

## Chem 10 Winter 2026 Syllabus

### Chem 10 - Introductory Chemistry

**Term:** Winter 2026

**Instructor:** Dr. Semere Bairu

**Class Schedule:** Section 43Z Lecture TTh 5:30 pm – 7:20 pm (zoom)

Section 43Z Lab T 7:30 pm – 10:20 pm (zoom)

**Lecture Link:** <https://fhda-edu.zoom.us/j/81917152871>

**Lab Link:** <https://fhda-edu.zoom.us/j/85200032436>

**Office Hrs. Link:** <https://fhda-edu.zoom.us/j/82822421084> (Th: 8:30 pm to 9:30 pm)

**January 18** - Last day to [add 12-week class](#)

**January 18** - Last day to [drop classes](#) without a W.

**January 19** - Martin Luther King Jr. Holiday – [NO CLASSES](#), offices closed

**February 13-16** - Presidents' Holiday – [NO CLASSES](#), offices closed

**February 27** - Last day to [drop classes](#) with a W.

#### Course Delivery and Schedule

This course is delivered fully online via Zoom. Lectures are held on Tuesdays and Thursdays from 5:30 PM to 7:20 PM, and labs are held weekly on Tuesdays from 7:30 PM to 10:20 PM. Both lectures and labs require mandatory attendance and punctual participation. Lectures are not recorded, so students must attend live to avoid missing content. Lecture PowerPoint slides will be available on Canvas, and all asynchronous materials must be completed before the Friday lecture.

#### Quizzes

An online quiz is administered once a week. Pre-lab quizzes are administered via Canvas at the beginning of each lab session, and students must complete them within the first 10 minutes of lab time.

#### Laboratory Handouts and Assignments

Laboratory handouts will be uploaded to Canvas. Students are responsible for reviewing the handouts before each lab and having them accessible during the Zoom session to follow instructions, record results, and participate effectively. In most cases, experimental data will be provided during the Zoom lab session after reviewing the lab handouts together. Students are expected to answer the questions at the end of the handouts using the provided data and their understanding of the laboratory lecture. Lab assignments and reports are submitted via Canvas.

#### Enrollment Requirements

Students who are unable to reliably attend the scheduled Zoom lectures and labs should not enrol in this course.

#### Course Webpage

The course webpage is hosted on De Anza Canvas, and students are automatically added to the Canvas shell upon enrolment. Waitlisted students, however, will not have access to Canvas. The webpage is best viewed on a web browser rather than the Canvas student app. Be sure to enable

Canvas notifications to stay updated on class announcements, Inbox messages, and comments or feedback on assignment submissions.

### **Community Statement**

Every individual in this class is a valued and integral member of the group, regardless of personal history or identity. Your experiences are important and welcomed, and you are encouraged to share them when relevant. No one is expected or presumed to represent all members of any group. You have the right to define your identity, choose the name you wish to be called, and specify your pronouns, which you may change at any time. If any aspect of the class, including facilitation, instruction, content, or environment, creates barriers to your inclusion, please inform me privately without fear of reprisal. We are all on a learning journey, and my goal is to continually improve to support everyone in this class and my future students.

### **About Your Instructor:**

E-mail: bairusemere@fhda.edu

Phone Number: 269-365-8814 (not preferred)

The most reliable way to contact me outside of class is through **Canvas Inbox**. Generally, you can expect a reply within 12 hours.

### **Office hours**

Office hours is an opportunity to meet with me outside of regular class time. Bring your homework, notes, readings, or any other assignments to discuss over a zoom. You're welcome to ask questions about the course material, practice problems, or your educational path. My office hours are open to all students, feel free to join zoom meeting every **Thursday from 8:30 pm to 9:30 pm** using this link. <https://fhda-edu.zoom.us/j/82822421084>

### **My Teaching Philosophy**

My goal is for every student in my class to develop an appreciation for the power of chemistry and the beauty of the natural world. I aim to create a course that is accessible to students from diverse educational, cultural, and socioeconomic backgrounds while upholding high intellectual and academic standards. I strive to recognize and reward consistent, sustained effort throughout the quarter, and my ultimate objective is for every student to pass with a reasonable grade, enabling you to progress to the next stage of your educational or career journey.

### **Course Description**

This is an introduction to the discipline of chemistry, including chemical laboratory techniques and 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.

