Welcome to Chemistry 30A, General, Organic and Biochemistry I, Spring 2024

Instructor:

Dr. Valeria Martinovic

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Sections:

CHEM CHEM 30A-Section 27Y Lecture: F 8:30AM-10:30 AM Lab: F 10:30 AM-1:30 PM

Office Hours:

F: 1:30 - 2:30 PM

Required Materials:

- 1. Janice G. Smith, General, Organic and Biological Chemistry, 5th ed., 2016, McGraw-Hill. Ebook access will be provided in ALEKS.
- 2. A scientific calculator that has at least log and exponential functions is required.

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

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

Grade Distribution:	
ALEKS Homework Assignments	30%
Lab Reports	15%
Participation	5%
2 Midterm Exam	40
Final Exam	10%

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

 $A+ \ge 98\%$ $A \ge 92\%$ $A- \ge 89\%$ $B+ \ge 85\%$ $B \ge 82\%$ $B- \ge 79\%$ $C+ \ge 75\%$ $C \ge 68\%$ $D \ge 64\%$ $D- \ge 58\%$ 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 in ALEKS, and instructions to complete these assignments are 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 Makeup exams.

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

FRIDAYS	LECTURE in G7	LAB in SC2202	
4/12	LECTURE: Ch. 1: Matter and Measurement	CHECK-IN	
4/19	LECTURE: Ch 2: Atoms/ Periodic Table	LAB: DENSITY	
4/26	LECTURE: Ch 3: Ionic Compounds	LAB: NOMENCLATURE STRUCTURES	
5/3	LECTURE: Ch 4: Covalent Compounds	EXAM 1: Ch. 1-4 LAB: SAND/SALT SEPARATION	
5/10	LECTURE: Ch 5: Chemical Reactions	LAB: CHEMICAL REACTION	
5/17	LECTURE: Ch 6: Energy and Reactions	LAB: YIELD OF SODIUM	
5/24	LECTURE: Ch. 7: Gases, Liquids, and Solids	LAB: SYNTHESIS OF ALUM	
5/31	LECTURE: Ch. 7: Gases, Liquids, and Solids	EXAM 2: Ch. 5-7 LAB: GAS FORMATION REACTION	
6/7	LECTURE: Ch 8: Solutions	LAB: CITRIC ACID FORMATION	
6/14	LECTURE: Ch 9: Acids/Bases	CHECK OUT	
6/21	LECTURE: Ch 9: Acids/Bases		
6/28	FINAL EXAM 7am - 9am in G7		

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 compoundsionics vs. covalent.

Office Hours:

T,TH	05:00 PM	06:00 PM	In-Person,By Appointment,Zoom,Email	SC2208
F	01:20 PM	02:20 PM	In-Person, By Appointment, Email, Zoom	SC2202