## De Anza College –win 2022 (01/03/22– 03/25/2022)

**INSTRUCTOR:** Elena Zlatogorov

# INTRODUCTIN TO CHEMISTRY

### **Chem D025-03Z and Chem D025-04Z**

LECTURE Chem. D025-03Z Mon., Wed. 2:30PM – 4:20PM Online- Canvas /Zoom

LAB Chem. D025-03Z Tue. 2:30PM – 5:20PM Online- Canvas /Zoom (Synchronized)

Office Hr. Chem. D025-03Z Mon. 4:30PM- 5:20PM Online- Canvas /Zoom

Emergency contact: email: zlatogorovelena@deanza.edu

# I. COURSE DESCRIPTION:

5 Units

Prerequisite: Mathematics MATH 114 or equivalent. Advisory: English EWRT 1A or EWRT 1AH or ESL 5.

# **Course Description:**

An introduction to the core theory and problem- solving techniques of chemistry as preparation for Chemistry 1A and other science related fields. An introduction to gravimetric and volumetric analysis, rudimentary laboratory equipment and operations.

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

Chem. D025-03Z and Chem. D025-04Z students will have the same lecture period, but a different lab lecture and lab period. At De Aza College the lab and lecture cannot be taken as separate courses under any circumstances. Once you are enrolled you may **not** switch lab lecture or lab whether on a temporary or on-going basis.

### **ATTENDANCE:**

Attendance will be enforced. Any student who has two or more lab or lecture absences may be dropped from the course. 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.** 

If for whatever reason you choose to drop or withdraw from this course during the winter 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 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 **MyPortal/Apps/Academic Dates & Deadlines** 

#### **LECTURE:**

### Required text and equipment.

<u>Textbook</u>: Introduction to Chemistry, 5<sup>th</sup> edition by Bauer, Birk, Marks (McGraw Hill Education). E-book: ISBN: **9781307601633**. (\$40).

Hard copy book: (BAUER PREP CHEM 25): 9781307235159-\$99.00 net to bkstr

When students order directly using the link, they are charged \$30 The bookstore sells codes but mark them up. <a href="https://www.mheducation.com/highered/custom/product/">https://www.mheducation.com/highered/custom/product/</a> 9781307601633.html.

You can try to find a used version of the book on Amazon or any book retailer.

# Equipment:

- 1. A computer or tablet to browse the web.
- 2. Cell phone or camera to capture photos.
- 3. Any App that will allow you to convert photos to pdf files
- 4. A scientific calculator.
- 5. A ruler graduated in centimeters.

The class will meet online in Zoom for lecture Mon., Wed. at 2:30PM – 4:20PM.

The textbook should be read and notes from the textbook and glossary should be written before lecture. As you read the chapter try to do in-chapter sample. The first part of lecture class will be lecture and discussion. The remaining class time will be problem solving. The homework (Practice quizzes) is assign but not collected. In class we will review all Practice Quizzes. Everyone would need to participate. In modules I will include homework practice quizzes for each chapter. It is important for student to do assign practice quizzes. In class quizzes and exams will be similar to homework problems. An advanced education requires active and polite participation.

#### **Course information:**

This course will consist of lectures, interactive multimedia, problem solving, lab lectures- laboratory experiments (simulations), movies, exams and quizzes. Chem. D025-03Z and Chem.D025-04Z students will have the same lecture period, but a different lab lecture and lab experiments days depending on which code you used for enrolling.

At De Anza College the <u>lab and lecture cannot be taken as separate</u> courses under any circumstances. <u>Once you are enrolled you may not switch lab lecture or lab whether on a temporary or on-going basis.</u>

### **Registration and Attendance**

**Registration:** Enrollment in each section is limited to 30 students per section. Class spaces are filled in accordance with official class roster from Admission and Records, followed by the official wait list. Any errors with registration must be addressed directly to Admission and Records.

