

Course Syllabus: General Chemistry II

McCoy College of Science, Mathematics & Engineering
CHEM1243-101
Fall 2026; TR 8:00 – 9:20am; Bolin 306

Contact Information

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Course Description

Second semester general chemistry introduces students to solutions, thermodynamics, equilibrium, electrochemistry, and kinetics. This is the foundational course for all upper-level chemistry courses and many biology courses. Critical thinking and problem solving will be emphasized. Credit or concurrent enrollment in MATH 1233 (college algebra) or 1534 (precalculus) is ***required**.

Purpose of Syllabus

The purpose of the syllabus is to inform you of course expectations, policies, and content. Ignorance of course policies because you did not read your syllabus will not be an acceptable excuse for not adhering to these policies. Because the syllabus is online, you cannot lose it. By accepting this syllabus and remaining enrolled in the course, you affirm that you understand the contents of this syllabus and that you will adhere to its requirements.

Textbook & Instructional Materials

1. **REQUIRED TEXT:** an official *ACS Study Guide for General Chemistry* (full year; available from the American Chemical Society (ACS) website or from the Chemistry Department). It is the same study guide you should have bought for Gen Chem 1.
2. **REQUIRED TEXTBOOK (FREE ONLINE):** *OpenStax Chemistry 2nd edition. eBook. Flowers, Theopold, Langley, Robinson. (2019, Rice University)*. This is [online](#) through OpenStax or you can download a [free pdf](#). Note, please get the version of the textbook associated with the above hyperlink (there is another version of the textbook arranged in a different order).
3. **Scientific Calculator:** bring your calculator **every** day.
4. **Reliable Internet, access to a personal computer (your own or a lab), and access to D2L.** You must be able to access D2L for any information that is placed there, including important announcements. There is an app for D2L called *PULSE*—PUT IT ON YOUR PHONES AND PAY ATTENTION TO IT.

Technology BAN

This class is an ***ELECTRONICS FREE ZONE**. All cell phones must be silenced and put face down on the desk in front of you—it may not be touched until class is over. All smart watches must be silenced, removed from your wrist, and placed face down on the desk in front of you—it may not be touched until class is over. All ear buds and headphones are to be kept in your backpack, not in/on your head or neck. **NO LAPTOPS OR TABLETS ARE ALLOWED, EVEN FOR NOTE TAKING.** *The ONLY two exceptions to the laptop/tablet policy are: 1) if you are registered through DSS as requiring smart technology for a learning disability, OR 2) if you have a dedicated note-taking device, such as a ReMarkable tablet, that is NOT connected to the internet, or a tablet and stylus with a disabled wifi connection. You are to take handwritten notes only in class. If you use a tablet, it must be with stylus ONLY. Studies show that students learn and retain information better when it is physically written.

Study Hours and Tutoring Assistance

For every 1 hour in class, students should spend 3 hours studying, doing homework, and otherwise preparing for this course. Free tutoring will be available during the semester. You cannot expect to do well if you do not work at it; chemistry must be practiced to be mastered. **How to use a tutor:** tutors are NOT to be given homework questions to work for you. Instead, the proper use of a tutor is to ask for explanations of given topics using non-homework problems as a guide so that you can then go home and **do your own homework!**

Recording Classes

***Recording classes is generally prohibited without the professor's explicit permission.** Such recordings, when permitted, are for personal use only and may not be uploaded to the internet or otherwise shared, transmitted, or published without the professor's prior consent. Some faculty may not permit recordings of their classes. When it is feasible and appropriate, students may record classes to accommodate disabilities under the Americans With Disabilities Act, with prior approval of Disability Support Services. Such recordings may not be uploaded to the internet or otherwise shared, transmitted, or published.

Emergency Aid Resources for Basic Needs

Unexpected life circumstances can affect anyone. If you are experiencing challenges meeting basic needs—such as housing, utilities, food, transportation, healthcare, technology, textbooks or other life necessities, resources may be available to help. Visit the [Student Emergency Support and Resources webpage](#) to learn more, and explore emergency support opportunities through MSU and how to access them. For additional information, please contact the Office of Student Affairs: Clark Student Center #108, (940) 397-7500, student.affairs@msutexas.edu.

Expectations and Goals

It is expected that you will try your best to understand the material; complete all quizzes, exams, and assignments; ask for help when you need it; and seek to understand why you are in this class (what purpose does it serve to you, your major, and your future?). Chemistry tutors will be available throughout the semester to help you. Additionally, Khan Academy and other academic videos can be useful, but these are NOT a substitute for a textbook and hard work. It is expected that you will use ALL of this material in this course.

