

CHEM 1311: General Chemistry I

Ms. Colleen Trainor

Syllabus
 Summer 2026
 RBS 2015
 M-F 9-10:40 am

Contact Info

Instructor:

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- Office hours: M-F 10:40-11:40am or by appointment

Welcome to General Chemistry I

Introduction

General Chemistry I will provide you with an understanding of the underlying principles of chemistry including the composition, structure, properties, and reactivity of matter. Topics include the physical and electronic properties of atoms, chemical formulas and reactions, periodic trends and the basic principles of chemical bonding (Chapters 1–10 in the textbook). Good study habits will be essential to your success. You will have to employ logic and critical thinking in order to solve a wide variety of both problems. This is a fast paced course and it is imperative that you do not fall behind. If you find yourself struggling to keep up, attending my office hours is your best resource for success.



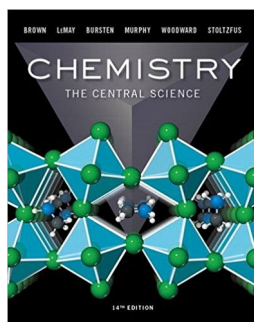
Student Learning Outcomes

- 1) apply the scientific method to analyze items or problems found on exams (Critical Thinking).
- 2) manipulate and analyze data embedded in word problems found on exams (Empirical and Quantitative Skills).

Additional Learning Outcomes

- 1) define the different classes of matter, compounds, and chemical reactions
- 2) solve quantities based on chemical equations
- 3) describe the electronic structure of atoms
- 4) predict periodic trends of the elements
- 5) explain the bonding and shape of simple molecules or ions

Course Materials (*not required*)



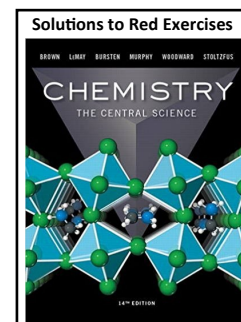
Chemistry: The Central Science, 14th Ed by Brown, Lemay, and Bursten

Textbook options (with ISBN)

- hardcover: 9780134414232
- 3-ring binder: 9780134555638
- e-book: 9780134554570

Scientific calculator capable of exponents and logarithms.

Some kind of periodic table



Solutions to Red Exercises

Periodic Table of Elements

For elements with no stable isotopes, the mass number of the isotope with the longest half-life is in parentheses.

Course Requirements

- High school algebra and high school chemistry are highly recommended. If you haven't had chemistry, plan to devote extra study time to keep up
 - General Chemistry I Lab (CHEM 1111) is a separate course. If CHEM 1311 is being taken to fulfill a degree requirement **you must take both lecture and lab**. Students taking CHEM 1311 to satisfy the Core do NOT have to take the lab. However, the lab does satisfy 1 hour of the STEM Core requirement
 - To receive a passing grade for the course, **you must take the comprehensive final exam**; otherwise, you will fail the course (Final exam: July 3rd)
 - The **last day to withdraw from the course with a "W" is Wednesday, June 24**. It is *your* responsibility to withdraw from the course; otherwise, if you stop coming to class, you will receive an F! If you are withdrawing from this course, you are not required to withdraw from the laboratory course (CHEM 1111) and vice versa. Your lab instructor is not responsible for catching you up on lecture material you missed. If you are unsure as to whether or not you should drop a course please consult with your instructor
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Study Tips

- **Study, study, study!** Chemistry requires you to **read, review** and **practice**. Typically, you will need 2 hours of studying per hour of lecture material. Since we meet for almost two hours everyday, you should expect to study 4 hours a day outside of class time
 - **Don't "brain-dump" after an exam**, you will continue to build upon and use information throughout the semester; *there are no retakes for exams!* Additionally, the final exam is cumulative, so holding onto material from exam to exam is crucial.
 - **Form study groups**, there are some smart students at UT Tyler, get to know them. Also, teaching a topic to someone is a great way to reinforce that topic.
 - If you get behind, **do not be afraid to get help!** Take advantage of my office hours. I have all the answers you need to be successful in this course and would love to help you master this material!
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Attendance Policy

Attendance is essential. This 5-week summer course is extremely fast paced. Lectures are in-person and will not be posted online. The Department of Chemistry & Biochemistry requires a certain amount of material to be covered to prepare students for General Chemistry II. **An unexcused absence results in a grade of zero for any exam missed.**

Normally, an excused absence includes medical emergencies, a death in your family or required travel for a UT Tyler's event (e.g., athletic team travel). All supporting documentation should be presented to the instructor.

