Introduction to Chemistry
Chem 25/section 04
Course CRN 23016

Instructor: Yue Liu (liuyue@fhda.edu)
Office Hour: Thur. 8:00 AM – 8:30 AM and 10:30 AM - 11:30 AM @ SC1224

	Room	Days	Start Time	End Time
Lecture	SC1102	T/Th	8:30 AM	10:20 AM
Lab	SC2208	Th	11:30 AM	2:20 PM

All lecture slides and online homework assignments are posted on Canvas.

Course Description:
An introduction to the core theory and problem-solving techniques of chemistry as preparation for CHEM 1A and other science related fields. An introduction to gravimetric and volumetric analysis, rudimentary laboratory equipment and operations, and the preparation and maintenance of a laboratory notebook.

Prerequisite: Mathematics MATH 114 or equivalent. Advisory: English EWRT 1A or EWRT 1AH or ESL 5.

Necessary Materials

1. Introduction to Chemistry, 4th edition by Bauer, Birk, and Marks (McGraw-Hill)
2. Preparation for General Chemistry: Chem 25, by Applegate, Neely, and Sakuta (McGraw-Hill). Note: This must be purchased from the De Anza Book Store. It is not available anywhere else.
3. A scientific calculator that has at least log and exponential functions is required.
4. Safety goggles, Visorgogs® or Z87.1-2010 Rates Safety Glasses

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/studentsuccess

Adds and Drops

If you do not show up for more than one day during the first week, you will be dropped. 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	Oct 06, 2018
Last Day for Refund	Oct 07, 2018
Last Day for Drops w/o W	Oct 07, 2018
Last day for P/NP	Oct 19, 2018
Last Day for Drops with W	Nov 16, 2018

COURSE GRADING POLICIES:

Types of Assignments	Points per Item	Number of Assignments	Total points	Percentage
Lecture Exam	50	3	150	27%
Online Homework	10	13-2=11	110	20%
Final Exam	100	1	100	18%
Lab Final	50	1	50	9%
Pre-lab	5	9	45 (drop the lowest)	9%
Lab Report	10	9	90 (drop the lowest)	18%
Total			545	

97-100 %	A+	93-97 %	A	90-93 %	A-
85-90 %	B+	80-85 %	B	77-80 %	B-
74-77 %	C+	70-74 %	C		
60-70%	D	0-60 %	F		

ATTENDANCE

It is expected that you attend and participate in all of the lecture and laboratory sessions. If you must be absent, **you are responsible to contact the instructor via emails**. You should also exchange phone numbers with a few classmates whom you can contact regarding material missed if you must be absent.

HOMEWORK

- All Canvas HW assignments are due on Dec 13, 2018 @ 11:59 PM. No late submission will be accepted.

EXAMS

Make-up exams will NOT be given. Accommodations will be made ONLY for VERIFIED illness or legitimate emergencies. Documentation is required.

CLASS RULES AND REGULATIONS-Professional behavior is expected

- **Arrive on time**. The classroom is an academic environment where students come to focus and learn. Those students who arrive on time, ready to learn, should not be disturbed by students coming in late. If you arrive late to lecture, please enter quietly from the back of the classroom.
- **Be polite** to your instructor and fellow students. Any type of vulgar or rude language toward the instructor or another student may result in dismissal from the course. This rule applies to emails and phone messages as well as face-to-face exchanges!

Any student who, in my judgment, is habitually disruptive or rude may be dismissed from the class.

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

ACADEMIC DISHONESTY:
It is your responsibility to understand what constitutes academic dishonesty in accordance with the Foothill College Academic Honor Code.
Academic dishonesty includes:

- Plagiarism
- During an exam, communicating or transferring information to another student, receiving information from someone else, looking at another person's exam, and/or using unauthorized materials such as text books, notes, etc.
- Having another person complete and submit work in your name.
- Lying to an instructor to improve your grade.
- Altering a graded work after it has been returned and then submitting the work for regarding.

The first offense results in a zero of that assignment for all students involved. The second offense results in an "F" grade for the class.

Laboratory syllabus

Daily Check-in and Check-out Policies

- All students are expected to arrive to lab on time. If you are **more than 20 minutes late**, you get one point deduction for every 10 minutes that you are late for.
- All students are expected to do a conscientious and thorough job of cleaning up after themselves, whether it be in their own work area in the lab, or shared areas such as the chemical supply fume hood, the balance area, and the waste hume hood. You need to **obtain my signature after you finish** the activities designated for each lab meeting.

Lab Safety

- Being safe in the lab is a top priority. Any unsafe behavior, intentional or not, will be noted and may be cause for dismissal from the class.
- For your protection, safety goggles or visorgogs with indirect ventilation and an ANSI minimum rating of Z87.1-2010 must be worn AT ALL TIMES in the laboratory. TWO warnings will be issued to any student that is observed wearing their googles/visorgogs on their forehead, hanging them around their neck, etc. instead of wearing over their eyes. If the warning is disregarded, expulsion from the lab may result.

Absences

- Any unexcused absence results in a zero grade for the missed lab.
- An excused absence, upon verification with written proof, receives partial credit: up to 3 points for the pre-lab and up to 5 points for the lab report (completed using other students' data).

Late submission

- The pre-lab question sheet should be turned in immediately when you come to the lab. It is considered late if it is turned in after I finish the lab lecture, and will receive 2 points deduction.
- Late lab reports receive 1point deduction per lab meeting.

