

**Course Grading De Anza College
Chemistry Department
Spring 2024**

COURSE TITLE

Chemistry 10 Sec 23 & 24 General Chemistry

Class 04/08/24 to 06/28/24

Meeting times: Lecture – TTh 8:30 AM - 10:20 AM SC1102

Laboratory – Sec 23 T 11:30 AM – 02:20 PM SC2204

Sec 24 Th 11:30 AM – 02:20 PM SC2204

INSTRUCTOR

John Cihonski Contact: School e-mail: cihonskijohn@fhda.edu

Zoom code (if needed): <https://fhda-edu.zoom.us/j/9071890886>

Note: This course does not use Canvas

OFFICE HOURS

Office Hours – 10:30 AM – 11:30 AM, catch me after lecture, in lab or make an appointment

Course Description: An introduction to the discipline of chemistry, including chemical laboratory techniques, methods and a survey of important chemical principles. The course emphasizes chemistry as a subject of scientific inquiry and is designed to give the student a general appreciation for chemistry as a science. We will be examining some of the central themes of chemistry as well as how understanding chemistry can impact our daily lives. **This course is not a prerequisite for General Chemistry, nor does it serve as adequate preparation. Students hoping to enroll in Chem 1A or Nursing should take Chem 25 or Chem 30A in preparation.**

REQUIRED MATERIALS

Syllabus for Chem 10 pdf

Text Options (Instructor provided via memory stick):

- 📖 1 Complete Study Guide to Chemistry - Kernion & Mascetta 2021
- 📖 2 Chemistry Barron's SAT Subject Test - Mascetta & Kernion 2016
- 📖 3 Chemistry for Changing Times, 14e - Hill, Kolb, McCreary 2016
- 📖 Chemistry - Matter & Change - Dingrando, et al 2005

Lab Experiments – a PDF file containing the experimental procedures will be provided on the text book memory stick

Test Support Information Packet

+ a *Basic Scientific Calculator*

Attendance - Attendance is required for **all** laboratory sessions and highly encouraged for lectures. If you miss a lab or exam, you must have a valid reason with verifiable written documentation to support your absence (e.g. letter from doctor including address and phone number).

Lecture & Exams – Lecture is recommended but optional. There will be two regular exams worth 100 points each and a comprehensive final exam worth 200 points. At the discretion of the instructor, a makeup exam may be allowed for an urgent medical or legal situation which prevents a student from attending class.

Homework – Homework is also optional. However, it is important for your learning and it will help if you are on the border of a grade. “Homework” constitutes the problems related to each lesson that address the material covered in the lecture slides.

Laboratory - *All laboratories are required (NOT Optional – see Attendance) and there is a dress code.* Final lab reports are due at the beginning of the following lab. If a lab report is late it will be penalized twenty percent per day. For all laboratory experiments the final report will consist of three parts:

- An *Advance Study Assignment* that must be completed and initialed by the instructor prior to the beginning of the lab period. *No prelab ≡ no lab.* The *Advanced Study Assignment* consisting of a one page hand written (cursive & in ink) overview of the experiment consisting of 1) a goal statement clearly stating the purpose of the experiment and how you will accomplish it, 2) a list of any special equipment and chemicals required, 3) acknowledgement of any special safety related issues and 4) the identity of your lab partner (No more than two /team unless you have instructor approval).
- *Laboratory Data & Calculations* pages cover the data collected and the calculations required for the experiment. The data must be also must be initialed before leaving the lab but the calculations can be completed outside the lab.
- A cursive *Results and Conclusions* page that outlines your key results and their meaning (conclusions) that someone who has not taken Chem 10 can read and understand.
- The *final report* will contain all three sections. An incomplete report will receive a zero. The basis for each Lab report grade will be comprised of 1/4 (5 pts) for the Advanced Study Assignment, 1/2 (10 pts) for the data collection, calculations and experiment related comments/clarifications, and 1/4 (5 pts) for your conclusions and their significance for a total of 20 pts/lab report.

Minimum Course Score Grade (%)	Grade	Course Score formula		
90	A	$(2E + F + L)/600 = \text{Grade}$		
80	B		Total	
65	C		Exams (E) 2 x 100 pts/exam	200
55	D		F = Final Exam	200
			L = Laboratory Reports 10 x 20pts	200
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Total Possible Points			600	

Lecture (by Topic #)		Laboratory (by Week #)	
1	Basic, Definitions, Measurement & Scientific Method	1	Check-In
2	Atoms, Atomic Structure and Periodic Table	2	Exp 1 Taking Measurements
3	Chemical Bonding	3	Exp 2 Percent Water in Popcorn
4 & 5	Molecular Electronic & Geometric Structure	4	Exp 3 Electron Dot Structures & Exp 4 Molecular Shapes
6	Nomenclature	5	Exp 5 Nomenclature
Exam 1		6	Exp 6 Molecular & Reaction Stoichiometry
7	Molecular Stoichiometry	7	Exp 7 Solutions
8	Chemical Reactions & Stoichiometry	8	Exp 8 Acid-Base Upset Stomach
9	Solutions & Solution Stoichiometry	9	Exp 9 Organic Molecules
10	Gases & Gas Stoichiometry	10	Exp 10 Potato Chips - How Much Fat?
Exam 2		11	
11	Acids & Bases	12	Check-Out
12	Oxidation-Reduction & Electrochemistry (Batteries)		
13	Organic Chemistry		
14	Polymers		
Comprehensive Final Exam June 25 or 27th			

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:

T,TH 10:20 AM 11:30 AM In-Person,By Appointment Chemistry Offices