Course Syllabus: General Chemistry I Lab

College of MCOSME
CHEM 1141
Spring 2026

Contact Information

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Course Description

CHEM 1141 is a first semester chemistry lab 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. This is the supplementary lab that practices lab techniques and teaches the students about accuracy, measurements, common lab equipment and techniques.

Inclement Weather Procedure

In the event of a snow day, online assignments will keep the same date. Assignments due in person will be collected the next day we meet. If it is an exam/quiz day, expect the exam/quiz the next day we meet. Watch for D2L announcements to cover any other differences that may occur.

Required Textbook & Instructional Materials

1.Laboratory Manual for Chemistry 1241, Fulton et al)
2.D2L LMS platform for online quizzes and assignment droboxes

Study Hours and Tutoring Assistance

Professors have office hours for the purpose of asking questions, working problems, and clarifying information – use this! **TASP** can be used as well.

Study Monkey/Ai, Youtube, chemreview, Khan Academy, and Quizlet are all very good options to look up videos, examples, demonstrations, extra problems, and practice problems.

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Dishonesty: Cheating, collusion, and plagiarism (the act of using source material of other persons, either published or unpublished, without following the accepted techniques of crediting, or the submission for credit of work not the individual's to whom credit is given).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. 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

Grading is represented in percentile score where all assignments in a given category count the same.

Table 1: Points allocated to each assignment

Assignments	**Percent**
Data Sheets (11)	50
Prelabs (10)	10
Quizzes (10)	10
Class Participation	10
Midterm	10
Final	10
Two exam extra credit opportunities	5 pts each

Table 2: Total points for final grade.

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

Homework (Prelabs)

Before you may enter lab, you must read and sign the safety sheet online and an academic integrity policy. You must also watch the safety film and take a quiz. You are not allowed to do experiments until this is done. There will be a prelab homework assignment due at the beginning of lab each week. Your data sheet is due at the beginning of lab the week after the experiment.

**MAKE SURE TO CHECK YOU COMPUTER'S OPERATING SYSTEMS TO ENSURE YOUR COMPUTER IS COMPATIBLE AND UP TO DATE FOR D2L and HOMEWORK PLATFORMS/LMS.*

Quizzes

Quizzes will be given for each lab (online in D2L) and are due before lab begins. *See schedule.

No late work or reopening of this assignment.

Exams: Midterm and Final

Exams: midterm (experiments 0 – 5) and a final (experiments 6 – 10). More information will be given in the days prior to the exams.

***NOTE day and time of midterm and final. All sections take exams together, Thursday, 6-8 PM*

No *Inspires* *will be allowed for exams. Pencil, scantron, nonprogrammable calculator needed.*

Extra Credit

There are occasions when extra credit will be offered for attendance to professional seminars or service projects sponsored by our department. TWO seminars (5 pts each) or completion of a service project (10 pts) may be used on one exam.

Extra credit is also offered for each lab. It is due and written in a separate section on the report to follow the sources of error section. It must be an industrial/commercial application (large scale) of either the piece of equipment/instrument used in the experiment or the technique. This does not include equipment that is in your drawers or the community glassware. For all 5

points, A. the application must be summarized (equipment must have a schematic and function explained); B. a reaction must be given if relevant (discussion of a drug, chemical reaction process); or the technique must be explained; C. a cite must be given; and D. originality or relevance to other applied disciplines is preferred.

Late Work/Make Up Work

Quizzes cannot be made up or reopened. **Prelabs and reports** can be turned in up to a week late: 5% off first 24hrs late increasing by 1% for each day for the maximum of 10%. **For incomplete assignments durned in up to one week late, a base score of 50 will be given. Exams** can only be made up with a university excuse or equivalent otherwise **NO exams** are made up after due date. Exams for those who travel/absences for work/school functions must be made up BEFORE leaving. Make sure to ask about make up material if you miss class for any reason as soon as possible. Do not wait until you return if at all possible.

