



Course Syllabus: General Chemistry I Laboratory

MCOSME
CHEM 1141
Fall 2026

Contact Information

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Course Description

CHEM 1141 is a first semester chemistry course to satisfy lab science requirements for BS majors and provide entry level information for students wishing to pursue other chemistry courses. The content covers basic chemistry concepts, calculations, and background for future courses such as organic, analytical, environmental, and biochemistry. This is a survey course. Highlights and introductions to various specific and applied concepts will be covered in several areas relating to different aspects chemistry.

Objectives include: to understand scientific thought and process as it relates to chemistry and problem solving; to analyze numbers and data to interpret outcomes of experimentation; to comprehend how atoms/matter form and change through a chemical process; and to understand stoichiometry, thermodynamics, periodic trends, substance formation/bonding, and laws and theories pertaining to matter.

Textbook & Instructional Materials

- CHEM 1141 Lab manual (Bookstore)
- MSU approved goggles, lab coat, and gloves (Bookstore). Buying any of these online or at another store in town MUST be approved BEFORE wearing to lab – we do not wear what other subjects or hospitals wear.
- Weekly Prelabs (homework): disbursed first day of lab.

Study Hours and Tutoring Assistance

Professors have office hours for the purpose of asking questions, working problems, and clarifying information – use this! Chemistry also offers free tutoring for lab and lecture classes. Personal tutors can be obtained but for an hourly rate. SI hours/TASP hours will be posted in D2L

Student Handbook

Refer to: [Student Handbook](#)

Academic Misconduct Policy & Procedures

Although there will be opportunities for group work, assignments unless otherwise noted are to be done individually. Similar answers on homework, labs, or quizzes will have one written warning. Zeros will be given to every assignment afterwards where cheating is done. Blatant and obvious copying (exact odd/wrong answers, cut and paste) will receive an automatic zero the first and every time. Scores obtained by cheating will NOT be ones that are dropped in any category. Phones out/sounding during exam, cheating aids, or staring eyes during exams will result in a zero on the exam.

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. [Office of Student Conduct](#)

Moffett Library

Moffett Library provides resources and services to support student's studies and assignments, including books, peer-reviewed journals, databases, and multimedia materials accessible both on campus and remotely. The library offers media equipment checkout, reservable study rooms, and research assistance from librarians to help students effectively find, evaluate, and use information. Get started on this [Moffett Library webpage](#) to explore these resources and learn how to best utilize the library.

Grading

Table 1: Percent allocated for each assignment

Assignments	Percent
Safety Quizzes (10)	5
Experiment Quizzes (10)	5
Prelab Homework (10)	10
Data Sheets (10)	50
(extra credit on one exam)	0-10 pts
Midterm	10
Final Exam	10
Class Participation (lab engagement/ organization)	10
Total Percent	100

Table 2: Total points for final grade.

Grade	Percent
A	89
B	79
C	69
D	59
F	Less than 59

Homework

Prelabs are weekly homework assignments to prepare for lab. They are in hardcopy form and are due on the desk at the beginning of the lab lecture. These will be passed out the first lab day we meet.

Quizzes

There are TWO quizzes each week: one online safety quiz due BEFORE your lab time and general knowledge quiz, and one in-person quiz after the lab lecture. If you are reading this, email me in D2L, (Name and section of lab, and "I want free goggles!" as subject) and the first person from each lab will get free goggles.

Exams

CHEM 1141 will have a midterm over labs 1 – 5 and a final for labs 6 – 10. Check schedule below for dates and times. ALL SECTIONS take the midterm and final at the same time.

Phones/smart watches will be placed on a desk at the front of the room. Having a second phone/watch on person assumes cheating. If caught, a zero will be given on the exam.

Midterm/Final Exams

The exam is a comprehensive exam of the first 5 labs for the midterm and the last 5 labs for the final. Any rescheduling must be done 48 hours in advance. **No exams will be given after Thursday 6 PM.**

Extra Credit

There are occasions when extra credit may be offered for attendance to professional seminars, etc, sponsored by our department. For seminars, handwritten notes must be taken and a typed summary written. Both are to be turned in within 2 weeks of the seminar. Other opportunities may be given with other/added instructions- see instructor.

Late Work

ONLINE quizzes will not be reopened. IN-class quizzes and Prelabs and datasheets can be up to ONE week late with 10% deduction. It must be a school sponsored absence or an illness/extenuating circumstances.

