

Chemistry 30A: Introduction into General, Organic and Biochemistry

De Anza College Fall 26 (9/21/2026 - 12/11/2026)

Class times:

Section /CRN	Lecture Room FOR4	Laboratory Room SC2204
CHEM D030A.0 CRN29058	Tuesday and Thursday 11:30 AM-1:20 PM	Tuesday 8:30 AM-11:20 AM
CHEM D030A.26 CRN29059	Tuesday and Thursday 11:30 AM-1:20 PM	Thursday 8:30 AM-11:20 AM

Instructor:

Dr. Margarete Leclerc, email: leclercmargarete@fhda.edu

Office Hours: Tuesday and Thursday: 1:30-2:30 SC1200. In case you need to speak to me outside office hours, please reach out and we will find time for a Zoom meeting.

Course Description:

Prerequisites: MATH 114 or MATH 130, or the equivalent

Course Objectives:

- Solve scientific problems using dimensional analysis and report measured values to appropriate precision in standard or scientific notation.
- Examine the relationships between energy and matter.
- Examine the structure of the atom and summarize major properties of elements based on a discussion of the periodic table of elements.
- Examine the structure, properties and nomenclature of chemical compounds.
- Balance and classify chemical equations for common reaction types.
- Perform calculations based on stoichiometric relationships, given a balanced chemical equation.
- Examine the properties and behavior of ideal gases.
- Examine the chemical properties of solutions.
- Compare the properties of acids and bases.
- Discuss the theory and relevant applications of nuclear chemistry perspective.

Laboratory Topics Covered:

- Develop sound laboratory methodology by learning how to maintain a laboratory notebook and writing laboratory reports
- Familiarize with what chemical safety means by studying Materials safety data sheets (MSDS), learning proper chemical disposal methods and separation of waste streams and thinking about environmental hazard of improper waste disposal
- Learn to maintain a clean laboratory environment
- Learn proper way to label chemicals by hazards and learn about secondary containment.

- Learn to about personal safety in the laboratory by use of safety goggles, by limiting chemical exposure by dressing properly, by learning the locations of safety showers, eyewash stations, and fire extinguishers
- Learn what to do in Emergency Situations such as fires and earthquakes, by reviewing evacuation procedures
- Investigate physical measurements including but not limited to gravimetric analysis, and boiling points
- Get familiar with basic laboratory techniques such as proper way to ignite a Bunsen burners, use of pipettes
- Explore various concepts by carrying out chemical analyses such as: gravimetric analysis of a hydrate, acid-base titrations and use of indicators, determination of density, classes of chemical reactions, physical vs. chemical properties, stoichiometric analysis.

Course Format:

The course is divided into two separate instructional periods. A lecture period, and a lab period. These periods will both be conducted in person. At De Anza College, the lab and lecture may not be taken as separate courses under any circumstances. Attendance at each is mandatory. Studies have shown that students who are present and pay attention in lecture classes are more successful in the course. So, I strongly encourage each of you to attend all lectures.

Required Course Material:

1. Text Book: Owens, Owens and Murkowski General, Organic, and Biological Chemistry, 1st edition (De Anza Bookstore) Published by Pearson (May 28, 2022) **with** Modified Mastering Chemistry (this includes eText Student Access. The course eText, reading assignments and graded online homework are delivered in the “Access Pearson” Tab in Canvas. **You must sign up for this online access to Mastering Chemistry through the “Access Pearson” Tab in Canvas. The price for this required course material is about \$48.** You can pay in the Access Pearson App. Alternatively, purchase an access code at the books store (ISBN: 9780135402399). There is a 2-week complementary trial period, so please sign up promptly.
2. **Lab Manual:** Lab Manual for CHEM 30A adapted for De Anza College is available on the Canvas Course Site. You will need a paper copy of that lab manual, so you will need to print out the lab manual files
3. **Access to Canvas: Assignments and course material will be provided on Canvas.** Turn on Canvas notifications to receive class announcements.
4. **Lab Safety Goggles:** You will need full safety goggles (not safety glasses) that seal on the sides, not just safety glasses. The goggles need to meet the ANSI Z87.1 or Z87+ specification
5. **Scientific Calculator.** Logarithm and exponential functions required, No graphing calculators. Phones will not be allowed for calculations during tests so be sure to bring a calculator every day.

