

CHEM1303 General–Organic–Biol Chemistry

Spring 2026 Syllabus; TR 8:00am - 9:20am; Bolin 127

Course Instructor

Instructor: Dr. Elizabeth A. Machunis-Masuoka, PhD, MA

Office: Bolin 307F

Email: elizabeth.masuoka@msutexas.edu

Office Hour: T 11:00am - 1:00pm; W 9:00am - 11:00am; Th 11:00am - 12:00pm

Purpose of the Syllabus

The purpose of the syllabus is to inform you about 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 also available 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.

Prerequisites

Math 1003, Math THEA > 270, math Accuplacer > 90, or satisfactory score on placement exam.

Chemistry is a math intensive course.

Required Textbook and Materials

1. **Laura Frost and Todd Deal, *General, Organic, and Biological Chemistry: 4th ed., 2020***

Pearson [REQUIRED]. Your materials will be available the first day of class. To access your materials, please log into D2L and navigate to your course. Your textbook and Mastering (the Homework platform) should have been added to your course. The charges for this material have been posted to your student account at the Business Office. If you want to "opt out" of this program and the cost savings, you will receive the "opt out" instructions in your my.msutexas.edu email on the first day of class. If you "opt out" of this lower priced option for your course content, the material will be removed from your D2L account and you will need to purchase the material on your own, at a higher cost to you. If you have any questions or need assistance, please feel free to contact the MSU Bookstore (940) 397-4303.

2. A **scientific calculator** of some kind is required. Bring it every day.

3. **Internet access** and a **computer**. Your homework will be done through Mastering in D2L; thus, you need reliable access to D2L. If you do not have a personal computer, there are computer labs on campus. The syllabus and all course communication will occur through D2L and your university email. You are responsible for regularly checking both.

Lecture Attendance Policies

1. Lecture attendance is required; it is not optional. You will only learn if you come to class.
2. Lecture will begin on time; students are expected to be in their seats, ready to begin, and will need to sign in before the class starts.
3. Students are expected to have read all required materials before walking into class.
4. If you miss class, it is up to you to get notes from another student as I will not provide them.
5. Students with excessive absences may be instructor dropped from the course with an "F".
6. No make-ups will be given for missed quizzes or assignments due to lack of attendance, regardless of the reason you did not attend.
7. No make-ups will be given for exams; however, under special circumstances (see section on exams), consideration will be given and a substitute grade offered.

8. No one is allowed to miss the final. Missing the final exam will result in an "F" for the course.
9. To monitor attendance, a seating chart or attendance sign-in sheet will be kept. Students who sign-in for students that are not present will be referred to the Dean of Students because signing in for another student is fraud.
10. Because quizzes and assignments cannot be made-up and because exams are written off of my lectures, attendance of the lecture is critical. 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.
11. Do not email me regarding lecture absences or bring doctor's notes, etc. if you miss lecture. If you miss lecture, it is up to you to find out from another student what was missed and obtain notes from other students. Formal notification is required for athletes and other university sponsored events and in the event the missed day coincides with an exam (see section on exams for specific details).
12. For further information on Class Attendance policies, see the MSU Student Handbook, available online through the Student Life section of the MSU website.

Late Assignment Policies

1. All assignments are to be turned by the electronic deadline on the day that the assignment is due. Assignments are posted or assigned in advance and due dates will be clearly indicated; there is no excuse for not turning assignments in on time. It is YOUR responsibility to pay attention to deadlines.
2. Mastering assignments that come in after the stated deadline will lose 50% of their value (they will be worth half credit only).
3. Presentations submitted after the stated deadline will receive a zero.