Core Assessments

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

Table 3: Core assessment requirements.

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

Missing class means missing notes and material. This is an in-person class, so slides/notes will not be placed online, although some examples and additional copies of assignments may be placed online for ease or clarity. 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**.**

Instructor Class Policies

Attendance is needed to obtain material and for those on financial aid. Owl v2 must be purchased and worked for homework grade. Students must schedule exams prior to leaving on university/military/other trips/absences. Absence due to illness requires a notification by email as soon as able so that missed work can

be scheduled. Emails require your name and lecture/lab you are in for accurate information. This must be through university emails/D2L.

Computer Requirements – Ai Policy

Ai is a tool to help organize notes, for study help, and general questions. It is not to be used to create any working or written assignments that require your original work. 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 a100% 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) exists 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.

College Policies

Campus Carry Rules/Policies

Refer to: Campus Carry Rules and Policies

Smoking/Tobacco Policy

College policy strictly prohibits the use of tobacco products in any building owned or operated by WATC. Adult students may smoke only in the outside designated-smoking areas at each location.

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

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:

Table 4: Schedule.

Quizzes are given after each chapter. Owl v 2 due dates are on the required Cengage platform and due after the completion of each chapter.

Week	Activities/Assignments/Exams	Due Date
Jan 19	**No lab** (Online integrity policy and safety paperwork; safety quiz open)	NA
Jan 26	Check in, Safety, Introduction Equipment and Protocol "paper lab" data sheet (Online integrity policy and safety paperwork; safety quiz	**Online paperwork, safety qz DUE SUNDAY Feb 1 at 11:59 PM**)
Feb 2	Exp 1: Density SDS assignment	Prelab hardcopy due on desk and quiz due online by 1 PM Datasheet due following week by 1 PM
Feb 9	Exp 2: Paper Chromatography	Prelab hardcopy due on desk and quiz due online by 1 PM Datasheet due following week by 1 PM
Feb 16	Exp 3: Use of Micropipettes	Prelab hardcopy due on desk and quiz due online by 1 PM Datasheet due following week by 1 PM
Feb 23	Exp 4: Mass Relationships	Prelab hardcopy due on desk and quiz due online by 1 PM Datasheet due following week by 1 PM
Mar 2	Exp 5: Alum	Prelab hardcopy due on desk and quiz due online by 1 PM Datasheet due following week by 1 PM
Mar 9	**Spring Break No Lab**	**NA**

Week	Activities/Assignments/Exams	Due Date
Mar 16	Complete Exp 5	Datasheet due following week by 1 PM
Mar 23	**Midterm 1 – 3 PM**	**NA**
Mar 30	Exp 6: Calorimetry	Prelab hardcopy due on desk and quiz due online by 1 PM Datasheet due following week by 1 PM
Apr 6	Exp 7: Titration of Vit C	Prelab hardcopy due on desk and quiz due online by 1 PM Datasheet due following week by 1 PM
Apr 13	Exp 8: Alkaline Earths and Halogens	Prelab hardcopy due on desk and quiz due online by 1 PM Datasheet due following week by 1 PM
Apr 20	Exp 9: Nonmetals and Their Compounds	Prelab hardcopy due on desk and quiz due online by 1 PM Datasheet due following week by 1 PM
Apr 27	Exp 10: Molecular Models and VSEPR Theory (core assessment: teamwork*)*	Prelab hardcopy due on desk and quiz due online by 1 PM
Apr 29	**Drop date by 5 PM**	**NA**
May 4	**Final 1 – 3 PM**	**Lab 10 due IN PERSON by 1PM**

General Chemistry II Lab topics

The following table gives the main topics covered in chapters stated above.

Table 5: Experiment Summary.

Experiment	Topics
Exp 1: Density	The analysis and calculation of the density of an unknown liquid and unknown metal using a pycnometer. The concept of space in a container to calculate volume and 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, the 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.
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.