

INSTRUCTOR: Elena Zlatogorov

INTRODUCTORY CHEMISTRY

Chem D010-02Z; CRN 42702

LECTURE Chem. D010-02Z Tue., Thu. 8:30AM-10:20AM Online- Canvas /Zoom (Synchronized)

LAB Chem. D010-02Z Thu. 11:30AM – 2:20PM Online- Canvas /Zoom (Synchronized)

Office Hr. Chem. D010-02Z Thu. 10:30AM-11:20PM

I. COURSE DESCRIPTION:

5 Units

It is an introductory chemistry course for students, who are not majoring in science. The course is designed to familiarize students with chemical laboratory techniques and important chemical principles. It emphasizes chemistry as a subject of scientific inquiry and is designed to give the student a general appreciation for chemistry as a science.

Emergency contact: email: zlatogorovlena@fhda.edu

Course information:

This course will consist of lectures, interactive multimedia, problem solving, lab lectures- laboratory experiments (simulations), movies, exams and quizzes. Chem. D010-01Z and Chem.D010-02Z 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 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.

Required text and equipment.

Cengage learnings. Nivaldo J. Tro "Chemistry in focus"s. A Molecular View of our World 7th Edition .

- Hard copy ISBN: 978-1-337-39969-2; New \$250.; Used \$187.50
- e book ISBN: 978-1-337-670-425; \$44.99 RedShelf (180 days)

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.

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 first two weeks 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 zlatogrovelena@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/studentssuccess>

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 Questions -not graded % | |
| Chapter quizzes | 7.7% |
| Chapter Exams (2) | 20.0% |
| Final Exam | 20.0% |
| Laboratory work includes 10 points for safety quiz | 34.0% |

Special project selected by each student

3): Example: Chemistry and health, Chemistry and memory, Chemistry and learning abilities, Chemistry and medicine, Chemistry and longevity, Chemistry and air, Chemistry and Coronavirus, Chemistry and poisons, Household Chemicals.

| | |
|--|-------|
| Project should be presented in class and power points uploaded by each student - | 10.0% |
| Subjective Grade for 33 sessions is | 8.3% |

Total 100%

(Note) –**Subjective Grade 8.3%** - Evaluation, which will be assess by instructor at the end of the quarter to reward student for: Performing Chapter Practice Questions, **punctual attendance**, active **participation in lectures and labs**, lecture quizzes and lab assignments his or her **unique** and **creative** way.

Grade Scale:

| <u>% of total points possible</u> | <u>Grade</u> |
|-----------------------------------|--------------|
| 98-100 | A+ |
| 92-97 | A |
| 89-91 | A- |
| 85-88 | B+ |
| 82-84 | B |

| | |
|---|----|
| 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 |

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

LECTURE:

The class will meet Online/ Zoom for lecture Tue., Thu. from 8:30AM -10:20AM. 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 10 **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:

Thu: 10:30 AM-11:20 AM Chem D010-02Z -Zoom Office Hours.

To join office hours please click on this [link](#) 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 <http://www.deanza.edu/studentsuccess/> 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 questions. You should answer the questions as you read to understand the material better.

Practice Questions are not gradable, but some of these questions will be in your 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 100 points each and **based on lectures, textbook material, practice questions and quizzes**.

Final comprehensive exam, worth 200 points.

There will be no make- up exams.

There will be take home Practice questions covering chapters 1-6, 8,13,14,16. **Notes from the textbook (summary for each chapter and glossary) covering the above chapter are for your benefit.**

Chapter # Quizzes • There will be a lecture quiz at the **beginning of class** after -completion of each chapter. The quizzes will be multiple choice /essay type -problem solving questions. The quizzes are designed to test your understanding of 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 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. After each section of the experiment 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. Please 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 **45.0 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 **340** 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.

