Intro to Chemistry (PS)

CHEM - 1010 003

Course Description

This introductory chemistry course uses case studies to demonstrate how chemistry can support individual and community health. No prior science experience is needed. Students gain fundamental chemical knowledge, quantitative problem-solving skills, and a modern scientific perspective. The course also challenges students to adopt evidence-based learning strategies.

Semester: All

Course Learning Outcomes

- Apply fundamental concepts of chemistry including measurement, atomic theory, nomenclature, bonding, molecular geometry, and intermolecular forces to understand real-world problems from a scientific perspective.
- Demonstrate substantive knowledge through practical and quantitative problem-solving assessments.
- Use the periodic table to characterize and predict the physical and chemical properties of elements and compounds.
- Construct three-dimensional models of simple molecules and predict their physical characteristics through an understanding of intermolecular forces.
- Classify various types of chemical reactions and be able to accurately balance chemical equations.
- Perform multi-step unit conversions, as well as stoichiometric, concentration, and empirical formula calculations.
- Organize, present, and explain chemistry concepts in writing and in group settings.

Engagement Plan

Purpose of the Communications Plan

This Communications Plan establishes clear guidelines for effective communication between students and instructors throughout the semester. Effective communication and engagement are essential for fostering a conducive learning environment. Below are the minimum expectations for students and instructors in both online and face-to-face classes.

Importance of Substantive Communications

Substantive communications are defined as exchanges that are specific, detailed, and directly relevant to distinct course content or individual student concerns or performance. These communications should aim to clarify, explore, or expand upon specific chemistry problems, assignments and topics covered in the course or issues and concerns regarding the implementation or expectation of the course.

Student Expectations

To ensure a smooth and successful semester, students need to stay actively involved in the course and communicate effectively.

- Always contact your course instructor using the Canvas Inbox to maintain a reliable record of communications.
    - For emergencies or if internet access is unavailable, contact the instructor via SLCC email at instructor.name@slcc.edu, then follow up using Canvas.
    - Instructors will generally respond within 12 to 24 hours on weekdays, with longer response times on holidays and weekends.
- Read all Canvas Announcements and keep up to date with important information about upcoming assignments, tests, exams and due dates.
    - Review announcements weekly by visiting the Home page.
    - To set up email and push notifications: How do I set my Canvas notification preferences as a student?

- Regularly check the Canvas Calendar to stay up to date with assignments, tests, and exams, ensuring you keep pace with the course schedule. This practice empowers you to be proactive rather than reactive and promotes ongoing engagement with the course content and instructor.
- Actively participate in graded Discussions by posting Feynman notes and summaries, engaging in questions and answers.
- To earn full credit for Discussions, you must also reply to *at least two of your peers*. You should also return later to acknowledge replies to your own posts. This keeps the discussion active, deepens understanding, and strengthens our learning community.
- Regularly review your grades to monitor your progress and maintain alignment with course expectations and reach out to the instructor for advice on necessary course corrections to ensure your success.

Instructor Expectations

Instructors will foster a supportive and interactive learning environment through substantive engagement by promptly responding to communications, providing timely updates, and actively participating in Discussions in both online and face-to-face classes.

- Respond to all Canvas InBox emails within 12 hours on weekdays, with adjusted response times on weekends and holidays.
- Send weekly Announcements detailing learning outcomes, key dates, and other crucial course-related information to keep students well-informed and prepared or make these announcements in class with face-to-face sections.
- Ensure the Canvas Calendar reflects the current status of the course and make any necessary adjustments or changes. Promptly announce updates to keep students informed and prepared.
- Engage in the Discussion board at least twice weekly; grading Feynman Notes and providing feedback, monitoring student interactions, providing supplemental information, answering questions, and fostering a supportive learning environment.
- Proactively reach out to students not engaging with course material as expected, offering support and resources to assist their progress.

- Reconcile the Canvas Gradebook by zeroing out incomplete assignments after each Unit Test to ensure student grades are accurate and up to date.

Add a Profile Picture or Avatar

You will engage in many online interactions within Canvas during this class. Creating a distinctive online identity with a profile picture or avatar will help set you apart and create a distinctive virtual presence for your Canvas interactions. Follow these instructions to add your profile picture to your user account.

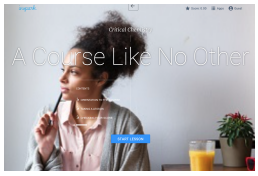
How do I add a profile picture in my user account as a student?