Make Up Work/Tests

Exams can only be made up with a university excuse or equivalent but only up and until the scheduled time. No exams will be given after the exam date. Any extenuating circumstances must be discussed within 48 hours of the exam date. Make sure to ask about make up material if you miss class for any reason. See late work section above for other assignment protocols.

Core Assessments

CHEM 1141 lab is a core course. As such, the following assessments are required:

COURSE	Objective: assignment
CHEM 1141	Teamwork: Exp 10 Molecular Models and VSEPR Theory Group assignment to assess molecular bonding and geometry; coordination to build models and assess outcomes related to the assignment and teamwork

Important Dates

- Last day for term schedule changes: Check date on [Academic Calendar](#).
- Deadline to file for graduation: Check date on [Academic Calendar](#).
- Last Day to drop with a grade of "W:" Check date on [Academic Calendar](#).
- Refer to: [Drops, Withdrawals & Void](#)

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.

Attendance

Students are expected to attend all meetings of the labs in which they are enrolled. If available, students, by request only, may attend another lab that week. No makeup labs are given outside of the week scheduled. Although in general students are graded on intellectual effort and performance rather than attendance, absences will lower the student's grade because vital information is not gained. One quiz, prelab and data sheet will be dropped from each student's score. This can be due to missing a lab OR lowest grade: 1 drop per student per semester. Excessive, non-university excused absences or missing TWO exams or THREE labs will result in an instructor drop. Missing this amount of material results in the inability to pass the course. The instructor must give the student a verbal or written warning prior to being dropped from the class.

Students are expected to attend all meetings of the classes in which they are enrolled. Although in general students are graded on intellectual effort and performance rather than attendance, absences may lower the student's grade where class attendance and class participation are deemed essential by the faculty member. In those classes where attendance is considered as part of the grade, the instructor should so inform students of the specifics in writing at the beginning of the semester in a syllabus or separate attendance policy statement. An instructor who has an attendance policy must keep records on a daily basis. The instructor must give the student a verbal or written warning prior to being dropped from the class. Instructor's records will stand as evidence of absences. A student with excessive absences may be dropped from a course by the instructor. Any individual faculty member or college has the authority to establish an attendance policy, providing the policy is in accordance with the General University Policies.

Online Computer Requirements

Taking an online class requires you to have access to a computer (with Internet access) to complete and upload your assignments. It is your responsibility to have (or have access to) a working computer in this class. ****Assignments and tests are due by the due date, and personal computer technical difficulties will not be considered reason for the instructor to allow students extra time to submit assignments, tests, or discussion postings.*** Computers are available on campus in various areas of the buildings as well as the Academic Success Center. ****Your computer being down is not an excuse***

for missing a deadline!! There are many places to access your class! Our online classes can be accessed from any computer in the world which is connected to the internet. Contact your instructor immediately upon having computer trouble. If you have technical difficulties in the course, there is also a student helpdesk available to you. The college cannot work directly on student computers due to both liability and resource limitations; however, they are able to help you get connected to our online services. For help, log into [D2L](#).

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.

Instructor Ai/Class Policies

Ai is a tool to help organize notes, for study help, and general questions. ***It is not to be used to create any work or written assignments that require your original work/thought.*** Over 25% Ai assignments will be a zero with no "redo"

Change of Schedule

A student dropping a course (but not withdrawing from the University) within the first 12 class days of a regular semester or the first four class days of a summer semester is eligible for a 100% refund of applicable tuition and fees. Dates are published in the Schedule of Classes each semester.

Refund and Repayment Policy

A student who withdraws or is administratively withdrawn from Midwestern State University (MSU) may be eligible to receive a refund for all or a portion of the tuition, fees, and room/board charges that were paid to MSU for the semester. HOWEVER, if the student received financial aid (federal/state/institutional grants, loans, and/or scholarships), all or a portion of the refund may be returned to the financial aid programs. As described below, two formulas (federal and state) exist in determining the amount of the refund. (Examples of each refund calculation will be made available upon request).

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. For more details, please go to [Disability Support Services](#).

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@mstuexas.edu.

College Policies

Campus Carry Rules/Policies

Refer to: [Campus Carry Rules and Policies](#)

Smoking/Tobacco Policy

Midwestern State University seeks to provide a safe, healthy, pleasant environment for its faculty, staff, and students. To this end, the use of tobacco products, including smoke and smokeless tobacco, and the advertising, sale, free distribution, and discarding of tobacco products shall be prohibited in all indoor and outdoor facilities and in all university vehicles. The policy extends to faculty, staff, students, vendors, guests, and visitors.

