De Anza College – win 2020 (01/06/20– 03/27/20)

INSTRUCTOR: Elena Zlatogorov

CHEMISTRY 10-02

HOURS:

Hours: LECTURE T., Thu. 2:30PM – 4:20PM Room: S 32
Chem. 10-02 LAB Thu. 11:30AM –2:20PM Room: SC 2208
OFFICE HOURS T, Thu. 10:25 AM - 11:15 AM; Instructors Offices – across the chem. labs_ 2nd floor

I. COURSE DESCRIPTION: 5 Units

Prerequisite: Advisory: Mathematics 212 or equivalent. English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

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: zlatogorovelena@fhda.edu

This course will consist of lectures, interactive multimedia, problem solving, lab lectures, laboratory experiments, exams and quizzes. Chem. 10-01 and Chem. 10.02 students will have the same lecture period, but a different lab lecture and lab period 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.

Resources
Tutoring: De Anza's tutorial center is in L47. This 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/

LECTURE:

The class will meet in Room S32 for lecture T., Thu. 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 **arrive** to lecture and lab **on time** and plan on staying the entire session as late arrival and early departure distract everyone. If you are late, please enter quietly and find seat as quickly and quietly. Do not disrupt class with conversations. Please turn your cell phone **Off** when enter the class. **You** may **not take calls or texts, except for emergencies.**

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/**.

The chapters from the textbook should be read and vocabulary/glossary from the text should be written before lecture. 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. Your Chem 10 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 or bring it to me during my office hours.**
If you need help with any aspect of this course, please contact your instructor first. 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.
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.
The assigned homework problems 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 (neatly done) and if required transferred to scantron. 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: Two lecture **exams** on all material covered worth 100 points each and **based on lectures, textbook material, homeworks (practice exercises)**.
Final comprehensive exam, worth 200 points.
There will be no make- up exams.

There will be a home take practice exercises. **For your benefits** write notes from the textbook (summary for each chapter and glossary) covering chapters 1-11.
Practice exercises should be written in pen and transferred to scantron using pencil #2.
Keep (summary for each chapter, glossary and practice exercises) in your binder and review it before each quiz and exam.

In class Lecture Quizzes • There will be a lecture quiz at the beginning of class after completion of each chapter. The quizzes will be essay/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.

Grading Scheme: Percentage
Homework 11%
In class quizzes 5%
Topic Presentation 10%
Chapter Exam**s** (2) 20%
Final Exam 20%
Laboratory Work 29%
Subjective Grade 5%

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Total 100%

(Note) –**Subjective Grade 5% -** Evaluation, which will be assess by instructor at the end of the quarter to reward student for: punctual **attendance**, active participation in lectures and labs, performing practice lecture and lab assignments his or her unique and creative way.

LABORATORY:

Labs will be done in the room SC-2208. The laboratory data is due the same day you perform the experiment. **The lab manual should be read and pre-lab notes for the experiment should be written before the experiment.** On each day that a new experiment begins, the **pre-lab** for the experiment **will be checked** at the very beginning of lecture, **post-lab** for the experiment **will be checked** at the same day or as **required by instructor**. You must obtain the signature of the lab instructor in the lab notebook at the end of each lab period. You must be present in the lab for the **entire duration of the experiment**. Each lab quiz will begin at the very beginning of the lab lecture.

If you fail to show up for two labs or present and do not perform lab assignments /experiments you will be dropped from the class. All lab work must be in **PEN** for **credit**. You must complete all labs to receive a grade in the class.
When you are working in the room SC-2208 you must wear **Safety GOGGLES. No SHORTS or OPEN TOE SHOES will be allowed in the lab**. **NO FOOD OR DRINKS ARE ALLOWED IN THE CHEMISTRY LAB. Hair longer than the bottom of your neck must be securely tied back.**
You may not be in the laboratory unless an instructor is present.
Notify the instructor immediately in cases of illnesses while in the lab.
Personal headphones may not be used while in the lab.
Dispose off waste material and broken glassware as per instructions from your instructor.

The first part of class will be lecture and discussion. The remaining class time will be experiments and / or problem solving.
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.