Class Mode and Meeting Times

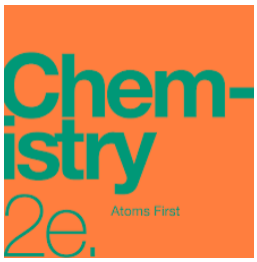
Class Mode

- This class meets entirely online - There are no face-to-face meetings. Graded Discussion Boards count toward your Participation score.

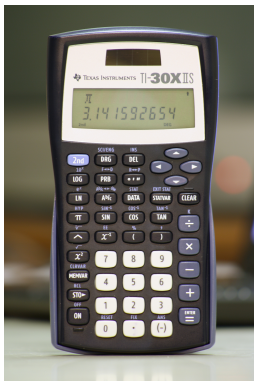
Required Text or Materials



Title: Critical Chemistry
Subtitle: Required Online Courseware - Counts 20% of grade. Cost is $40 with a two week free trial. Register by clicking on Register for Critical Chem link in the Welcome to the Course and Introductions Module. Must use Chrome (preferred) or Firefox on a laptop or desktop computer.
Publisher: Argos Education and Inspark



Title: Chemistry: Atoms First 2e
Subtitle: Free Online Textbook
ISBN: OpenStax Chemistry - General Chemistry - Selected Sections



Title: Calculator - with exponential functions
Subtitle: Required for Tests and Exams. $20 or less through various online retailers. Phones or tablets are not allowed on Tests and Exams. Practice in class and with assignments to ensure familiarity.

For more information on textbook accessibility, contact Accessibility & Disability Services at ads@slcc.edu.

Office Hours

Virtual Office Hours by Appointment using Zoom

- Zoom by Appointment
    - Or use the Canvas InBox to make arrangements with your instructor
        - You must make your appointment at least 24 hours in advance
        - You will receive an email confirmation of your appointment and a Zoom link

Both you and your instructor will receive confirmation of your appointment. If you need to cancel, you must do so within 12 hours of your appointment.

Keys for Success (how to succeed in the course)

Make a Time Commitment

This is a 3-credit-hour course and you should expect to spend, on average, 6-9 hours per week outside of class studying or a total of 12 hours if taken as an Online class.

Do not assume an online class will require less engagement than an in-person class. If anything, taking this class online will require even more dedication and engagement from the very start.

Online and Face to Face Classes

- Set aside time to watch the videos and review the slides available with each Pre-Reading Quiz.
- Expect to spend three to five hours a week engaged in inquiry-based learning with Critical Chemistry Lessons.
    - The median time spent by students on all Critical Chemistry Lessons is 61 hours over the course of the semester.
    - That's an average of four hours per week in Spring and Fall, and five hours each week in the Summer.
- Set aside an additional three to five hours each week for Canvas Section Quizzes and Practice Tests in preparation for the Unit Tests,
    - Additional time will be needed to prepare for the *cumulative* Midterm and Final Exams.
- Spend another hour or so per week composing a set of "Feynman Notes" to be posted to the Discussion Boards.

It is an expectation that you will adopt a consistent weekly study schedule to support these activities.

How to Navigate to Canvas

Free Tutoring and Workshops at SLCC

Free Tutoring

- SLCC On Campus and Online tutoring as a drop-in service.
- For information on subjects, hours, and how to get the most out of tutoring visit STEM Learning Tutoring.

Additional Online Tutoring

- Eight hours of free tutoring each month from Tutor.com.

- Click on the Online Tutoring link in the Canvas Navigation Menu to schedule a tutoring session.

Brief Description of Assignments/Exams

Participation (10% of Course Grade)

Participation includes the following required components. Due dates are posted on the course Calendar.

1. Pre-Reading Quizzes

- One or more Canvas quizzes per section
- Includes video tutorials, review slides, and other learning resources
- Must be completed before the corresponding Unit Test

2. Practice Tests

- Two attempts allowed for each Unit Test
- Use to identify knowledge gaps and reinforce preparation
- Not proctored
- Time limit: 120 minutes
- Allowed materials:
    - Open notes (printed or handwritten)
    - Printed periodic table
    - Calculator with exponential functions

3. Additional Participation Components

- Attendance and in-class activities (for in-person or hybrid sections)
- Canvas Discussion boards (Discussions are required and graded for Online Sections)

Required Critical Chemistry Assignments (20% of Course Grade)