Grading

Course Grade: Grades will be assessed based on the following percentages (actual points will vary).

Table 1: Weighted Distribution of Points

Assignments	Percent of Grade
Midterm Exams (2; 100 points each)	30%
ACS Full Year Final Exam (CORE Assessment: Quantitative; 200 points)	30%
Weekly Quizzes (12 at 15 points each; lowest dropped)	25%
Homework (Variable)	10%
Kinetics (CORE Assessment: Critical Thinking)	5%
Total Percent	100%

Table 2: Percentage Breakdown for Final Grades

Grade	Percentage Range
A	89.5% and higher
B	79.5% to 89.4%
C	69.5% to 79.4%
D	59.5% to 69.4%
F	59.4% and lower

CORE Assessments

CHEM1243 is a CORE course. All CORE courses have specific university-wide requirements that must be assessed for all students. The following assessments are required as part of all introductory general chemistry courses:

Table 3: CORE Assessments Required in CHEM1243

Category	Assignment
Quantitative Analysis	ACS Final: Calculations; Assessment of quantities and units for problem solving and dimensional analysis
Critical Thinking	Kinetics POGIL Worksheet; Assessment of understanding of kinetics concepts and application of principles to solve problems.

Homework

Throughout the semester, homework assignments (various point totals) will be given. Due dates will be announced at the time the work is given. Homework will be physically turned in on the due date or before. Homework not turned in on or by the due date will NOT be accepted.

Looking up the answers through Google searches is called **CHEATING**. Cheating will not help you pass the quizzes or the exams. Cheating results in a zero for the assignment; repetitive cheating will earn an F in the course. Note: using Chegg, Course Hero, ChatGPT and ALL OTHER online resources is **CHEATING**.

You are strongly encouraged to do the problems at the end of the chapters ON YOUR OWN because you want to learn. You will not learn the material if you do NOT do problems. If you are not motivated to do problems on your own because you want to know the answer, you are in the wrong major.

Quizzes

***Quizzes will be given every Thursday except exam days.** Quizzes will consist of general theory and problem solving. Problem-solving will be extensive. All quizzes will be TIMED (you will not have unlimited time to complete quizzes). Quizzes are **NOT** open-note, open-book, or open-internet (NO PHONES OR SMART WATCHES). Quizzes represent YOUR best effort.

***There will be NO make ups for missed quizzes** for any person for any reason (DO NOT ASK FOR ONE). Each quiz will be worth 15 to 20 points and there will be a total of 12 quizzes. The lowest quiz grade will be dropped (missed quizzes beyond the 1 drop will count against you). Quizzes are worth **25% of your grade**. Poor quiz scores will drag your grade down, making it impossible to make up the difference.

Disability students must take their quizzes under the same conditions as all other students.

Midterm Exams

There will be 2 (two) midterm exams. Midterms will be composites of multiple-choice questions, fill-in or short-answer questions, and problems and generally will not be cumulative. Midterms are designed to test problem-solving skills. These types of exams cannot be crammed for; you must study every day to do well and to finish the exams in the allotted timeframe. All exams are TIMED. ***Exam dates are listed on the Lecture Schedule and will not be moved.** ***No make-up midterms will be offered** to any person for any reason (DO NOT ASK FOR ONE).

Students with a ***legitimate, excusable reason** for missing a midterm will be given consideration. A substitute score based on the final will be used to replace the zero received. **Excusable reasons** for missing an exam include: a) extreme and verifiable illness (you must provide doctor/hospital verification; I will not simply take your word for it that you are too ill to attend); b) accident or injury (must present verification); c) MSU sanctioned event (active participant and you must have provided official university documentation at least 2 class periods BEFORE the exam); and d) extreme family emergency (e.g., funeral the day of the exam; immediate family only). **Inexcusable reasons** for missing an exam include: a) scheduling doctor, dentist, therapy or other appointments for the day/time of the exam (possible exception: court dates); b) failure to show up (this includes sleeping through the exam); c) weather (if MSU is open, then you must be here); d) congested exam schedule or overlapping classes; e) failure to obtain babysitter or caregiver; and f) work schedule conflict. ***Students MUST notify me PRIOR to the start of the exam to receive consideration for an excused absence.** Notifying me after the fact will result in an unexcused absence. You only get 1 excused absence. Note: family trips, weddings (only if you are in it), etc.—if they were planned before the beginning of the semester and you can demonstrate that will be considered on a case-by-case basis. Anything planned after the semester begins will not be excusable.