Registration details:

Class Registration. This class is a lecture and laboratory-based course, so the registration limit is strictly set at 30 students per section based on the number of people able to safely conduct experiments in the space provided.

Dropping the Course. Students that choose to drop this course are responsible for requesting a withdrawal through the admissions and records department **before** the deadline. Students who drop the class are to be also required to officially check out of the lab locker.

Course drops, withdrawals, and other deadlines

All registrar deadlines for fall quarter are as follows:

Adding the course	Sunday 10/4/2026
Dropping the course without a W	Sunday 10/4/2026
Dropping the course with a W	Friday 11/13/2026

Resources: Learn about [Student services](#) Academic support and information about tutoring can be found at the [Math Science and Technology Resource Center](#) .

Academic Integrity: By enrolling in classes at De Anza College, you agree to the academic integrity policy and are held to all standards. Specifics can be found at [Academic Integrity](#) and it is your responsibility to understand what academic dishonesty involves. Cheating during an exam or quiz will not be tolerated and will result in zero for that quiz/exam regardless of what percentage of the work is from cheating and the offending student will be reported to the Dean of Student Affairs. For laboratory work you will have to write your own lab report and show your own data analysis even when the data in lab was collected with a partner. Using another student's data or making up data is plagiarism and data falsification and will result in a zero for the assignment and referral to the dean.

Disability Service Support: De Anza is committed to providing support for students with disabilities. Please contact me as soon as possible if you require special accommodation and I will be happy to do what I can to help. For more information, visit [Disability Service Support](#)

Missing class: You are responsible for all the material covered in this course, and it is expected that you will attend and participate in all of the lecture and laboratory sessions. **If you miss a lab or lecture on the first day of class, you will be dropped from the course unless previous arrangements have been made with the instructor.** Regular participation in class is essential for success in class. **Please know that instructors can drop students who miss class in the first two weeks of the quarter.**

Grades/Evaluations:

Your grade will be determined through assignments and assessments in lecture and lab. Here are the approximate percentages that each assignment groups contributes to the final grade:

Assignment groups	Approximate Overall %
Homework (lowest score will be dropped)	11
In-class assignments and lecture quizzes (lowest score will be dropped)	9
3 Lecture Exams	34
Lecture Final (1)	16
Lecture Total	70
Lab assignments	24
Lab Final (1)	8
Lab Assignments Total	30
Course total	100

Grade Assignment. Grade cut offs are as follows:

A+ (97.0), A (92.0), A- (89.0), B+ (86.0), B (81.0), B- (78.0), C+ (75.0), C (70.0), D (59.0), F (0-58.9)

I reserve the right to adjust the grade cut off if necessary.

NOTE: You must receive **at least 55.0%** on the combined lab assignments+ lab final **AND 55.0%** on the combined lecture exams for a passing grade of C in addition to achieving 69% or higher overall.

Assignments fall into the following categories.

Graded Homework through Mastering Chemistry: You need to sign up for Mastering Chemistry through the Canvas interface

In class assignments and lecture quizzes: A variety of assignments and low-stakes quizzes also on Mastering Chemistry interface. These are due during class.

Lecture Exams. There will be three lecture exams to test comprehension throughout the quarter, the dates are indicated in the lecture schedule. Exams will cover material from lectures, homework, and book chapters. If you have difficulties completing the homework without outside help, you need to get additional support before you take the exam. There are **no automatic make-up exams** if you miss an exam. Missing a midterm will result in zero credit. The lowest midterm score will be replaced by your Final score if the Final score is higher than your lowest midterm score.