- Register for courseware through the “Register for Critical Chem” link in the Welcome to the Course and Introductions Module
- Cost: $40 (after a two-week free trial)
- Begin working on assignments on Day 1 using two week free trial
- Use a laptop or desktop computer — mobile devices are not supported
- Use Chrome, Edge, or Firefox Browser
- To receive credit:
    - Complete the entire lesson
    - Close the “You’re Done” banner at the end of the lesson (Partial credit is not awarded)

Canvas End-of-Section Quizzes (15% of Course Grade)

- Assigned at the end of each section
- Must be completed before the corresponding Unit Test

Signature Assignment & Reflection (10% of Course Grade)

- A requirement for all General Education courses
- Includes both a Signature Assignment and Reflection
- To be submitted to corresponding Canvas Assignments

Unit Tests (20% of Course Grade)

- Four Unit Tests, each covering multiple sections
- Taken online using Canvas with Respondus Monitor and LockDown Browser
- Location: At home or in the SLCC Library computer with LockDown preinstalled
- One attempt per test
- Time limit: 120 minutes

Allowed Materials:

- Open notes (printed or handwritten)
- Printed periodic table

- Calculator with exponential functions

Bonus Point Survey Quizzes:

- Available for a limited time
- Count toward the Unit Test grading group

Midterm & Final Exams (25% of Course Grade)

- Cumulative, **in-person proctored exams**
- Taken at an SLCC Testing Center by reservation (for all course formats)

Distance learners must:

- Use an approved proctoring service in their area
- Qualified proctors are employed by facilities such as local colleges
- A proctor is an individual not associated with you who is present to ensure a secure testing environment
- Submit a Remote Proctor Request at least two weeks in advance

Allowed Materials:

- One handwritten notes sheet (8.5 x 11 in., front and back)
- Periodic Table with symbols only (know names of elements through Row 6)
- Calculator with exponential functions(No other electronic devices allowed)

Canvas Bonus Point Survey Quizzes

- Due dates and availability posted on the Canvas Calendar
- Open for a *limited time only*
- Closed and inaccessible after the posted deadline
- Count toward the Unit Test grading group

General Education Information

PS

This course fulfills the above requirement for the General Education Program at Salt Lake Community College. It is designed not only to teach the information and skills required by the discipline, but also to develop vital workplace skills and to teach strategies and skills that can be used for life-long learning.

General Education courses teach basic skills as well as broaden a student's knowledge of a wide range of subjects. Education is much more than the acquisition of facts; it is being able to use information in meaningful ways in order to enrich one's life.

While the subject of each course is important and useful, we become truly educated through making connections of such varied information with the different methods of organizing human experience that are practiced by different disciplines. Therefore, this course, when combined with other General Education courses, will enable you to develop broader perspectives and deeper understandings of your community and the world, as well as challenge previously held assumptions about the world and its inhabitants.

Due Dates

Graded Assignments - Begin on Due Date as posted on the Calendar

- Due Dates on the Calendar specify when you should *begin* Assignments
- *No penalties for late submissions* of Assignments provided they are completed before the corresponding Unit Test closes
- Assignments are closed and may not be available after the close of the corresponding Unit Test, Midterm and Final Exams
- Adhering to these dates will help you keep pace with the course

Unit Tests, Midterm and Final Exams - Take as scheduled on the Calendar

- Unit Tests and Exams must be taken on the dates specified on the Calendar
- Exceptions require advance notice and arrangements with your instructor

Special and Makeup Test and Exam Scheduling (Test Exceptions)

Advance Scheduling

If you expect to miss a Unit Test, Midterm or Final Exam date, you must submit a written request to your instructor *in advance* using the Canvas Inbox .

Exceptions will not be given without advance notice and Tests and Exams must be completed within four days of the regularly scheduled date.

Makeup Scheduling

If you miss a Test or Exam due to significant circumstances beyond your control, you must provide your instructor with written documentation detailing the reasons for missing the test before you will be allowed to take a makeup test or exam. In addition, you must contact your instructor within four days of the test or exam you missed in order to reschedule a makeup Test or Exam.

Online Tutoring

Students at SLCC have access to online tutoring through Canvas. From your Canvas course click Online Tutoring in the course navigation and follow the steps to set up an appointment. If this is your first time using the Online Tutoring we recommend you click "Take a Tour" to familiarize yourself with the service.

