Dr. Jerry Godbout

CHEM-1225 General Chemistry II for STEM Majors

Fall 2026 – Section 501 – CRN 64810



Class Meetings

Wednesday 10:30 am – 1:15 pm US MT, VAAS 128

Modality: 100% face-to-face. We hope.

COURSE DESCRIPTION: General Chemistry II Laboratory for Science Majors is the second of a two semester sequence of laboratory courses designed to complement the theory and concepts presented in General Chemistry II lecture. The laboratory component will introduce students to techniques for obtaining and analyzing experimental observations pertaining to chemistry using diverse methods and equipment.

Instructor Contact Information:

Office: VAHS 100A

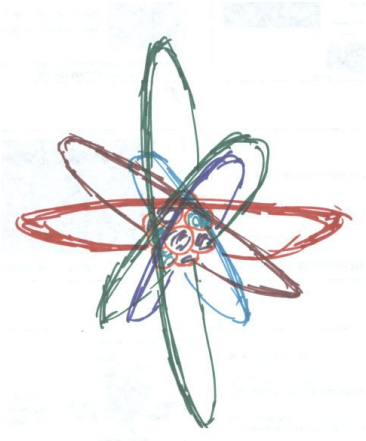
Phone: 505.925.8875

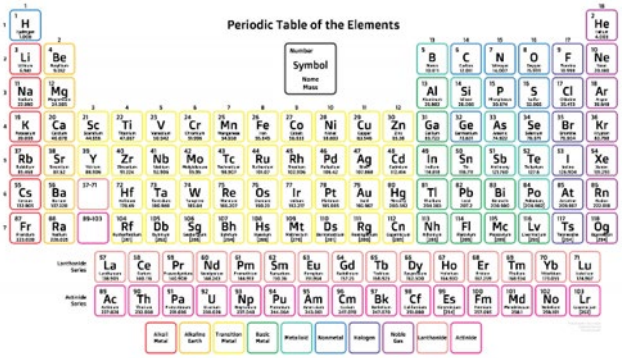
Drop-in Hours (all times US MT)**:**

Mondays: 10:30 am – 12:00 pm
Thursdays: 10:30 am – 12:00 pm
And other times by appointment

Canvas Messaging (Inbox) preferred for course matters, for other issues**:**

Email: jgodbout@unm.edu





COURSE/INSTRUCTOR COMMUNICATIONS

- Canvas messaging is the preferred communication method – UNM email second choice.
- When requesting an appointment (which I am always happy to schedule), please propose three (3) times that work for you in your initial request. This will simplify and quicken the process
- It is the responsibility of the student to keep up with course announcements. ***Check your UNM email and Canvas daily!***

WHAT YOU'LL NEED (Required Resources)

- OpenStax Chemistry: Atoms First, 2e (text required for lecture)
- Safety goggles, lab notebook (CHEM 1215L notebook may be used)
- Calculator (non-graphing) with log/antilog and exponential functions
- Internet Access: *Canvas* and *UNM email address* ***should be checked daily!***

WHAT IF YOU NEED HELP? (UNM-Valencia Resources)

- **Instructor**: Office hours, STEM Center Hours, email
- **STEM Center**: Tutors*, molecular modelling kits, Laptops, textbooks

*When using tutors, it is the **students'** responsibility to make sure they understand well enough to complete the problems on **their own**.

HOW IS YOUR GRADE DETERMINED?

(Exams, Quizzes, Homework, and the Like)

	How Many	Points
Experiments & Activities	8	240
Project Proposal	1	40
Project Poster	1	80
Project Presentations	1	80
Final Exam	1	15 %
Total		**100 %**

* Approximate values

WHAT DO I NEED FOR AN A?

(What's the grading scale?)

Earn This %	Get This Grade
98	A+
92	A
90	A-
88	B+
83	B
80	B-
78	C+
73	C
69	C-
67	D+
62	D
60	D-
55	F+
0	F



WHEN WE LEARN THIS STUFF?