**Attendance:** Lecture and Lab will be provided via **Zoom.** Lecture and lab are offered synchronously, and attendance is expected during all lectures and lab periods. **Dropping out.** 

If for whatever reason you choose to drop or withdraw from this course after the first 2 weeks, it is **your responsibility alone** to initiate the drop or withdraw through Admissions @ Records by the appropriate deadline. After the <u>first two weeks</u> 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/** 

#### E-mail.

Please always use the InBox in the left side toolbar to send an email. I generally answer emails within 24 hrs. Monday-Friday. It may take more time for a response depending on time and internet availability. If for some reason you need to email me outside of Canvas, my email address is zlatogorovelena@fhda.edu

#### Resources

**Tutoring:** De Anza's tutorial center and many other campus services can be found as part of the student success center: http://www.deanza.edu/studentsuccess

**Disability Support Program and Services**: DSPS can help you get the right tools to succeed. Their website is http://www.deanza.edu/dsps/

# **Grading Scheme: Percentage**

Chapter Practice Quizzes -not graded %	
Chapters In class quizzes	10.0 %
Chapter Exams (2)	22.5 %
Final Exam	22.5%
Laboratory work	36.5%
Subjective Grade for 33 sessions is	8.5%
Total 100%	

( Note) —**Subjective Grade 8.5%** - Evaluation, which will be assess by instructor at the end of the quarter to reward student for: Performing Chapter Practice Quizzes, <u>punctual attendance</u>, active <u>participation in lectures and labs</u>, lecture quizzes and lab assignments his or her <u>unique</u> and <u>creative</u> way.

### **Grade Scale:**

% of total points possible	Grade
98-100	A+
92-97	A
89-91	A-
85-88	B+
82-84	В
79-81	B-
75-78	C+
68-74	C
Students who got grade below C need to	Retake the course
64-67	D+
61-63	D
58-60	D-
Less than 58%	F

<u>Instructor Elena Zlatogorov reserves the right to change exam and quiz dates</u> as well as modify the grade scale at any point during the quarter.

### LECTURE:

The class will meet Online/ Zoom for lecture Mon., Wed. from 2:30PM -4:20PM. No one is excused from attending the lecture. If you have a medical or other documentable **emergency**, you are expected to provide **written proof**. You are expected to **be** for lecture and lab **on time** and plan on **staying the** 

entire session. Your Chem 25 grade is influenced by attendance and participation. (Students, not present in class and participate in class activities, will not receive subjective grade for that session).

The chapters from the textbook should be read and vocabulary/glossary from the text should be written before lecture. Notes from the textbook (summary for each chapter and glossary) covering the above chapter are for your benefit.

The first part of lecture 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.

#### Office Hours/ How to contact me:

Mon. 4:30 PM-5:20 PM Chem D025-03Z -Zoom Office Hours.

To join office hours please click on this <u>link</u> during office hour times.

You will be placed in a waiting room initially and then be admitted to office hours one at a time.

You can also contact the Student Success Center at <a href="http://www.deanza.edu/studentsuccess/">http://www.deanza.edu/studentsuccess/</a> to get help with tutoring or academic skills. Please use this resource.

Problem-solving • When time permit, we will also work problems in lecture. Almost all modules have Practice quizzes. You should answer the questions as you read to understand the material better. Practice Quizzes are not gradable, but similar to these questions will be in In class quizzes and exams.

EXAM dates are listed on your schedule. FAILURE TO TAKE THE EXAM AT THE SCHEDULED TIME WILL RESULT IN A ZERO FOR THAT EXAM.

There will be: Two lecture exams on all material covered worth 112.5 points each and based on lectures, textbook material, practice quizzes and in class quizzes.

Final comprehensive exam, worth 225 points.

There will be no make- up exams.

There will be take home Practice quizzes covering chapters 1-9, 11. Submitted notes from the textbook (summary for each chapter and glossary) are for your benefit and I will give to you 5 extra points for each chapter.

Chapter # In class Quizzes • There will be a lecture in class quiz at the beginning of class after completion of each chapter. The In class quizzes will include multiple choice, true/false and essay type problems. The quizzes are designed to test your understanding the concepts presented in the class, in the reading, and from take home Practice questions. These quizzes are for your benefit. They are meant as motivation for keeping up with the material and prepare you for exams.

### LABORATORY:

Students are expected to attend all laboratory session. This is a synchronous portion of the course . The first part of class will be lecture and discussion. During assigned lab time we will discuss the theory

behind the on-line simulation or video you will watch asynchronously.

Labs will be done online. The laboratory data is due the same day you perform the "simulation". The lab simulations include the theoretical part, which you would need to read and only after reading you need to perform each step of the experiment. It is beneficial for you to write some notes, because simulation quizzes will include questions from the theoretical part of the experiment. In Labster's program, after each section of the experiments, you will have a quiz which will be graded automatically.