Note that students only receive 480 minutes of tutoring time each semester. After that we encourage you to use the resources found through this link: https://www.slcc.edu/tutoring/index.aspx

If you have any additional questions reach out to elearningsupport@slcc.edu.

Additional Policies

Web Cam Equipped Computer Required

While some features of Canvas may be accessed using a mobile device, you will need a sufficiently capable desktop or laptop machine to fully access all the components of Canvas and Critical Chemistry. You will also need a laptop or desktop computer with a

webcam to take the Unit Tests which are proctored with Respondus LockDown Browser and Monitor.

- Computers with webcams are available in the Redwood Markosian Library
    - You may need to plan ahead to take your Unit Tests using one of these computers.
    - You may also check out a laptop for the semester from the Library on a first-come-first-serve basis.
- Critical Chemistry lessons may be completed using computers at the Library or an SLCC STEM Learning Centers
- Virtual Office hours are through Zoom which also requires access to a webcam and microphone-enabled computer or phone.

Electronic Devices in the Classroom and Study Spaces

Recording Devices

Video or audio recording in the classroom by any means is not allowed without written authorization from the instructor or the Office of Accessibility & Disability Services.

Cell Phone Use

Cell phone use during lectures and study sessions has been shown to negatively impact academic performance, leading to lower-quality notes, less retained information, and poorer test results. Multitasking distracts both the user and surrounding students, particularly when the content is unrelated to the class. Therefore, the following rules apply:

- Cell phones are not to be out and available or accessed at any time during class.
- In case of an emergency, students should exit the classroom before they e-mail, text, or use their cell phones.
- Students who text, talk, or use their cell phones may be asked to leave the classroom and will lose participation points.

Computer Use

Studies have shown that handwritten notes are more effective learning tools than typewritten notes, as they aid in better retention and understanding of material. Additionally, many concepts in chemistry necessitate the use of handwritten drawings, schemes, and diagrams, which cannot be adequately captured through typewritten notes.

- Therefore, laptop computers are not allowed without the express consent of the instructor.
- Tablet computers are allowed provided they are used for note taking purposes.

Administrative Drops for Non-Attendance

Face to Face Sections

Students who fail to attend the initial class meeting(s) as required and who fail to contact the instructor in advance of the absence may be dropped from the course by the instructor.

Online Sections

Students are required to log into online classes within the first five days of the term and demonstrate engagement by completing one or more assignments in Canvas.

Students should not assume classes are automatically dropped for non-attendance or nonpayment and are responsible for dropping or withdrawing from classes they are not attending or do not intend to complete in the current semester.

Students who stop attending a course without completing the formal drop or withdrawal procedures by the published deadlines may be held responsible for all SLCC tuition and fees associated with the course.

Technical Support for Critical Chem, Canvas, and Testing Services

Critical Chemistry

Note: Canvas and Critical Chemistry require the use of Chrome, Edge, or Firefox on a desktop or laptop computer. Use of mobile devices is not supported.

For support and technical assistance with Critical Chemistry, submit your request to Argos Learning Support which is marked by a question mark in the upper right-hand corner of the Critical Chem courseware near the Account User name.

Be prepared to provide the following details:

1. The name of the Lesson and Page including the URL
2. Details of the issue you are experiencing
3. A Screenshot of the page that shows the complete browser window including the URL
4. Your bruinmail email address

Some issues with Critical Chemistry may be resolved by refreshing the browser page or by using the arrows at the bottom of the Lesson screen to go Back, then Forward again. Do not use the browser's Back button.

Clear Your Browser Cache

Standard troubleshooting methods such as quitting and restarting your browser and/or computer may also help.

Another possible solution is to use a different browser such as Firefox or Chrome. Also, try clearing your browser's "cache".

If your issue remains unresolved, provide your instructor with the same details from above and they will submit a support request on your behalf.

Canvas Technical Support

24/7 Canvas Support : 801-957-5125 or 1-844-334-0397 (toll-free student support)

SLCC Technical Help Desk: 801-957-5555

Testing Services and Testing Support

SLCC Testing Services: email TestingServices@slcc.edu or call 801-957-4500

Note: You must resolve technical and testing issues in a timely manner so that you can meet the expectations of this class.

Reproduction of Course Materials

Students may not publish or redistribute any information from this class in any form without written authorization from the instructor. This includes all content in Canvas and Critical Chemistry. Unauthorized distribution is a violation of Privacy and Intellectual Property Rights and the Code of Student Rights and Responsibilities.

