

# CHEM1141-170: General Chemistry 1 Laboratory

Spring 2026; M 5:00 – 9:00pm; Bolin 306 and 303

## Contact Information

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

**Office:** Bolin 307F

**Office Hours:** T 11:00am – 1:00pm; W 9:00am – 11:00am; Th 11:00am – 12:00pm

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## Required Materials:

1. **Laboratory Manual** for General Chemistry 1141, Fulton, Quashnock, et al. (must be new; you may NOT recycle books from past students)
2. **Scientific Calculator:** bring your calculator every day.
3. Access to **D2L** and all materials that may be uploaded to the website.
4. **Goggles:** these are your responsibility to provide. We will provide gloves.
5. **Lab Coats:** Information on lab coats is posted outside of Bolin 307G. Lab coats must be approved by the Chemistry Safety Officer (Bolin 307G).

## Prerequisites:

Concurrent enrollment in CHEM1143 or successful completion of CHEM1143 lecture in a previous semester (if you drop a concurrently enrolled CHEM1143 you MUST drop CHEM1141).

## General Education Statement:

Each student must show competency in all areas of the General Chemistry laboratory: collecting and manipulating data, calculations, understanding the equipment used and sources of error, and concepts/topics covered in each experiment. Data sheets and prelabs are due weekly in addition to a quiz over the material. A midterm and final will also be given.

## 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.

## Attendance

Students are expected to attend all meetings of the classes in which they are enrolled. Lab attendance is thus required. Your first missed lab will be dropped, and you will be given data and required to submit a “dry lab” data sheet to receive credit for the lab. The second missed lab counts against you as a zero. With the third missed lab, you fail the course. You cannot do labs if you are not physically in lab; you cannot do labs online. NOTE: I will NOT be offering make-up in-person labs, regardless of what other instructors might do. Students are expected to always be ON TIME. Students are expected to have read all required materials before walking into class. You should plan on taking the entire allotted time to

complete the lab. Lab runs from 5:00pm to 9:00pm; if you are not finished, you will be required to stay until you are done. To complete labs ON TIME you need to PREPARE for them ahead of time.

## Grading

Grades will be assessed based on the following percentages shown in Table 1. There will be NO extra credit. Course grade categories are shown in Table 2.

Table 1: Distribution of Points.

Assignment	Percentage of Grade
Midterm	10%
Final Exam	10%
Quizzes (12 at variable points; lowest dropped)	10%
Prelabs (11 at variable points)	10%
Data Sheets (10 at 100 points each)	50%
Participation (Demerit system)	10%

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 Assessment

CHEM1141 lab is a CORE course. As such, the following assessments are required:

Category	Assignment
Teamwork	Experiment 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

## Quizzes

Quizzes will be given EVERY lab meeting except for 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 WATCHES). Quizzes are to represent YOUR best effort.

There will be NO make-ups for missed quizzes. Each quiz will be worth 15-20 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). This class is graded on straight points—do NOT blow off the quizzes. Poor quiz scores will drag your grade down, making it impossible to make-up the difference.

Quizzes will be given at the end of lab lecture and before you begin the lab. Disability students must take their quizzes under the same conditions as all other students.

## **Midterm and Final Exams**

There will be 1 (one) midterm exam and 1 (one) final exam. Each exam will test your ability to perform calculations from the labs and to interpret data and results. You will also be tested on safety, concepts such as accuracy and precision, general concepts and theory from the labs covered by the exam, and significant figures. Both exams are based off of the datasheets you complete in lab to emphasize that this material must be learned. All exams are TIMED. Exam dates are listed on the Lab Schedule and will not be moved. No make-up exams will be offered. You MUST be there; missing the exam means missing lab and unless you are verifiably ill, injured, in the hospital, or otherwise detained (e.g., in jail) you are expected to be there. Missing the exam ALSO counts as one of the absences for the lab.

