General Chemistry I and II introduces the fundamentals of chemistry with emphasis on scientific problem-solving skills. Students learn chemical principles, and apply these scientific principles to solve qualitative and quantitative problems.

Completing both courses fulfills the prerequisites for medical school and for all majors that require a year of general chemistry, as well as the general chemistry prerequisite for Chem 220.

Given the compressed schedule of a summer session, the course requires an extensive commitment of time and effort. Given the cumulative nature of the content, keeping up with the material is a priority as there is very little time to go back and relearn concepts if not fully understand when first taught.

**Instructor:** Dr. Paul Cooper       **Office:** SCL 209       **E-mail:** paul.d.cooper@yale.edu

**Office Hours:** M & W 12:30 – 2:30pm, F 11:00am – 1:00pm. At other times, if I’m in my office and the door is open, I’m happy to talk. If my door is closed, it generally means I’m busy.

**Canvas** is used for the course website, and you are responsible for reading and knowing the course information described there.

**Class Times**

**Lecture** - MTWThF 9:30-10:45 am.

**Discussion Section** – M & W 11:00am-noon, Th 11:00am-11:30am. A short quiz will be given at the end of each M & W section.

**Required Resources**

The textbook for the course is the General Chemistry e-text published by Top Hat ([https://tophat.com/marketplace/science-&-math/chemistry/full-course/general-chemistry-franklin-ow/293/](https://tophat.com/marketplace/science-&-math/chemistry/full-course/general-chemistry-franklin-ow/293/)). This is a **digital-only** book, and as such you will need access to it. It is accessible via a computer, tablet or smartphone. Purchasing the book will also provide access to all homework and quiz questions.
Exams

Gen Chem I

Exam 1  Friday 5 June  9:30 - 10:45 am
Exam 2  Friday 19 June  9:30 - 10:45 am
Final Exam  Friday 26 June  9:30 am - noon

Gen Chem 2

Exam 1  Friday 10 July  9:30 - 10:45 am
Exam 2  Friday 24 July  9:30 - 10:45 am
Final Exam  Friday 31 July  9:30 am - noon

Calculators

You will need to use a calculator during each exam, but we can allow only non-Internet-enabled devices. This rule will be strictly enforced, and we do not have spare calculators, so plan ahead carefully. A scientific calculator is required.

Laboratories

Labs are a different course (Chem 134L/136L) and the organization and grades are separate.

Grading

There are 100 points available for each course in total.

Homework Problems (total 24 points) – for each chapter there will be two homework sets. The first will be “practice” questions that you may attempt as many times as you wish. These will be graded on a completion basis only. The second will be a traditional end-of-chapter style problem set usually consisting of 20-25 questions. You will have 3 attempts to get these correct.

• Quizzes (total 6 points) – at the end of each Discussion Section, there will be a short quiz.
• Exams (total 70 points): Exam 1 and 2 each contribute 20 points each, and the Final Exam contributes 30 points.
**Letter Grades.** 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 B+ corresponds to the class average, but 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 as A = consistently excellent answers; B = primarily correct answers; C = lack of understanding of some key concepts; D = lack of understanding of most key concepts.

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**Academic Honesty Policy**

Plagiarism is defined in the *Undergraduate Regulations* page, as are the penalties associated with cheating:

http://catalog.yale.edu/undergraduate-regulations/

Examples of cheating include, but are not limited to:

- Getting the answers from another student for problem sets, or having another student complete your online homework. You may discuss the Practice Problems with one another.
- Looking at unauthorized notes, books, or another student's paper during an examination.
- The use of a phone or Internet-enabled device during an exam. You **must** find a compliant calculator for use in the exams.
- Alteration of an exam after turning it in.

I encourage you to form study groups and to work together on ungraded questions.

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**Disabilities**

If you have a documented disability that requires special accommodations, you must bring a Letter of Accommodation to Dr. Cooper. In the case of exams, advanced notice of at least 1 week is required so that arrangements can be made.