Being late for more than 10 minutes, or missing **laboratory lecture**, will result in your not being allowed to perform the laboratory for that day, because of **safety reasons**. (An important part of lab lecture is being sure that students understand the experiment enough to be safe in their work). **Since there are no possibilities for making up a laboratory**, this will result in a **zero** for that lab.

The labs to be performed are outlined with expected completion dates.
There will be 2 quizzes on all material covered in the lab worth 32.5 points each.
Laboratory experiment worksheets/reports and prelab notes are worth 20 points; post lab questions /participation 5 points for a lab total of 290 points.

Chemistry requires time and effort to understand and learn.
Between reading, writing notes for lecture and lab procedures, and working pre lab/post lab problems, it is expected that you will set aside at least **two hours for studying chemistry for every hour of lecture and lab lecture.**

Total points possible for the course are 1000.
Assigned grades are:

Percentage points Grade
97-100 A+
93-96 A
89-92 A-
85-88 B+
81-84 B
77-80 B-
73-76 C+
69-72 C
65-68 D+
62-64 D
59-61 D-
0-58 F
Grade "C" is considered the minimum grade for passing a course within the California college system, **there is no grade "C-" at De Anza**.

Extra credit assignments are not offered in this course on an individual basis. It is unfair to allow some students to improve their grade while not allowing others the same opportunity. However, some extra credit problem may appear at the end of the lab quizzes or lecture exams.

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

II. RECOMMENDED TEXT:

1. Lecture

The official lecture text for Chem10 is "Chemistry for Changing Times", 14th edition by John Hill (Pearson: 2016; ISBN 978-0-321-97202-6). Due to the high cost of textbooks, you can order Redshelf e-Book. The cost of the e-book is much cheaper.
If you have already purchased a previous edition of this text, it is your decision whether or not to purchase the official text.

2. Laboratory Manual.

John Suchocki, Donna Gibson "Conceptual Chemistry" lab manual, 5th Edition, Pearson ISBN-13: 978-0-321-80453-2 or ISBN-10: 0-321-80453-8. You need only **new** paper lab manual. (Used labs manuals sometimes have missing experiments)

III. REQUIRED CLASS MATERIALS:

Student must bring **OSHA approved laboratory goggles** to the first laboratory meeting. Other types will not be permitted.
Latex or Nitrile gloves and goggles available from the bookstore.
Scantron forms 882E
Regular Scientific math calculator.
Permanently bound laboratory notebook; either 6x9 or 8.5x11 sizes acceptable; **No spiral bound lab notebook may be used.**
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.

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) 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.

4) Copying of laboratory data or data analysis from another student, including from a lab partner, without prior permission of the instructor.

CHEMISTRY Chem10-02

LABORATORY SCHEDULE
SC2208
Instructor: E. Zlatogorov
Win 2020

Week	Experiment/ Lab lecture	Date
01.	CHECK-IN	01/09/20
02.	Exp #2 Taking Measurements	01/16/20
	Last day to adds	01/18/20
03.	Last day to drop for a refund	01/19/20
	Last day to drop w/o W	01/19/20
	Census day	01/21/20
	Exp #4 Percent Water in Popcorn	01/23/20
04.	Exp #9 Electron dot structures (No prep)	01/30/20
	Last day to request "Pass / No Pass classes"	01/31/20
05.	Exp #10 Molecular shapes (No prep)	02/06/20
06.	Exp #11 Solutions	02/13/20
07.	Exp #17 Upset stomach	02/20/20
08.	Exp #13 How much fat	02/27/20
	Last day to drop with a "W"	02/28/20
09.	Quiz #1; Exp #20, Organic molecules (No prep)	03/05/20
10.	Exp # 21; DNA capture	03/12/20
11.	Quiz #2 /Lab final, Check out	03/19/20
12.	Final exams	03/23/20-03/27/20