If any content from this course is found on study materials sharing sites such as Chegg.com, an investigation may be conducted to determine the identity of the student and may result in disciplinary action. Chegg allows for the release of identifying student information in the context of an academic dishonesty investigation.

Grading Scale

GradeRange

A	100 % to 93.0%
A-	< 93.0 % to 88.0%
B+	< 88.0 % to 84.0%
B	< 84.0 % to 78.0%
B-	< 78.0 % to 74.0%
C+	< 74.0 % to 70.0%
C	< 70.0 % to 66.0%
C-	< 66.0 % to 62.0%
D+	< 62.0 % to 58.0%
D	< 58.0 % to 54.0%
D-	< 54.0 % to 50.0%
E	< 50.0 % to 0.0%

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

SLCC Student Academic Calendar

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

For more information, navigate to the Institutional Policies tab on the Institutional Syllabus page.

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, visit the Institutional Syllabus page under the Tutoring and Learning Support tab. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, visit the Institutional Syllabus page under the Advising and Counseling

Support Services tab. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

"Netiquette" for Discussion Boards

"Netiquette" is a term describing how to interact with others in an online environment, such as on a discussion board or in emails. These guidelines are to be followed by everyone in this course.

Participate: This is a shared learning environment. So for discussions, there is no lurking in the cyberspace background. It is not enough to log in and read the discussion thread of others. For the maximum benefit to all, everyone must contribute.

Avoid Repetition: For discussions, read everything in the discussion thread before replying. This will help you avoid repeating something someone else has already contributed. Acknowledge the points made with which you agree and suggest alternatives for those with which you don't.

Use Proper Writing Style: The academic environment expects higher-order language. Write in emails, assignments, and discussions as if you were writing a term paper. Correct spelling, grammatical construction and sentence structure are expected in every other writing activity associated with scholarship and academic engagement. Avoid profanity.

No YELLING! Using bold upper-case letters is bad form, like stomping around and yelling at somebody (NOT TO MENTION BEING HARD ON THE EYE).

Cite Your Sources: Another big must! If your assignments and discussions include the intellectual property (authored material) of others, e.g., books, newspaper, magazine, or journal articles—online or in print—they must be given proper attribution.

Have Opinions: Everyone is entitled to have an opinion. In discussion forums, everyone is encouraged to share them.

Respect Disagreement: People have the right to disagree with you. However, disagreement should never be personal. Online discussions are a means to share ideas and practice the skill of persuasion. Persuasive speech cannot be achieved with hurtful, hateful or inappropriate language. Review your posts before you publish and reread them for unintended meanings.

Respect Diversity: We live in an ethnically rich and diverse, multi-cultural world. Use no language that is—or that could be construed to be—offensive toward others. Racist, sexist, and heterosexist comments and jokes are unacceptable, as are derogatory and/or sarcastic comments and jokes directed at religious beliefs, disabilities, and age. We all come with different perspectives, so please be respectful and resist the urge to tell anyone they are wrong. Understand they have had different life experiences and all of our world views are simply different.

Remember, You Can't Un-Ring the Bell: Language is your only tool in an online environment. Be mindful. How others perceive you will be largely—as always—up to you. Once you've hit the send or post button, you've rung the bell. Review your written communication to ensure that you've conveyed exactly what you intended. This is an excellent opportunity to practice your proofreading, revision, and rewriting skills—valuable assets in the professional world for which you are now preparing. Read your emails, posts, and assignments out loud before hitting the send button. This will tell you a lot about whether your grammar and sentence structure are correct, your tone is appropriate, and your writing clear or not.

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- Classify various types of chemical reactions and be able to accurately balance chemical equations.
- Perform multi-step unit conversions, as well as stoichiometric, concentration, and empirical formula calculations.
- Organize, present, and explain chemistry concepts in writing and in group settings.

