

CHEM 403: GENERAL CHEMISTRY LABORATORY

Fall 2025

Instructors: Dr. Schofield

Contact: Joanna.schofield@unh.edu

Lab Meetings: Wednesday 6:10 PM

Laboratory: 88 Commercial St., Room 574

Course Policies

The General Chemistry lab is a supplement to the General Chemistry lecture. As such, it counts as 20% of your total grade in the course. Please note that you must pass the lab in order to pass the course. There are no lab make-ups, except in the event of a school cancellation. Two or more unexcused absences from lab will result in a failing grade for the ENTIRE CHEM 404 COURSE.

You are expected to attend your scheduled lab section; any student wishing to switch lab sections for an experiment must obtain prior approval for the switch from the instructor teaching that lab section.

You are expected to be in lab on time and prepared to start that day's experiment. This means that you have read the background and procedure for the experiment and have completed the experiment's pre-lab questions. This also means that you will enter the lab wearing appropriate clothing and shoes. Your instructor may provide you with additional laboratory policies specific to their laboratory sections.

Laboratory Materials

Handouts of the procedures and pre-lab questions will be provided in lab. Copies of these handouts will also be available to view on myCourses. You will also need to record and submit your data and observations for each experiment, but you will not need a dedicated laboratory notebook. A scientific calculator is also required to perform calculations during the lab.

Appropriate clothing must be worn in the laboratory. Lab coats and goggles must also be worn while performing all experiments. These items can be purchased online through the UNHM bookstore, or at Work'n'Gear on South Willow St. in Manchester. "Community" goggles are available, but it is recommended that you have your own pair. Shoes must have closed toes and cover the top of the foot; no sandals or flip-flops are allowed. Suitable clothing should be worn underneath lab coats; shorts, capris and short skirts are inappropriate for lab work. If you are not dressed appropriately for lab, you will not be allowed to perform the experiment, and you will receive a zero for that experiment.

Grading

Labs will be graded on a 20-point scale:

6 points – Pre-Lab Assignment

14 points – Data and Calculations pages

Pre-lab questions must be attempted and completed before each lab; incomplete assignments at the beginning of class will receive a 10% grade deduction (2/20 points).

Corrections can be made to the assignment after finishing the experiment, but students are expected to attempt this assignment prior to coming to lab. In-lab observations and the “Data and Calculations” pages along with any post-lab questions are to be completed immediately after the experiment and submitted before leaving the lab.

The lowest graded experiment will be dropped before calculating your lab average for your overall CHEM 403 grade. This means students are expected to attend and complete each experiment and may have their lowest completed experiment excluded from their reported lab average. This does not allow students to skip an experiment.

Accommodations for Lab Absences:

If a personal or medical emergency, such as an illness, personal injury, or family situation, impacts your ability to attend a lab session, please contact Lisa Enright (lisa.enright@unh.edu) to provide documentation. She will provide your instructors with a letter informing us of the dates your coursework has been affected, and arrangements can be discussed so that you are not penalized for these circumstances. While you should not send an instructor any documentation directly, informing them of the absence as soon as you are able either before or after you miss a lab meeting is appreciated.

Class Cancellations and Delayed Openings:

UNH Manchester makes weather-related decisions independent of UNH Durham. For information on cancellations and closings, call the UNH Manchester Information Line at **603 641 4100**, or visit the UNH Manchester website.

Closing and delay information will also be announced on the following stations:
WMUR Channel 9 TV; WGIR 101 FM and 610 AM; WJYY 105.5 FM; WMLL 96.5 FM;
WOKQ 97.5 FM; WZID 95.7 FM; WFEA 1370 AM.

A weather-related cancellation of one lab meeting does not necessarily mean the other labs will be cancelled for that week; if campus is open for your scheduled lab time, always assume you will meet for the experiment as scheduled. Any changes to the lab schedule will be announced on myCourses.

TENTATIVE LABORATORY SCHEDULE
CHEM 403

Week 1, 8/27	*No Lab* First Week of Class
Week 2, 9/3	Check-in/Safety/Introduction to the Chemistry Lab
Week 3, 9/10	Exp #1. Resolution of Matter I: Paper Chromatography
Week 4, 9/17	Exp #2. The Atomic Spectrum of Hydrogen
Week 5, 9/24	Exp #3. Resolution of Matter II: Fractional Crystallization
Week 6, 10/1	Exp #4. The Geometrical Structure of Molecules
Week 7, 10/8	Exp #5. Determination of an Unknown Chemical Formula
Week 8, 10/15	Exp #6. Identification of a Compound using Mass Relationships
Week 9, 10/22	*No Labs* Lecture Midterm
Week 10, 10/29	Exp #7. Analysis of an Unknown Chloride
Week 11, 11/5	Exp #8. Spectroscopy – Using Light as a Probe
Week 12, 11/12	*No Labs* Veterans Day
Week 13, 11/19	Exp #9. Heat Effects and Calorimetry
Week 14, 11/26	*No Lab* Thanksgiving Break
Week 15, 12/3	Exp #10. Molar Mass of a Gas