TENTATIVE LECTURE AND EXAMINATION SCHEDULE

CHAPTER AND LECTURE TOPIC

Chapter 1 –Chemistry	01/07/20
Chapter 2 –Atoms	01/07/20-01/09/20
Chapter 3 – Atomic Structure	01/14/20-01/16/20
Last day to add	01/18/20
Last day to drop for a refund	01/19/20
Last day to drop a class with no record of grade	01/19/20
Census day	01/21/20
Chapter 4 – Chemical Bonds	01/21/20-01/23/20
Review Chapters 1,2,3,4	01/28/20
MIDTERM #1 CHAPTERS 1- 4	01/30/20
Chapter 5 – Chemical Accounting	01/30/20-02/04/20
Chapter 7 – Acids and bases	02/06/20-02/11/20
Chapter 8 – Oxidation and reduction	02/11/20-02/13/20
Chapter 9 – Organic Chemistry	02/18/20-02/20/20
Review Chapters 6-9	02/20/20
MIDTERM #2 CHAPTERS 5, 7- 9	02/25/20
Chapter 10 – Polymers	02/25/20
Last day to drop with a "W"	02/28/20
Chapter 10 – Polymers cont.	03/03/20
Chapter 16 – Biochemistry	03/05/20-03/10/20
Chapter 11 – Nuclear Chemistry	03/10/20-03/12/20
Presentations	03/17/20
Review for FINAL	03/19/20
FINAL EXAMINATION -- CHAPTERS 1-11 @ 1:45PM-3:45PM Room: S 32	Thu. 03/26/20
Last day of Win Quarter	03/27/20

Exams will be given in the regularly assigned lecture room unless otherwise noted. When a class has both a lecture and a laboratory, the exam schedule is geared to the lecture.

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.

1. Notes: *--(Chemistry for Changing Times –Fourteen Edition)
2. **Students are responsible** for taking final examinations at the scheduled time.
3. **Instructors are to remind** students of the scheduled date and time prior to finals week.

Safety guidelines

From the American Chemical Society Safety In Academic Laboratories Guidelines, 7th Ed., the following mandatory minimum safety requirements must be followed by all students and be rigorously enforced by all Chemistry faculty:

1) Chemistry Department-approved safety goggles purchased from the De Anza College bookstore (NOT safety glasses) must be worn at all times once laboratory work begins, including when obtaining equipment from the stockroom or removing equipment from student drawers, and may not be removed until all laboratory work has ended and all glassware has been returned to student drawers.

2) Shoes that completely enclose the foot are to be worn at all times; NO sandals, open-toed, or open-topped shoes, or slippers, even with socks on, are to be worn in the lab

3) Shorts, cut-offs, skirts or pants exposing skin above the ankle, and sleeveless tops may not be worn in the lab: ankle-length clothing must be worn at all times

4) Hair reaching the top of the shoulders must be tied back securely

5) Loose clothing must be constrained

6) Wearing "...jewelry such as rings, bracelets, and wristwatches in the laboratory..." should be discouraged to prevent "...chemical seepage in between the jewelry and skin...".

7) Eating, drinking, or applying cosmetics in the laboratory is forbidden at ALL times, including during lab lecture

8) Use of electronic devices requiring headphones in the laboratory is prohibited at ALL times, including during lab lecture

9) Students are advised to inform their instructor about any pre-existing medical conditions, such as pregnancy, epilepsy, or diabetes, that they have that might affect their performance.

10) Students are required to know the locations of the eyewash stations, emergency shower, and all exits

11) Students may not be in the lab without an instructor being present

12) Students not enrolled in the laboratory class may not be in the lab at any time after the first lab period of each quarter.

13) Except for soapy or clear rinse water from washing glassware, NO CHEMICALS MAY BE POURED INTO THE SINKS; all remaining chemicals from an experiment must be poured into the waste bottle provided.

14) Students are required to follow the De Anza College Code of Conduct at all times while in lab: “horseplay”, yelling, offensive language, or any behavior that could startle or frighten another student is not allowed during lab;

15) Strongly recommended: Wear Nitrile gloves while performing lab work; wear a chemically resistant lab coat or lab apron; wear shoes made of leather or polymeric leather substitute.

By signing below, I,

_____,

First Name Family Name

acknowledge that I fully understand and agree to abide by the laboratory safety rules listed above.

Further, I acknowledge that my failure to abide by these rules will result in my being dropped from this chemistry class immediately.

_____

_____

Signature Date

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.