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."](#)

Grade Appeal Process

Update as needed. Students who wish to appeal a grade should consult the Midwestern State University [MSU Catalog](#)

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

Course Schedule:

Lab schedule and brief experimental overview.

Week	Activities/Assignments/Exams	Due Date
Aug 25-27	No lab (Online integrity policy and safety paperwork; safety quiz)	Online paperwork, safety qz DUE BEFORE LAB
Sept 1-3	Check in, Safety, Introduction Equipment and Protocol “paper lab” data sheet Exp 1: Density	Prelab hardcopy due on desk, quiz due online by 1 PM Datasheet due following week by 1 PM

Week	Activities/Assignments/Exams	Due Date
Sept 8-10	Exp 2: Paper Chromatography	Prelab hardcopy due on desk, quiz due online by 1 PM Datasheet due following week by 1 PM
Sept 15-17	Exp 3: Micropipettes SDS assignment	Prelab hardcopy due on desk, quiz due online by 1 PM Datasheet due following week by 1 PM
Sept 22-24	Exp 4: Mass Relationships	Prelab hardcopy due on desk, quiz due online by 1 PM Datasheet due following week by 1 PM
Sept 29-Oct 1	Exp 5: Alum	Prelab hardcopy due on desk, quiz due online by 1 PM Datasheet due following week by 1 PM
Oct 6-8	Complete Exp 5	Prelab hardcopy due on desk, quiz due online by 1 PM Datasheet due following week by 1 PM
Oct 8	Midterm 6 – 8 PM	Datasheet at midterm
Oct 13-15	Exp 6: Calorimetry	Lab Due by 8 PM IN PERSON
Oct 20-22	Exp 7: Titration of Vit C	Prelab hardcopy due on desk, quiz due online by 1 PM Datasheet due following week by 1 PM
Oct 27-29	Exp 8: Alkaline Earths and Halogens	Prelab hardcopy due on desk, quiz due online by 1 PM Datasheet due following week by 1 PM
Nov 3-5	Exp 9: Nonmetals and Their Compounds	Prelab hardcopy due on desk, quiz due online by 1 PM Datasheet due following week by 1 PM

Week	Activities/Assignments/Exams	Due Date
Nov 10-12	Water sample lab (bring water sample to lab)	No Prelab or quiz due
Nov 17-19	Exp 10: Molecular Models and VSEPR Theory (core assessment: teamwork)	Prelab hardcopy due on desk, quiz due online by 1 PM
Nov 23	Drop date by 5 PM <i>SEE ME FIRST</i>, you may not need to drop lab.	NA
Nov 24-26	NO LAB Thanksgiving Break	
Dec 3	Final 6-8 PM	Lab 10 due IN PERSON by 1PM

Experiment	Topics
Exp 1: Density	The analysis, calculation of the density of an unknown liquid and unknown metal using a pycnometer. The concept of space in a container to calculate volume, mathematical concepts used to calculate unknown variables will be discussed.
Exp 2: Paper Chromatography	Practice in chromatography separation method
Exp 3: Micropipettes	Practice in the use of micropipetting of food coloring and dilutions
Exp 4: Mass relations	An introduction to mass relationships as it applies to mole relationships in chemical equations. An unknown substance will be identified (out of four possible) by its mass relationship of original material to known salt formed.
Exp 5: Preparation of Alum	Synthesis lab where alum salt is made from recycled aluminum cans. Synthesis using types of reactions, understanding of Al as an amphoteric substance, and use of multiple chemicals and transfers will be utilized. Percent yield is calculated. Purity is tested by melting point.
Exp 6: Calorimetry	The study of heat transfer for a hot metal, dissolving of a salt, and a chemical reaction. Calorimetry, enthalpy, and mole calculations are utilized.
Exp 7: Analysis for Vitamin C	The study of the titration method, preparing stock solutions, equipment accuracy/use, and calculating the concentration of a titrant and unknown will be discussed. The amount of vitamin c in an unknown will be calculated.

Experiment	Topics
Exp 8: Alkaline Earths and Halogens	A descriptive lab to learn about the color, solubility and some physical/chemical characteristics of group 2A and 7A. Characteristics will then be used to determine an unknown.
Exp 9: Nonmetals and Compounds	A descriptive lab used to learn about the physical and chemical nature of common gases. Specific characteristics will be determined and used to find the identity of an unknown gas. Gases are generated from chemical reactions where the gas in question is a product.
Exp 10: VSEPR and Molecular Shape	a lab of building molecules according to Lewis Dot rules. Prediction of shape, polarity, and bonding is practiced for numerous molecules.