General Chemistry I

CHEM - 1210 002

Course Description

Fundamentals of inorganic chemistry. Atomic structure chemical bonding, chemical reactions, solution chemistry, stoichiometry, periodic table, thermochemistry, kinetics, gases, and kinetic molecular theory will be covered. It is recommended that students take CHEM 1215 in the same semester as this course.

Pre-Requisite(s): MATH 1050 w/C grade or higher, or appropriate placement.
Semester: All

Course Learning Outcomes

- Distinguish between chemical reactions and physical changes.
- Classify matter as solids, liquids, or gases based on their characteristics and demonstrate how intermolecular forces influence their properties.
- Define and describe chemical terms and use them appropriately to communicate and solve problems in the sphere of chemistry.
- Describe the roles of protons, neutrons, and electrons in atoms.
- Use the periodic table to predict various physical and chemical properties, including bond types, metallic character, relative atomic size, electron affinity, ionization energy, and electronegativity.
- Write names from formulas or structures or deduce formulas or structures from names of compounds using IUPAC nomenclature rules for a variety of ionic and binary covalent molecules and acids.
- Represent atomic and molecular structures and substructures using appropriate models, including atomic structure, electronic structure, Lewis structures, VSEPR

shapes, and molecular hybridization.

- Apply scientific notation, metric prefixes, and measurement units appropriately to a given mathematical value.
- Perform multistep conversions using dimensional analysis, including metric conversions and stoichiometric calculations with limiting reagents.
- Solve mathematical problems representing chemical properties using appropriate formulas, including atomic weight, elemental analysis and empirical formulas, gas laws, concentration units, enthalpy changes, specific heat, and colligative properties.
- Interpret scientific data in tables and graphs appropriately, including energy changes and phase diagrams.
- Classify and balance a variety of chemical equations.
- Explain the first law of thermodynamics as it relates to heat and work and explain the enthalpy changes that occur in chemical reactions.
- Predict relative physical properties of simple compounds based on molecular structure, including melting point, boiling point, and solubility.
- Predict the properties of chemical reactions, including thermodynamic properties, equilibrium disturbances, precipitation, and gas-forming reactions.

Class Mode and Meeting Times

Class Mode

- This class meets in person - Attendance is taken and counts toward your Participation score

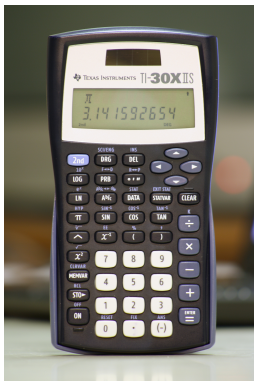
Class Meetings - Days, Times, and Locations if Applicable

- Section 002: M-W 5:00 PM - 6:50 PM; Redwood Campus SI-RM291

Required Text or Materials

Title: REAL Chemistry

Subtitle: Required Online Courseware - Counts 20% of grade. Cost is ~$40 with a two week free trial. Register by clicking on the REAL CHEM Registration link in the Welcome Module. Use Chrome, Edge, or Firefox on a laptop or desktop computer. Tablets and phones are not supported.
Publisher: ASU and Carnegie Mellon University



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.

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?

Office Hours

Using MySuccess to Make Online Office Hour Appointments via Zoom

- From Canvas, select the MySuccess tab.
- Find your Instructor in the list of Your Connections under the "How can we help" banner.
- Alternatively, use the search field to find your instructor by name.

- Click on the link for your instructor to see their Office Hours for the week.
- Choose one of the available Office Hours.
    - You must make your appointment at least 12 hours in advance.
    - Note: Your appointment will indicate Zoom as the meeting platform.
    - Add details regarding the specific questions, problems, concepts or issues you wish to discuss.
    - Once your appointment is confirmed, you will receive 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

As this is a 4-credit-hour course, you should expect to spend, on average, *12 hours per week outside of class studying*.

If taking as an Online class, you should allow at least 3 additional hours of independent study time for a total of *15 hours per week*. Do not assume this class will require less engagement than an in-person class. If anything, taking this class online will require more dedication and engagement from the very start.

- Expect to spend five to six hours a week taking the Study Guide & Concept Quizzes and engaging with the online courseware, REAL CHEM.
- Spend another hour or so per week composing a set of "Feynman Notes" to be posted on the Discussion Boards.
- Schedule at least one to two hour-long focused study sessions per week.
- Schedule several extra hours for additional review in preparation for Unit Tests and Exams.