Please note that Chem 10 is not equivalent to Chem 25 or Chem 30A. Moreover, this class will not prepare you for Chemistry 1A. Please make sure that this is the correct class for you to take at this time in your academic journey.

### **Required Materials**

**Textbook:** Introductory Chemistry, 7th Edition by Nivaldo J. Tro, will be used this quarter. It is accessible via Canvas - through Access Pearson after purchasing the access code.

*Final Exam: Tuesday March 24 from 6:15 PM to 8:15 PM (Chapter 8 – 14)*

**Lab Handouts:** Laboratory handouts will be uploaded to Canvas. Students are responsible for reviewing the handouts before each lab and having them accessible during the Zoom session to follow instructions, record results, and participate effectively.

### Technical Requirements and Resources

- **Computer and Webcam Access:** This course is delivered fully online with extensive technological requirements. Students must have regular access to a computer with a camera, microphone, and stable internet connection. Be proactive in reaching out to technical support for any platform issues and start your work early to avoid falling behind.
- **Submitting Handwritten Work:** Some lab reports may require handwritten work. Students should create a PDF of their reports and upload it to Canvas. Recommended apps for scanning include [GeniusScan](#) or [CamScanner](#). Ensure all documents are combined into a single PDF with a clear file name. Multiple image files will not be accepted, as they are difficult to grade online.
- **Course Platform Access:** This course uses Access Pearson, accessed directly via the link in Canvas, for readings and assignments. Students should purchase an access code through Access Pearson, which will direct you to the correct eTextbook and assignment pages. Courtesy access is available through the second week of the quarter, after which a purchased access code is required.

### Add Codes Policy

Add codes will only be provided if space is available during the first week of class. To be considered for enrollment in Chemistry 10, you must attend both the first lecture and especially the first lab meeting. Students who miss either, particularly the lab, will be dropped and replaced by someone from the waitlist. Add codes will not be issued after the first week.

### Course Objectives

1. Examine the historical development of concepts concerned with the fundamental building block of matter— atoms and molecules— and their concomitant effect on our understanding of molecular structure.
2. Assess the importance of the mole concept in stoichiometric calculations.
3. Explore the relationship between the molecular structures of compounds and their effects on chemical properties of compounds.
4. Explore the contributions of men and women from a variety of cultures and ethnic backgrounds to the field of chemistry.
5. Evaluate the ethical issues and environmental effects, from local to global, that have arisen from the extraction, use, and disposal of chemicals.

### Academic Policy and Integrity

**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.

**Lecture Attendance:** Your punctual attendance is expected at all online 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.

**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>

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.

### **Attendance Policy**

Your punctual attendance is expected at all class meetings of the course. In order 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 after that 5- minute window, I cannot guarantee that I will see you in the waiting room. If you will have to miss a meeting for any reason, let me know by e-mail or phone as soon as possible. Notifying your instructor of absences or tardiness shows that you take your responsibility towards yourself and your fellow students seriously.

This is an online class, and an online laboratory attendance is mandatory. You must attend your scheduled lab meeting in week 1. You may miss one lab experiment without a grade penalty. If you miss three labs, you will automatically fail the course.

### **Student Learning Outcomes (SLOs):**

- 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.

### **Active Course Outline**

The active course outline for this class may be found online at:  
<https://www.deanza.edu/catalog/courses/outline.html?cid=chemd010>

## Important Dates

**First Day:** January 9, 2026 - First day of class for Chem 30B! In-person attendance is *mandatory*.

**Withdraw:** Last day to [drop classes](#) with a W.

For a **full list of important dates**, please see <https://www.deanza.edu/calendar/>

If circumstances beyond your control prevent you from completing the course, you may qualify for an excused withdrawal. Please see the following website for more information.

<https://www.deanza.edu/admissions/withdrawals.html#excused>

## Syllabus Statement

This syllabus serves as a contract for the course. Please read it thoroughly before asking questions about the course schedule, content, requirements, grading, or other details, as many answers can be found within. As a student in this course, you are expected to conduct yourself with integrity and professionalism at all times. This includes adhering to the De Anza College Student Code of Conduct (Administrative Policy 5510). For complete details, please refer to the linked PDF file below.

<https://www.deanza.edu/titleix/documents/5510Conduct.pdf>

This syllabus is a living document and subject to updates. Any corrections or changes will be communicated through Canvas Announcements.