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Algebraic Equations	Assignment	31
	Aqueous Solvation	Assignment	98
	Atomic Structure	Assignment	109
	Balancing Chemical Reactions	Assignment	48
	Chemical Nomenclature	Assignment	21
	Concentration	Assignment	86
	Dimensional Analysis	Assignment	34
	Electron Configuration	Assignment	104
	Empirical and Molecular Formulas	Assignment	70
	Intermolecular Forces	Assignment	137
	Ionic and Covalent Bonding	Assignment	17
	Lewis Structures	Assignment	98

Due Date	Assignment Name	Assignment Type	Points
	Limiting Reactant	Assignment	96
	Molecular Geometry	Assignment	78
	Periodic Table	Assignment	14
	Significant Figures	Assignment	18
	Types of Bonds	Assignment	22
	Types of Reactions	Assignment	66
	Unit 0: Secrets to Success - Time Management - Bonus Point Survey Quiz	Quiz	1
8/26/25	Begin Unit 0	Assignment	
8/26/25	Unit 0: Setting Goals and Building Good Study Habits - Graded Discussion	Discussion	10
8/26/25	Welcome to Critical Chemistry - Register for Your Two Week Free Trial Now	Assignment	
8/26/25	Section 0.0: Using AI Tools Effectively—to Strengthen Learning, Not Shortcut It - Readings and Quiz	Quiz	19
8/26/25	Welcome to Chem 1010	Assignment	
8/27/25	Section 0.1: Adopting a Proper Mindset – Readings and Quiz	Quiz	10

Due Date	Assignment Name	Assignment Type	Points
8/27/25	Section 0.1: Using Effective Study Strategies – Readings and Quiz	Quiz	10
8/28/25	Section 0.2: Why study chemistry? - Readings and Quiz	Quiz	10
8/28/25	Section 0.2: Explaining Gen Ed - Readings and Quiz	Quiz	10
8/28/25	Section Quiz 0.2 - About the Syllabus, Unit Tests, and Exams - Requires Respondus LockDown Browser + Webcam	Quiz	25
8/29/25	Section 0.3: Explore Critical Chemistry - How Science Saves Lives - Readings and Quiz	Quiz	7
8/29/25	Section 0.3: Lesson - Courseware Like No Other - A Critical Chemistry Assignment	Assignment	
8/29/25	Unit 0: Tips on How to Study Chemistry - Summary	Assignment	0
9/2/25	Begin Unit 1	Assignment	

Due Date	Assignment Name	Assignment Type	Points
9/2/25	Section 1.0: Growing Your Math Skills – Graded Discussion - Feynman Notes and Q&A	Discussion	13
9/2/25	Section 1.0: Measurements and the Metric System - Pre-Reading and Quiz	Quiz	10
9/2/25	Unit 1: A Roadmap for Success – Readings and Quiz	Quiz	8
9/2/25	Unit 1: Foundations for Success: Engagement - Graded Discussion	Discussion	10
9/3/25	Section 1.0: Video Lecture and Practice Problems - Converting Metric Units (Khan Academy)	Assignment	
9/3/25	Section 1.0: Video Lecture and Practice Problems - Scientific notation (Khan Academy)	Assignment	
9/4/25	Section 1.0: Significant Figures - Pre-Reading and Quiz	Quiz	10

Due Date	Assignment Name	Assignment Type	Points
9/4/25	Section 1.0: Guided Reading - Significant Figures	Assignment	
9/8/25	Section 1.0: Algebraic Equations - Pre-Reading and Quiz	Quiz	10
9/8/25	Section 1.0: Case Study - Algebraic Equations	Assignment	
9/8/25	Section 1.0: Case Study - Dimensional Analysis	Assignment	
9/8/25	Section 1.0: Dimensional Analysis - Pre-Reading and Quiz	Quiz	10
9/9/25	Section Quiz 1.0 - Growing your Math Skills	Quiz	29
9/10/25	Section 1.1: Atomic Structure - Pre-Reading and Quiz	Quiz	15
9/10/25	Section 1.1: The Atom - Graded Discussion - Feynman Notes and Q&A	Discussion	13
9/11/25	Section 1.1: Atomic Structure Problem Set	Assignment	
9/11/25	Section 1.1: Case Study - Atomic Structure	Assignment	

Due Date	Assignment Name	Assignment Type	Points
9/11/25	Section 1.1: Mini-PhET Build an Atom	Assignment	
9/12/25	Section Quiz 1.1 – The Atom	Quiz	25
9/14/25	Unit 1: Pre-Test Quiz Survey for Bonus Points - Open for 5 Day Window	Quiz	1
9/15/25	Section 1.2: The Periodic Table - Pre-Reading and Quiz	Quiz	10
9/15/25	Section 1.2: The Elements - Graded Discussion - Feynman Notes and Q&A	Discussion	13
9/16/25	Section 1.2: Guided Reading - Periodic Table	Assignment	
9/17/25	Section 1.2: Case Study - Electron Configuration	Assignment	
9/17/25	Section 1.2: Electron Configuration - Pre-Reading and Quiz	Quiz	10
9/18/25	Section Quiz 1.2 – The Elements	Quiz	35
9/19/25	Unit 1 Test Opens for 3 Days	Assignment	

