You **must** work on your own when completing the Progress Checks. You should not use **any** outside resources. You are allowed a periodic table that you can print from eLC, any equations or constants provided by your instructor, and your exam-approved calculator. This is your opportunity to see what you need to work on before the exam. Sharing Progress Check questions with other students while the Progress Check is open is a violation of the Academic Honesty policy.

Recitation Sessions

There will be weekly in-person recitation sessions that are intended to supplement course material and promote a deeper understanding of concepts. Attendance is required. The assignments during recitation sessions may include worksheets, case studies, and other activities. Any activities that require online submissions must be submitted to the correct platform (Gradescope, eLC, etc.) to receive credit. During the recitation sessions you will work in small groups, and assignments will be due at the end of the session. Recitation activities are worth 48 total points.

Exams

Four 90-minute, 200-point examinations will be given. All four exams will be administered on a Tuesday evening. There will be no makeup exams. Your exam grade with the lowest percent value will be replaced with your final exam percentage value if it is higher.

Final Exam

The final exam will be administered on Wednesday, December 25th, from 7:00 p.m. until 8:50 p.m. This multiple-choice exam has a total value of 200 points in the course. Remember, 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.

Exam	Day/Time	Date
Exam 1	Tuesday, 5:30-7:00 p.m.	September 14th
Exam 2	Tuesday, 5:30-7:00 p.m.	October 5th
Exam 3	Tuesday, 5:30-7:00 p.m.	November 2nd
Exam 4	Tuesday, 5:30-7:00 p.m.	November 30th
Final Exam	Wednesday, 7:00-8:50 p.m.	December 15th

Course Grades Summary

Total Score:1250 points

Assignment	Possible Points
Four Exams	800
Final Exam (ACS)	200
Reading Checks	42
Progress Checks	60
Class Activities	100
Recitation Activities	48
Total Points	1250

Grading Criteria

Your final grade will be based on the following:

Letter Grade	Points	Percentage
A	1125 to 1250 points	90%
A-	1100 to 1124 points	88%
B+	1075 to 1099 points	86%

Letter Grade	Points	Percentage
B	1000 to 1074 points	80%
B-	975 to 999 points	78%
C+	937 to 974 points	75%
C	812 to 936 points	65%
D	625 to 811 points	50%
F	0 to 624 points	

Special Note on Grading

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 either by email or by announcement on the course eLC site. You may login to eLC at <http://elc.uga.edu> (<http://elc.uga.edu>) using your UGA myID and password. It is highly recommended that you forward you 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 slides and notes, exam resources, general handouts and other documents. You will also find instructions covering Gradescope and Webassign.

Email Etiquette

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

1. Do not send email to eLC accounts. Instructors may be reached via their primary email addresses.
2. Instructors will not respond to questions that are answered in the course syllabus or postings on eLC.
3. Please allow at least 24 hours for a response due to the high volume of emails.
4. Your emails must be both respectful and coherent.

Withdrawal Policy

The last day to withdraw from CHEM 1210 is Monday, October 25th, 2021. 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.

Incomplete Policy

An incomplete grade, "I" may be assigned to students that are passing CHEM 1210 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 incomplete.

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.

MENTAL HEALTH AND WELLNESS RESOURCES

If you or someone you know needs assistance, you are encouraged to contact Student Care and Outreach in the Division of Student Affairs at 706-542-7774 or visit <https://sco.uga.edu> (<https://sco.uga.edu>). They will help you navigate any difficult circumstances you may be facing by connecting you with the appropriate resources or services.

UGA has several resources for a student seeking mental health services:

<https://www.uhs.uga.edu/bewelluga/bewelluga> (<https://www.uhs.uga.edu/bewelluga/bewelluga>) or crisis support <https://www.uhs.uga.edu/info/emergencies> (<https://www.uhs.uga.edu/info/emergencies>).

If you need help managing stress anxiety, relationships, etc., please visit BeWellUGA <https://www.uhs.uga.edu/bewelluga/bewelluga> (<https://www.uhs.uga.edu/bewelluga/bewelluga>) for a list of FREE workshops, classes, mentoring, and health coaching led by licensed clinicians and health educators in the University Health Center.

Additional resources can be accessed through the UGA App.