

De Anza College
Chemistry DO25 21/22 Course Syllabus
Fall 2025

Instructor: Nayereh Rezaei

Lecture:	MW	8:30 - 10:20 PM	Room SC1102
CHEM DO25-21 Lab:	M	11:30 - 2:20 PM	Room SC2208
CHEM DO25-22 Lab:	W	11:30 - 2:20 PM	Room SC2208
Office Hours:	MW	10:30-11:20 AM	Upstairs Faculty offices building

Email: rezaeinayereh@fhda.edu

Prerequisites: Math 114 or equivalent

Introduction:

Chemistry 25 is a one term introduction to physical and inorganic chemistry. This course serves either for preparation for chemistry 1A or for students who wish to meet general education requirements for physical science.

Textbook & Materials:

- **Text:** Introductory Chemistry, 7th edition by Nivaldo J. Tro (Pearson: 2023, ISBN 978-0-135402-23-8) or the ebook ISBN (0135402220) (\$40).
- **Lab Manual: Preparation for General Chemistry by Ram Subramaniam (McGraw Hill Create; ISBN 978-1-307-81770-6) available at De Anza Bookstore.**
- A scientific calculator that has at least log and exponential function
- Safety Goggles, needs to meet the ANSI Z87.1 or Z87+ specification, which will generally be listed in the product description. Visorgogs or Z87.1-2010 Rates Safety Glasses

Homework:

- A. Reading Assignment:** The key to success in chemistry is regular study. On the average students need to study at least two hours for each hour spent in class. It is important to study regularly, preferably daily.
- B. Homework Exercise: Homework: (On-Line):**
- C. “Mastering Chemistry”** is a web-based tutorial/homework program used to assign homework for this class. A portion of your overall grade will be based upon the use of this software. **Therefore, access is required!** Your access code, which is included with the purchase of the textbook from the bookstore.

D. A key factor for your success in this class is to do the assigned homework independently, and to understand the methodologies in problem solving. Not only are you rewarded for doing the homework, but the greater rewards come with the skills you've acquired from the homework to help you perform much better in midterm exams.

E. In order to do and receive credit for the homework, you must enroll in my on-line homework class: [Chemistry 25 Fall 2025_ Nayereh Rezaei](#)

Attendance:

Attendance in the Laboratory Lecture and Lab is required. Any student who has two or more unexcused lab absences may be dropped from the course. Allowances may be made for emergencies and other complications in life. However, every absence will lower your grade.

Grading:

Lecture quizzes: There will be two quizzes throughout the quarter. The dates for the quizzes will be announced in advance.

Lecture exams: There will be two midterm exams and a comprehensive final exam.
All quizzes and exams will be given in person during lecture or lab time.

Point distribution:

Two Midterm Exams	30%	Lab reports:	15%
Two quizzes	10%	Lab quizzes	10%
Homework assignments	8%	Pre-Lab	5%
Final Exam	22%		
Total Lecture Percentage:	70%	Total Lab Percentage:	30%

Lecture Exams DATES: **Exam-1 Monday Oct 20**
Exam-2 Monday Nov 17
Final Exam: Wednesday Dec 10 at 7:30-9:30 AM

Lecture Quizzes DATES: TBA

A letter grade will be assigned according to the following percentage scale:

A+ ≥ 97%	A ≥ 90%	A- ≥ 88%	B+ ≥ 85%	B ≥ 80%	B- ≥ 78%
C+ ≥ 75%	C ≥ 65%	D+ ≥ 62%	D ≥ 58%	D- ≥ 55%	F ≤ 55%

Make-up Exams: Make-up exams will NOT be given. However if you receive a higher score on your final exam, then your weaker midterm weight will be reduced by 5% and the weight of your final will be increased by 5%. The midterm, quizzes and final are mandatory and cannot be missed.

Important Dates: The last day to add classes is **Oct 5**. The last day to drop classes without a **W** is **Oct 5**. The last day to drop classes with a grade of **W** is **NOV 14**, 2025.