There may be special circumstances that require **written proof** of an excused absence such as a police report, an official doctor's note, etc. Only one make-up per quarter may be granted in an accepted excused absence special situation.

Lecture Final. A comprehensive final will cover all material from the course. The time is set by the final schedule for Tuesday 12/8/2026 1:30am-1:30pm. Please do not sign up for this class if you can't make the final time.

Lab assignments. They consist of Pre-labs, Lab reports which will be a mixture of worksheets and discussion submissions and a Lab final on the last lab days. The lab points represent 30% of your final grade.

Participation & Attendance & Late Work Policy

Regular lecture participation is highly encouraged. There are no make-ups for missed lecture quizzes or in-class assignments. There are no automatic make-up dates for lecture exams. Please contact me if you have a documented medical or other emergency to address missed exams as soon as possible. You must take the final at the date indicated in the final schedule to pass the class. If you stop participating in the course after the “W” deadline, I may assign you an “FW” grade. Participation is determined by submitting assignments on a regular basis, so not submitting assignments on a regular basis for more than 2 weeks or not responding to email notifications for more than 2 weeks will be considered non-participation.

Work Expectation: Each week there are two lectures, and one 3 hour lab section. Expect to spend an additional 8 hours a week on the course. You are expected to join class having done some related reading and chapter assignments. You will spend additional time preparing for the labs (Prelab), completing Homework, and writing up the results from the labs (Lab Writeup or Post Lab Activity), as well as preparing for Quizzes and Midterms.

Late work is accepted on Mastering Chemistry after the due date until 12/8/2026. There is a late submission penalty of 5% each day after the due date, however you can get not less than a 50% reduction. Lab reports are due a week after the lab session. There is a late submission penalty of 5% each day after the due date. Lab reports are accepted up to **1 week late after the due date**. After being 1 week late, I will not accept the lab report for credit. Each student can get the late penalty waved once or can request a specific extension for lab reports.

A note on disruptive behavior: Professional behavior, conduct, communication (verbal and nonverbal), and language is expected at all times. The college will enforce all policies and procedures set forth in the *Standards of Student Conduct*:

(<https://go.boarddocs.com/ca/fhda/Board.nsf/goto?open&id=9U2UC77B2DA5>[Links to an external site.](#)). Any student disrupting the class may be asked to leave that class.

How to be successful in Chemistry:

1. Prepare for lecture by reading the assigned textbook chapter before class.

Previewing the material in advance will make lecture content easier to understand and help you engage more effectively in discussions and activities. Reading beforehand also improves organization and retention of key concepts.

2. Attend lecture.

Lectures clarify textbook material, include active learning activities, and may cover additional content not found in the text. Because chemistry concepts build on one another, regular attendance is essential for success. Please arrive on time, stay for the entire class, and silence your cell phone. Calls and texting are not permitted during class or lab except in emergencies.

3. Review lecture material and complete additional practice problems.

Learning chemistry requires active engagement and problem solving. Since there is not enough class time to practice every concept in depth, reviewing notes, rereading relevant sections of the textbook, and working problems are essential. Review material within 24 hours of each lecture rather than waiting until an exam approaches.

4. Complete homework as a self-assessment.

Treat homework as you would a quiz or exam question. It should help you identify what you understand well and where you need additional practice. Ultimately, you should be able to solve problems independently without relying on notes, the textbook, friends, or online resources.

5. Don't fall behind.

Set aside time each week to complete assignments and review course material. Cramming is rarely effective in chemistry because each new topic builds on previous concepts. Staying current with the material is critical for long-term success.

6. Get help early.

If you are struggling with a topic, seek help promptly. Forming a study group, attending office hours, and using resources such as the Math, Science & Technology Resource Center (MSTRC) can significantly improve your understanding and confidence.

Laboratory:

Laboratory attendance is **mandatory** and labs are conducted in person each week. Please refer to the lab schedule. The De Anza College Chemistry Department does not offer make-up labs.

