

Chemistry 1A Greensheet – Lecture & Lab

Instructor: Michael Lane

Office Hours: By appt.

Phone: 408 839 5228 – Please send long communication via email

Lecture Hours: 10:30 – 11:45

Lab Hours: 8:30 – 9:45

Additional Lab Hours: During non covid times, the lab meets for 3 hours twice a week. As such, you should anticipate additional lab hours to complete experiments. HW and lab reports constitute additional study and preparation obligations.

Summer 2021

E-mail: LaneMichael@fhda.edu

Zoom URL:

<https://fhda-edu.zoom.us/j/9532118916?pwd=b2g0RTEwYStRaktRUmdyTU5lcWhZQT09>

Communication: One of the things that has not changed with On-line learning is that students usually do not communicate until AFTER their grade is beyond repair. I am usually alone during office hours. If you are stuck on a topic, have questions about the class, do not understand how to submit work in Canvas, etc., the most effective means of getting help is meeting with me one on one.

Required Texts: Silberberg, Chemistry, The Molecular Nature of Matter and Change, 9th edition. (The 8th edition is acceptable, earlier versions are not – the HW problems are too different).

A **Graph ruled** notebook is required for the laboratory. It must be **bound** and the pages must either be numbered or you will need to number them.

Technology requirements: 1) The ability to create pdfs of your written work. I recommend Genius Scan or similar. 2) Audio and visual presence during zoom sessions. 3) Use of your full De Anza registration name on Zoom sessions. Please do not use nicknames, or first names only. I often use this for grading and attendance purposes.

Prerequisites: Chemistry 25 and Intermediate Algebra, or satisfactory score on Chemistry placement test. It has been my experience that students who received a grade of C in Chemistry 25 seldom complete this course.

Study Expectations: This course is a descriptive course in General Chemistry. Often, a concept in Chemistry is more easily explained if a student has a background in Calculus or Physics. Where necessary, I will provide the necessary background or provide an alternative explanation. A solid background in algebraic manipulation is necessary and will be assumed. You should plan on committing 30 +/- hours a week for this course if you wish to master the material. That includes 15 +/- hours per week of class or laboratory time and an additional 15 +/- hours per week of dedicated study time. If your math or chemistry skills are very weak, you may need to commit more time to studying.

Laboratory: You must receive a passing grade in the lab to receive a passing grade in the course.

Homework: Homework from the text for each chapter will be provided. Additional problem sets may also be provided. Homework will be due approximately weekly. The specific due dates will be posted.

The following criteria must be met to earn full credit for the homework: 1) It must be handwritten, 2) All work, and all steps must be clearly shown, 3). All units (if any) must be shown, 4) underline or **highlight** your answers. 5) The question number must be shown and space between questions must be provided, 6) leave a 1" margin on all work.

Each chapter homework is worth 25 pts. I will generally select approximately 4 questions to review in detail. Each of these questions will be graded on a 5pt scale. The remaining pts will be granted for substantial completion of all other assigned problems.

Participation: You are expected to attend the live on-line portions of this class. Problems may be assigned during class. Your participation grade will be based on your attendance and response to questions during class.

Exams/Quizzes: Three lecture examinations will be given. None of the scores will be dropped. No make-up examinations will be given. Exams may be both oral and written. The midterms are based primarily upon material discussed since the previous midterm. However, as the course material builds upon itself, if you start off poorly, it will have an effect on your ability to do well on subsequent exams. Several (5-10) Lab quizzes will be given. In general, these will cover the 1 or 2 most recent lab experiments or discussed topics. While I will announce many of these quizzes in advance, I will not always do so.

Exam/Quiz questions: Students often ask "What is going to be on the exam". The answer "Chemistry Questions". I promise not to ask Political Science, Automotive Technology, Biology Questions, etc. You should study my lectures, the homework problems and the book in that approximate order.

Your camera and microphone must be on and functional during exams & quizzes. Please create a quiet space so that others are not disturbed by background noise. The use of headphones are not allowed during Exams & Quizzes.

