Chemistry 10: Introduction to Chemistry

Lecture:	M/W	8:30AM - 10:20 AM	Online
Lab:	W	11:30AM – 2:20 PM	Online

Instructor:Dr. Parnian LakPhone: 408.864.5722E-mail: lakparnian@fhda.eduOffice Hours:M: 10:30-11:00 AM

Zoom Link: https://fhda-edu.zoom.us/j/8484027225 Meeting ID: 848 402 7225

This course syllabus serves as a binding agreement between you, the student, and me, the instructor. Its primary objectives are to establish the foundational principles governing the course and to address common inquiries. You can access this document at any time on Canvas. Before seeking clarification on course-related matters such as the schedule, requirements, or grading, please ensure you have thoroughly read it. It also functions as a pact outlining your responsibilities throughout the course, especially in relation to examinations and grade computation. By remaining enrolled in the course, you implicitly consent to adhere to these terms.

Course Description: This course provides a non-STEM approach to the field of chemistry, including practical laboratory techniques, an overview of key chemical principles, and an exploration of chemistry as a scientific pursuit. Its overarching goal is to cultivate a general understanding of chemistry as a scientific discipline and enhance your overall scientific literacy. We will delve into core chemistry concepts and examine how chemistry influences our perspectives on historical and contemporary events. Additionally, I aim to make the learning experience enjoyable.

It's important to note that this course does not serve as a prerequisite for General Chemistry, nor does it adequately prepare students for Chem 1A. Those aspiring to enroll in Chem 1A should consider taking either Chem 25 or Chem 30A as prerequisites.

Important Dates: Please refer to the De Anza College academic calendar for important dates: https://www.deanza.edu/calendar/

Advisory Skills:

Previous experience with College-level Reading and Writing, Familiarity with Algebra (linear and quadratic functions)

Course Materials (Required):

- 1. **Text Book:** <u>Chemistry in Focus</u> an open-source book, available online. You can download this or print a copy via the website. Small cost for print copy.
- 2. A scientific or graphing calculator (Must have log and exponential functions. *Graphing is not necessary*. You may not use your phone as a calculator for any quizzes, exercises, or exams.)
- 3. Lab Resource: <u>https://phet.colorado.edu/</u>

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: <u>http://www.deanza.edu/studentsuccess</u>

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

Grading Scheme:	Percentage
Homework	10
Laboratory Work	25
Topic Presentation	10
Chapter Exams (3)	30
Final Exam	15
Class discussion participation	10
Total	100%

Homework (10%): Homework will consist of assigned problems on Canvas and is graded based on completeness and accuracy. As we learn by doing, "practice makes perfect," and as exam questions may be similar to the homework, it is to your advantage to take the homework seriously. Copying another student's homework is counterproductive. If you're not working it out, you won't get the benefit.

Laboratory Work (25%): You will be expected to participate in lab, complete lab worksheets and reports, and pass lab exams. More details on these items can be found in the laboratory section.

Topics Presentation (10%): Small groups of students will be expected to give a 15-minute multimedia presentation on current topics in science and chemistry throughout the quarter on assigned "Topics" days. Topics must be cleared with the instructor at least a week in advance. Topics may not be duplicated.

Chapter Exams (30%): There will be 3 chapter exams worth 10% of your grade each. Exams will be a combination of any of the following: multiple choice, short answer/calculation problems, and vocabulary questions. Early and late exams are not administered. Missing an exam **will result in a zero** for that exam without proof of an excused absence (doctor's note, police report, etc...). You may retake exams if you are not happy with your previous grade. Make ups are held during office hours or by appointment.

Final Exam (15%): The Final Exam is cumulative and will have the same format as the chapter exams. The exam will be given **Wednesday**, **Dec 14th**. The final exam cannot be retaken. ***If you cannot make your assigned exam time, you should not enroll in this class*. **

Subjective Grade (10%): A subjective evaluation will be assessed by your instructor at the end of the quarter to reward you for: your good and punctual attendance; **active participation**, preparedness for the lecture and laboratory, ability to follow written and verbal instructions, adherence to the safety rules, cleanliness practices, and overall respect for the laboratory through the proper care and use of all laboratory apparatus and instruments. These are NOT free points and must be earned.