Absolutely no electronic devices of any kind may be used during exams. 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.

## **Extra Credit**

Absolutely NO extra credit will be offered for this course.

## **Late Work**

Absolutely NO late work will be accepted without penalty. FOR EACH 24 HOURS THE WORK IS LATE YOU WILL LOSE 10% OFF OF THE GRADED SCORE OF THAT ASSIGNMENT. This 24-hour period INCLUDES weekends.

## **Make Up Work/Tests**

Absolutely NO make-ups will be allowed for any lab, quiz, or exam. Legitimate absences will be worked around (documentation must be provided), but not through a make-up process.

## **Desire-to-Learn (D2L)**

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. NOTE: there is a D2L app you can put on your phone to have access to the class anywhere and at any time—put it on your phone!

## **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 and on a repeated basis should consider NOT taking lab this semester. You cannot complete the lab if you are not in the lab.

## **Services for Students with Disabilities**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for

reasonable accommodation of their 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 Clark Student Center, Room 168, (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. Students with disabilities must still take their exams on the same day as the rest of the class. For more details, please go to Disability Support Services.

## College Policies

1. Campus Carry Rules/Policies: Senate Bill 11 passed by the 84th Texas Legislature allows licensed handgun holders to carry concealed handguns on campus, effective August 1, 2016. Areas excluded from concealed carry are appropriately marked, in accordance with state law. For more information regarding campus carry, please refer to the University's Campus Carry homepage. If you have questions or concerns, please contact MSU Chief of Police Patrick Coggins at [patrick.coggins@mwsu.edu](mailto:patrick.coggins@mwsu.edu). NOTE: guns are definitely NOT allowed in lab spaces.
2. 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.
3. 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.
4. University Code of Conduct: 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.
5. 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 after reading the material below, please see the instructor or the Dean of Students.
  - a. 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.

- b. 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, whether intentional or not.
- c. 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.
- d. 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.

### **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.

### **Instructor Drops**

According to the MSU Student Handbook, "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.

## SP2026 CHEM1141 Laboratory Schedule

Date	Activities/Assignments/Exams	Assignments Due
Jan 19	No Lab (Online integrity policy and safety paperwork)	--
Jan 26	Check In, Lab Safety, Introduction Equipment and Protocol “paper lab assignment” Safety Lecture and Video	Online integrity/safety sheets (done after class) Safety Quiz (In Class)
Feb 2	Experiment 1: Density	Experiment 1 Prelab
Feb 9	Experiment 2: Paper Chromatography	Experiment 2 Prelab Lab 1 Datasheet
Feb 16	Experiment 3: Use of Micropipettes	Experiment 3 Prelab Lab 2 Datasheet
Feb 23	Experiment 4: Mass Relationships	Experiment 4 Prelab Lab 3 Datasheet
Mar 2	Experiment 5: Alum (part 1)	Experiment 5 Prelab Lab 4 Datasheet
Mar 9	<b>SPRING BREAK NO LAB</b>	--
Mar 16	Experiment 5: Alum (part 2)	--
Mar 23	<b>MIDTERM 5:00 – 7:00pm</b>	<b>Lab 5 Datasheet</b>
Mar 30	Experiment 6: Calorimetry	Experiment 6 Prelab
Apr 6	Experiment 7: Titration of Vitamin C	Experiment 7 Prelab Lab 6 Datasheet
Apr 13	Experiment 8: Alkaline Earths and Halogens	Experiment 8 Prelab Lab 7 Datasheet
Apr 20	Experiment 9: Nonmetals and Their Compounds	Experiment 9 Prelab Lab 8 Datasheet
Apr 27	Experiment 10: Molecular Models and VSEPR Theory CORE ASSESSMENT	Experiment 10 Prelab Lab 9 Datasheet Lab 10 Datasheet
Apr 29	Drop Date by 5 PM	--
May 4	<b>FINAL EXAM 5:00 – 7:00pm</b>	--