(Schedule is approximate and subject to change by the instructor, and of course any new public health orders. I'm going to try to front-load the experimental stuff as much as possible in case we have to stop in-person activities before the end of the semester)

Week	Date	Activity
1	19 Aug	Safety, Lab Notebook, Measurements, 1215 Review Games
2	26 Aug	Colligative Properties of Candles
3	02 Sep	Hard Water Titration
4	09 Sep	Solution Spectroscopy
5	16 Sep	Kinetics of Food Coloring Bleaching
6	23 Sep	K_C of Complex Ion Formation
7	30 Sep	Le Châtelier's Principle
8	07 Oct	University Holiday: Fall Break
9	14 Oct	Independent Project Part I
10	21 Oct	Mole Day ! (A very special episode!)
11	28 Oct	K_a Determination for a Weak Acid
12	04 Nov	Independent Project Part II – Experimentation
13	11 Nov	Independent Project Part II – Experimentation
14	18 Nov	Independent Project Part II – Analysis
15	25 Nov	Electrochemistry
16	02 Dec	Project Poster Session (subject to change)
Final Exam Week - no assignments, no lab		

Selected Dates, Deadlines & Holidays[1]	
Fri, 28 Aug 2026	Last day to register, ADD sections and change credit hours on LoboWEB Enrollment cancellation for non-payment on LoboWEB
Fri, 04 Sep 2026	Last Day to DROP without "W" grade and 100% tuition refund on LoboWEB
Mon, 07 Sep 2026	University Holiday – Labor Day
Thu, 08 Oct 2026	University Holiday – Fall Break (through Fri, 09 Oct, 2026)
Fri, 06 Nov 2026	Last Day to DROP **WITHOUT** Dean's Permission on LoboWEB
Thu, 26 Nov 2026	University Holiday – Thanksgiving (through Sun, 29 Dec 2026)
Fri, 04 Dec 2026	Last day to withdraw **WITH** Dean's Permission and change grading options

[1] These are only selected deadlines! For a complete and up-to-date calendar, please see https://registrar.unm.edu/semester-deadline-dates/index.html

What You'll Learn: Course-Level Student Learning Outcomes

By the end of the course, students will be able to…

1. Demonstrate and apply concepts associated with laboratory safety, including the possible consequences of not adhering to appropriate safety guidelines.
2. Demonstrate the computational skills needed to perform appropriate laboratory related calculations to include, but not be limited to determining the number of significant figures in numerical value with the correct units, solving problems using values represented in exponential notation, solving dimensional analysis problems, and manipulating mathematical formulas as needed to determine the value of a variable.
3. Perform laboratory observations (both qualitative and quantitative) using sensory experience and appropriate measurement instrumentation (both analog and digital).
4. Prepare solutions with an acceptable accuracy to a known concentration using appropriate glassware.
5. Perform basic laboratory operations related to, but not limited to, gas behavior, colligative properties of solutions, calorimetry, chemical kinetics, chemical equilibria, acid/base titrations, electrochemistry, metal reactivity, and qualitative analyses of ions.
6. Draw conclusions based on data and analyses from laboratory experiments.
7. Present experimental results in laboratory reports of appropriate length, style and depth, or through other modes, as required.
8. Relate laboratory experimental observations, operations, calculations, and findings to theoretical concepts presented in the complementary lecture course.
9. Design experimental procedures to study chemical phenomena

Independent Research Project

- The independent research project for CHEM 1225L has three components: the research proposal, the lab poster, and the research presentation (PowerPoint).
- Each student or lab group will develop their independent research proposal. It must involve non-alcoholic liquids (ie. cola, milk, tea, coffee, fruit juice, well water, etc.) or foodstuff. The proposal must be approved by Dr. Godbout. No two groups will test the same hypothesis or do the same experiments.
- The research proposal is due week 8. Turn in 1 per lab group. Include the hypothesis, a COMPLETE list of materials required, a proposed method (refer to a published laboratory procedure), and references. You will be graded on originality, organization, completion, sound scientific ideology and proper grammar.
- After approval of your research proposal, you will conduct the experiments during week 11 through week 13. No unauthorized experiments should be conducted at this time. If an unauthorized experiment is conducted, you will receive a zero on all components of the independent research proposal.
- If experimentation is completed during weeks 10-12, lab time on week 13 should be used to begin to compile data, discuss interpretation with Dr. Godbout, and create the lab poster and presentation.
- The research presentation will occur in class during week 15, the poster is also due at this time.
- The poster session will occur in the hallway outside of lab during week 16.