Special Note:

****You Pass!!**** As long as your work is turned in completed and on time and you demonstrate active participation in lab and class you will pass this class with at least a C.

However, if your average % is failing (<55%) in any of the following course portions, you will not receive a passing grade: **exams, homework, or lab reports/assignments**.

Class Policies.

- A. Time Requirement: This class includes appx. 4 hours of lecture and appx. 3 hours of lab per week. In order to receive a "C" or better grade, you should allow 8-12 hours of studying, reading, and preparing outside of class PER WEEK. Help yourself to do your best by making time to keep up with the reading and homework. If this time commitment is not possible given your current situation, please consider taking this class at a later date when you do have more time available.
- **B.** Lecture Attendance: Your punctual attendance is expected at all class meetings. To be counted "present" and receive credit for that day's activities, you must arrive during the first 5 minutes of class. If you try to enter the zoom class later, I cannot guarantee that I will see you in the waiting room, and you may miss important information. If you will have to miss a class session for any reason, let me know by Canvas message as soon as possible. Notifying your instructor of absences or tardiness shows that you take your responsibility towards yourself and your fellow students seriously. There are no make-up assignments for missed class meetings. In the case of a documented emergency (e.g. hospitalization, court appearance, car crash), I may excuse you from that day's work. These instances will be handled and decided on a case-by-case basis. Travel does not constitute an emergency or excused absence. Plan ahead and submit assignments in advance. It is the student's responsibility to notes from a classmate for missed information.
- **C.** Academic Integrity The process of learning requires physical changes to occur in your brain. Cognitive research demonstrates that consistent practice and learning to recognize mistakes are key aspects of the learning process. As such, all students should be aware of the De Anza College policy on academic integrity outlined at

https://www.deanza.edu/policies/academic integrity.html. The following text is reproduced from the De Anza College manual: the college is committed to providing academic standards that are fair and equitable to all students in an atmosphere that fosters integrity on the part of student, staff and faculty alike. The student's responsibility is to perform to the best of his or her potential in all academic endeavors. This responsibility also includes abiding by the rules and regulations set forth by individual faculty members related to preparation and completion of assignments and examinations. I expect that all work submitted for this class will represent your own understanding of the material and must be written in your own words. Cheating, copying, plagiarizing, etc. will not be tolerated. Due to the "online" nature of the class, students must take extra care to abide by the policies and expectations set forth for each assignment. While it is tempting to use the full weight of the internet, some sources may provide misleading or corrupt information. Students should focus on the required reading and recommended resources for the class, and any other sources must be vetted by the instructor. Tutoring resources are allowed for homework assignments; however, using a paid, static resource is forbidden. This can be particularly challenging as some websites that profess to provide tutoring services are actually destructive to the learning process. A good rule-of-thumb is that any tutoring service will help you solve a problem and arise at an answer on your own-this means that your brain is making new physical connections between neurons, and you are learning! If an online source professes to offer tutoring, but instead provides you with answers, this is cheating. The websites Chegg, CourseHero, Reddit, as well as any similar site are explicitly forbidden for all class assignments. Posting class assignments on these websites is considered intent to cheat. I am happy to discuss appropriate resources with you, and I encourage you to ask for permission. You may collaborate with your classmates on lecture homework assignments; however, the final work that you submit must reflect your own understanding of the material. Do not allow any other student to copy your work under any circumstance. If a student asks if they can copy your work or "just see it as an example", ask them to reach out to the instructor for help. If two students turn in the same work, both students will have participated in academic dishonesty. Class assessments are used to measure