You are expected to create a consistent weekly study schedule to support these activities.

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
    - Two attempts
    - Complete before and after each REAL CHEM Module.
    - Each quiz includes:
        - Key Learning Outcomes
        - REAL CHEM reading assignments
        - Additional resources (e.g., videos or links)
    - No penalty for late submissions, but quizzes may close after the corresponding Unit Test.
2. Practice Tests
    - Two attempts
    - Available for each Unit Test.

- Designed 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 (Online sections – all graded; In Class Sections – select Discussions graded)

AI Readings and Assignments (10% of Course Grade)

1. AI Reading Activities
   - Based on the "Using AI Effectively and Responsibly" materials in Section 0.0.
   - Include guided readings, examples, and practice prompts to improve AI interaction skills.
   - Activities connect AI use to growth mindset, metacognition, and evidence-based learning strategies.
2. AI Assignments
   - Require you to submit your prompt, AI output, and a short reflection on how the interaction supported your learning.
   - Some assignments may allow a screenshot of your AI conversation instead of pasted text.
   - Emphasis on verifying AI-generated responses against course materials and revising for accuracy and clarity.
3. Expectations
   - All AI work must be used to check your own work and support your learning—not to replace it.

    - AI should help you reflect, verify, and strengthen your understanding while keeping you in control of the thinking process.
    - Completion and submission of all assigned AI activities are required for full credit.
    - Late submissions may be accepted only if the corresponding unit is still open; activities may close after the related Unit Test.

REAL CHEM Checkpoints (20%)

- Three attempts
- Module and Unit Checkpoints are graded assignments.
- Prepare by completing all activities on each of the preceding REAL CHEM page.
- Register through the REAL CHEM link in Canvas Modules.
- Cost: ~$40
- Use Chrome, Edge, or Firefox on a laptop or desktop (tablets/smartphones are not supported).
- Using unsupported browsers or devices may result in anomalous performance.

Unit Tests (20%)

- One attempt
- Four tests, each covering 2–3 Units.
- Taken online in Canvas using Respondus Monitor + LockDown Browser.
- Must be completed in one attempt within 120 minutes.
- May be taken at home or in the SLCC Library.
- Allowed Materials:
    - Open notes (printed or handwritten)
    - Printed periodic table
    - Calculator with exponential functions
- Prohibited:
    - Use of AI or unauthorized aids
    - All other electronics

- Violations may lead to disciplinary action

Midterm & Final Exams (40%)

- One attempt
- Cumulative exams, administered in person at an SLCC Testing Center.
- Required for both online and in-person sections.
- Dates listed on Calendar – no makeups without prior approval.
- 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 (front and back, one page)
    - Periodic Table with symbols only (element names through Row 6 must be memorized)
    - Calculator with exponential functions (no other electronics)
    - A sheet of useful equations and constants will be provided by the Testing Center or approved remote proctor.

Canvas Bonus Point Quizzes

- Due dates and availability posted on the Calendar.
- Open for a limited window only.
- Closed and inaccessible after the deadline.
- Earn bonus points applied to the Unit Test category.

Due Dates

Graded Assignments and Exams: Deadlines and Scheduling

- Due Dates on the Calendar indicate when you should begin working on assignments.
- No late penalties for assignments submitted within the Unit timeframe.
- Assignments must be submitted before the corresponding Unit Test closes.
- After the Unit Test, Midterm, or Final Exam, assignments may be closed and inaccessible.
- Staying on schedule will help you maintain steady progress throughout the course.

Unit Tests, Midterm, and Final Exams

- Must be taken on the dates listed on the Calendar.
- No makeups without advance notice and prior arrangement 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, you must submit a written request in advance using the Canvas Inbox.
- Exceptions will not be granted without prior notice.
- Approved makeups must be completed within four days of the originally scheduled date.

Makeup Scheduling (After a Missed Exam)

- If you miss a test or exam due to significant, documented circumstances beyond your control, you must:
    - Provide your instructor with written documentation explaining the reason for the absence.
    - Contact your instructor within four days of the missed test or exam to request a makeup.
- Makeup requests submitted after the four-day window may not be approved.

