



CHEMISTRY 0120-1040

Fall 2025

Instructor Information

Dr. Margaret A. Vines

Office: 309 Chevron Science Center

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Office Hours: TBD

Course Information

Lectures: MWF 12:00-12:50 PM

Textbook and Materials

OpenStax Chemistry 2e: electronic versions are always available at

<https://openstax.org/details/books/chemistry-2e>

Achieve (Electronic Homework)

CHEM 0120 Student Lab Manual (**will be distributed during first lab class**)

Safety Goggles (**required for CHEM 0120 students**)

Lab Coat (**required for CHEM 0120 students**)- flame resistant

Scientific Calculator (**required**)

Canvas: A Canvas site has been set-up for the Lecture portion and the Recitation portion (Recitation is the first hour of your lab section) of the class. You will be added to the site when you register for CHEM 0120. Your grades, power points, previous exams, and additional materials will be placed in the Lecture Canvas site. The materials for Recitation will be placed in the Recitation Canvas site

- Lecture portion: [2261 CHEM 0120 SEC1040](#)
- Recitation portion: [2261 CHEM 0420 SEC1020](#)

Course Objectives:

- Understand and be able to explain the general principles, laws, and theories of chemistry that are discussed and presented throughout the semester
- Use critical thinking and logic in the solution of problems
- Apply learned chemistry skills to new situations
- Demonstrate an understanding of chemistry through technological advancement
- Apply chemical principles in the laboratory setting

Course Mechanics

The final grade for CHEM 0120 will be determined from the following:

Chem 0120	Course Component	Percentage
Class (12 %)	ICA	4 %
	Panopto Videos	3 %
	Achieve Homework	5 %
Examinations (60 %)	Exams	36 %
	Final Exam	24 %
Recitation (12 %)	Worksheets, Problem-Solving Activities, and Quizzes	14 %
Laboratory* (16%)	Laboratory*	14 %
	Total	100%

If you are registered for CHEM 0420 (no lab), your course grade will be the same as above except no lab grade

- ❖ The Instructor reserves the right to change this syllabus as needed and will inform the class verbally and on Canvas of any changes.
- ❖ In addition, University policy and procedures prohibit unauthorized duplication or retransmission of course material. Some materials posted on Canvas can be printed for your use. Posting materials from Canvas online is strictly prohibited.

Grades

I do not give grades. You earn them.

Examinations

There will be two types of examinations in this course: You must bring your Pitt ID or another photographic ID to each exam for your exam to be graded.

1. **Mid-term Exams:** There will be four “mid-term” exams throughout the semester, each lasting 50 minutes. These exams will cover approximately two/three chapters of material and will include both multiple-choice and free-response questions. The weeks for these exams are listed on the class schedule but may be adjusted if necessary. You will be able to drop your lowest score, if you miss an exam that will be the Exam dropped. The lowest midterm exam score will be dropped.
No make-up exams will be given during the semester. If you miss an exam due to illness, you will have to use your dropped exam for that exam. If you know that you will be absent for an exam due to a school function, let me know at least one week before the exam and we can make alternate arrangements. The final exam is cumulative and mandatory. In no circumstances will the final exam be allowed as the dropped exam.

2. **Final Exam:** A comprehensive final exam will be given during Finals week covering all material presented in lectures, recitations, labs, and the textbook. This exam will be two hours long and must be taken at the scheduled time. This will be part of your grade and will not be one of your dropped exams. The final exam is cumulative and mandatory. In no circumstances will the final exam be allowed as the dropped exam.

Final Exam Policy

You need to check your schedule for final exams early in the term. If you have three or more finals on the same day, you need to print the form from the Registrar's website, obtain faculty signatures, and file the form with the Registrar. They will move one of your finals for you. Please note that there is a deadline for the submission of this form, and students filing forms after that date will not be given relief.

Makeup Exams Policy

Makeup exams are only allowed in cases of serious family or medical emergencies, or for official University of Pittsburgh business. A missed exam will count as the one you drop. If you know that you will be absent for an exam due to a school function, let me know at least one week before the exam and we can make alternate arrangements.

If there are extenuating circumstances, these must be discussed and addressed in person.