an individual student's mastery of the material. They are all closed resource, and you will be provided with any physical constants or additional information as necessary. A common mistake that past students have made is to Google a question and copy an answer from the internet—this behavior is forbidden, and the consequences are described below. If I suspect cheating on a quiz, you will be required to meet with me face-to-face. Any incident of cheating or plagiarism, no matter how minor, will be reported to the Dean of Student Development and the Dean of the Physical Sciences, Mathematics, and Engineering division. Administrative consequences are summarized in the college manual. Additional consequences will be applied to your course grade. The first incident of academic dishonesty will result in zero points on the assignment, a grade penalty of up to 10% to be deducted from your final grade, and loss of any extra credit points for the quarter no matter how minor the incident. Any subsequent instances of academic dishonesty no matter how minor will result in failing the class. In short, academic dishonesty will have a negative impact on your grade and may result in disciplinary probation or expulsion. If academic dishonesty is discovered within two-years of your completion of the course, your official grade will be changed. I recognize that these consequences may sound scary. Unfortunately, I have had students who did not pass this class as a direct result of academic dishonesty. I am committed to supporting you and your learning process, and I expect you to display high ethical standards. If you require an extension on any assignment, please reach out to me to arrange appropriate accommodations. Our class meetings are dedicated to working through practice problems, and I encourage you to bring questions and utilize the discussion boards for additional feedback. If you are not sure if a resource is allowed, or if something feels "off" to you, alert your instructor right away. I do reserve the right to make major changes to the class structure-including requiring an oral exam / exit interview—if there are widespread violations of the academic integrity policy.

- D. Grading: This class is not graded on a curve. Grade cut offs are as follows: A+ (97), A (93), A- (90), B+ (87), B (83), B- (80), C+ (76), C (69), D+ (65), D (60), D- (56), F (56-0)
- **E. Extra Credit:** Extra credit assignments are not offered in this class on an individual basis. It is unfair to allow some students to improve their grade while not allowing others that same opportunity. Some extra credit problems may appear at the end of exams and in homework.
- **F. Dropping the Class:** If you wish to drop the class after the first 2 weeks, it is your responsibility to do so. If you fail to drop the class you will be assigned a grade in keeping with your submitted work.
- **G.** Questions/Help: I am available to answer questions during office hours, by email, or by appointment. Please feel free to contact me with any problems or concerns that you have. Also remember that your fellow students are great resources.

Attendance Note

You are responsible for all the material covered in this course, and it is expected that you attend and participate in all of the lecture and laboratory sessions. *If you must be absent, then it is in your best interest to contact your instructor as soon as possible in order to find out what work you have missed.* **Due to the high number of students wishing to enroll in this class, any unjustified absences during the **first two weeks of class **will result in you being dropped.**

Lab Score Breakdown (comprises 25% of final class grade)

Lab Worksheets/Reports	70%	Lab Exams	20%
Lab Prep and Participation	10%		

Tentative Lecture Schedule for Chem 10: *Subject to Change* Fall 2023 De Anza College

Week	Date	Chapter
1	9/25	1
	9/27	2
2	10/2	3
	10/4	4
3	10/8	Review
	10/10	Exam
4	10/15	5
	10/17	6-1
5	10/22	6-2
	10/24	8
6	10/29	Review
	10/31	Exam
7	11/5	12
	11/7	13
8	11/12	14
	11/14	16-1
9	11/19	16-2
	11/21	17-1
10	11/26	17-2
	11/28	Review
11	12/3	Topics
	12/5	Topics
12	12/10	Exam
	12/12	Final Exam

Tentative Lab Schedule for Chem 10: *Subject to Change* Fall 2023 De Anza College

Week	Week of	Lab Topic
1	Sept 27	Introduction – building molecules
2	Oct 4	Lab 1
3	Oct 11	Lab 2
4	Oct 18	Lab 3
5	Oct 25	Lab 4
6	Nov 1	Lab 5
7	Nov 8	Lab 6
8	Nov 15	Lab 7
9	Nov 22	Lab 8
10	Nov 29	Lab 9
11	Dec 6	Lab Exam
12	Dec 13	Final's Week. No Lab
	Dec 15 th	FINAL EXAM Cumulative Exam

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.

Office Hours:

M 10:30 AM 11:00 AM Email lakp@fhda.edu