Quiz Policies

1. Quizzes will be given every Thursday that an exam is not given. A total of 13 quizzes will be given. The lowest quiz grade will be dropped to allow for one absence or one "bad day". If you miss more than one quiz, the resulting zeros will be incorporated into your quiz score.
2. Quizzes will be variable points and will be given during the first 15 minutes of class ONLY on Thursdays. If you come in late, you will NOT be allowed to take the quiz.
3. Quizzes may include problems from the book or new questions not from the book. Problems will be representative of what you may expect on the exams.
4. Disability students must take their quizzes under the same conditions as all other students.
5. There will be no make-ups for missed quizzes.
6. NO PHONES, SMART WATCHES, COMPUTERS, or other electronic devices are allowed to be on during quizzes. NO NOTES of any kind may be used during quizzes. Cheating will result in a zero on the quiz, dismissal from the class, and a referral to the Student Conduct office.

Exam Policies

1. There will be 2 midterm exams and one comprehensive final exam in this course. The dates for these exams are shown on the schedule and will NOT be moved unless the university is CLOSED due to weather or other disaster. In case of university closure, the exam will be moved to the next class day that the university is open.
2. No make-up midterms will be offered if the midterm is missed, regardless of the reason. Students with a legitimate, excusable reason for missing the midterm will be given consideration IF the instructor was notified prior to the start of the missed exam AND the excuse falls into one of the following categories: 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. Notifying me after the missed exam will result in an unexcused absence regardless of the reason you missed. You only get 1 excused absence. If the absence is excused, a substitute grade based on the final exam will be used to replace the missed grade. Note: vacations or other family activities are not excusable.

3. Students are not allowed to miss the final exam. Failure to take the final exam will result in an F in the course. All graduating seniors are required to take the final exam.
4. Absolutely **no electronic devices of any kind** may be used during exams. All phones and smart watches will be silenced and placed, face down, on the desk in front of you and not touched during the exam. All exams are **closed book** and will be monitored for cheating. All of your belongings other than your phone and smart watch will be placed at the front of the lecture room during the exam. You are allowed to have **NOTHING** at your desk except phone/watch (silenced, face down), pencils/pens/erasers, and a calculator. 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.

Final Grade Assessment

Final grades will be calculated using the following distributions:

Component of Course	Percentage of Grade
Midterm Exams (2 @ 100pts each)	40%
Quizzes (13 total, lowest dropped)	10%
Homework (Mastering)	10%
Oral Presentation (recorded)	10%
Attendance	10%
Final Exam	20%

Overall, final course grades will be based on the following scale: A (90% or higher); B (80-89.9%); C (70-79.9%); D (60-69.9%); F (59.9% or less). If you do not get 90% or better on every assignment, you should not expect to get an A in the course. There will be no extra credit offered or adjustments made to the class.

Midterm Exams will be a mixture of multiple-choice and problems. All exams will be a significant test of your ability to understand both detail and context and use your knowledge to solve problems.

The Final Exam will be CUMULATIVE, but weighted towards the new material. It will consist of 100 multiple-choice questions that include problems to be solved. The exam will consist of 30 questions for Midterm 1 material, 30 questions from Midterm 2 material, and 40 questions from the material covered after the second midterm.

Oral Presentation

CHEM1303 is a CORE class and as such requires you to demonstrate an ability to work with others AND communicate in your field. To meet the CORE requirement, you will record an oral presentation based on a **primary research paper** (not a **review** paper) related to any field that involves "Chemistry or Biochemistry" as covered in our class. The paper **must** be from a peer-reviewed journal published within the last five years. You will present as a group of three to four students. If you are

unable to find partners, the instructor will assign them for you.

1. Submission Deadlines:

- a. The selected research paper and group roster (who is in your group) are due by **Tuesday, April 7, 2026**. Please ensure you email the instructor a PDF of your chosen paper along with the names of your group members.
- b. The recorded oral presentation is due by **Thursday, May 7, 2026**. A Dropbox will be opened on D2L in which ONE member of the group will upload the FINAL recorded presentation. ALL group members must participate in the crafting of the presentation AND in the actual verbal presentation.