If you have a medical emergency or some other emergency that prevents you from attending lab, you will be asked to supply written documentation in order for the absence to be excused. <u>Please</u> contact the instructor as soon as possible if you miss a lab session.

Students, who miss due date/hrs. for the lab simulation or lab assignment session and **do not provide** written proof, and ask instructor permission to do this simulation before "**until**" date will lose 5 points for **each** assignment from their **subjective** grade.

Midterm and Final Lab Quizzes dates are listed on your schedule.

NO QUIZZES WILL BE GIVEN AT ANY OTHER TIME. FAILURE TO TAKE THE QUIZ AT THE SCHEDULED TIME WILL RESULT IN A ZERO FOR THAT QUIZ.

**Being late for class** will result in a failure on any quiz you miss, and you will not be allowed extra time to complete a quiz because of tardiness.

In Canvas the labs to be performed are outlined with expected completion dates.

There will be 2 midterm quizzes on all material covered in the lab worth 62.5 points each. **Second** midterm **lab** quiz is the **final quiz**. Each experiment including lab simulation is worth 24 points. Lab safety quiz worth 10 points. Total score for the lab is is **365**points.

Chemistry requires time and effort to understand and learn.

Note: You are not permitted to attend this class if you are not officially registered.

Cell Phone Policy • The use of cell phones or pagers is strictly prohibited during lecture and lab. There is to be **no** text messaging, browsing the Internet, or voice conversations. Turn Cell Phone OFF before you arrive or you will be **dropped** from the class.

Academic Integrity• Giving or receiving unauthorized aid in any form is not tolerated and will result in dismissal from the course with a grade of **F**. 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) Communicating to another student inside the classroom during an exam or quiz.
- 3) Using data or formulas stored in a calculator or obtained from any communication device.
- 4) Copying of laboratory data or data analysis from another student without prior permission of the instructor.

Chem D025-03Z CRN 33761 ; Chem D025-04Z CRN 33763 Win 2022

Mon., Wed. 2:30PM 4:20PM Online/Zoom2 Elena Zlatogorov

# TENTATIVE LECTURE AND EXAMINATION SCHEDULE

## CHAPTER AND LECTURE TOPIC

Chapter 1a – Matter and Energy, Math Toolbox (1-3)	01/03/22-01/05/22
Chapter 2 – Atom, Ions, and Periodic Table.	01/05/22-01/10/22
Chapter 3 Chemical Compounds.	01/12/22
Last day for adds	01/15/22
Last day for drops w/ Refund	01/16/22
Last day for drops w/out "W"	01/17/22
Census date	01/18/22
Chapter 3 Cont. Chemical Compounds.	01/19/22
Chapter 4 Chemical Composition	01/19/22-01/24/22
Review Chapters 1,2,3,4	01/26/22
Last day to request Pass/ No pass	01/28/22
MIDTERM #1 CHAPTERS 1-4	01/31/22
Chapter 5 Chemical Reactions and Equations	01/31/22-02/02/22
Chapter 6Quantities in Chemical Reactions	02/07/22-02/09/22
Chapter 7 – Electron Structure of the Atom	02/09/22-02/14/22
Chapter 8 – Chemical Bonding	02/14/22-02/16/22
Review Chapters 5,6,7,8	02/23/22
Last day to drop with "W"	02/25/22
MIDTERM #2 CHAPTERS 5, 6, 7, 8	02/28/22
Chapter 9 – The Gaseous State	02/28/22-03/02/22
Chapter 11 – Solutions	03/07/22-03/09/22
Review Chapters 9, 11	03/14/22
Review for FINAL	03/16/22
Extra assignments	03/21/221
FINAL EXAMINATION CHAPTERS 1-9, 11 1:45PM-3:45PM	03/23/22

When a class has both a lecture and a laboratory, the exam schedule is geared to the lecture. 03/25/22

Last day of the winter quarter is

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.

# **Student Learning Outcome(s):**

<sup>\*</sup>Assess the fundamental concepts of modern atomic and molecular theory.

<sup>\*</sup>Evaluate the standard classes of chemical reactions.

<sup>\*</sup>Demonstrate a fundamental understanding of mathematical concepts pertaining to chemical experimentation and calculations.