Missing the laboratory lecture, discussion, or demonstration may prevent you from completing the experiment and will result in a zero for that lab session. To pass the course, you must earn at least **55% of the total laboratory points** and achieve an overall course grade of **69% or higher**.

LABORATORY PROCEDURES AND POLICIES

Students are expected to arrive on time and prepared for each lab session. Before coming to lab, you should:

- Read the experiment and understand its purpose and procedure.
- Complete any required pre-lab assignments.

LABORATORY SAFETY

Laboratory safety is an everyday assignment. Being safe in the lab is a top priority. The importance of safety in the laboratory will be reviewed the first day of lab. Any unsafe behavior, intentional or not, will be noted and may be cause for dismissal from the class. For your protection, safety goggles with indirect ventilation and an ANSI minimum rating of Z87 must be worn **AT ALL TIMES** in the laboratory.

LABORATORY LECTURE

Each lab begins with a required laboratory lecture covering procedures, calculations, safety considerations, and proper chemical disposal. Students who arrive more than **15 minutes late** may not be allowed to perform the experiment and may receive zero points for all assignments associated with that lab session.

ATTENDANCE/PARTICIPATION

Attendance and participation are required for all laboratory sessions. Missing a lab results in a zero for the lab assignments. Missing **three laboratory sessions** will result in an automatic failing grade for the course.

You demonstrate your participation by:

- **Being on time:** Students who arrive more than 15 minutes late will not be permitted to complete the experiment and will receive zero points for that lab session.
- **Being prepared:** Bring the lab manual and complete all required pre-lab work.
- **Completing laboratory activities:** Plan to remain for the entire lab period. Experiments and associated work should be completed during the scheduled lab time.

CHEMICAL DISPOSAL

As a concern for the environment and to follow county, state and federal law, proper chemical disposal is essential. Students who do not comply with disposal procedures may be expelled from the lab or failed in the course for repeated offenses. Check with the instructor if you have any questions.

LAB REPORTS

All lab reports must be completed and turned in to receive a passing grade in this class.

Tentative Schedule:

Here is the approximate timing for the material we will cover. This is subject to change; see Canvas for updates. All dates except for final are subject to potential change throughout the quarter.

WEEK OF	WEEK	Approximate Lecture Chapters	TUESDAY LAB	THURSDAY LAB
9/21/2026	1	Chapter 1 +2	CHECK-IN, SAFETY	CHECK-IN, SAFETY
9/28/2026	2	Chapter 2+3	DENSITY	DENSITY
10/5/2026	3	Chapter 5+6	NOMENCLATURE + STRUCTURE	NOMENCLATURE + STRUCTURE
10/12/2026	4	Chapter 7 Exam 1 (Tu)	SAND/SALT SEPARATION	SAND/SALT SEPARATION
10/19/2026	5	Chapter 8	CHEMICAL REACTIONS	CHEMICAL REACTIONS
10/26/2026	6	Chapter 9	YIELD OF SODIUM CARBONATE	YIELD OF SODIUM CARBONATE
11/2/2026	7	Chapter 10 Exam 2	SYNTHESIS OF ALUM	SYNTHESIS OF ALUM
11/9/2026	8	Chapter 11	GAS FORMING REACTION	GAS FORMING REACTION
11/16/2026	9	Chapter 12	VINEGAR TITRATION	VINEGAR TITRATION
11/23/2026	10	Exam 3 (Tu)	VINEGAR TITRATION (2)	No Class (Thanksgiving Day)
11/30/2026	11	Chapter 4	CHECK-OUT, Lab Final	CHECK-OUT, Lab Final
12/7/2026	12	FINAL Tuesday 11:30 am - 1:30pm		

Student Learning Outcome(s):

- Solve stoichiometric problems by applying appropriate molar relationships.
- Identify the differences between elements and compounds and describe the chemical bonding in compounds- ionics vs. covalent.

Office Hours:

1:30 PM - 2:30 PM

SC1200

T,TH