Re-Grading Policy

If you believe your exam was graded incorrectly:

- **Submission:** Request a regrade via Gradescope within one week of the answer key being posted.
- **Explanation:** Provide a written explanation detailing the grading error.
- **Re-Grading:** The entire exam may be re-graded

Recitations

Weekly recitations offer tailored guidance to sharpen your problem-solving and critical thinking abilities. Here's what to expect:

1. **Recitation Worksheet:** Complete a worksheet before each recitation session, graded initially based on your attempt. During recitation, your TA/UTA will address questions from the worksheet and coursework. Submit the worksheet before the weekly Problem-Solving Activity; it will be graded for accuracy.
2. **Problem-Solving Activity:** Collaborate in groups of 3-4 to tackle 2-3 concept-driven or real-world problems. These activities are evaluated for effort and accuracy, focusing on the correct application of chemical concepts and mathematical skills.
3. **Post-Activity Quiz:** A brief, primarily multiple-choice quiz follows the problem-solving activity to confirm participation and understanding of key concepts.

Recitations are vital for reinforcing your understanding and building core chemistry skills.

Laboratory

The laboratory is where chemistry concepts come to life. It provides hands-on experience and helps you understand and apply what you've learned in lectures. You'll develop experimental techniques and explore chemical processes firsthand.

To succeed in the lab:

1. **Prepare Thoroughly:** Review lab procedures and concepts before attending. This preparation will help you conduct experiments safely and effectively.

2. **Follow Safety Protocols:** Adhere to all safety guidelines to ensure a safe working environment.
3. **Engage Actively:** Participate fully in lab activities to maximize your learning.

The laboratory portion of the course is required for all CHEM 0120 students and will account for ~14% of your overall grade. Your teaching assistant will review the rules and due dates for pre-labs and lab reports during your first meeting.

Consult the Lab Canvas site for make-up lab policies. If you miss a lab, you may make it up in a different lab section **during that week** provided space is available. The labs are near capacity and it is possible you will not be able to easily find an available space.

Your lab instructor will provide specific requirements for each experiment. Your grade will be determined by the lab coordinator and manager and reported to me.

In-Class Activities (ICAs)

ICAs are designed to help you apply and reinforce concepts learned through lectures, preparing you for exams and labs. Here's how to make the most of them:

1. **Purpose and Structure:**
 - Application: ICAs reinforce your understanding and application of course material.
 - Distribution: Activities are handed out and collected in class and later posted on Canvas with an answer key.
2. **Grading and Submission:**
 - Completion-Based: ICAs are graded on completion. Your participation and effort are crucial.
 - Submission: Dr. Vines will submit completed ICAs to Gradescope for review. You can also view your grades there.
 - No Make-Ups: ICAs cannot be made up. Attend each class and complete activities on time.

By participating fully and submitting your work on time, you will enhance your learning and contribute positively to your overall grade.

Homework

Chemistry is best learned by regularly practicing problems and thinking through the concept behind each step. Homework assignments will be completed through the online system, Achieve. The assigned problems should be considered the bare minimum; more practice problems are available at the end of the chapters in your book. To master chemistry, regular practice and comprehension of concepts are essential. We will be using Achieve by Macmillan. This is a variety of traditional homework and adaptive quizzes.

Attendance

Students should attend Lecture. The main goals in lectures are to go over key concepts, provide additional examples, and give students a chance to ask questions and collaborate on applying what they've learned.

Here's a suggested outline for students to make the most of this session:

The lecture will be an interactive review session aimed at consolidating your understanding. To make the most of it:

1. **Review Panopto Material:** Watch the recordings, take notes, and identify any unclear areas.
2. **Prepare Questions:** Write down questions about confusing topics to bring to the lecture.
3. **Active Participation:** Engage in discussions, work through examples, and collaborate with peers.

4. **Group Work:** Use group activities to apply and reinforce what you've learned.
5. **Seek Feedback:** Clarify doubts and get feedback on your understanding.
6. **Post-Lecture Review:** Go over your notes and any additional material to solidify your learning.

Following these steps will help you maximize the benefits of the lecture and strengthen your grasp of the material.

Classroom Etiquette

A student has an obligation to exhibit honesty and to respect the ethical standards of the profession in carrying out his or her academic assignments.

1. Exhibit Honesty and Adhere to Ethical Standards:

- Academic Integrity: Complete assignments and exams independently unless collaboration is allowed. Avoid plagiarism and cheating.
- Respect: Honor the intellectual property of others.

2. Avoid Disruptive or Disrespectful Conduct:

- Classroom Behavior: Engage respectfully; avoid talking out of turn, making unnecessary noise, or distracting others.
- Consequences: Disruptive behavior may lead to being asked to leave. Contribute positively to the class environment.