Class Rules and Regulations:

1. access to computers is required.
2. Arrive on time to minimize distractions to your instructor and fellow students
3. Talking to fellow students during lectures is disruptive. Remain quiet during lecture. Raise your hand if you have a comment or question.
4. Turn off or turn to silent mode all cell or message, quietly leave the classroom to respond to it.
5. Repeated disruptive/rude behavior will cause dismissal from the class.

Resources:

Your Instructor: See me regularly for help, do not wait until the week or day of a test.

Other students: Help each other to learn (not copy)

Academic Dishonesty:

Any form of academic dishonesty will be ground for dismissal from the course. Foothill College has information regarding academic dishonesty in the schedule of classes. Please read it! Violations will be reported. Plagiarism on lab exercises and reports or during class examinations constitutes academic dishonesty.

Accommodations:

Accommodations for a range of disabilities are available through Disability Support Programs & Services (DSPS). To receive an academic accommodation on assessments – such as additional time, a reduced-distraction environment, or the use of alternative media or assistive technology – you must first be evaluated by Disability Support Services (DSS) and obtain a Test Accommodation Verification (TAV) form. Absolutely no accommodations can be provided on assessments without a completed TAV form.

LABORATORY: Chemistry 25/REZAEI

The laboratory is an integral part of the course; an F in the lab will result in an F for the final course grade.

Since chemistry 25 is an experimental course, the presence of the student in the laboratory is essential for the understanding of the materials covered. A student may be dropped if **3** or more unexcused lab absences are counted. Missed labs cannot be made up. You may miss one lab without penalty. I may allow for emergencies and other complications in life.

Required Materials for Lab:

1. **Lab Manual: Preparation for General Chemistry by Ram Subramaniam (McGraw Hill Create; ISBN 978-1-307-81770-6)**
2. Scientific Calculator that has at least log and exponential functions.

3. Safety Goggles or Visorgogs: must be purchased from Foothill bookstore.

Safety Rules:

1. Make sure you read and understand all of the safety rules.
2. **Safety goggles must be worn at all times while working in the chemistry laboratory. NO EXCEPTIONS will be made to this rule.** Any student who does not cooperate with this policy will be asked to leave the lab and will receive zero credit for the experiment. Students with prescription glasses will be required to wear safety goggles over their prescription glasses. Contact lenses should NOT be worn in the laboratory.

Lab Procedure/Policies:

1. All students are expected to arrive at the lab on time and to come to the lab prepared to carry out the experiment scheduled for that session. This means that you have studied the experiment for the day, have a basic understanding of its purpose, procedure, and the chemistry involved. Before coming to the lab you should do the assigned pre laboratory reading, read the background discussion and procedure and complete the pre laboratory exercises for the experiment.
2. We ask that all students do a conscientious and thorough job cleaning up after them, whether it is in their own work area in the lab, or shared areas such as the chemical supply table and balance room.
3. When you work with a partner or group of students, you will share the data that is collected. However, you must do your own calculations and lab reports.
4. Proper chemical waste disposal is absolutely required. Students who do not comply with direct procedures may be dropped from the course.

Lab Tests: will be based on the laboratory experiments and exercise; and will cover the chemistry, calculations and conclusions of the experiments. Critical thinking is required.

Lab reports: are due one week after you finish the experiment. There will be a 10% deduction for late lab reports up to one week and 50% deduction for lab reports that are more than two weeks late. Your completed lab-reports must be uploaded on canvas assignments.

Pre-Lab questions: are due at the beginning of the lab and should be uploaded on canvas pre-lab assignments by the beginning of the lab. It is considered late if it is submitted after I finish the lab lecture.

LABORATORY CHECK-IN:

For this course each student will be assigned a drawer containing laboratory glassware and other needed items. You will check in at the beginning of the quarter. Inspect the drawer content against the list and take note of all missing items. Record the missing items. The missing items will be replaced for you. If you prefer to lock your drawer, you may bring your own combination lock to lock your drawer. You will check out the same way at the end of the quarter.