2. Paper Selection:

- a. Your presentation topic must be based on current literature where Chemistry or Biochemistry is a significant component of the paper. Thus, the paper must be a primary research paper: these papers will have methods and results sections.
- b. You can search for papers using various databases including those found at Moffett Library and those found online through Google, Google Scholar, or PubMed (<https://pubmed.ncbi.nlm.nih.gov/>). Once you find a suitable paper, obtain an electronic copy through open access or the interlibrary loan service provided by MSU Moffett Library. Some journals may offer free access to their publications. You MUST email me a complete pdf of the paper and get my approval.
- c. Note: It is expected that you will have to consult other papers, textbooks, or online sources to fully understand the paper you present.

3. Presentation Requirements:

- a. Your presentation should be **10 minutes** long. Deviation from this time (either over or substantially under) will result in point deductions.
- b. Presentations must be created using Microsoft PowerPoint or a program that allows you to save as a PowerPoint capable format. If I cannot open your presentation and play it, you will receive a zero. PowerPoint has a built-in recording function.
- c. Be sure to practice to manage your time effectively, practice proper pronunciation, and eliminate "uhms", getting lost in your presentation, etc. A nervous voice is ok, so long as you are saying things properly.
- d. Use large, easily readable fonts (26-34 point). Avoid overcrowding slides with too much text and do not use small fonts like 12-point just to fit everything in. Each slide should convey a basic, clear concept that you will elaborate on verbally.
- e. A well-organized presentation is key. Structure your slides to include a title slide (the paper citation and your names as presenters), introduction (what question was asked, what was the hypothesis, why is the work important), experimental section (what did the researchers do), results and discussion (for each experiment done, what was the overall result), conclusion (tie the work back to the original question/hypothesis), and references (all sources you consulted for the presentation). Remember: organize, organize, organize. Just because your paper may have 10 figures doesn't mean you need to include all of them to tell the story found in that paper. Moreover, it improves the flow of the presentation to present experiments and their results together (example: experiment A was done to test X and here is the result and what it means).
- f. Do not record yourselves reading directly from your slides—this is unprofessional. To ensure this, practice your presentation several times—professional presentations are typically rehearsed around six times. Your oral presentation should build on the slides, not just repeat the slides.

University-Sponsored 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.

Students with Disabilities

Students with disabilities are required to register with Disability Support Services (DSS) before classroom accommodations can be provided. 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. Students with disabilities must still take their exams on the same day as the rest of the class.

Course Policies Regarding Disruptive Behavior

1. Do not walk through the classroom or leave once class has begun (exception: sudden illness)
2. Do not talk during lecture except to ask questions of the instructor; talking to your friends, even to ask a question, is disruptive and will prevent other students in the class from hearing me. If you don't want to be in class, you are free to leave so long as you accept that you will fail.
3. Do not engage in disruptive or disrespectful behavior.
4. Do not cheat on exams or assignments (see Student Handbook).
5. 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.
6. Eating is not allowed in the lecture rooms. You may have WATER only during class. If you spill it, you MUST clean it up.
7. 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.

Policy on Electronic Devices [READ THIS TWICE]

1. Turn off or silence (note: vibrate is not the same as silent) all cell phones, pagers, music players/headphones, and other electronic devices that make noise or have the potential to disrupt the class *before* you walk into the room.
2. Slideshows are available on D2L. You should print them out and write on them in class. You should not need any electronic device in class. Printing slides for your own personal use is allowable under US Copyright Laws. You may NOT redistribute them.
3. NO cell phones are permitted to be out and/or in my (or your) sight in this class. YOU MAY NOT TAKE PHOTOS OF MY SLIDES. These slides are copyrighted. If your phone is out and/or in sight and/or you are caught using it, you will be asked to put it away and you will lose 1% from your final lecture grade in the course for each violation. Should your phone ring/vibrate during class, you are dismissed for the day and you will lose 1% from your final lecture grade in the course for each violation.
4. If you want to use your phone to record the lecture, it must be placed at the front of the room and out of your reach.
5. No laptops/tablets are allowed AT ALL. Computers are distracting and you will learn more by writing.