Week	Tuesday Lecture	Thursday Lecture	Lab
1	Sep. 25	Sep. 27	Sep. 27

	Syllabus and Chap. 1	Chap. 1 and 2	Lab Check-in Lab 1: (dry) Math Module
		Canvas HW on Chap. 1	Bring syllabus
2	Oct. 02	Oct. 04	Oct. 04
	Chap. 2	Chap. 3	Lab 2: Measurements
	Canvas HW on Chap. 2		Lab report 1 due
3	Oct. 09	Oct. 11	Oct. 11
	Chap. 3 and 4	Chap. 4	Lab 3: Density
	Canvas HW on Chap. 3	Canvas HW on Chap. 4	Lab report 2 due
4	Oct. 16	Oct. 18	Oct. 18
	Chap. 5	Chap. 5	Lab 4: Atomic structures
	Exam 1 (Ch. 1-4)	Canvas HW on Chap. 5	Lab report 3 due
5	Oct. 23	Oct. 25	Oct. 25
	Chap. 6	Chap. 6	Lab 5 (dry) Ionic compounds
		Canvas HW on Chap. 6	Lab report 4 due
6	Oct. 30	Nov. 01	Nov. 01
	Chap. 7	Chap. 7	Lab 6: (dry) Covalent compounds
		Canvas HW on Chap. 7	Lab report 5 due
7	Nov. 06	Nov. 08	Nov. 08
	Chap. 8	Chap. 8	Lab 7: Empirical Formula
		Canvas HW on Chap. 8	Lab report 6 due
8	Nov. 13	Nov. 15	Nov. 15
	Chap. 9	Chap. 9	Lab 8: Chemical reactions
	Exam 2 (Ch. 5-8)	Canvas HW on Chap. 9	Lab report 7 due
9	Nov. 20	Nov. 22	Nov. 22
	Chap. 10.1-10.3	Holiday	Holiday
	Canvas HW on Chap. 10	No class	No lab
10	Nov. 27	Nov. 29	Nov. 29
	Chap. 11.4-11.5	Chap. 13	Lab 9: Titration
	Canvas HW on Chap. 11		Lab report 8 due
11	Dec. 04	Dec. 06	Dec. 06
	Chap. 13 and Chap. 14.1	Chap. 14.2, 14.4	Lab check-out, **Lab final**
	Canvas HW on Chap. 13	**Exam 3 (Ch. 9-11, 13)** Canvas HW on Chap. 14	Lab report 9 due
12	Dec. 11	Dec. 13	Dec. 13
	No class	**Final Exam (Cumulative)** **7:00 – 9:00 am** **@ SC1102**	No Lab

From the American Chemical Society Safety In Academic Laboratories Guidelines, 7th Ed., the following mandatory minimum safety requirements must be followed by all students and be

rigorously enforced by all Chemistry faculty:

1) Chemistry Department-approved safety goggles purchased from the De Anza College bookstore (NOT safety glasses) must be worn at all times once laboratory work begins, including when obtaining equipment from the stockroom or removing equipment from student drawers, and may not be removed until all laboratory work has ended and all glassware has been returned to student drawers.
2) Shoes that completely enclose the foot are to be worn at all times; NO sandals, open-toed, or open-topped shoes, or slippers, even with socks on, are to be worn in the lab
3) Shorts, cut-offs, skirts or pants exposing skin above the ankle, and sleeveless tops may not be worn in the lab: ankle-length clothing must be worn at all times
4) Hair reaching the top of the shoulders must be tied back securely
5) Loose clothing must be constrained
6) Wearing "...jewelry such as rings, bracelets, and wristwatches in the laboratory..." should be discouraged to prevent "...chemical seepage in between the jewelry and skin...".
7) Eating, drinking, or applying cosmetics in the laboratory is forbidden at ALL times, including during lab lecture
8) Use of electronic devices requiring headphones in the laboratory is prohibited at ALL times, including during lab lecture
9) Students are advised to inform their instructor about any pre-existing medical conditions, such as pregnancy, epilepsy, or diabetes, that they have that might affect their performance.
10) Students are required to know the locations of the eyewash stations, emergency shower, and all exits
11) Students may not be in the lab without an instructor being present
12) Students not enrolled in the laboratory class may not be in the lab at any time after the first lab period of each quarter.
13) Except for soapy or clear rinse water from washing glassware, NO CHEMICALS MAY BE POURED INTO THE SINKS; all remaining chemicals from an experiment must be poured into the waste bottle provided.
14) Students are required to follow the De Anza College Code of Conduct at all times while in lab: "horseplay", yelling, offensive language, or any behavior that could startle or frighten another student is not allowed during lab;
15) Strongly recommended: Wear Nitrile gloves while performing lab work; wear a chemically resistant lab coat or lab apron; wear shoes made of leather or polymeric leather substitute.

By signing below, I, _____,
First Name Family Name
acknowledge that I fully understand and agree to abide by the laboratory safety rules listed above. Further, I acknowledge that my failure to abide by these rules will result in my being dropped from this chemistry class immediately.

_____ _____
Signature Date

Student Learning Outcome(s):

*Assess the fundamental concepts of modern atomic and molecular theory.
*Evaluate the standard classes of chemical reactions.
*Demonstrate a fundamental understanding of mathematical concepts pertaining to chemical experimentation and calculations.