***Absolutely no electronic devices of any kind may be used during exams, INCLUDING SMART WATCHES.** All exams are closed book and will be monitored for cheating. If you are caught doing anything suspicious, your exam will be taken away from you and you will

receive an automatic zero for the exam. NOTE: using old notes and exams from other students to prepare for this class is considered cheating and is not allowed. Copying your notes or exams to give to others either in or out of this class is considered cheating and is not allowed. Working in small groups for the purposes of skewing exam scores is considered collusion and is not allowed.

Comprehensive ACS FULL YEAR Final Exam

All students are required to take the ***comprehensive ACS FULL YEAR General Chemistry exit exam**. This exam is a secured national exam and it is a CORE Assessment (Quantitative). This exam is an all multiple-choice, TIMED exam. The ACS Exam is NOT a trivial exam. You MUST begin to prepare for the Final on the first day of the semester. The Final Exam is 30% of your overall grade – do NOT blow it! You MUST go back and study first semester material to do well on this exam! Again, do NOT blow it off.

Attendance

Students are expected to attend all meetings of the classes in which they are enrolled.

***Lecture attendance is thus required.** Students with excessive absences may be instructor dropped from the course with an “F”. Missing more than 3 classes in a TR class is considered excessive. ZOOM will NOT be offered. If you miss class, YOU are responsible for getting notes from another student in class—I will NOT provide them.

Students are expected to always be ***ON TIME**. Students are expected to have read all required materials before walking into class. If you need to leave class early, it must be for a good reason, and you must tell me before class begins or you will be marked absent.

Extra Credit

***NO extra credit of any kind will be offered for this course.** You must earn your grade by doing the assigned work. Bonus questions may be added to some exams, quizzes, or assignments, but they will represent problems you need to know how to do anyway.

Late Work

***NO late work will be accepted from anyone for any reason.** Deadlines are hard deadlines. You are given at least a week to work on assignments so there is NO EXCUSE for you not completing them. Note: forgetting assignments at home is NOT acceptable behavior in college, so you do NOT get to run home and get it. Assignments are due even if you are sick because you should have started working on the assignment the day it was received. You do NOT get extensions for being in athletics or members of other traveling groups.

Make Up Work/Tests

***NO make ups will be allowed for any assignment, quiz, or exam.** Legitimate absences for exams ONLY will be accommodated, WITH documentation, but not through a make-up process. Do NOT ask for a chance to take things early, late, or “at another time”.

Important Dates

- Last Day to drop with a grade of “W:” **November 23, 2026**

- Refer to: [Drops, Withdrawals & Void](#)

Student Handbook

Refer to: [Student Handbook](#)

Academic Misconduct Policy & Procedures

Academic Dishonesty: Cheating, collusion, and plagiarism (the act of using source material of other persons, either published or unpublished, without following the accepted techniques of crediting, or the submission for credit of work not the individual's to whom credit is given). Additional guidelines on procedures in these matters may be found in the [Office of Student Conduct](#).

1. The term “**cheating**” includes, but is not limited to: (1) use of any unauthorized assistance in taking quizzes, tests, or exams; (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; or (3) the acquisition, without permission, of tests or other academic material belonging to a member of the faculty, staff, or another student.
2. The term “**plagiarism**” includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials. Plagiarism also includes the use of someone else's thoughts, words, ideas, or lines of argument in your own work without appropriate documentation (a parenthetical citation at the end and a listing in “Works Cited”) whether you use that material in a quote, paraphrase, or summary. It is a theft of intellectual property and will not be tolerated: plagiarism is NEVER accidental.
3. The term “**collusion**” means collaboration with another person in preparing any work offered for credit if that collaboration is not authorized by the faculty member in charge.
4. **Student Honor Creed:** “As an MSU Student, I pledge not to lie, cheat, steal, or help anyone else do so.” You should memorize this and live by it.
5. **Any form of cheating will result in a 0 (zero) for the assignment/exam/quiz.** Repeated cheating will result in an F in the course and an instructor drop (with F), as well as a trip to the Dean of Students

Statement on Generative AI

***Students are NOT allowed to use ANY generative AI (ChatGPT, Gemini, Claude, etc.) to complete assignments or to answer problems.** Generative AI does not represent your work; additionally, because generative AI pulls information from copyrighted sources, you commit plagiarism every time you use generative AI. Generative AI crafts the answer for you and thus you learn nothing. Generative AI can't help you on the exams. Grammar checkers that read your work, highlight problems, and make suggestions to fix them, are NOT generative AI. However, if your writing is so poor that the grammar checker essentially rewrites the work for you, it then becomes generative in nature and thus plagiarism. Use of generative AI and plagiarism will result in zeros for any assignments in which they are

found. Note: using an AI scrubber to make your AI generated text sound human is also cheating.

