

General Chemistry_Chem 1B_Summer 2015

Section 61, Course CRN 00213

Instructor: Dr. Yue Liu (liyue@fhda.edu)

Office hours: Wed. 2 - 3 PM in SC1224

Session	Room	Days	Start Time	End Time
Lecture	SC2204	M-R	6:00 PM	7:15 PM
Lab	SC2204	M-R	3:00 PM	5:50 PM

We use CATALYST for this course. All lecture slides, weekly announcements and online homework assignments are posted in CATALYST.

catalyst.deanza.edu (available to log in at noon the first day of class!)

Learning objectives

1. Demonstrate a knowledge of intermolecular forces.
2. Evaluate the principles of molecular kinetics.
3. Apply principles of chemical equilibrium to chemical reactions.
4. Apply the second and third laws of thermodynamics to chemical reactions.

Prerequisites: A "C" or better in Chem 1A

Necessary Materials

1. Text book: Chemistry: *The Molecular Nature of Matter and Change*, 7e, by Silberberg
2. A scientific calculator that has at least log and exponential functions is required (~\$12). Graphing capabilities are not necessary. You **may not** use your phone as a calculator for any quizzes, or exams.)
3. Safety goggles.
4. Examination gloves.
5. Five scantron sheets (Form No. 882-E)

Resources

Disability Support Program and Services is located in SCS41 (408-864-8753 or 408-864-8748 TTY or dss@deanza.edu) to coordinate reasonable accommodations for students with verifiable documentation. <http://www.deanza.edu/dsps/>

Tutoring service is located in S43 among many other campus services offered by the student success center: <http://www.deanza.edu/studentuccess>

Adds and Drops

The lecture and lab cannot be taken separately under any circumstances. One registration code automatically enrolls you in both instructional periods.

If you do not show up at the first class, you will be dropped automatically. If you choose to drop the course at any point during the quarter, it is your responsibility to withdraw from the course through Admissions and Records by the appropriate deadline.

Last Day for Adds	July 05, 2015
Last Day for Refund	July 01, 2015
Last Day for Drops w/o W	July 05, 2015
Last day for P/NP	July 09, 2015
Last Day for Drops	July 28, 2015

Conduct

No disrespectful, demeaning, or discriminatory remarks and behaviors will be tolerated. This includes, but is not limited to, any form of coercive behavior towards the instructor or other students, speaking over the instructor, interrupting other students, monopolizing the instructor's attention so that other students cannot be served. Any student who engages in such behaviors repeatedly will be referred to the Vice President of Instruction for disciplinary action.

Please be polite to mute your cell phones or pagers during lecture and lab.

Academic honesty

Students are expected to abide by the Academic Integrity as outlined in the De Anza College catalog at all times <http://www.deanza.edu/studenthandbook/academic-integrity.html>. It is the student's responsibility to know what constitutes academic dishonesty.

"The two most common kinds of academic dishonesty are cheating and plagiarism. Cheating is the act of obtaining or attempting to obtain credit for academic work through the use of dishonest, deceptive or fraudulent means. Plagiarism is representing the work of someone else as your own." It is appropriate for you to seek help from your instructor, the tutors, and your colleagues. I encourage you to form study groups; you will sometimes work with partners in laboratory. However, this does not mean that copying and submitting identical lab reports is acceptable. Everyone should work on his/her own lab report individually.

Students caught cheating or plagiarizing on any test or assignment will receive a zero for that assignment; if caught a second time, the student will receive a grade of "F".

Grading

Assignments	# of assignments	Points each	Total	Percentage
Lecture exams	5-1=4	50	200	33 %
Final exam	1	100	100	15.6 %
Homework	6	20	120	18 %
Prelab	8	5	40	6 %
Lab report	8	10	80	12.5 %
Lab exam	2	50	100	15.6 %
Total			640	100 %

97-100 %	A+	93-97 %	A	90-93 %	A-
85-90 %	B+	82-85 %	B	77-82 %	B-
74-77 %	C+	70-74 %	C		
60-70%	D	0-60 %	F		

Homework: there are six online assignments done through Catalyst. You have up to 3 attempts on each assignment, and the highest score among the 3 attempts will be recorded. There is no time limit on each attempt. The deadline on each assignment is 08/05/2015 at 11:59 PM.

Lecture exams: There are 5 lecture exams. Everyone drops the lowest one. Make-up exams are only given to excused absences. An excused absence is an absence due to a medical emergency or some other emergency that is proven with **written documentation**.

Final exam: The final exam is cumulative and cannot be dropped. No early, late, or make-up final exams will be given.

Exam re-grade policy: If you feel that any of the exams are graded incorrectly, you can request for a complete re-grade within 24 hours after the exam is passed back.

Laboratory

Pre-labs should be prepared in a hard-bound lab notebook, including 1) experimental title and part, 2) reaction equations or formulas, 3) materials table and apparatus drawing, 4) outline of procedure, and 5) pre-lab questions in the lab book, if any. For the procedure section, please draw a vertical line along the middle of the page. List the experimental steps to the left of the line, and leave the right half to record any observations made during the lab. **Pre-lab preparation will be checked at the first lab meeting of each experiment, and graded upon completeness instead of correctness.**

Lab reports include the data table and post-lab questions in the lab book. The last lab meeting of each experiment will be dedicated to completing the lab report in class. All lab reports are due at the end of the last lab meeting of each experiment. **Late submissions are allowed, but with a penalty of 1 point per day.**

There are no make-up labs, but you could write an essay with an assigned topic instead. Unexcused absences receive a 5 points deduction on the make-up essay. Only a medical emergency or some other emergency that is proven with written documentation is considered as excused absences.

Course outline and laboratory schedule

Week	Topic	Lab
1	Chap 5 Gases <i>7/02: lecture exam 1</i>	6/29: Check in, 6/30: Lab 1 Benzoic acid extraction (1) 7/01: Lab 1 (2) 7/02: Lab 1 (3), <i>Lab report 1 due</i>
2	Chap 12 liquids, solids, and phase changes <i>7/09: lecture exam 2</i>	7/06: Lab 2 Molar volume (1) 7/07: Lab 2 (2), <i>Lab report 2 due</i> 7/08: Lab 3 Iodine clock reaction (1) 7/09: Lab 3 (2)
3	Chap 16 Kinetics <i>7/16: lecture exam 3</i>	7/13: Lab 3 (3) 7/14: Lab 3 (4), <i>Lab report 3 due</i> 7/15: Lab 4 Kc of Iron (III) thiocyanato by spectrometry 7/16: Lab 4 (2), <i>Lab report 4 due, Lab mid-term</i>
4	Chap 17 Equilibrium <i>7/23: lecture exam 4</i>	7/20: Lab 5 Determine Ka of a weak acid (1) 7/21: Lab 5 (2), <i>Lab report 5 due</i> 7/22: Lab 6 Determine pKa of an indicator (1) 7/23: Lab 6 (2), <i>Lab report 6 due</i>
5	Chap 18 Acid-base equilibrium <i>7/30: lecture exam 5</i>	7/27: Lab 7 Aspirin (1) 7/28: Lab 7 (2) 7/29: Lab 7 (3), <i>Lab report 7 due</i> 7/30: Lab 8 Determine Ksp of Ca(OH) ₂
6	Chap 20 Thermodynamics <i>8/06: Final exam</i>	8/03: Lab 8 (2), <i>Lab report 8 due</i> 8/04: Lab check-out 8/05: <i>Lab final</i>