Due Date	Assignment Name	Assignment Type	Points
9/19/25	Unit 1: Practice Test - Sections 1.0 - 1.2 for Participation Points	Quiz	40
9/21/25	Unit 1 Test Closes - Sections 1.0- 1.2 - Open Notes Timed Test Taken in Canvas over 3 Day Window - Requires Respondus LockDown Browser + Webcam	Quiz	40
9/21/25	Unit 1: Post-Test Quiz for Bonus Points - Open for 5 Day Window	Quiz	1
9/22/25	Begin Unit 2	Assignment	
9/22/25	Section 2.1: Ionic Bonding - Pre-Reading and Quiz	Quiz	16
9/22/25	Section 2.1: Chemical Bonds - Graded Discussion - Feynman Notes and Q&A	Discussion	13
9/23/25	Section 2.1: Guided Reading - Types of Bonds	Assignment	
9/24/25	Section 2.1: Covalent Bonding - Pre-Reading and Quiz	Quiz	20
9/25/25	Section 2.1: Guided Reading - Ionic and Covalent Bonding	Assignment	

Due Date	Assignment Name	Assignment Type	Points
9/26/25	Section Quiz 2.1 - Chemical Bonds	Quiz	23
9/29/25	Section 2.2: Lewis Structures - Pre-Reading and Quiz	Quiz	20
9/29/25	Section 2.2: Molecular Structure - Graded Discussion - Feynman Notes and Q&A	Discussion	13
9/30/25	Section 2.2: Case Study - Lewis Structures	Assignment	
10/1/25	Section 2.2: Molecular Geometry - Pre-Reading and Quiz	Quiz	18
10/2/25	Section 2.2: Case Study - Molecular Geometry	Assignment	
10/3/25	Section Quiz 2.2 – Molecular Structure	Quiz	25
10/6/25	Section 2.3: Intermolecular Forces - Graded Discussion - Feynman Notes and Q&A	Discussion	10
10/6/25	Section 2.3: Intermolecular Forces - Pre-Reading and Quiz	Quiz	15

Due Date	Assignment Name	Assignment Type	Points
10/7/25	Section 2.3: Case Study - Intermolecular Forces	Assignment	
10/8/25	Section 2.3: IMF Problem Set	Assignment	
10/10/25	Section Quiz 2.3 - Intermolecular Forces	Quiz	20
10/13/25	Section 2.4: Chemical Nomenclature - Feynman Notes and Q&A	Discussion	10
10/13/25	Section 2.4: Chemical Nomenclature - Pre-Reading and Quiz	Quiz	20
10/19/25	Prepare Your Study Guide for the Midterm Exam	Assignment	
10/20/25	Section Quiz 2.4 - Chemical Nomenclature	Quiz	25
10/21/25	Section 2.4: Guided Reading - Chemical Nomenclature	Assignment	
10/24/25	Unit 2 Test Opens for 3 Days	Assignment	
10/24/25	Unit 2: Practice Test - Sections 2.1- 2.4 for Participation Points	Quiz	40

Due Date	Assignment Name	Assignment Type	Points
10/26/25	Unit 2 Test Closes - Sections 2.1- 2.4 - Open Notes Timed Test Taken in Canvas over 3 Day Window - Requires Respondus LockDown Browser + Webcam	Quiz	40
10/27/25	Begin Unit 3	Assignment	
10/27/25	Midterm Opens for 4 Days	Assignment	
10/27/25	Section 3.1: Aqueous Solutions - Graded Discussion - Feynman Notes and Q&A	Discussion	10
10/27/25	Section 3.1: Aqueous Solvation - Pre-Reading and Quiz	Quiz	12
10/27/25	Section 3.1: Case Study – Aqueous Solvation	Assignment	
10/28/25	Section 3.1: Chemical Formula and the Mole - Pre-Reading and Quiz	Quiz	20
10/28/25	Section 3.1: Concentration - Pre-Reading and Quiz	Quiz	10
10/29/25	Section 3.1: - Concentration Problem Set	Assignment	