Desire-to-Learn (D2L)

Extensive use of the MSU D2L program is a part of this course. Each student is expected to be familiar with this program as it provides a primary source of communication regarding assignments, examination materials, and general course information. You can log into [D2L](#) through the MSU Homepage. If you experience difficulties, please contact the technicians listed for the program or contact your instructor.

Instructor Class Policies

1. **Do not walk through the classroom or leave once class has begun** (exception: sudden illness) and ***NEVER WALK IN FRONT OF ME ONCE I HAVE BEGUN TO LECTURE.** It is disrespectful to me and to the other students to have you cut in front of the room to get to your seat and to wander in and out. **Go to the bathroom BEFORE you walk in;** if you can't get from class to class on time, YOU need to figure out how to resolve that problem. **Do NOT be late; being late is rude to other students and to the faculty.**
2. **Do not talk during lecture except to ask questions of the instructor.** If you miss something, ask me, not the person sitting next to you.
3. **Do not engage in disruptive or disrespectful behavior.** Do not play games on your electronic devices or play with your social media sites, do homework for other classes, read books or newspapers, sleep, listen to music, etc. during the lecture; pay attention to the lecture! Please refrain from ALL disruptive behaviors (drumming on the desks, clicking your pen repetitively, etc.).
4. ***Turn off or silence (note: vibrate is not the same as silent) all cell phones, pagers, music devices, and other electronic devices that make noise or have the potential to disrupt the class before you walk into the room.** NO electronic devices are to be used during class unless you have documentation from DSS for their use.
5. **YOU MUST REMOVE YOUR EARBUDS IN CLASS.** If you are listening to music, you are NOT listening to me. If you want to listen to music, don't come to class since you won't get anything from it.
6. Disruptive students will be given one (1) verbal warning to improve their behavior. Second offenders will be asked to leave the classroom and will be referred to the Dean of Students. Abusive students will be dismissed from the class permanently.

University Teams and Organizations

***All members of in-season sports teams or other campus organizations who will be missing class because of university sanctioned events MUST present to me a written statement on university letterhead and signed by a university official indicating those dates that will be missed because of travel or participation in the university-sponsored event.** Athletics documentation must be presented to me within the first 2 weeks of the beginning of the semester. Other documentation (such as for theater, etc.) must be presented to me at least one week prior to the time that will be missed. **NOTE: if you KNOW you will be missing more than 3 classes during the semester, you MUST come talk with**

me the first week. Please note, your athletic schedule is NOT a surprise to you or your coaches so don't act like it is.

Services for Students with Disabilities

In accordance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Midwestern State University endeavors to make reasonable accommodations to ensure equal opportunity for qualified persons with disabilities to participate in all educational, social, and recreational programs and activities. After notification of acceptance, students requiring accommodations should make application for such assistance through Disability Support Services, located in the Student Wellness Center, (940) 397-4140. Current documentation of a disability will be required in order to provide appropriate services, and each request will be individually reviewed. ***The instructor then needs to be notified by the student of the nature of these accommodations. This notification will take the form of an official letter obtained from DSS by the student and given to the instructor.** Every effort should be made to provide me with this documentation within the first 2 weeks of the semester to avoid losing accommodations because you failed to provide proper notification in a timely manner. ***It is always the responsibility of the student to arrange accommodations with DSS.** For more details, please go to [Disability Support Services](#).

College Policies

Smoking/Tobacco Policy

Smoking is prohibited on MSUTexas grounds, including buildings, parking lots, and open spaces.

Alcohol and Drug Policy

To comply with the Drug Free Schools and Communities Act of 1989 and subsequent amendments, students and employees of Midwestern State are informed that strictly enforced policies are in place which prohibits the unlawful possession, use or distribution of any illicit drugs, including alcohol, on university property or as part of any university-sponsored activity. Students and employees are also subject to all applicable legal sanctions under local, state and federal law for any offenses involving illicit drugs on University property or at University-sponsored activities.

