

General Chemistry II Laboratory Course Syllabus

CHEM 1225L Spring Semester 2026, Wednesdays 14:30-17:30

UNMV AAS Building Room #128

Instructor: Dr. Alan Thomas

Office location: AAS Building behind Administration Offices, Cubicle #119

Office Hours: Wednesdays 11:00 to noon

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**** ATTENDANCE TO ALL LABORATORY SESSIONS IS MANDATORY! ****

Laboratory courses are a hands-on experience, if you are not present in the laboratory it is impossible for you to fulfill the requirements for the course. Every student is allowed a single excused absence per semester. Any additional absences will result in the loss of a letter grade (first) and a failing grade in the course (second).

This is a one (1) credit hour class which meets once a week for 11 weeks during the spring semester. Each class session is 2 hours and 45 minutes long. Students should be prepared to stay for the entire duration of the class during every session.

Electronic Device Policies:

All students will be required to have a scientific calculator available for use during the every laboratory session..

**** This course is an exception to all other courses in terms of recording or photographing your experiment. Recording an experiment with pictures or video is acceptable and even encouraged. Such matter should not ever contain pictures of the laboratory instructor or other students without their permission. **You are required to request permission from anyone you intend to photograph or record before you take any pictures or any recordings in the lab.** Failure to obtain permission prior to recording any student or the instructor may result in civil or criminal penalties, involuntary withdrawal from the course, and expulsion from the university. If pictures or video showing students or the instructor without their permission taken from inside the laboratory during this semester is found posted on any electronic forum, either on the internet or any telephone app such as but not limited to Signal, Telegram, or Snapchat at any time in the future your grade may be changed retroactively to a failing grade. This may affect your degree if it has already been granted by the university, and your degree may be revoked by the university.****

Grading:

Grading will be done using a standardized scale without adjustment:

| | |
|-----------|---|
| 90 – 100% | A |
| 80 – 89% | B |
| 70 – 79% | C |
| 60 – 69% | D |
| >60% | F |

Each laboratory experiment is worth 10 points, there will be ten experiments for a total of 100 points. In addition, every student is required to keep and maintain a laboratory notebook which will be submitted for grading at mid-term and the last regular meeting of the class during the semester for grading. The laboratory notebook grades are worth an additional 100 points total. The maximum number of points possible for one student to attain is 200 per semester.

Laboratory Etiquette:

All students shall refrain from disruptive behavior such as habitual tardiness, inappropriate talking during class, horseplay, all cell/smart phone/tablet use include browsing/texting—essentially anything other than taking notes or conducting your experiment is considered disruptive in the laboratory. Earphones/buds are prohibited. Failure to adhere to proper classroom decorum could result in a lower grade or even dismissal from the class.

Preparing Your Laboratory Notebook:

Every student will need to purchase or obtain a notebook for use in the laboratory, larger than 7.5" x 10", permanently hard bound (no ring, loose leaf, or spiral binders). Any type of note book will work as long as it meets the prior requirements. You will be given instructions on how to order your experiments in the notebook when you are in the lab. Your notebook needs to be legible, clear, concise, and comprehensive in order to obtain the best grade. Your report on each experiment you have conducted in your notebook should be clear, concise, and complete (see instructions below).

Every student must complete an outline for the entire laboratory report, including all charts, tables, and pre-lab questions in their lab notebook before coming to lab. Any student who appears for class unprepared will be asked to leave the lab until they have completed this task. The only incomplete portions of the lab report at the beginning of class should be any tables for collected data, data analysis, a discussion of the experimental results, and the conclusion to the report.

Preparing a Laboratory Notebook Report:

Essential components of a laboratory report:

- Use the minimum number of words to describe your experiment with the greatest accuracy and precision possible. Anyone reading your report should be able to reproduce your experiment and obtain the similar results based on the information your report contains.
- Use the passive voice; e.g., do not say “We used a magnetic stirrer to stir the mixture.” but “The mixture was stirred using a magnetic stirrer.” Emphasize the experiment rather than the experimenters, the processes rather than the persons.
- Write legibly or hand print **in ink**, cross out and initial all corrections – do not erase or try to white out anything which has been written in a lab notebook. This is suspicious behavior.
- Each experiment will be graded on scientific content as well as clarity, grammar, punctuation, and spelling, and will have the following sections:
 1. Title, which should succinctly express the purpose/objective of the laboratory exercise;
 2. Authors (your name and your lab partner’s name), Course Name and Number, Day and Date;
 3. Introduction: a brief description of why the experiment is being conducted and how this will be accomplished.
 4. Materials, Instrumentation, and Equipment Required.
 5. Experimental Results and Data;
 6. Discussion of experimental results including any calculations (with error analysis); and
 7. Summary/Conclusion is a paragraph that is written after the other sections of the report are completed. It includes, using complete sentences, key words and phrases that describe what you did, sometimes how you did it if a unique process or procedure is required—routine experimental procedures and equipment are not mentioned—and the results that you got. Another person with the same level of expertise in chemistry should be able to read your Summary and Conclusion and have a clear idea of what you did, how you did it, and the results that you obtained without reading the entire report.

Student Learning Outcomes:

The purpose of this course is for each student to become familiar with the safety protocols which are used in a chemistry laboratory, to learn how to properly measure

substances in different phases, how to keep and maintain a laboratory notebook, and how to safely conduct a chemistry experiment in the laboratory. In addition, the experiments assigned are designed to reinforce concepts covered in the classroom portion of this course, give students the opportunity to apply mathematics to actual quantities they have measured (such as the maximum theoretical product of a chemical reaction), allow students the opportunity to fail and learn from these failures, and demonstrate the difficulty in conducting a rigorous scientific experiment in a laboratory.

Student Academic Integrity

Academic dishonesty will not be tolerated. UNM Valencia students are expected to maintain integrity through honesty and responsibility in all their academic work. Academic dishonesty includes any attempt to present some other person's work as your own. This includes plagiarism, cheating, collusion, facilitation, fabrication, multiple submissions, and falsification of records. Any student apprehended in any act of academic dishonesty on any assignment or exam will receive a failing grade on that work and may receive a failing grade for the entire course.

Accessibility Services and Accommodations:

UNM is committed to providing equitable access to learning opportunities for students with documented disabilities. As your instructor, it is my objective to facilitate an inclusive classroom setting, in which students have full access and opportunity to participate. To engage in a confidential conversation about the process for requesting reasonable accommodations for this class and/or program, please contact Accessibility Resource Center at arcsrvs@unm.edu or 505-277-3506.

UNM-CARES

Our classroom and university should foster mutual respect, kindness, and support. If you have concerns about discrimination, harassment, or violence, please seek support and report incidents. Find confidential services at LoboRESPECT Advocacy Center, the Women's Resource Center, and the LGBTQ Resource Center. UNM prohibits discrimination on the basis of sex (including gender, sex stereotyping, gender expression, and gender identity). All instructors are "responsible employees" who must communicate reports of sexual harassment, sexual misconduct and sexual violence to Compliance, Ethics and Equal Opportunity. For more information, please see UAP 2720 and UAP 2740.