CHEMISTRY 25 LABORATORY CALENDAR-Fall 2025/Rezaei

WK#	Week of	Monday/Wednesday
1	Sep-22	Mandatory attendance Introduction to lab & Safety Rules/ Video Check-in
2	Sep-29	Lab 2: Measurements and Significant Figures
3	Oct-6	Lab 3: Density Lab report 2 due
4	Oct-13	Lab 4 Atomic Structures & Periodic Table Lab report 3 due
5	Oct-20	Lab 5: (dry) Ionic Compounds Lab report 4 due
6	Oct-27	Lab 6: (dry) Covalent Compounds Lab report 5 due, Lab Test #1
7	Nov-3	Lab 7: Empirical Formula Determination Lab report 6 due
8	Nov-10	Lab 8: Chemical Reactions Lab report 7 due
9	Nov-17	Lab 9: Molar Volume Lab report 8 due
10	Nov-24	Lab 10: Titration Vinegar Analysis Lab report 9 due
11	Dec-1	Lab Test # 2, and Check out of Lab Lab report 10 due
12	Dec-8	Final Exam: Wednesday Dec 10, 7:30-9:30 AM

Laboratory Safety:

The chemistry department has adopted the following rules from the American Chemical Society. Safety in Academic Laboratories Guidelines, 7th edition, as mandatory for all chemistry labs.

- 1 • Department-approved safety goggles must be worn at all times that chemicals or glassware are in use, including when obtaining items from the stockroom or moving equipment to or from your locker. Goggles may not be removed until all lab work has been completed and all chemicals and glassware have been stored.
- 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, may 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.
- 4 • Hair reaching the top of the shoulders or below must be tied back securely.
- 5 • Loose clothing must be constrained, while form-fitting items should be avoided as chemicals can be held against the skin.
- 6 • Wearing jewelry (rings, bracelets, watches, etc.) is discouraged as chemicals can seep in between jewelry and skin.
- 7 • Eating, drinking, or applying cosmetics in the laboratory room is forbidden at all times, including during lab lectures.
- 8 • Headphones are prohibited in the lab at all times as you must be able to hear any emergency announcements made.
- 9 • Students are required to know the locations of the eyewash stations, emergency shower(s), and all exits.
- 10 • You may not be in the laboratory, balance, or instrument rooms unless an instructor is present to supervise.

11 • Students not enrolled in the course may not remain in the lab even for lectures once the add deadline has passed.

12 • If for any reason you feel faint during the lab, notify an instructor before stepping out for air so you can be supervised.

13 • Never point a heated system towards any person, including yourself.

14 • Glass and needles must only be disposed of in the appropriate containers, never in the regular trash.

15 • Except for soapy or clear rinse water from cleaning glassware, no chemicals may be poured into any sink; any remaining chemicals from an experiment must be poured into the appropriately labeled waste bottle.

16 • Students must follow the Code of Conduct at all times while in the lab. Any behavior that could startle, frighten, or injure anyone in the lab is not allowed.

Student Learning Outcome:

- Students will be able to recognize basic patterns of chemical reactivity, express reactions in terms of balanced equations and be able to determine quantities of reactants and products in terms of moles, mass and volumes of solutions.
- The students will be able to use dimensional analysis to set up and solve numerical problems.
- The students will understand the meaning and uses of the mole and of Avogadro's number.
- The students will be able to identify physical and chemical properties and change
- The students will be able to explain the differences between a solid, liquid and gas

Student Learning Outcome(s):

- Assess the fundamental concepts of modern atomic and molecular theory.
- Evaluate the standard classes of chemical reactions.
- Demonstrate a fundamental understanding of mathematical concepts pertaining to chemical experimentation and calculations.

Office Hours:

M,W 10:30 AM - 10:25 AM
building

upstairs faculty offices