

**De Anza College - spring 2019
(4/08/19– 06/28/19)**

**INSTRUCTOR: Elena Zlatogorov
LECTURE: CHEMISTRY 1A-04**

HOURS: LECTURE: T., Th. 2:30PM – 3:45PM S32

**OFFICE HOURS Mon., Wed. 10:25AM - 11:25AM; Instructors Offices –
across from the chem. labs_ 2nd floor**

LAB: CHEMISTRY 1A-04

LAB: T., Th. 11:30AM – 2:20PM SC2202

INSTRUCTOR: Erik Woodbury

I. COURSE DESCRIPTION:

5 Units

Prerequisites

CHEM 25 or CHEM 30A or satisfactory score on the Chemistry Placement Test; MATH 114 or equivalent. Advisory: EWRT 1A or EWRT 1AH or ESL 5.

Chemistry 1A course includes: the study of atomic and molecular structure, quantum theory, thermo chemistry, solutions, and qualitative analysis with the classical study of properties of atoms and molecules and their reactivity.

This course will consist of lectures, interactive multimedia, problem solving, lab lectures, laboratory experiments, exams and quizzes.

Emergency contact: email: zlatogorovelena@deanza.edu

LECTURE:

The class will meet in Room S32 for lecture T., Th. No one is excused from attending the lecture. If you fail to show-up for two lectures you will be dropped from the class. If you have a medical or other documentable emergency, you are expected to provide written proof. You are expected to arrive to lecture and lab on time. Each two late arrivals count as an unexcused absence.

Dropping out.

If you miss lecture or lab for any reason within the first two days of class, you will be dropped from the course.

If for whatever reason you choose to drop or withdraw from this course during the spring session, it is **your responsibility alone** to initiate the drop or withdraw through Admissions @ Records by the appropriate deadline. After the first two days of class, I **will not** initiate drops or withdrawals-even if you stop attending. If you fail to drop the course, you will be **assigned a grade corresponding to the total number of points accumulated up to the point you stopped attending.** For important academic calendar dates, please check www.deanza.edu/calendar/fall.html.

The textbook should be read and notes from the textbook should be written before lecture. The first part of class will be lecture and discussion. The remaining class time will be problem solving. An advanced education **requires active and polite** participation in class activities. Your Chem 1A grade is influenced by attendance and participation. I encourage you to ask chemistry questions during lecture no matter how trivial, silly or boring they are. **Simply write down your question and pass it to me.**

You are encouraged to interact with each other in a collegial manner.

Problem-solving • When time permits we will also work problems in lecture. Sometimes problems are intended to be worked individually and in other instances, the class will be divided into groups to solve a problem. Sometimes a student may be called up to the board to answer a question. This is not meant to intimidate you; it is instead meant to better prepare you academically by giving you an opportunity to solve a problem your own unique way. It may be difficult at first to get in front of the class, but it will help you in long terms.

There will be a home take lecture practice exercises, chapter notes from the textbook (summary for each chapter) covering chapters 1-4, 6-11.

Notes from the textbook, lectures and practice exercises should be written in pen for credit. The assigned work are due the meeting after completion of the chapter. You must have the questions and problems fully worked out to receive credit. These questions must be answered on a separate sheet of paper and neatly done. EXAM dates are listed on your schedule. **NO EXAMS WILL BE GIVEN AT ANY OTHER TIME. FAILURE TO TAKE THE EXAM AT THE SCHEDULED TIME WILL RESULT IN A ZERO FOR THAT EXAM.**

There will be 2 exams on the material covered worth 100 points each and final comprehensive exam, worth 200 points.

In class Lecture Quizzes • There will be a lecture quiz at the beginning of class after completion of each chapter. The quizzes will be short answer type questions as well as problem solving. The quizzes are designed to test

your understanding of the concepts presented in the class, in the reading, and from the homework. These quizzes are for your benefit. They are meant as motivation for keeping up with the reading and homework. They will prepare you for questions and problems that are on the exams. Lecture quizzes covering chapters 1-4, 6-11 are worth a total 80 points. No make-up quizzes will be given.

Total points possible for the course are 760. Assigned grades are:
97-100% A+; 92-96% A; 89-91% A-; 85-88% B+; 81-84% B; 77-80% B-;
73-76 C+; 68-72% C; 64-67% D+; 61-63% D; 58-60% D-; 0-57% F

II. Required Materials:

1. **Lecture:** 1. Chemistry : The Molecular Nature of Matter and Change, 8th edition by Martin Silberberg (McGraw-Hill)
2. Scantron forms 882E
3. A scientific calculator that has log and exponential functions is required. Graphing calculators will not be allowed!

Disruption• Any student disrupting class may be asked to leave. DeAnza College will enforce all procedures set forth in the Student Standards of Conduct and the appropriate remedial and/or disciplinary steps will be taken when violations occur.

The use of cell phones or pagers is strictly prohibited during lecture and lab. Turn them OFF before you arrive.

Academic Integrity• Giving or receiving unauthorized aid in any form is not tolerated.

Academic dishonesty includes, but not limited to, the following:

- 1) Looking at another student's test and copying from it or allowing another student to copy from your test during an exam or quiz.
- 2) Talking to another student inside the classroom during an exam or quiz.
- 3) Using data or formulas stored in a calculator or obtained from any communications device.

TENTATIVE LECTURE AND EXAMINATION SCHEDULE

CHAPTER AND LECTURE TOPIC

Chapter 1 – Keys to Studying Chemistry	04/09/18-04/11/19
Chapter 2 –The Components of Matter	04/11/19-04/16/19
Chapter 3-Stoichiometry of formulas and equations	04/18/19
Last day to add spring classes	04/20/19
Last day for refund	04/21/19
Census date	04/22/19
Chapter 3 –cont. Stoichiometry of formulas and eq_ns	04/23/19
Chapter 4 and Review Chapter 1,2,3	04/25/19

MIDTERM #1 CHAPTERS 1- 3 04/30/19

Chapter 4 – 3 Major Classes of Chemical Reactions	04/30/19-05/02/19
Chapter 6 Thermochemistry	05/07/19-05/09/19
Chapter 7 – Quantum Theory	05/09/19-05/14/19
Review Chapter 4,6,7	05/16/19

MIDTERM #2 CHAPTERS 4, 6,7 05/21/19

Chapter 8– Electron Configuration	05/23/19-05/28/19
Chapter 9 – Models of Chemical Bonding	05/30/19
Last day for drop with a “W”	05/31/19
Chapter 9 – Models of Chemical Bonding cont.	06/04/19
Chapter 10-The shapes of molecules	06/06/19-06/11/19
Chapter 11 Covalent bonding	06/13/19-06/18/19
Review Chapters 1-11	06/20/19

FINAL EXAMINATION -- CHAPTERS 1-4, 6-11 06/27/19 @ 1:45PM-3:45PM Room: S 32

Notes: Please note that this is a **tentative** schedule. While I think it is a realistic one, we may not always proceed exactly according to the schedule. However, you are expected to have read each chapter before I begin to lecture on that material, and you are expected to be prepared for each lab experiment.

Notes: Please note that this is a **tentative** schedule.

PRACTICE HOMEWORK PROBLEMS

I will e-mail every day

Student Learning Outcome(s):

- *Identify and explain trends in the periodic table.
- *Construct balanced reaction equations and illustrate principles of stoichiometry.
- *Apply the first law of thermodynamics to chemical reactions.