Additional Policies

Technology Requirements and Classroom Policies

1. Web Camera and Computer Requirements

- A webcam-equipped laptop or desktop computer is required to:
    - Complete REAL CHEM assignments
    - Take Unit Tests (proctored with Respondus LockDown Browser and Monitor)
    - Attend Zoom-based virtual office hours (requires microphone and webcam)

⚠ Mobile devices and tablets are not supported for REAL CHEM activities and will produce unreliable results.

- Library Resources:
    - Web-enabled computers are available at the Redwood Markosian Library
    - Laptops may be checked out for the semester on a first-come, first-served basis
    - REAL CHEM may also be accessed using computers in SLCC STEM Learning Centers

2. Electronic Device Policies in Class and Study Spaces

Recording Devices

- Video or audio recording is prohibited without written authorization from the instructor or the Office of Accessibility & Disability Services

Cell Phone Use

- Cell phones must remain off and out of sight during class
- In case of an emergency, leave the classroom before using your phone
- Students who text, talk, or use phones may be asked to leave and will lose participation points

Computer Use

- Laptops are not allowed unless explicitly approved by the instructor
- Tablet devices are permitted for note-taking only
- Handwritten notes are preferred, especially for drawing chemical structures and diagrams

3. Attendance and Administrative Drops

Face-to-Face Sections

- Students who miss the first class meeting and fail to notify the instructor may be dropped from the course

Online Sections

- Students must log into Canvas within the first five days of the term
- Students are responsible for officially dropping or withdrawing from classes they do not intend to complete
- Failure to drop a course may result in financial liability for tuition and fees

Technical Support Resources

1. REAL CHEM Technical Support

- Use Chrome, Edge, or Firefox on a laptop or desktop computer
- To report technical issues:
    1. Open REAL CHEM via the Canvas Welcome Module
    2. Click the Tech Support link and complete the form
    3. Include:
        - Name of the lesson and page (include the URL)
        - Description of the issue
        - Screenshot of the full browser window (with URL visible)
        - Your Bruinmail email address

 Troubleshooting tips:

- Refresh the page or use the in-app navigation arrows (not the browser back button)

- Quit and restart your browser or computer
- Try a different browser
- Clear your browser's cache

If the issue persists, send the same details to your instructor for escalation.

2. Canvas and General Tech Support

- Canvas Support (24/7):801-957-5125 or 1-844-334-0397 (toll-free)
- SLCC Technical Help Desk:801-957-5555

3. Testing Services Support

- SLCC Testing Services:Email: TestingServices@slcc.eduPhone: 801-957-4500

⚠ It is your responsibility to resolve technical and testing issues promptly to stay on track with course requirements.

Course Material Use Policy

- Unauthorized reproduction or redistribution of course materials—including all content in Canvas and REAL CHEM—is strictly prohibited
- Violation of this policy is a breach of:
    - Intellectual Property Rights
    - The Code of Student Rights and Responsibilities

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.

Grading Scale

GradeRange

A	100%			to 92.5%
A-	< 92.5%			to 89.5%
B+	< 89.5%			to 86.5%
B	< 86.5%			to 82.5%
B-	< 82.5%			to 79.5%
C+	< 79.5%			to 76.5%
C	< 76.5%			to 72.5%
C-	< 72.5%			to 70%
D+	< 70%			to 66.5%
D	< 66.5%			to 62.5%
D-	< 62.5%			to 59.5%
E	< 59.5%			to 0%

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.

How to Navigate to Canvas

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.

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

Course Student Learning Outcomes

- Fundamentals of inorganic chemistry. Atomic structure chemical bonding, chemical reactions, solution chemistry, stoichiometry, periodic table, thermochemistry, kinetics, gases, and kinetic molecular theory will be covered.

"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.

Upload a Profile Picture of Avatar: Creating a distinctive online identify with a profile picture or avatar will help set you apart and allow you to 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?