LABORATORY SCHEDULE

Chem D010-02Z CRN 42702

Instructor: E. Zlatogorov

Thu. 11:30AM – 12:45PM Online- Canvas /Zoom (Synchronized)

Please see **details in Canvas Modules** (Lab Week #)

| Week | Experiment/ Lab lecture | Starting Date |
|------|--|-------------------|
| 01. | Lab safety | 04/07/22 |
| 02. | Exp #2 Taking Measurements: Mass, Length, Temperature, Volume, Lab report | 04/14/22 |
| | Last day for adds | 04/16/22 |
| | Last day for drops w/out "W" | 04/17/22 |
| | Last day for drops w/ Refund | 04/17/22 |
| | Census day | 04/18/22 |
| 03. | Exp #3 Density: Prelab, experiment, Lab report | 04/21/22 |
| 04. | Exp #4 "Periodic Table"- Labster Simulation | 04/28/22 |
| | Last day to request "Pass/no Pass" | 04/29/22 |
| 05. | Exp # 5 "Atomic Structure" Labster Simulation | 05/05/22 |
| 06. | Review Lab quiz #1 (During Lecture hr.) | 05/12/22 |
| | Exp # 6 "Ionic and Covalent Bonds" Labster Sim-n | 05/12/22 |
| 07. | Lab quiz #1 (Week 1-5 Labs) during lecture | 05/19/22 |
| | Exp # 7 Stoichiometry Prelab; Stoichiometry Report | 05/19/22 |
| 08 | Exp # 8 "Stoichiometric calculations"- Labster simulation | 05/26/22 |
| | Last day to drop with "W" | 05/27/22 |
| 09. | Exp # 9 "Acid and Bases" Labster sim-n | 06/02/22 |
| 10 | Exp # 10 " Solution Prep. from salt to solution" Labster sim-n | 06/09/22 |
| | Review Lab quiz #2 | 06/09/22 |
| 11. | Lab Final Quiz | 06/16/22 |
| 12. | Final exams | 06/20/22-06/24/22 |

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TENTATIVE LECTURE AND EXAMINATION SCHEDULE

CHAPTER AND LECTURE TOPIC

| | |
|--|--------------------|
| Chapter 1 –Molecular Reasons | 04/07/21- 04/12/22 |
| Chapter 2 The Chemists Toolbox | 04/14/22-04/19/22 |
| Last day for adds | 04/16/22 |
| Last day for drops w/out “W” | 04/17/22 |
| Last day to drop w/Refund | 04/17/22 |
| Census day | 04/18/22 |
| Chapter 3 – Atoms and elements | 04/21/22-04/26/22 |
| Chapter 4 – Molecules, Compounds, and Chemical Reactions | 04/28/22-05/03/22 |
| Review Chapters 1,2,3,4 | 05/03/22 |
| | |
| MIDTERM #1 CHAPTERS 1- 4 | 05/05/22 |
| | |
| Chapter 5 – Chemical Bonding | 05/05/22-05/10/22 |
| Chapter 13 – Acids and bases | 05/12/22- 05/17/22 |
| Chapter 14– Oxidation and reduction | 05/19/22-05/24/22 |
| Chapter 6 – Organic Chemistry | 05/26/22-05/31/22 |
| Last day to drop with "W" | 05/27/22 |
| Review Chapters 5, 13, 14, 6 | 06/02/22 |
| | |
| MIDTERM #2 CHAPTERS 5, 13, 14, 6 | 06/07/22 |
| | |
| Chapter 16 – Biochemistry and biotechnology | 06/07/22-06/09/22 |
| Chapter 8 – Nuclear Chemistry | 06/09/22-06/14/22 |
| Review for final | 06/16/22 |
| Extra project | 06/16/22 |
| FINAL EXAMINATION -- CHAPTERS 1-6, 8, 13-14,16 | 06/21/22 |
| Wed. @ 7:00-9:00AM On ZOOM | |

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

Last day of the spring quarter is 06/24/22

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.

Student Learning Outcome(s):

*Develop problem solving techniques by applying the \Scientific Method\" to chemical data."

*Analyze and solve chemical questions utilizing information presented in the periodic table of the elements.

*Evaluate current scientific theories and observations utilizing a scientific mindset and an understanding of matter and the changes it undergoes.