

## Chemistry 1A Lecture Syllabus

- Instructor: Jessica Rosenthal, MS
- Email: [rosenthaljessica@fhda.edu](mailto:rosenthaljessica@fhda.edu)
- Course Info: myportal.fhda.edu
- Office Hours: Wed 3:30 – 4:30pm and Monday by appt.  
@ Chemistry Department Open Office Space (second floor of SC1)
- Lecture Schedule: M, W (Course 21578 and 21579) 4:30 – 5:45pm in S34
- Lab Schedule: M, W (Course 21578) 11:30am – 2:20pm in SC2202  
T, Th (Course 21579) 11:30am – 2:20pm in SC2202 (H. Ramakrishna)
- Required Materials: Silberberg, Chemistry, The Molecular Nature of Matter and Change 8<sup>th</sup> ed.  
Scientific calculator – phones and graphing calculators will not be permitted on tests or quizzes.

### About the Course:

This is a fast-paced course for science and engineering majors. Chem 1A is the first of a three-quarter general chemistry course. This class introduces the structure and reactivity of matter at the molecular level. We will cover: measurement, atomic structure, the periodic table, solutions, thermochemistry, quantum theory, molecular structures, molecular bonding, and orbital theory. CHEM 50 **precedes** CHEM1A in the chemistry sequence. You should take CHEM 50 before taking CHEM 1A, if it has been more than one year since your last chemistry course. If you have never had chemistry before, you must take CHEM 50 before taking CHEM 1A.

### Student Learning Outcomes:

- Identify and explain trends in the periodic table.
- Construct balanced reaction equations and illustrate principles of stoichiometry.
- Apply the first law of thermodynamics to chemical reactions.

### Attendance:

Attendance in lectures and laboratories is mandatory. If your instructor(s) don't see you or hear from you for three consecutive meetings (lectures and labs), you may be dropped from the course. It is understandable that things can happen to prevent you from attending a lab or a lecture, but you must inform me of that (via email) within 24 hours of the class missed. Even if an absence is excused there will be **no make-up quizzes, tests or labs**. I will be dropping no-shows after the lecture on Wednesday, September 27.

### Deadlines:

Deadline to drop without a W on your record is **October 8<sup>th</sup>**. The last day to drop and receive a W is **November 17<sup>th</sup>**. If you have checked into a drawer in the lab and you drop the class, it is your responsibility to check out and prevent a hold on your record.

The Chemistry department is not adding students after the first week of classes. In order to add the class, you must attend all the lectures and your registered lab section (either MW or TTH). If you are registered for the class, **failure to appear in any one class meeting** (lecture or lab) **during the first week** will result in dropping **you from the class list**. There are absolutely **no late adds**.

### The Time Commitment:

In order to succeed in this course, you must set aside **at least** 6 hours per week for studying outside lecture/lab time. This time is best spent reviewing notes, reading the text, and working problems from the text.

### Assessments:

**Exams:** There will be four midterm exams and a final. Midterms will be given in class and they will take up the whole class period. They will be based on lecture material and homework problems. The final exam is comprehensive.

**Quizzes:** Four “pop” quizzes will be given, either in-class or on-line. They will be unannounced and modeled after one of the questions from the homework. Your three BEST scores will be included in your final grade (lowest score dropped).

**Laboratory:** Lab assignments are discussed separately in the lab syllabus. Your lab grade will be normalized to 200 points.

\*\*\*No make-up exams or Labs will be given. To be excused from an exam or a lab – you must notify the instructor before the scheduled time.

**Homework:** You should read through ALL of the questions at the end of each chapter. Complete the problems that have answers in the back of the book and check your work. If you feel you need more practice, complete the problems that do not have answers. I will NOT collect homework, but the quizzes and exams are modeled directly from these end-of-chapter problems. You should be working as many problems as needed to familiarize yourself with the material and be able to comfortably work through the problems without help from your notes or the text.

