

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

### **Instructor:**

Dr. Valeria Martinovic  
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### **Sections:**

CHEM 30A-Section 61 CHEM 30A-Section 62  
Lecture: MTWTh 5:30PM-7:20 PM -online  
Lab: MWTR 2:30 PM-3:20 PM or 4:00 PM-4:50 PM - 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 gas

### Assignments:

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

es and solutions will be discussed.

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

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, Tuesday	Wednesday, Thursday	Online Labs and Homework due dates
6/29-07/02	Online Lab : 1. LAB SAFETY - due 07/30 by 9:59 pm	Online Lab: 2. MATTER AND PHASE CHANGE - due by 07/02 by 9:59 pm	
1	LECTURE: Ch. 1: Matter and Measurement	LECTURE: Ch. 1: Matter and Measurement LECTURE: Ch 2: Atoms/ Periodic Table	
7/06-07/09	Online Lab: 3. IONIC AND COVALENT BONDS - due 07/07 by 9:59 pm	Online assignment: 4. WRITING FORMULAS AND NAMES - due by 07/09 by 9:59 pm	
2	LECTURE: Ch 2: Atoms/ Periodic Table LECTURE: Ch 3: Ionic Compounds	LECTURE: Ch 3: Ionic Compounds LECTURE: Ch 4: Covalent Compounds	Homework: Ch, 1, 2, 3, 4 - due Sunday 07/12 by 9:59 pm
7/13-07/16	Monday 07/13: EXAM 1: Ch. 1-4	Online assignment: 5. CHEMICAL REACTIONS - due 07/16 by 9:59 pm	
3	LECTURE: Ch 5: Chemical Reactions	LECTURE: Ch 6: Energy and Reactions	

07/20-07/23	<b>Online Lab: 6. CONSERVATION OF ENERGY -due 07/21 by 9:59 pm</b>	<b>Online Lab: 7. IDEAL GAS LAW - due 07/23 by 9:59 pm</b>	
4	<b>LECTURE: Ch. 7: Gases, Liquids, and Solids</b>	<b>Thursday 07/23: EXAM 2: Ch. 5-7</b>	<b>Homework: Ch.5,6,7 - due Wednesday 7/22 by 9:59 pm</b>
7/27-07/30	<b>Online Lab: 8. SOLUTION PREPARATION - due 07/28 by 9:59 pm</b>		
5	<b>LECTURE: Ch 8: Solutions</b>	<b>LECTURE: Ch 9: Acids/Bases</b>	
8/03-08/05 6	<b>Online Lab: 9. ACIDS AND BASES due 08/04 by 9:59 pm</b>  <b>LECTURE: Ch 9: Acids/Bases</b>	<b>FINAL EXAM comprehensive Thursday 08/05 at 5:30</b>	<b>Homework: Ch.8, 9 - due Wednesday 08/04 by 9:59 pm</b>

**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.