Due Date	Assignment Name	Assignment Type	Points
10/29/25	Section 3.1: Case Study - Concentration	Assignment	
10/29/25	Section 3.1: Other Units for Solution Concentrations - Pre-Reading and Quiz	Quiz	10
10/30/25	Midterm Exam Closes - Unit 1-2: Sections 1.0-2.4 - All Sections - Taken at a Testing Center (4-Day Window)	Quiz	40
10/31/25	Section Quiz 3.1 - Aqueous Solutions	Quiz	27
11/2/25	Midterm Check In Quiz - Course Survey in Canvas for Bonus Points	Quiz	1
11/3/25	Section 3.2: Limiting Reactant Part I - Pre-Reading and Quiz	Quiz	12
11/3/25	Section 3.2: Chemical Reactions in Aqueous Solutions - Graded Discussion - Feynman Notes and Q&A	Discussion	10
11/4/25	Section 3.2: Case Study - Limiting Reactant	Assignment	

Due Date	Assignment Name	Assignment Type	Points
11/5/25	Section 3.2: Limiting Reactant Part II - Pre-Reading and Quiz	Quiz	10
11/6/25	Section Quiz 3.2 - Chemical Reactions in Aqueous Solutions	Quiz	15
11/7/25	Unit 3 Test Opens for 3 Days	Assignment	
11/7/25	Unit 3: Practice Test - Sections 3.1- 3.2 for Participation Points	Quiz	40
11/9/25	Unit 3 Test Closes - Sections 3.1- 3.2 - Open Notes Timed Test Taken in Canvas over 3 Day Window - Requires Respondus LockDown Browser + Webcam	Quiz	30
11/10/25	Begin Unit 4	Assignment	
11/10/25	Section 4.1: Balancing Chemical Reactions - Pre-Reading and Quiz	Quiz	15
11/10/25	Section 4.1: Chemical Reactions - Graded Discussion - Feynman Notes and Q&A	Discussion	10
11/11/25	Section 4.1: Balancing Equations Problem Set	Assignment	

Due Date	Assignment Name	Assignment Type	Points
11/12/25	Section 4.1: Case Study – Balancing Chemical Reactions	Assignment	
11/14/25	Section Quiz 4.1 - Chemical Reactions	Quiz	10
11/16/25	Begin Your Signature Assignment	Assignment	
11/16/25	Mission Control Discussion - Graded Q&A	Discussion	10
11/17/25	Section 4.2: Classes of Chemical Reactions - Graded Discussion - Feynman Notes and Q&A	Discussion	13
11/17/25	Section 4.2: Types of Reactions - Pre-Reading and Quiz	Quiz	25
11/19/25	Section 4.2: Case Study – Types of Reactions	Assignment	
11/21/25	Section Quiz 4.2 - Classes of Chemical Reactions	Quiz	15
11/30/25	Submit Your Signature Assignment to Canvas	Assignment	75
11/30/25	Begin Writing Your Reflection	Assignment	

Due Date	Assignment Name	Assignment Type	Points
11/30/25	Prepare Your Study Guide for the Final	Assignment	
11/30/25	Submit Your Reflection to Canvas	Assignment	30
12/1/25	Section 4.3: Chemical Formula - Graded Discussion - Feynman Notes and Q&A	Discussion	10
12/1/25	Section 4.3: Empirical and Molecular Formula - Pre-Reading and Quiz	Quiz	25
12/3/25	Section 4.3: Case Study – Empirical and Molecular Formula	Assignment	
12/4/25	Section Quiz 4.3 - Chemical Formula	Quiz	10
12/5/25	Unit 4 Test Opens for 3 Days	Assignment	
12/5/25	Unit 4: Practice Test - Sections 4.1- 4.3 for Participation Points	Quiz	27
12/7/25	Unit 4 Test Closes - Sections 4.1- 4.3 - Open Notes Timed Test Taken in Canvas over 3 Day Window - Requires Respondus LockDown Browser + Webcam	Quiz	20

Due Date	Assignment Name	Assignment Type	Points
12/15/25	Final Exam Opens for 4 Days	Assignment	
12/18/25	Final Exam Closes - Unit 1-4: Sections 1.0-4.3 - All Sections - Taken at a Testing Center (3 Day Window)	Quiz	40
12/21/25	End of Semester Quiz - Course Survey in Canvas for Bonus Points	Quiz	1
12/22/25	Complete the Course Evaluation	Assignment	