Credit-hour Statement

This is a three-credit-hour course. Class meets for two 75-minute sessions of direct instruction per week for sixteen weeks during the Fall 2026 semester. Please plan for a minimum of six hours of out-of-class work (or homework, study, assignment completion, and class preparation) each week.

Responsible Learning and Academic Honesty

Cheating and plagiarism (academic dishonesty) are often driven by lack of time, desperation, or lack of knowledge about how to identify a source. **Communicate with me and ask for help, even at the last minute, rather than risking your academic career by committing academic dishonesty.** Academic dishonesty involves presenting material as your own that has been generated on a website, in a publication, by an artificial intelligence algorithm (AI), by another person, or by otherwise breaking the rules of an assignment or exam. Academic dishonesty is a violation of the Student Code of Conduct that can lead to a disciplinary procedure.

Student Code of Conduct

Having academic integrity is paramount to your success in any class. Plagiarism or cheating is not tolerated. For more information, please consult the UNM Academic Integrity Policy

The policy states in part: *Each student is expected "to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, up to and including dismissal, against any student who is found guilty of academic dishonesty or who otherwise fails to meet the expected standards. Any student judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course.*

Academic Integrity Policy

Academic Dishonesty is defined as: "Academic dishonesty" includes, but is not limited to, dishonesty in quizzes, tests, or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; misrepresenting academic or professional qualifications within or without the University; and nondisclosure or misrepresentation in filling out applications or other University records.

Generative AI Statement

This course is meant to help you develop and demonstrate key knowledge and skills without the support of generative artificial intelligence (AI) tools for submitted work. Using generative AI to complete submitted coursework in this course will interfere with the advantages in learning and understanding that this course offers you. You are expected to complete submitted work without any generative AI assistance. Prohibited generative AI use includes tools such as ChatGPT, Claude, Gemini, Copilot, Grammarly's generative AI features, AI image generators, AI video or audio generators, AI code generators, AI paraphrasing tools, AI presentation generators, AI design tools, and similar technologies. The purpose of this course policy is educational, not punitive. The assignments in this course are aligned with specific learning processes and outcomes that support your future learning and expertise. Submitting AI-generated or AI-assisted in this course is inconsistent with course expectations and may violate UNM's academic integrity standards and Student Code of Conduct. If AI use is suspected, I will use submitted coursework, assignment directions, conversations with you about your work and process, and this syllabus to determine whether academic misconduct occurred. If you are unsure if a tool or use is allowed, please ask before submitting the assignment.

Wellness

If you do need to stay home due to illness or are experiencing a wellness challenge, please take advantage of the resources below. You can communicate with me via Canvas messaging or jgodbout@unm.edu, and I will work with you to provide alternatives for course participation and completion. Let me, an advisor, or another UNM staff member know that you need support so that we can connect you to the right resources. UNM is a mask friendly, but not a mask required, community. If you are experiencing COVID-19 or any other infectious symptoms, please do not come to class.

Support

PASOS Resource Center (505) 925-8546, mailto:pasos@unm.edu. The Resource Center is an on-campus center that serves as a "one-stop" for all non-academic needs of UNM-Valencia students.

Student Health and Counseling (SHAC) at (505) 277-3136.

TimelyCare: Free 24/7 virtual care services (medical, emotional support, health coaching, self-care, basic needs support).

LoboRESPECT Advocacy Center (505) 277-2911 can offer help with contacting faculty and managing challenges that impact your UNM experience.

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 The UNM-Valencia Equal Access Services (Sarah Clawson, Coordinator), at (505) 925-8840 or by email at msjclawson@unm.edu. Or the UNM-Albuquerque Accessibility Resource Center at arcsrvs@unm.edu or by phone at 505-277-3506.

Equal Access Services

Support

UNM Valencia Learning Commons (tutoring). Tutoring is available to you in math, science, writing, and other subjects through the Learning Commons: Learning and STEM Centers and Writing Center. In person tutoring is in these centers in the LRC (the building that also has the library). Tutoring in Zoom and, for writing, through email, is also available.

Learning Commons Booking

Making use of tutoring is a fantastic way to use your resources and set yourself up to learn deeply and well in your courses. To schedule an appointment, please go to: Learning Commons Bookings

If you are making an email appointment with the Writing Center, email your draft to tutor@unm.edu after you fill out the form above.