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Advanced Theories of Covalent Bonding Module Checkpoint	Assignment	8
	Aqueous Solutions Module Checkpoint	Assignment	10
	Atomic Theory and The Periodic Table Module Checkpoint	Assignment	9
	Atoms Molecules and Ions Unit Checkpoint	Assignment	6
	Basic Concepts of Matter and Energy Module Checkpoint	Assignment	12
	Calorimetry Module Checkpoint	Assignment	8

Due Date	Assignment Name	Assignment Type	Points
	Chemical Bonding and Molecular Geometry Unit Checkpoint	Assignment	9
	Chemical Reactions and Equations Module Checkpoint	Assignment	10
	Composition of Substances and Solutions Unit Checkpoint	Assignment	9
	Compounds and Chemical Formulas Module Checkpoint	Assignment	4
	Electromagnetic Energy and the Bohr Model of the Atom Module Checkpoint	Assignment	7
	Electronic Structure and Periodic Properties Unit Checkpoint	Assignment	11
	Enthalpy Module Checkpoint	Assignment	10
	Exploration: Is the Town Toxic? Quantifying Concentrations of Lead	Assignment	90
	Foundations of Chemistry Unit Checkpoint	Assignment	7

Due Date	Assignment Name	Assignment Type	Points
	Gas Laws Module Checkpoint	Assignment	8
	Gases Unit Checkpoint	Assignment	12
	Intermolecular Forces Module Checkpoint	Assignment	8
	Introduction to Energy Module Checkpoint	Assignment	6
	Ionic and Covalent Bonding Module Checkpoint	Assignment	7
	Lewis Structures Module Checkpoint	Assignment	7
	Measurements Module Checkpoint	Assignment	10
	Molecular Structure and Polarity Module Checkpoint	Assignment	6
	Periodic Properties Module Checkpoint	Assignment	7
	Phase Changes Module Checkpoint	Assignment	7
	Quantum Theory Module Checkpoint	Assignment	11
	Reaction Stoichiometry Module Checkpoint	Assignment	8

Due Date	Assignment Name	Assignment Type	Points
	Reactions and Stoichiometry Unit Checkpoint	Assignment	10
	Solids and Liquids Unit Checkpoint	Assignment	11
	Solubility Module Checkpoint	Assignment	8
	Stoichiometry of Gases Module Checkpoint	Assignment	8
	The Kinetic-Molecular Theory Module Checkpoint	Assignment	8
	The Mole Module Checkpoint	Assignment	10
	Thermochemistry Unit Checkpoint	Assignment	11
	Unit 0: Secrets to Success - Time Management - Bonus Point Survey Quiz	Quiz	1
8/26/25	Unit 0: Begin Unit 0 - Introduction to the Course and Tips on How to Study Chemistry	Assignment	
8/26/25	Welcome to REAL CHEM - Register Now!	Assignment	

Due Date	Assignment Name	Assignment Type	Points
8/26/25	Section 0.0: Using AI Tools Effectively - Complete Survey Before Reading Following Pages	Quiz	10
8/26/25	Welcome to Chem 1210 – General Chemistry I	Assignment	
8/27/25	Section 0.1: Adopting a Proper Mindset – Readings and Quiz	Quiz	10
8/27/25	Section 0.1: Using Effective Study Strategies – Readings and Quiz	Quiz	10
8/28/25	Section 0.2: About the Syllabus - Readings and Quiz - Requires Respondus LockDown Browser + Webcam	Quiz	13
8/29/25	Unit 0: Tips on How to Study Chemistry Unit Checkpoint	Assignment	
8/29/25	Unit 0: Using AI to Help Design Your Study Strategy	Assignment	10
9/2/25	Section 1.0: A Roadmap for Success – Pre-Reading Quiz	Quiz	8

Due Date	Assignment Name	Assignment Type	Points
9/2/25	Section 1.0: Foundations for Success: Engagement - Graded Discussion - All Sections	Discussion	10
9/2/25	Unit 1: Begin Unit 1 - Foundations of Chemistry - Learning Outcomes and Preview Slides	Assignment	
9/2/25	Unit 1: Foundations of Chemistry – Graded Discussion - Feynman Notes and Q&A - All Sections	Discussion	10
9/2/25	Unit 1: Using AI as Your Personal Tutor	Assignment	10
9/3/25	Section 1.1: Basic Concepts of Matter and Energy Module Checkpoint	Assignment	
9/3/25	Section 1.1: Basic Concepts of Matter and Energy: Pre-Reading Quiz	Quiz	17
9/4/25	Section 1.2: Measurements Module Checkpoint	Assignment	
9/4/25	Section 1.2: Measurements: Pre-Reading Quiz	Quiz	25

