CHEM 25: Preparatory Course for General Chemistry Syllabus

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Zoom PMI: 413 944 4512
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Lectures:	M/W	5^{30}-7^{20}pm	Mandatory Zoom Meeting	12276 12277
Solo work:	Tu/Th	5^{30}-7^{20}pm	Solo work offline	
Labs:	n/a	n/a	Solo work offline	

Pre-requisites:

MATH 114 or equivalent. EWRT 1A or ESL 5 recommended.

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.

Student Learning Outcomes:

1. Asses the fundamental concepts of modern atomic and molecular theory.
2. Evaluate the standard classes of chemical reactions.
3. Demonstrate a fundamental understanding of mathematical concepts pertaining to chemical experimentation and calculations.

Course Materials:

- Lecture Text (*recommended*) – Introductory Chemistry Tro 6th Ed. (other options available on canvas)
- Chem101 (*required*) – online platform for taking exams, doing homework, and practice (link on canvas)
- Lab Manual PDF (*required*) – online via Canvas (no need to print it)
- Scientific calculator (*required*) - with log functions
- Scanning App (*recommended*) – used for converting pictures to PDFs (any free app will do)

Class Conduct/Zoom Expectations

- Log into Zoom on time or early to sit in the waiting room. (check canvas for the meeting ID under the syllabus tab)
- Be on zoom actively participating the entire time the course is synchronous. Contact your instructor if anything comes up and you can't attend the meeting.
- Keep your microphone muted until you are ready to speak or have been called on.
- Always use your real name as it appears on the roster, this way I can keep attendance when necessary.
- Use the nonverbals (raise hand, yes, no, slower, faster) to help communicate your needs with me without interrupting the flow of the class.
- Be prepared to talk on the microphone every class. This might mean you need to use your phone to dial in if your microphone doesn't work.

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- Keep your video on, unless your internet is lagging, then turn off your video. If you can't, then you need to have a new picture of your face each day! I don't want to stare back at empty names only.
- On the first day of class, you will need to have video on for a minute to introduce yourself.

Grades:

DISCLAIMER: I will not assign letter grades until the end of the term; I then create my own grading scale based on the distribution of percentages in the course. An example of a previous term is shown to the right, we might not use that one though! My goal in this course is to challenge you and develop your critical thinking. The level of difficulty will demonstrate that and test you, but the grades are meant to show your level of effort & understanding in the course, so do not assume a letter grade until the end of the term! Also note our school might have a different system of grades to be awarded. ***Ultimately, letter grades CANNOT be estimated during the term.***

Letter Grade	A/A-	B+/B/B-	C+/C/C-	D+/D/D-	F
Standard Scale	90-100	80-89.9	70-79.9	60-69.9	<60
An Old Scale	88-100	74-87.9	64-73.9	54-63.9	<54

Your grade will be based on several parts and divided as shown to the right:

HW	150
Problem Sets	100
Exams	450
Labs	250
Total	**1000**

- Exams (45%) - There will be 4 exams in total during the term and the lowest of the scores will be dropped. The four exams will cover specific chapters as noted on canvas. The exams will be given through chem101 on zoom. Make sure to log in early and do not miss the start of the exam. You may also be required to submit your work for the exam so make sure to clearly show work if needed on a problem and be prepared to submit a PDF of that work within a 10-minute window of the end of the exam.

  As chemistry always tends to build on previous knowledge, keeping up with old material will help you throughout the course. To study for the exams, I would recommend completing all homework assignments, reviewing lecture notes in a study group, and completing the problem sets on chem101. If you find that you need extra practice material for a certain section or chapter, I have posted Worksheets online that have an overabundance of practice material. Please use these as a source of extra work for any subject that you find you are struggling with; we can review this material during office hours.
- Problem Sets (10%) - there will be a problem set for each of the four exams. They are posted on chem101 and will be available 1 week prior to the exam and close at the start of the exam. You are welcome and encouraged to solve these in study groups but be careful not to split up the work. In a group you should discuss the problem and ways to potentially solve it. Brainstorm the problem, don't let 1 student solve it. I'm also happy to help talk through any tough problems during reviews/office hours. A good thing to note is that problem sets tend to be harder than homework/exam questions you might see, but the goal is to practice critical thinking.
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- Homework (15%) – The homework will be given through chem101 and will be due on the evening of the exams associated with that homework chapter. Make sure to complete the homework early as it will give you a good idea of material that might show up on exams. The homework is selected to help you focus on key

problems for each chapter and to help you understand the material through practice. If you need extensions or more trials on the homework, please reach out to me!

- Lab Activities (15%) - will be started during lecture hours. These worksheets should be scanned and uploaded to canvas under the appropriate assignment page. Make sure to complete fill out the worksheet and double check your answers.

Students with Disabilities

Students who are seeking support from the Disability Support Programs and Services (DSPS) should contact them directly at their office in LCW 110 or at (408) 864-8839 or via www.deanza.edu/dsps. De Anza College has the policy to accommodate all individuals regardless of disabilities, as such any students are welcome to come and speak with me privately regarding any accommodations necessary. They should email me directly and we can meet, please plan to bring your Accommodation Memo from the DSPS. Anything discussed will be kept in strict confidence and will not influence or affect your grade.

Academic Integrity

Academic integrity is a very serious thing. Cheating, copying, plagiarizing, or any form of using other person's work as your own is a serious offense. For more details about De Anza college's Academic Integrity policy go to http://www.deanza.edu/studenthandbook/academic-integrity.html to view. Any instance of academic dishonesty will not be tolerated and said students will not receive a passing grade in the course.

Since this course is now meeting remotely via Zoom, it will place the responsibility of being totally honest onto your shoulders, that is why I ask that you think twice before looking to cheat or take an easy way to finish an exam, quiz, or lab assignment. I believe every student wants to work hard and own their own work, please show me that I'm right.

How to Approach This Course:

This course will move fast covering a variety of topics. In general chemistry is best studied through repetition of practice problems and group discussion of theories. I recommend forming a study group as soon as you can and meeting regularly. A good idea for a study group is to come together with a plan of action for each session. For example, come to the group planning to review a practice exam or working on hard challenge problems that some people did not understand.

In order to do well in chemistry, I advise a variety of methods to study:

- Read ahead in the textbook
- Complete homework problems (first with help if need be, second without help)
- Complete lab assignments
- Flashcards and study group work to teach each other (the best way to see if you know something, is if you can teach it to someone else)
- Attend lecture actively
- Attend office hours with questions, talk to me!

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Schedule:

The following is the layout of the weeks:

- Homework is due 2 weeks after that chapter is released. Always on a Sunday at 11:59pm.
- Lab Activities are due 1 week from the beginning of the meeting time for that experiment, prior to the start of the next meeting. (The last one will be due earlier than this).
- Exams will be conducted during the lecture times of on that day. You will have 90 minutes for the exam and then we will still conduct class as well to review material on some dates.

CHEM 25 Schedule (Subject to Change)			
Week #	**Date**	**Mon Lec**	**Wed Lec**
1	6/28	Intro	Ch 1-3
		Act 1-2	**Act 3-4**
2	7/5	***No School - Holiday***	***Exam 1***
			Ch 4
3	7/12	Ch 9-10	***Exam 2***
		Act 5	
4	7/19	Ch 5-7	Ch 8
		Act 6-7	**Act 8**
5	7/26	Ch 11-2	***Exam 3***
		Act 9	
6	8/2	Ch 13-14	***Exam 4***
		Act 10	