University Code of Conduct

For university standards of conduct please refer to the MSU Student Handbook. In general, students are to attend all meetings of all classes; instructors may drop students for excessive absences, indifference, disruptive behavior, or failure to complete class assignments; students are prohibited from cheating, plagiarizing, or colluding. Students are expected to have read the Student Handbook.

Academic Dishonesty

Cheating, plagiarism, and collusion (as well as several other forms of conduct) are all strictly prohibited at MSU. Please read the MSU Student Handbook definitions of cheating, plagiarism, and collusion and **MAKE SURE** that you do not engage in any of these behaviors. If you are unclear on what may count as cheating, plagiarism, or collusion, please see the instructor or the Dean of Students. Plagiarism hurts everyone and is never acceptable.

Statement on Generative AI

In an effort to make all PowerPoint slides ADA compliant, generative AI (Google Gemini) was used to facilitate the creation of alternative text for all images. This generative text has been read for clarity and correctness, but corrections are ongoing and periodically the slides will be updated. This is fair warning that all text may not yet be accurate. Because generative AI pulls information from copyrighted sources, you may NOT redistribute these slides nor sell them. Note: I am telling you up front that I used AI; I am not trying to hide it. Because the AI may be wrong, only what I say in lecture and what is printed in the textbook will constitute correct answers on exams and assignments.

Students are NOT allowed to use any generative AI to complete assignments. Generative AI is NOT your work and thus constitutes cheating and potentially plagiarism because you do not know where the AI gets its information. Generative AI crafts the answer for you. Grammar checkers that read your work, highlight problems, and make suggestions to fix them, are NOT generative AI. 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. **NO AI assistance may be used in any form whatsoever on your oral presentations.**

Instructor Drops

According to the 2012-2013 MSU Student Handbook, p. 47, "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.

Important: Based on experience, students with a failing quiz average at the time of the first midterm who then fail Midterm 1 go on to get Ds or Fs in the class. If you are struggling, it is recommended that you come see me EARLY in the semester. I cannot help you if you do not make the effort to come see me.

Lecture Schedule

Date	Topic	Quiz Dates Due Dates
1/20	Course Introduction Chapter 1: Chemistry Basics, Matter and Measurements	--
1/22	Cp. 1	Quiz 1 Intro to Mastering/D2L
1/27	Cp. 1	--
1/29	Chapter 2: Atoms and Radioactivity	Quiz 2
2/3	Cp. 2	--
2/5	Chapter 3: Compounds, How Elements Combine	Quiz 3
2/10	Cp. 3	--
2/12	Cp. 3	Quiz 4
2/17	Cp. 3	--
2/19	EXAM 1: Chapters 1, 2, 3	Homework for Cp. 1, 2, 3
2/24	Chapter 4: Introduction to Organic Compounds	--
2/26	Cp. 4	Quiz 5
3/3	Cp. 4	--
3/5	Chapter 5: Chemical Reactions	Quiz 6
3/10	SPRING BREAK NO CLASS	--
3/12	SPRING BREAK NO CLASS	--
3/17	Cp. 5	--
3/19	Cp. 5	Quiz 7
3/24	Chapter 6: Carbohydrates	--
3/26	Cp. 6	Quiz 8
3/31	EXAM 2: Chapters 4, 5, 6	Homework for Cp. 4, 5, 6
4/2	HOLIDAY BREAK NO CLASS	--
4/7	Chapter 7: States of Matter, IMF, Gas Laws, Solubility	Groups and Papers
4/9	Cp. 7	Quiz 9
4/14	Cp. 7	--
4/16	Chapter 8: Solution Chemistry	Quiz 10
4/21	Cp. 8	--
4/23	Cp. 8	Quiz 11
4/28	Chapter 9: Acids, Bases, and Buffers	--
4/30	Cp. 9	Quiz 12
5/5	Chapter 10: Proteins	--
5/7	Cp. 10	Quiz 13 Oral Presentations
5/14	FINAL EXAM: 8:00am - 10:00am; Bolin 127	Homework for Cp. 7, 8, 9, 10

This schedule is subject to change.