

CHEM S136L

In General Chemistry Laboratory II, the main goal is to provide to students, hands-on training in laboratory skills and experience in conducting experiments. These two activities are essential for a robust understanding of chemistry and proficiency in it. Along the way, students will have the opportunity to sharpen and deepen their understanding of advanced chemistry concepts and facts, including chemical kinetics, chemical equilibrium, acids, bases, buffers, electrochemical cells, and chemical synthesis. In addition, students will gain tremendous training and experience in quantitative reasoning and critical thinking.

Prerequisite: CHEM134L, and Prerequisite/Co-requisite of CHEM165 or equivalent

Given the compressed schedule of a summer session, the course requires an extensive commitment of time and effort. Given that new course content builds upon material previously learned in the course, keeping up with the course is a priority, as there is very little time to go back and relearn concepts if not fully understood when first taught. Therefore attendance to all lectures and discussions are mandatory, including any class sessions that fall on holidays.

Instructor: Dr. Laura Herder (Laura.Herder@yale.edu)

Office Hours: I will be available to help you directly after lab each day, in addition, I am happy to meet with you outside of these hours on an as needed basis (send an email to arrange days and times of additional hours)

Course Site: Canvas is used for the course website, and you are responsible for reading and knowing the course information described there including any announcements, due dates, exam dates, schedule of labs, etc.

Class Times:

Tuesday and Thursdays 12:30 - 4:00 PM

Required Resources:

Lab Coat: For purchase at the Yale Bookstore, or contact Dr. Herder to borrow one

Laboratory Notebook: Need a bound notebook for use for this course (you can continue to use the same one you used for CHEM134L or choose a new one)

Lectures: Lectures at Yale are a different course (CHEM165) and the organization and grades are separate.

Grading: The distribution of points can be found in the Canvas Gradebook but are split between:

- Attendance and participation during labs
- Pre-lab quizzes
- Notebook Submissions
- Formal Reports

Letter grades will only be assigned to the entirety of the semester's work and not to individual assessments. Typically a final letter grade of a B+ corresponds to current and prior class averages, however it is possible for everyone to get an A if you all excel.

The final grades are not assigned with a curve, but based on cut-offs determined by the instructor; A is for consistently excellent work; B is for primarily correct answers, C represents a lack of understanding of some key concepts, D represents lack of understanding of most key concepts.

Academic Honesty Policy:

Yale College has guidelines on academic integrity, given in the undergraduate regulations at: <http://yalecollege.yale.edu/campus-life/undergraduate-regulations>
[Links to an external site.](#)

It is your responsibility to be aware of these and to abide by them. Failure to do so will leave you open to severe sanctions.

Diversity, Equity, Inclusion, and Belonging and Accessibility:

Students from all backgrounds are encouraged to complete Chem 161. In particular, we are committed to increasing the representation of those populations that have historically been underrepresented in STEM due to either explicit or implicit discrimination. Further, there are no prerequisites for Chem 161. Therefore, for students who may not have a lot of background in STEM, we provide a variety of resources for gaining assistance.

If you have already established accommodations for exams with Student Accessibility Services, please communicate your approved accommodations to Dr. Herder at your earliest convenience. For more information on how to establish accommodations please see <https://sas.yale.edu/>