

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 an in-person course with in-person lectures either MWF or TR for a total of three hours per week and one one-hour weekly required in-person recitation session. 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 with weekly alternating synchronous and asynchronous labs. 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. NICHOLAS LLEWELLYN

Chemistry Annex, 407C

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706-542-2626

Group Office Hours: Mondays 2:00 – 3:00 PM; Wednesdays 9:30 – 10:30 AM

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

Zoom Meeting ID: 7065422626

Zoom Meeting Link: <https://zoom.us/my/nllewellyn>

Zoom Passcode: 042508

Course Information

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

Textbook (e-text to be purchased through eLC)

General Chemistry, 10th Edition; Steven S. Zumdahl, Susan A. Zumdahl, Donald J. DeCoste. The textbook must be purchased through eLC to receive the special UGA price of \$35.00.

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: Chemical Foundations

Chapter 2: Atoms, Molecules, and Ions

Chapter 3: Stoichiometry

Chapter 4: Types of Chemical Reactions and Solution Stoichiometry

Chapter 5: Gases

Chapter 6: Thermochemistry

Chapter 7: Atomic Structure and Periodicity

Chapter 8: Bonding: General Concepts

Chapter 9: Covalent Bonding: Orbitals

Course Assignments

Recitation Sessions

There will be required weekly in-person recitation sessions that are intended to supplement course material and promote a deeper understanding of concepts. The assignments during recitation sessions may include worksheets, case studies, and other activities. During the recitation sessions you will work in small groups, and assignments will be due at 11:59 PM on the day of the recitation. **Students must be present to receive credit for the recitation.** You will **not be allowed to attend if you arrive more than 10 minutes** after the recitation session begins. **Students are responsible for uploading the correct file as instructed in recitation.** The recitation attendance and worksheets will be worth **72 points**.

There will be **13 recitation sessions**, and the one with the lowest score will be dropped. Everyone in the course will receive a portion of the recitation session points based on your total percentage. If you score 90% of the credit for the lecture questions, you will earn 90% of 72 points (or 64.8 points) toward your final grade.

Class Activities

The instructor will provide class activities to accompany the in-person discussions during the semester, and **they will be worth 114 points**. The activities can be worksheets, hands-on activities, clicker questions, or other activities. **Students must be present to receive credit for the class activities and are responsible for uploading any required files correctly.**

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 93 points (or 83.7 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 WebAssign and will be available on **Thursdays at 5:00 PM** and will be due on **Sundays at 11:59 PM**. There will be a total of **fourteen** reading checks worth **five points** each. The reading check with the lowest score will be dropped at the end of the semester. No late reading checks will be accepted.

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 be delivered on WebAssign and will open on **Fridays at 5:00 PM** and will be due on **Sunday at 11:59 PM**. There will be a total of **fifteen** progress checks worth **five points** each. The lowest progress check 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.

Suggested Exercises and Practice Quizzes

Suggested practice problems for each chapter will be posted. I recommend that you do these with your available resources to help you build skills and master the material. These problems will not be graded.

Exams

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

- Exams will be administered in-person.
- 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 PM	August 31, 2021
Exam 2	Tuesday, 7:00-8:30 PM	September 14, 2021
Exam 3	Tuesday, 7:00-8:30 PM	October 5, 2021
Exam 4	Tuesday, 7:00-8:30 PM	November 2, 2021
Exam 5	Tuesday, 7:00-8:30 PM	November 30, 2021
Final Exam	Wednesday, 7:00-8:20 PM	December 15, 2021

Final Exam

The final exam will be administered on **Wednesday, December 15 and it is 80 minutes long**. 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

Requests for regrades on any assignment, including exams, must be submitted no later than one week after the score or key is posted.

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

Assignment	Points
Five exams	1000
Final Exam (ACS)	400
Reading Checks	65
Progress Checks	70
Class Activities	93
Recitation	72
Total	1700

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	= 1156 to 1274.9	68%
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 posts 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 slides, 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:

- 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 business hours** for a response due to the high volume of emails.
- Emails must be both courteous and coherent. If you would not say it in person, don't write it in an email.
- Experience has demonstrated that it is not effective to answer homework or concept questions via email. In order to receive help concerning class work or homework you must visit your instructor during regularly scheduled office hours.

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 **Monday, October 25, 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.

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.

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. 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.