Campus Carry

Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes has prohibited. The new Constitutional Carry law does not change this process. Concealed carry still requires a License to Carry permit, and openly carrying handguns is not allowed on college campuses. For more information, visit [Campus Carry](#).

Active Shooter

The safety and security of our campus is the responsibility of everyone in our community. Each of us has an obligation to be prepared to appropriately respond to threats to our

campus, such as an active aggressor. Please review the information provided by MSU Police Department regarding the options and strategies we can all use to stay safe during difficult situations. For more information, visit [MSUReady - Active Shooter](#). Students are encouraged to watch the video entitled “*Run. Hide. Fight.*” which may be electronically accessed via the University police department’s webpage: [“Run. Hide. Fight.”](#)

Safe Zones Statement

The professor considers this classroom to be a place where you will be treated with respect as a human being regardless of gender, race, ethnicity, national origin, religious affiliation, sexual orientation, political beliefs, age, or ability. Additionally, diversity of thought is appreciated and encouraged, provided you can agree to disagree. It is the professor’s expectation that ALL students consider the classroom a safe environment. If you experience bullying or other disrespectful behavior from other students, please inform the instructor.

Instructor Drops

An instructor may drop a student any time during the semester for excessive absences, for consistently failing to meet class assignments, for an indifferent attitude, or for disruptive conduct. For the purposes of this course, “consistently failing to meet class assignments” includes consistently not turning in assigned work or turning in work that consistently receives a failing grade.

Intellectual Property

By enrolling in this course, the student expressly grants MSU a “limited right” in all intellectual property created by the student for the purpose of this course. The “limited right” shall include but shall not be limited to the right to reproduce the student’s work product to verify originality and authenticity, and for educational purposes.

Study Tips

1. Every day you should go home and go through your notes. **Annotate** them, expand them, mark what is difficult. Then, go to the book and review only the problem sections and add to your notes. Notes are only useful if they are annotated. The more you write, the more you learn.
2. **DISSECT** the worked problems in the text to make sure you understand where the numbers come from and what they mean. Then, do the sample problems in the boxed problems. Then, go to the end of the chapter and do some of those problems, too. You CANNOT learn chemistry without doing a lot of problems. Moreover, you must be motivated to do problems on your own knowing that they will help you do better on quizzes and exams even if they do not directly earn you points.
3. **Study and review EVERY DAY.** You cannot be an A student without a lot of work.
4. **Do your OWN work.** You can form study groups, etc., but do your own problems. Missing points tells you what you don’t know; googling answers just shows you can cheat.

***Notice:** Changes in the course syllabus, procedure, assignments, and schedule may be made at the discretion of the instructor.

Course Schedule:

Week	Lecture Topic	Quiz/Exam
Aug 25	Course Introduction Topic 1: Liquids, Solids, Complexes, & Solutions	--
Aug 27	Topic 1	Quiz 1
Sept 1	Topic 1	--
Sept 3	Topic 1	Quiz 2
Sept 8	Topic 1	--
Sept 10	Topic 1	Quiz 3
Sept 15	Topic 1	--
Sept 17	Topic 1	Quiz 4
Sept 22	Topic 2: Kinetics	--
Sept 24	*EXAM 1: TOPIC 1	EXAM 1
Sept 29	Topic 2	--
Oct 1	Topic 2	Quiz 5
Oct 6	Topic 2	--
Oct 8	Topic 2	Quiz 6
Oct 13	Topic 3: Chemical Equilibria	--
Oct 15	Topic 3	Quiz 7
Oct 20	Topic 3	--
Oct 22	Topic 3	Quiz 8
Oct 27	Topic 3 *KINETICS CORE ASSESSMENT DUE	--
Oct 29	*EXAM 2: TOPIC 2 PLUS PART OF TOPIC 3	EXAM 2
Nov 3	Topic 3	--
Nov 5	Topic 3	Quiz 9
Nov 10	Topic 3	--
Nov 12	Topic 4: Thermodynamics	Quiz 10
Nov 17	Topic 4	--
Nov 19	Topic 5: Electrochemistry	Quiz 11
Nov 24	Topic 5	--
Nov 26	THANKSGIVING HOLIDAY	NO CLASS
Dec 1	Topic 5	--
Dec 3	Topic 6: Nuclear Chemistry	Quiz 12
Dec 10	*ACS FULL YEAR EXIT EXAM 8:00 – 10:00AM	FINAL