Due Date	Assignment Name	Assignment Type	Points
9/5/25	Unit 1: Foundations of Chemistry Unit Checkpoint	Assignment	
9/5/25	Unit 1 Exploration: Modeling Uncertainty in a Changing Climate	Assignment	
9/7/25	Unit 1-2: Pre-Test Reflection Quiz for Bonus Points- Five Day Open Window	Quiz	1
9/7/25	Unit 1-2: Prepare Your Study Guide for the Unit Test	Assignment	
9/7/25	Unit 1: Feynman Feedback Follow-up	Quiz	23
9/8/25	Unit 2: Atoms, Molecules and Ions - Graded Discussion - Feynman Notes and Q&A - All Sections	Discussion	10
9/8/25	Unit 2: Begin Unit 2 - Atoms, Molecules and Ions - Learning Outcomes and Preview Slides	Assignment	
9/8/25	Unit 2: Using AI to Classify and Categorize	Assignment	10
9/9/25	Section 2.3: Atomic Theory and the Periodic Table: Pre-Reading Quiz	Quiz	30

Due Date	Assignment Name	Assignment Type	Points
9/9/25	Section 2.3: Atomic Theory and the Periodic Table Module Checkpoint	Assignment	
9/10/25	Section 2.4: Compounds and Chemical Formulas: Pre-Reading Quiz	Quiz	35
9/10/25	Section 2.4: Compounds and Chemical Formulas Module Checkpoint	Assignment	
9/11/25	Unit 2: Atoms Molecules and Ions Unit Checkpoint	Assignment	
9/11/25	Unit 2 Exploration: Do you really want to drink that? The elements of water	Assignment	
9/12/25	Unit 1-2 Unit Test Opens	Assignment	
9/12/25	Unit 1-2: Practice Test for Participation Points - Take Before Unit Test	Quiz	58

Due Date	Assignment Name	Assignment Type	Points
9/14/25	Unit 1-2 Unit Test Closes - Taken in Canvas over Three Day Window - (PLO-CHEM-3) - Requires Respondus LockDown Browser + Webcam	Quiz	50
9/14/25	Unit 1-2: Post -Test Reflection Quiz for Bonus Points - Five Day Open Window	Quiz	1
9/15/25	Unit 3: Begin Unit 3 - Electronic Structure and Periodic Properties - Learning Outcomes and Preview Slides	Assignment	
9/15/25	Unit 3: Electronic Structure and Periodic Properties - Graded Discussion - Online Sections	Discussion	10
9/15/25	Unit 3: Using AI to Check and Strengthen Problem Solving	Assignment	10
9/16/25	Section 3.5: Electromagnetic Energy and the Bohr Model of the Atom: Pre-Reading Quiz	Quiz	19

Due Date	Assignment Name	Assignment Type	Points
9/17/25	Section 3.5: Electromagnetic Energy and the Bohr Model of the Atom Module Checkpoint	Assignment	
9/18/25	Section 3.6: Quantum Theory Module Checkpoint	Assignment	
9/18/25	Section 3.6: Quantum Theory: Pre-Reading Quiz	Quiz	23
9/19/25	Unit 3 Exploration: What's the World Made Of? Unlocking Secrets with Spectroscopy	Assignment	
9/21/25	Unit 2: Feynman Feedback Follow-up	Quiz	19
9/22/25	Section 3.7: Periodic Properties Module Checkpoint	Assignment	
9/22/25	Section 3.7: Periodic Propeties: Pre-Reading Quiz	Quiz	12
9/23/25	Unit 3: Electronic Structure and Periodic Properties Unit Checkpoint	Assignment	

Due Date	Assignment Name	Assignment Type	Points
9/24/25	Unit 4: Begin Unit 4 - Chemical Bonding and Molecular Geometry - Learning Outcomes and Preview Slides	Assignment	
9/24/25	Unit 4: Chemical Bonding and Molecular Geometry - Graded Discussion - Online Sections	Discussion	10
9/24/25	Unit 4: Using AI to Extend and Deepen Understanding	Assignment	10
9/25/25	Section 4.8: Ionic and Covalent Bonding Module Checkpoint	Assignment	
9/25/25	Section 4.8: Ionic and Covalent Bonding: Pre-Reading Quiz	Quiz	20
9/28/25	Unit 3-5: Prepare Your Study Guide for the Unit Test	Assignment	
9/29/25	Section 4.9: Lewis Structures Module Checkpoint	Assignment	
9/29/25	Section 4.9: Lewis Structures: Pre-Reading Quiz	Quiz	18