FERPA Notice

The Federal Family Educational Rights and Privacy Act (FERPA) grants students certain information privacy rights. See the registrar's explanation at <https://osas.franklin.uga.edu/ferpa-and-privacy>. FERPA allows disclosure of directory information (name, address, telephone, email, date of birth, place of birth, major, activities, degrees, awards, prior schools), unless a <https://reg.uga.edu/resources/documents/imported/FERPARequestForRestriction.pdf> is submitted to the Registrar's Office.

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>. 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>) or crisis support (<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>) 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.

CHEM 1211 Tentative Course Schedule Fall 2021

Week	Dates	Chapter/Section	Reading Check	Progress Check	Recitation Session
1	August 18-21	Introduction, 1.1-1.10	RC1: 8/19-8/22 Ch 2.1-2.8	PC1: 8/20-8/22 Ch 1.1-1.10	8/18-8/24 Not meeting
2	August 22-28	2.1-2.8, naming simple organic compounds	RC2: 8/26-8/29 Ch 3.1-3.6	PC2: 8/27-8/29 Ch 2.1-2.8, naming organic compounds	R1: 8/25-8/31 Test review
3	August 29-September 4	3.1-3.6	RC3: 9/2-9/5 Ch 3.7-3.11	PC3: 9/3-9/5 Ch 3.1-3.6	9/1-9/7 Not meeting
	August 31	Test 1 (Ch 1-2)			
4	September 5-11	3.7-3.11	RC4: 9/9-9/12 Ch 4.1-4.5	PC4: 9/10-9/12 Ch 3.7-3.11	R2: 9/8-9/14 Exam Review
	<i>September 6</i>	<i>Labor Day – No Class</i>			
5	September 12-18	4.1-4.6	RC5: 9/16-9/19 Ch 4.6-4.10	PC5: 9/17-9/19 Ch 4.1-4.5	R3: 9/15-9/21
	September 14	Test 2 (Ch 3)			
6	September 19-25	4.7-4.10	RC6: 9/23-9/26 Ch 5.1-5.10	PC6: 9/24-9/26 Ch 4.6-4.10	R4: 9/22-9/28
7	September 26-October 2	5.1-5.10	RC7: 9/30-10/3 Ch 6.1-6.3	PC7: 10/1-10/3 5.1-5.10	R5: 9/29-10/5 Exam Review
8	October 3-9	6.1-6.3	RC8: 10/7-10/10 Ch 6.4-6.6	PC8: 10/8-10/10 Ch 6.1-6.3	R6: 10/6-10/12
	October 5	Test 3 (Ch 4, 5)			

9	October 10-16	6.4-6.6	RC9: 10/14-10/17 Ch 7.1-7.7	PC9: 10/15-10/17 Ch 6.4-6.6	R7: 10/13-19
10	October 17-23	7.1-7.7	RC10: 10/21-10/24 Ch 7.8-7.13	PC10: 10/22-10/24 Ch 7.1-7.7	R8: 10/20-10/26
11	October 24-30	7.8-7.13	RC11: 10/28-10/31 Ch 8.1-8.6	PC11: 10/29-10/31 Ch 7.8-7.13	R9: 10/27-11/2 Exam Review
	<i>October 29</i>	<i>Fall Break – No Class</i>			
12	October 31-November 6	8.1-8.6	RC12: 11/4-11/7 Ch 8.7-8.10	PC12: 11/5-11/7 8.1-8.6	R10: 11/3-11/9
	November 2	Test 4 (Ch 6, 7)			
13	November 7-13	8.7-8.10	RC13: 11/11-11/14 Ch 8.11-8.13	PC13: 11/12-11/14 Ch 8.7-8.10	R11: 11/10-11/16
14	November 14 - 20	8.11-8.13	RC14: 11/18-11/21 Ch 9.1-9.5	PC14: 11/19-11/21 8.11-8.13	R12: 11/17-11/23 Exam Review
15	November 21-23	9.1	No RC	No PC	11/24-11/30 Not Meeting
	<i>November 24 - 26</i>	<i>Thanksgiving Holiday</i>			
16	November 28-December 4	9.1 con't., 9.2-9.5	No RC	PC15: 12/3-12/5 Ch 9.1-9.5	R13: 12/1-12/7
	November 30	TEST 5 (Ch 8, 9.1)			

17	December 5-7	Review	No RC	No PC	Not meeting
	Wednesday, December 15 7:00-8:50	FINAL EXAM ACS Standardized Exam			