

Welcome to Chemistry 30A, General, Organic and Biochemistry I, Spring 2020

Instructor:

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Sections:

CHEM 30A-Section 61 CHEM 30A-Section 62
Lecture: MW 5:30PM-7:20 PM -online Lecture: MW 5:30PM-7:20 PM - online
Lab: M 7:30 PM-10:20 PM - online Lab: W 7:30 PM-10:20 PM - online

Office Hours:

MW: 4:30-5:30PM minutes before lectures - online

Required Materials:

1. Janice G. Smith, General, Organic and Biological Chemistry, 3rd ed., 2016, McGraw-Hill. online access will be provided
2. A scientific calculator that has at least log and exponential functions is required (~ \$20). NO GRAPHING CALCULATORS.

Description: An introduction General Chemistry course for Allied Health Fields with Laboratory. The topics covered in this course includes discussion of various measurement tools, energy and matter, discovery of an atom, introduction to elements, compounds, and types of bonding in compounds followed by various types of chemical reactions and stoichiometric calculations based on chemical equations. Properties of gases and solutions will be discussed.

The course concludes with a discussion of acid-base chemistry.

Assignments

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ALEKS Homework Assignments	100
9 Online Labs/Assignments	90
2 Midterm Exam	200
Final	100

All grades will be assigned according to the following percentage scale:

A+ \geq 98% A \geq 92% A- \geq 89% B+ \geq 85% B \geq 82% B- \geq 79% C+ \geq 75% C \geq 68% D \geq 64% D- \geq 58% F < 58%

Attendance: Your attendance is urged for all lectures and required for all exams. Unexcused exam absences score zero. It is the responsibility of the student to contact the instructor regarding missed work. If an absence is anticipated, the student should make arrangements to complete the missed assignments prior to the absence. In an emergency, it is the student's responsibility to contact the instructor within one class period of an exam.

Academic integrity: Academic dishonesty is a serious offense. Students are also expected to abide by the Academic Integrity policy of De Anza college. Details can be found at,

<http://www.deanza.edu/studenthandbook/academic-integrity.html>. Copying another student's data, paper, exam, quiz or use of technology devices to exchange information during class time and/or testing is never tolerated and results in dismissal from the course with Grade F.

Homework :

Homework assignments are posted on the Canvas site, and instructions to complete these assignments provided on the Canvas site. The problems in these assignments are not necessarily an indicator of the types of problems that will be found on quizzes or exams.

Lab Experiments/Assignments: The lab experiments and assignments are going to be online. The link is provided in Canvas.

Exams: There will be two exams posted in Canvas. A scientific calculator that has at least log and exponential functions is required . NO GRAPHING CALCULATORS.. Each exam counts for 100 points.
No Make up exams.

Final Exam: A comprehensive final exam will be given. Students who miss or fail the final exam will not receive a grade C or better.

Lectures: All the lectures will be online using Zoom, link is provided in Canvas.
Read each chapter carefully before coming to class. Not every detail will be covered in lecture, but you are still expected to understand the whole chapter.

As you read the chapter, attempt to do the in-chapter sample and follow up problems and the corresponding end-of- chapter practice problems. Exam and quiz questions will often be very similar to the problems mentioned above; therefore, make sure you can do all of these problems comfortably before an exam. Try to first do these problems without looking at the solutions. This is very important since you will not have a solutions manual/answers on an exam!! Educational research tells us that it is just as important for your brain to see mistakes as it is for your brain to figure out the correct pathway. It also tells us that you must see the same information at least three times within 48 hours in order to retain that information.

DO NOT FALL BEHIND WITH THE READING OR HOMEWORK!! This is the number one mistake you can make. Concepts in chemistry are like building blocks. Initially, you learn one topic to build up to larger concepts. If you are shaky on a topic early on, your whole foundation will be unstable. To avoid this, try to read ahead of the scheduled lecture topics and keep up with the homework.

Tentative Laboratory, Lecture, and Exam Schedule

WEEK	Monday	Wednesday	Online Homework due dates
4/13		Online Lab : 1. LAB SAFETY -due 04/15	
1	LECTURE: Ch. 1: Matter and Measurement	LECTURE: Ch 1: Matter and Measurement	Ch. 1 - due 4/19 by 9:59 pm
4/20		Online Lab: 2. MATTER AND PHASE CHANGE - due 04/22	
2	LECTURE: Ch 2: Atoms/ Periodic Table	LECTURE: Ch 2: Atoms/ Periodic Table	Ch. 2 - due 4/26 by 9:59 pm
4/27		Online Lab: 3. IONIC AND COVALENT BONDS- due - 04/29	
3	LECTURE: Ch 3: Ionic Compounds	LECTURE: Ch 3: Ionic Compounds	Ch. 3 - due 5/3 by 9:59 pm
5/4		Online assignment: 4. WRITING FORMULAS AND NAMES - due 05/06	
4	LECTURE: Ch 4: Covalent Compounds	EXAM 1: Ch. 1-4	Ch. 4 - due 5/10 by 9:59 pm
5/11		Online assignment: 5. CHEMICAL REACTIONS - due 5/13	
5	LECTURE: Ch 5: Chemical Reactions	LECTURE: Ch 5: Chemical Reactions	Ch. 5 - due 5/17 by 9:59 pm
5/18 6	LECTURE: Ch 6: Energy and Reactions	Online Lab: 6. CONSERVATION OF ENERGY - due 05/20 LECTURE: Ch. 7: Gases, Liquids, and Solids	Ch. 6 - due 5/24 by 9:59 pm
5/25	MEMORIAL DAY HOLIDAY		
7		LECTURE: Ch. 7: Gases, Liquids, and Solids	
6/1	LECTURE: Ch. 7: Gases, Liquids, and Solids	Online Lab: 7. IDEAL GAS LAW -due 6/03 EXAM 2: Ch. 5-7	Ch. 7 - due 6/02 by 9:59 pm
6/8		Online Lab: 8. SOLUTION PREPARATION -due 6/10	
8	LECTURE: Ch 8: Solutions	LECTURE: Ch 8: Solutions	Ch. 8 - due 6/14 by 9:59 pm
6/15		Online Lab: 9. ACIDS AND BASES -due -06/17	
9	LECTURE: Ch 9: Acids/Bases	LECTURE: Ch 9: Acids/Bases	Ch. 9 - due 6/21 by 9:59 pm

6/22	FINAL EXAM		
10	comprehensive		

Student Learning Outcome(s):

*Solve stoichiometric problems by applying appropriate molar relationships.

*Identify the differences between elements and compounds and describe the chemical bonding in compounds- ionics vs. covalent.