Due Date	Assignment Name	Assignment Type	Points
9/30/25	Section 4.10: Molecular Structure and Polarity: Pre-Reading Quiz	Quiz	17
10/1/25	Section 4.10: Molecular Structure and Polarity Module Checkpoint	Assignment	
10/2/25	Section 4.11: Advanced Theories of Covalent Bonding Module Checkpoint	Assignment	
10/2/25	Section 4.11: Advanced Theories of Covalent Bonding: Pre-Reading Quiz	Quiz	15
10/3/25	Unit 4: Chemical Bonding and Molecular Structure Unit Learning Checkpoint	Assignment	
10/3/25	Unit 4 Exploration: Decoding the Mystery of Greenhouse Molecules	Assignment	
10/6/25	Unit 5: Begin Unit 5 - Composition of Substances - Learning Outcomes and Preview Slides	Assignment	

Due Date	Assignment Name	Assignment Type	Points
10/6/25	Unit 5: Composition of Substances and Solutions - Graded Discussion - Online Sections	Discussion	10
10/6/25	Unit 5: Using AI to Practice the COAST Problem-Solving Method	Assignment	10
10/7/25	Section 5.12: Mole Calculations Module Checkpoint	Assignment	
10/7/25	Section 5.12: Mole Calculations: Pre-Reading Quiz	Quiz	13
10/8/25	Section 5.13: Aqueous Solutions Module Checkpoint	Assignment	
10/8/25	Section 5.13: Aqueous Solutions: Pre-Reading Quiz	Quiz	21
10/9/25	Unit 5: Composition of Substances and Solutions Unit Checkpoint	Assignment	
10/9/25	Unit 5 Exploration: Is the town toxic? Quantifying concentrations of lead	Assignment	
10/10/25	Unit 3-5 Unit Test Opens	Assignment	

Due Date	Assignment Name	Assignment Type	Points
10/10/25	Unit 3-5: Practice Test for Participation Points - Take Before Unit Test	Quiz	59
10/12/25	Unit 1-5: Prepare Your Study Guide for the Midterm Exam	Assignment	
10/12/25	Unit 3-5: Unit Test Closes - Taken in Canvas over Three Day Window - (PLO-CHEM-2) - Requires Respondus LockDown Browser + Webcam	Quiz	41
10/20/25	Midterm Exam Unit 1-5 Opens	Assignment	
10/20/25	Unit 6: Begin Unit 6 - Reactions and Stoichiometry - Learning Outcomes and Preview Slides	Assignment	
10/20/25	Unit 6: Reactions and Stoichiometry - Graded Discussion - Online Sections	Discussion	10
10/21/25	Section 6.14: Chemical Reactions and Equations Module Checkpoint	Assignment	

Due Date	Assignment Name	Assignment Type	Points
10/21/25	Section 6.14: Chemical Reactions and Equations: Pre-Reading Quiz	Quiz	22
10/22/25	Section 6.15: Chemical Reactions Stoichiometry: Pre-Reading Quiz	Quiz	21
10/22/25	Section 6.15: Chemical Reactions Stoichiometry Module Checkpoint	Assignment	
10/23/25	Unit 1-5: Midterm Exam Closes - Taken at an SLCC Online Testing Center on One of Four Days	Quiz	48
10/24/25	Unit 6: Reactions and Stoichiometry Unit Checkpoint	Assignment	
10/26/25	Midterm Reflection on Using AI to Support Learning	Assignment	10
10/26/25	Midterm Survey: A Survey on Mindset, Strategies, and Tools	Quiz	10
10/27/25	Unit 7: Begin Unit 7 - Gases - Learning Outcomes and Preview Slides	Assignment	

Due Date	Assignment Name	Assignment Type	Points
10/27/25	Unit 7: Gases - Graded Discussion - Online Sections	Discussion	10
10/27/25	Section 7.16: Gas Laws: Pre-Reading Quiz	Quiz	25
10/28/25	Section 7.16: Gas Laws Module Checkpoint	Assignment	
10/29/25	Section 7.17: Stoichiometry of Gases: Pre-Reading Quiz	Quiz	5
10/30/25	Section 7.17: Stoichiometry of Gases Module Checkpoint	Assignment	
11/2/25	Unit 1-5: Midterm Reflection Quiz for Bonus Points - Five Day Open Window	Quiz	1
11/3/25	Section 7.18: The Kinetic-Molecular Theory: Pre-Reading Quiz	Quiz	25
11/5/25	Section 7.18: The Kinetic-Molecular Theory Module Checkpoint	Assignment	
11/7/25	Unit 7: Gases Unit Checkpoint	Assignment	