Students who anticipate being absent from class due to a religious observance are *required* to inform their instructors of such absences at least one week before the religious holiday. Students who anticipate being absent from class due to a required travel for a UT Tyler's event (e.g., athletic team travel) are *required* to inform their instructor of such absences at least one week before the absence.

Class will not meet on June 19th and offices will be closed

Canvas Learning Management System

I will communicate primarily through the Canvas course page. Let me know ASAP if you have issues accessing the canvas page. I will post:

- Lecture notes after each chapter
- All assignments and their due dates
- Announcements

4 Midterm Exams (20% each, 80% total)

- The exam dates listed are tentative. University-approved absences don't include things like family vacations so plan ahead!
- They will cover material discussed in lecture up to that class period
- You are required to bring a pencil and a **non-programmable** scientific calculator. **One** 3½" x 5" note card, both sides is permitted (**HANDWRITTEN ONLY**, no photocopies or printed materials!). No other materials, including cell phones or smart watches, are permitted!
- I will provide scantrons and scratch paper for calculations as necessary
- Exams start promptly at 9:00 am and you must finish by 9:55 am. We will cover more material after the exam is complete
- When finished please turn in your exam, scantron, note card, and scratch paper
- I will do my best to return everything as quickly as possible
- Mistakes do happen. If you think that I made a grading error, please see me within one week after taking the exam. *All* scores are final one week after grades are posted on Canvas!
- **Cell phones, smart watches, and any similar electronic devices must be turned off and put away during exams!** If they observed out in a visually accessible place (i.e. between legs, on the floor, etc.), it will be assumed that they are being used to cheat; your exam will taken away, you will receive a zero score (0 points) for the test, and you will be referred to the Office of Judicial Affairs

Exam Make-up Policy

- Missed exams will be handled according to one of the two following methods:
 - If you know that you will miss an exam due to an excused absence, then you can take the exam early. To do so you must give me a few day's notice
 - Only under rare circumstances will you be permitted an extension
 - For any unplanned, unexcused absences, such as illness, car-trouble, funeral, etc. the final exam can replace 1 exam grade
- If you have questions regarding these policies, please ask me

Exam Grade Replacement

- I will **replace** (not drop) your lowest exam score with your final exam score if your final exam score is higher. (If the final exam score is the lowest score, then no grade will be replaced.)
- As an example, if your three lowest exam scores were 60, 75, and 85 and you made an 80 on the final, then the 60 grade would be changed to 80. If you make a 55 on the final then the 60, 75, and 85 would remain as they are.

Homework and In Class quizzes (10% of total grade)

- Homework will be assigned for each chapter and will be **due 3 days after we finish that chapter's material**
- All assignment notices will be posted on Canvas
- Late work will lose 10% per day late
- In class quizzes will be a hand written problem or short multiple choice set that will be taken at the start of class periods

Final Exam (10% of total grade)

- The final examination will be given on (and only on) **Thursday, July 3rd**. You are required to take the final examination in order to receive a passing grade in the course. No make-ups of the final exam, no exceptions!
- The comprehensive final examination is a standardized exam written by the American Chemical Society (70 multiple-choice questions). The questions are not particularly hard, but there are A LOT of them

Grading Scale

- Grades will tentatively be assigned on a 90/80/70/60 scale, but may be adjusted based upon my evaluation of the overall class performance.
- Grades will be posted on Canvas and weighted as shown to the right:

Homework and daily quizzes	10%
Midterm Exams	80%
Final Exam	10%
Total	100%

Please inform me of any grading mistakes. They do happen! Grades will only be changed within a week of the grades being posted

Important Dates

- **June 10 (Wednesday) – Midterm Exam 1; subject to change**
- **June 17 (Wednesday) – Midterm Exam 2; subject to change**
- **June 19 –No class, Offices closed**
- **June 24 (Wednesday) – Midterm Exam 3; subject to change**
– Last day to withdraw from course
- **July 1 (Wednesday) - Midterm Exam 4; subject to change**
- **July 3 (Friday) – Final Exam from 9 am – 11 am**

Course Topics

• Introduction: Matter and Measurement	Chapter 1
• Atoms, Molecules, and Ions	Chapter 2
• Stoichiometry: Calculations with Chemical Formulas and Equations	Chapter 3
• Aqueous Reactions and Solution Stoichiometry	Chapter 4
• Thermochemistry	Chapter 5
• Electronic Structure of Atoms	Chapter 6
• Periodic Properties of the Elements	Chapter 7
• Basic Concepts of Chemical Bonding	Chapter 8
• Molecular Geometry and Bonding Theories	Chapter 9
• Gases	Chapter 10