If you have difficulty with the scheduling link above, would like an appointment in a subject not listed at that link, or have a question, email tutor@unm.edu. You'll get answers during business hours Monday through Friday.

The webpage, with more details about available hours, is here: Learning Commons: Tutoring Services webpage.

Center for Academic Program Support (CAPS). Many students have found that time management workshops can help them meet their goals (consult (CAPS) website under "services").



Title IX

Title IX Policy

The University of New Mexico and its faculty are committed to supporting our students and providing an environment that is free of bias, discrimination, and harass-ment. The University's programs and activities, including the classroom, should always provide a space of mutual respect, kindness, and support without fear of harassment, violence, or discrimination. Discrimination on the basis of sex includes discrimination on the basis of assigned sex at birth, sex characteristics, pregnancy and pregnancy related conditions, sexual orientation and gender identity. If you have encountered any form of discrimination on the basis of sex, including sexual harassment, sexual assault, stalking, domestic or dating violence, we encourage you to report this to the University. You can access the confidential resources available on campus at the LoboRESPECT Advocacy Center (https://loborespect.unm.edu), the Women's Resource Center (https://women.unm.edu), and the LGBTQ Resource Center (https://lgbtqrc.unm.edu). **If you speak with an instructor (including a TA or a GA) regarding an incident connected to discrimination on the basis of sex, they must notify UNM's Title IX Coordinator that you shared an experience relating to Title IX, even if you ask the instructor not to disclose it.** The Title IX Coordinator is available to assist you in understanding your options and in connecting you with all possible resources on and off campus. For more information on the campus policy regarding sexual misconduct and reporting, please see https://policy.unm.edu/university-policies/2000/2740.html and CEEO's website.

If you are pregnant or experiencing a pregnancy-related condition, you may contact UNM's Office of Compliance, Ethics, and Equal Opportunity at ceeo@unm.edu. The CEEO staff will provide you with access to available resources and supportive measures and assist you in understanding your rights.For more information on the campus policy regarding sexual misconduct, please see: https://policy.unm.edu/university-policies/2000/2740.html.

Support

Confidential services for students are available at LoboRESPECT Advocacy Center and the support services listed on its website, the Women's Resource Center and the LGBTQ Resource Center all offer confidential services and reporting. The Women's Resource Center supports all students, including those who are pregnant or are parents. UNM-Valencia has lactation stations located in LRC 112 (Tomé campus) and in the Workforce Training Center.

Land Acknowledgement

Founded in 1889, the University of New Mexico sits on the traditional homelands of the Pueblo of Sandia. The original peoples of New Mexico Pueblo, Navajo, and Apache since time immemorial, have deep connections to the land and have made significant contributions to the broader community statewide. We honor the land itself and those who remain stewards of this land throughout the generations and also acknowledge our committed relationship to Indigenous peoples. We gratefully recognize our history.

Resource: Division for Equity and Inclusion.



Citizenship and/or Immigration Status

All students are welcome in this class regardless of citizenship, residency, or immigration status. Your professor will respect your privacy if you choose to disclose your status. UNM as an institution has made a core commitment to the success of all our students, including members of our undocumented community. The Administration's welcome is found on our website:: http://undocumented.unm.edu/.



Citizenship/Immigration status

Respectful Conduct Expectations

I am committed to building with you a positive classroom environment in which everyone can learn. I reserve the right to intervene and enforce standards of respectful behavior when classroom conduct is inconsistent with University expectations [and/or classroom community agreements]. Interventions and enforcement may include but are not limited to required meetings to discuss classroom expectations, written notification of expectations, and/or removal from a class meeting. Removal from a class meeting will result in an unexcused absence. [Insert number] or more unexcused absences may result in permanent removal and a drop from the course (see attendance policy). The University of New Mexico ensures freedom of academic inquiry, free expression and open debate, and a respectful campus through adherence to the following policies: D75: Classroom Conduct, Student Code of Conduct, University Policy 2240 – Respectful Campus, University Policy 2210 – Campus Violence.

Thriving and Finding Support

Many students have found that time management workshops or work with peer tutors can help them meet their goals. These and other resources are available through PASOS (Pathways to Articulation and Sustainable Opportunities for Students), TRIO Student Support Services, and Student Learning Support at the Center for Teaching and Learning.