Due Date	Assignment Name	Assignment Type	Points
11/9/25	Unit 6-8: Prepare Your Study Guide for the Unit Test	Assignment	
11/10/25	Unit 8: Begin Unit 8 - Thermochemistry - Learning Outcomes and Preview Slides	Assignment	
11/10/25	Unit 8: Thermochemistry - Graded Discussion - Online Sections	Discussion	10
11/10/25	Section 8.19: Introduction to Energy: Pre-Reading Quiz	Quiz	19
11/11/25	Section 8.19: Introduction to Energy Module Checkpoint	Assignment	
11/12/25	Section 8.20: Calorimetry: Pre-Reading Quiz	Quiz	25
11/13/25	Section 8.20: Calorimetry Module Checkpoint	Assignment	
11/17/25	Section 8.21: Enthalpy: Pre-Reading Quiz	Quiz	24
11/18/25	Section 8.21: Enthalpy Module Checkpoint	Assignment	

Due Date	Assignment Name	Assignment Type	Points
11/20/25	Unit 8: Thermochemistry Unit Checkpoint	Assignment	
11/21/25	Unit 6-8: Unit Test Opens	Assignment	
11/21/25	Unit 6-8: Practice Test for Participation Points - Take Before Unit Test	Quiz	49
11/23/25	Unit 6-8: Unit Test Closes - Taken in Canvas over Three Day Window - (PLO-CHEM-4) - Requires Respondus LockDown Browser + Webcam	Quiz	39
11/24/25	Unit 9: Begin Unit 9 - Solids and Liquids - Learning Outcomes and Preview Slides	Assignment	
11/24/25	Unit 9: Solids and Liquids - Graded Discussion - Online Sections	Discussion	10
11/24/25	Section 9.22: Intermolecular Forces: Pre-Reading Quiz	Quiz	16
11/30/25	Unit 9-10: Prepare Your Study Guide for the Unit Test	Assignment	

Due Date	Assignment Name	Assignment Type	Points
12/1/25	Section 9.22: Intermolecular Forces Module Checkpoint	Assignment	
12/2/25	Section 9.23: Phase Changes: Pre-Reading Quiz	Quiz	20
12/3/25	Section 9.23: Phase Changes Module Checkpoint	Assignment	
12/4/25	Section 9.42: Liquids and Solids Unit Checkpoint	Assignment	
12/7/25	Unit 1-10: Prepare Your Study Guide for the Final Exam	Assignment	
12/8/25	Unit 10: Begin Unit 10 - Solutions - Learning Outcomes and Preview Slides	Assignment	
12/8/25	Unit 10: Solutions - Graded Discussion - Online Sections	Discussion	1
12/8/25	Section 10.24: Solubility: Pre-Reading Quiz	Quiz	18
12/9/25	Section 10.24: Solubility Module Checkpoint	Assignment	
12/12/25	Unit 9-10: Unit Test Opens	Assignment	

Due Date	Assignment Name	Assignment Type	Points
12/12/25	Unit 9-10: Practice Test for Participation Points - Take Before Unit Test	Quiz	25
12/14/25	Unit 9-10: Unit Test Closes - Taken in Canvas over Three Day Window - Requires Respondus LockDown Browser + Webcam	Quiz	47
12/15/25	Unit 1-10: Final Exam Opens	Assignment	
12/18/25	Unit 1-10: Final Exam Closes - Taken at an SLCC Online Testing Center on One of Two Days - (PLO-CHEM-1)	Quiz	50
12/22/25	Complete the Course Evaluation	Assignment	
12/22/25	Unit 11: End of Semester Reflection Quiz for Bonus Points - 3 Day Open Window	Quiz	1
12/25/25	Roll Call In Class Attendance Exceptions - Add 3 out of 0 to allow for several excused absences	Assignment	0
12/25/25	Roll Call Attendance	Assignment	100