Glassware & Chemical Kits: At the end of the first week of class, you will be able to and MUST order the glassware kits. There is no cost. Neither I nor De Anza can do anything about shipment delays for students with international addresses. We will address potential delays on a

case by case basis. Upon receipt of your equipment, immediately check the contents (including whether the chemical containers are full) against the equipment & materials checklist. You will receive a “kit code” and it may be on the box. So, do not discard the box or other paperwork.

Late Work – I strongly recommend that you get in the habit of finishing assignments early! Oh the horror of not waiting until the last minute. How will you survive without the adrenaline rush of submitting work at 11:59 p.m. on the day it is due! My internet went down, my dog/cat/goldfish became suddenly ill, my family is fighting again, etc. are not acceptable excuses. 20% will be taken off for work that is up to 1 day late. 50% will be taken off for work that is up to 2 days late. After that, no credit is provided

Grading:	Midterms	300 points	(approximate)
	Final (comprehensive)	400 points	(approximate)
	Homework	250 points	(approximate)
	Participation – Lecture	50 points	(approximate)
	Laboratory (reports, quizzes, etc.)	400 points	(approximate)

The grade for the course will be assigned as follows:

94-100% = A	91-93.9 = A-	88-90.9 = B+	84-87.9 = B	81% - 83.9 = B-
75-80.9 = C+	60-74.9 = C	50-59.9 = D	Below 50% F	

The only time a letter grade is provided is for the final course grade. That is, do not assume that if you have a 95% in the course at a given time, that you currently have an A. The scores on HW and Lab work are primary effort based and it is easy to accumulate most of the points (if submitted on time - - or early - - see previous comments). The quizzes and exams are more difficult and scores tend to reflect this reality. Notably, the final exam will be an oral exam and is 400 points (approximately 1/3 of the course). The class average on the final is typically around 70% (ranging from about 30% to 100%).

In summary, if you want to achieve a given grade, then you should be above the given thresholds going into the final.

I may lower these percentages based upon the class “curve”. i.e. make it easier to obtain a specific grade. I will not raise them.

Please note that the next statements in this paragraph are not a guarantee, just an observation of the arithmetic associated with the grading scale. The timely completion and submittal of homework, the completion and submittal and Laboratory work, and the demonstration of a mere modicum of knowledge will be sufficient to pass this course. Of course, the demonstration of mastery of the material on the exam may be necessary to achieve a grade of A.

A request to review a grade must be received within 1 week the posting of the score in Canvas. After that, all scores are final.

Cheating: YOU are responsible for understanding the De Anza Academic Integrity policy. The minimum penalty for cheating will be a score of zero on the assignment in question. Also, cheating that is identified after the end of the quarter will result in a change of grade which may affect your enrollment in Chemistry 1B. i.e. you could get dropped from the course

Lecture Recordings: I will endeavor to, but cannot guarantee that I will, post copies of the Zoom sessions.

Questions: I love questions about Chemistry, the nature of the atom, the nature of the universe, the mechanism of chemical reactions, how to balance equations, etc. I detest questions for which the answer is easily obtained by reading this greensheet.

<http://www.deanza.edu/bookstore/textbooks/oer.html>

Week of	Monday	Tuesday	Wednesday	Thursday
28-Jun	Chapter 1	Chapter 2	Chapter 2/3	Chapter 3
5-Jul	Independence day Holiday	Chapter 3/4	Chapter 4	Exam (chapter 1-3 & everything discussed through July 6)
12-Jul	Chapter 6	Chapter 6	Chapter 7	Chapter 7
19-Jul	Chapter 8	Chapter 8	Chapter 9	Exam - everything discussed through July 20
26-Jul	Chapter 9	Chapter 9	Chapter 10	Chapter 10

2- Aug	Chapter 11	Chapter 11/take home exam assigned	Take home exam due before class	Individual Oral Final Exams – times TBD
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Everything from the first word of my first lecture to the last word of my last lecture.

Student Learning Outcome(s):

- *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.