3. Arrive on Time and Stay for the Entire Class:

- Punctuality: Arrive before the class starts to minimize disruptions.
- Full Participation: Stay for the entire class to fully benefit from the lesson.

4. Keep Your Phone Put Away:

- Phone Usage: Use your phone only for class-related purposes if permitted. Keep it silent and stored away otherwise.
- Communication: Avoid talking or texting during class to maintain focus.

5. Audio or Video Recording:

- Permission: Do not record lectures or discussions without prior consent from the instructor to respect privacy and intellectual property.

By following these guidelines, you help maintain a respectful and productive learning environment for everyone.

Success

Given that CHEM 120 is a 4-credit course with a lab component, it's important to manage your time effectively to handle the course load. Here are some tips on how to schedule your time and stay on top of your coursework:

Success Tips for CHEM 120

1. Create a Study Schedule:

- Weekly Commitment: Dedicate 5-7 hours per week outside of class, more during exams or major assignments.
- Daily Sessions: Break study time into 1-1.5-hour sessions to avoid last-minute cramming.

2. Prioritize Tasks:

- Set Goals: Define goals for each study session (e.g., review topics, solve problems).
- Use a Planner: Track important dates and deadlines with a planner or calendar.

3. Stay on Top of Reading and Videos:

- Pre-Lecture: Watch Panopto videos and review materials before class.
- Post-Lecture: Review notes and class examples.

4. Practice Regularly:

- Problem-Solving: Regularly work on practice problems.
- Lab Preparation: Review lab procedures and concepts beforehand.

5. Utilize Office Hours and Study Groups:

- Office Hours: Ask questions and seek guidance from your instructor.
- Study Groups: Collaborate with peers to discuss and solve problems.

6. Balance Your Workload:

- Manage Stress: Include breaks and leisure activities to stay focused and prevent burnout.
- Avoid Procrastination: Start assignments and studying early to reduce stress.

Help

Places to Obtain Extra Help and Maximize Your Chem 120 Resources

1. Lecturer and TA/UTA:

- Office Hours: Visit Dr. Vines during office hours with specific questions or topics for personalized help.
- TA/UTA: Seek additional support from the TA/UTA for lecture and lab-related questions and course content.

2. Chemistry Department Tutoring:

- Location & Schedule: Check the schedule for free tutoring sessions in Chevron 130.
- How to Use: Bring questions about lecture material, homework, or lab work for guidance and clarification.

3. Study Lab:

- Drop-in Tutoring: Use drop-in tutoring for flexible, appointment-free help.
- Preparation: Bring notes, textbooks, and specific questions to make the session effective.

4. Study Groups:

- Forming a Group: Connect with classmates to create a study group for diverse perspectives and problem-solving.
- Group Dynamics: Schedule regular meetings, focus on specific topics, and ensure active participation from all members.

Additional Tips:

- **Be Proactive:** Seek help as soon as you encounter difficulties.
- **Be Specific:** Clearly state the problems or concepts you're struggling with.
- **Stay Engaged:** Actively participate in tutoring and study group sessions for maximum benefit.

Using these resources effectively will help you stay on track and succeed in CHEM 120.

UNIVERSITY POLICIES

Academic Integrity

The minimum penalty for cheating in this class is a zero score for the exam or assignment where the violation occurred.

The minimum penalty for cheating in this class is a zero score on the exam or assignment where the violation occurred. If a zero is received due to an academic integrity infraction, that assignment or exam will not be eligible for dropping. Students are expected to adhere to the University of Pittsburgh's Policy on Academic Integrity. Any student suspected of violating this policy during the semester will be subject to the procedural process initiated by the instructor, as outlined in the University's Guidelines on Academic Integrity. This process may include, but is not limited to, the confiscation of exams or other

materials. Unauthorized materials, such as dictionaries and programmable calculators, are strictly prohibited during exams.

For more information, visit the Academic Integrity Guide for an overview and complete the Understanding and Avoiding Plagiarism tutorial for hands-on practice.

Disability Services

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and [Disability Resources and Services](#) (DRS), 140 William Pitt Union, (412) 648-7890, drsrecep@pitt.edu, (412) 228-5347 for P3 ASL users, as early as possible in the term. DRS will verify your disability and determine reasonable accommodation for this course.

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