### Grading:

Midterms (100 pts each)	400 points
Quizzes	30 points
Laboratory	200 points
Final	170 points
Total	800 points

The grades in this class are **not curved**. Your grade depends on the percentage of points earned vs. points available in the course. The following grade breakdown is set based on past experience:

<b>A+</b>	97 – 100 %	<b>C+</b>	74 – 77%
<b>A</b>	92 – 96 %	<b>C</b>	70 – 73 %
<b>A–</b>	88 – 91 %	<b>D+</b>	66 – 69 %
<b>B+</b>	85 – 87 %	<b>D</b>	60 – 64 %
<b>B</b>	82 – 84 %	<b>D–</b>	57 – 59 %
<b>B–</b>	78 – 81 %	<b>F</b>	0 – 56 %

Academic Integrity:

**Please bring a photo ID to all Exams!** You may not work with another student on a quiz or an exam. The only electronic device you may have in your possession during the test is a scientific calculator (no ipods, cell phones etc.). Anyone found disregarding these rules will receive a grade of zero for the exam and will be reported to the Dean of PSME Division.

To Succeed in this Course:

- Attend lectures, take notes, and read the chapters from the book.
- Only after you are sure you understand the concepts from the chapter, move on to solving problems at the end of the chapter. You can expect to be successful on the test if you are able to solve the end of chapter problems **without referring to the book or your notes.**
- Ask questions – during lectures, lab, office hours – just ask!
- Form small (3-4 people) study groups. It is important that you realize you don't really know the material until you are able to explain it to a fellow student.
- Come to office hours.

Need Help?

The Student Success Center offers workshops, tutoring, and support for most De Anza classes. Visit the SSC today!

- Math, Science & Technology Resource Center: S-43 [408-864-8683](tel:408-864-8683)
- Academic Skills Center: LIBRARY 107a [408-864-8253](tel:408-864-8253)
- General Subject Tutoring: LIBRARY 107 [408-864-8682](tel:408-864-8682)
- Listening and Speaking Center: L-47 [408-864-5385](tel:408-864-5385)
- Writing and Reading Center: LIBRARY 107 [408-864-5840](tel:408-864-5840)

Hours vary by program. See <http://www.deanza.edu/studentssuccess> for details.

**Tentative Lecture Schedule:**

<b>Week</b>	<b>Dates</b>	<b>Topic/Chapter</b>
1	Sept 25 & 27	Introduction, Numbers, Units (Ch. 1) Matter and Nomenclature (Ch. 2)
2	Oct 2 & 4	Stoichiometry (Ch.3) <b>Exam #1 (Ch1,2)</b>
3	Oct 9 & 11	Stoichiometry (Ch.3) Major Classes of Chemical Reactions (Ch. 4)
4	Oct 16 & 18	Thermochemistry (Ch.6) <b>Exam #2 (Ch 3,4)</b>
5	Oct 23 & 25	Thermochemistry (Ch.6) Quantum Theory and Atomic Structure (Ch. 7)
6	Oct 30 & Nov 1	Quantum Theory and Atomic Structure (Ch. 7)
7	Nov 6 & 8	Electron Configuration and Periodicity (Ch. 8)
8	Nov 13 & 15	<b>Exam #3 (Ch 6,7)</b> Models of Chemical Bonding (Ch. 9)
9	Nov 20 & 22	Models of Chemical Bonding (Ch. 9) The Shapes of Molecules (Ch. 10)
10	Nov 27 & 29	The Shapes of Molecules (Ch. 10) Theories of Covalent Bonding (Ch. 11)
11	Dec 4 & 6	<b>Exam #4 (Ch 8,9,10)</b> Theories of Covalent Bonding (Ch. 11)
12	Dec 13	<b>Final Exam (Cummulative)</b> 4:00 – 6:00 pm

**Important Dates:**

October 8 - Last day to drop a class

November 17 - Last day to drop with a "W"