

## COURSE OUTLINE

### Chemistry 1A: General Chemistry Spring Semester 2015

Lectures: Mondays, Wednesdays, and Fridays 9-10 AM, 1-2 PM  
Pimentel Auditorium

Chem1A bCourses([bcourses.berkeley.edu](http://bcourses.berkeley.edu))  
Webpages: Mastering Chemistry ([www.masteringchemistry.com](http://www.masteringchemistry.com))

Instructor: Professor Richard J. Saykally  
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Prerequisites: High School Chemistry is recommended

Text: Nivaldo Tro; [Chemistry: A Molecular Approach, 3<sup>rd</sup> Edition](#)

Course Content: To the maximum extent possible, this course will be a survey of modern topics in chemistry. It will include basic principles as well as contemporary applications, *with emphasis on numerical problem solving*. The lecture material is divided into four sections. Each section is followed by an exam. Outlines of the lectures for each section will be provided separately. The laboratory course (Chem 1AL) is coordinated with the lectures to the maximum extent possible, although they are ultimately independent and complementary. Lecture material is designed to complement, not to repeat, the assigned reading in the text. Hence, it would be most helpful if you do the reading assignments before the lectures.

Homework: Weekly homework will be assigned and submitted on the Mastering Chemistry website. You will receive full credit (1 point) for an assignment if you answer 70% of the questions correctly. Homework (scaled to 50 total points) will comprise 5% of your total course grade.

Exams: Midterms will be held evenings from 7:00 to 8:30 (Feb. 10, March 10, April 2). **Do not schedule courses having conflicts with these times.** No makeup exams will be given. *If you miss an exam, you will receive a grade of zero, except in cases of documented emergencies.*

Final Exam: Exam Group 9: Wednesday, May 13, 2015 8-11 AM

Discussion: Discussion sections will be conducted by graduate student instructors. Students are strongly encouraged to attend and to participate. They are meant to provide students with the opportunity to solve problems working in small groups facilitated by an instructor, often working from practice exams. A short 10 minute quiz will be given at the end of each discussion section.

Grading: The composition of your course grade will be:

|                         |         |
|-------------------------|---------|
| Midterms (3)            | 600 pts |
| Final Exam (Cumulative) | 350 pts |
| Homework/Quizzes        | 50 pts  |

The course is not graded on a curve so as to encourage student interactions and peer learning in the class. The grading scheme is as follows (cutoffs may be lowered but they will not be raised):

|             |   |
|-------------|---|
| 900 – 1000: | A |
| 750 – 899:  | B |
| 550 – 749:  | C |
| 350 – 549:  | D |
| 000 – 349:  | F |