Email Policy

- I will respond to emails regularly during normal business hours
- After hours and on weekends, I will respond as my schedule allows
- Please don't expect responses to emails sent after 10 pm until at least 9 or 10 am the next day

University Policies

Withdrawing from Class Students are allowed to withdraw (drop) from a course through the University's Withdrawal Portal. Texas law prohibits students who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. The number includes courses dropped at other 2-year or 4-year Texas public colleges and universities. Make sure to consider the impact withdrawing from any course has on your academic progress as well as the financial implications. We encourage you to consult your advisor(s) and financial aid for additional guidance. CAUTION #1: Withdrawing before census day does not mean students receive a full refund. Please see the Tuition and Fee Refund Schedule. CAUTION #2: All international students must check with the Office of International Programs before withdrawing. All international students are required to enroll full-time for fall and spring terms.

Incomplete Grade Policy If a student, because of extenuating circumstances, is unable to complete course requirements by the end of the semester, then the instructor may recommend an Incomplete (I) for the course. The "I" may be assigned in lieu of a grade only when all of the following conditions are met: (a) the student has been making satisfactory progress in the course; (b) the student is unable to complete all course work or final exam due to unusual circumstances that are beyond personal control and are acceptable to the instructor; and (c) the student presents these reasons prior to the time that the final grade roster is due. The semester credit hours for an Incomplete will not be used to calculate the grade point average for a student. The student and the instructor must submit an Incomplete Form detailing the work required and the time by which the work must be completed to their respective department chair or college dean for approval. The time limit established must not exceed one year. Should the student fail to complete the work for the course within the time limit, the instructor may assign zeros to the unfinished work, compute the course average for the student, and assign the appropriate grade. If a grade has not been assigned within one year, then the Incomplete will be changed to an F or to NC, if the course was initially taken under the CR/NC grading basis.

Grade Appeal Policy UT Tyler's Grade Appeal policy requires the completion of a Grade Appeal form for this action to take place. The grade appeal begins with the instructor of the course. If a student does not agree with the decision of the instructor, the student may then move the appeal to the department chair/school director for that course. If the student is still dissatisfied with the decision of the chair/director, the appeal moves to the Dean of the College offering that course, who has the final decision. Grade appeals must be initiated within sixty (60) days from the date of receiving the final course grade.

Disability/Accessibility Services In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA), The University of Texas at Tyler offers accommodations to students with learning, physical and/or psychological disabilities. If a student has a disability, including a non-visible diagnosis such as a learning disorder, chronic illness, TBI, PTSD, ADHD, or a history of modifications or accommodations in a previous educational environment, the student is encouraged to visit <https://hood.accessiblelearning.com/UTTyler> and fill out the New Student application. The Student Accessibility and Resources (SAR) office will contact the student when the application has been submitted and schedule an appointment with the Assistant Director Student Accessibility and Resources/ADA Coordinator.

Military Affiliated Students UT Tyler honors the service and sacrifices of our military-affiliated students. If you are a student who is a veteran, on active duty, in the reserves or National Guard, or a military spouse or dependent, please stay in contact with your faculty member if any aspect of your present or prior service or family situation makes it difficult for you to fulfill the requirements of a course or creates disruption in your academic progress. It is important to make your faculty member aware of any complications as far in advance as possible. Your faculty member is willing to work with you and, if needed, put you in contact with university staff who are trained to assist you.

Academic Honesty and Academic Misconduct The UT Tyler community comes together to pledge that "Honor and integrity will not allow me to lie, cheat, or steal, nor to accept the actions of those who do." Therefore, we enforce the Student Conduct and Discipline policy in the Student Manual Of Operating Procedures (Section 8).

FERPA UT Tyler follows the Family Educational Rights and Privacy Act (FERPA) as noted in University Policy 5.2.3. The course instructor will follow all requirements in protecting your confidential information.

Absence for Official University Events or Activities All courses follow the practices related to approved absences as noted by the Student Manual of Operating Procedures (Sec. 1 -501).

Campus Carry We respect the right and privacy of students who are duly licensed to carry concealed weapons in all courses. They are expected to behave responsibly and keep a handgun secure and concealed. More information uttyler.edu/about/campus-carry/index.php.