## Late Work Policy

All due dates for take-home assignments are set for 11:59 PM on the specified day and must be submitted via Canvas or Mastering Chemistry, depending on the assignment instructions. However, in-class quizzes are time-limited and must be completed during the scheduled class period. Make-up quizzes will only be considered in the case of a documented emergency, as outlined in the attendance policy.

## How to Learn Chemistry

Chemistry is a broad subject with a reputation for being challenging. This class will leverage various resources to help you build the skills, knowledge, and understanding needed to apply chemical principles across multiple areas of study. Lectures will provide structure and context for the topics, while assigned readings will help you explore the details in depth.

## How to Succeed in This Course

- **Attend all class sessions:** Be punctual and actively participate in both lecture and lab sessions.
- **Stay organized:** Keep track of deadlines, assignments, and exam dates using a planner or digital calendar.
- **Review material regularly:** Study lecture notes, readings, and lab material consistently throughout the week.
- **Complete assignments on time:** Submit all work on Canvas by the deadlines to avoid late penalties.
- **Ask for help:** Reach out to me during study hall, office hours, or via Canvas Inbox with questions. Utilize campus tutoring and academic support services if needed.

Final Exam: Tuesday March 24 from 6:15 PM to 8:15 PM (*Chapter 8 – 14*)

- **Form study groups:** Collaborate with classmates to review material, work on practice problems, and discuss challenging concepts.
- **Practice problems:** Work through practice problems to strengthen your understanding of the material and prepare for exams.
- **Use recommended tools:** Ensure you have the required scientific calculator and PDF scanner app for assignments.
- **Engage with online content:** Complete all asynchronous online materials and activities by the required deadlines.
- **Communicate proactively:** Notify me in advance of any issues or absences and provide explanations for late submissions when necessary.

### Academic Integrity

Academic integrity is essential in this course, and students are expected to adhere to De Anza College's academic integrity policy. All submitted work must represent your own understanding, written in your own words, with collaboration only allowed on specific assignments where the final submission reflects individual effort. Cheating, copying, or plagiarism, including the use of prohibited online resources such as Chegg, CourseHero, or Reddit, is strictly forbidden. Assessments are closed resource, and using internet answers or unauthorized help is not allowed. Incidents of academic dishonesty, no matter how minor, will be reported to the Dean and may result in penalties to your course grade, including retroactive grade changes within two years of course completion. Reputable tutoring resources are encouraged, but services that provide direct answers without promoting learning are prohibited. Students should seek clarification about resources or policies when unsure and are encouraged to engage with the instructor and peers for support. Violations may lead to significant changes in course structure, such as oral exams or exit interviews, to ensure academic standards are maintained.

### Canvas Homework Guidelines

Homework questions for each chapter are available via **Access Pearson in Canvas**. You can also access the homework directly through the **Modules** (*links*). These assignments are designed to support your learning and prepare you for exams.

You will have up to **two attempts** to answer each question without penalty, allowing you to practice and strengthen your understanding. Late submissions accepted at a **10% deduction per day**. Be sure to stay on track and complete your assignments on time to maximize your success in the course.

### Canvas Quiz Guidelines

To further reinforce understanding of the course material, a graded in-class quiz will be administered during each scheduled class session, based on the previous lecture. Attendance during these quiz sessions is required, as they provide valuable opportunities to address questions and strengthen understanding of the material. Regular engagement and consistent practice are essential for success in this course.

### Assessments

#### Quizzes and Exams Policy

Several quizzes will be conducted throughout the quarter, typically at the beginning of class session. All quiz questions are multiple choice and are administered online through the Canvas quiz system.

Two midterm exams will be conducted during the course. **Midterm Exam 1** is scheduled for **February 3, 2026**, and **Midterm Exam 2** will take place on **March 5, 2026**.

### Final Exam

The final exam covers chapter 8-14, with 40% focusing on chapter 8-12 and 60% exclusively covering chapter 13, 14 and 17. The exam will be conducted online via zoom, proctored, and subject to exam rules, which must be followed to receive credit. The final exam is scheduled for **March 24, 6:15 pm to 8:15 pm**. Early or late exams will not be offered, and missing an exam will result in a score of zero.

**If you require accommodations**, you must be approved by DSPS, (<https://www.deanza.edu/dsps/>). For extended-time or reduced-distraction accommodations, you must schedule your exam with the DSPS office to coincide with the normal class time.

Phones, smartwatches, and other unauthorized electronic devices are **not permitted during exams**. Any use of such devices will result in a **zero on the exam**.

All exams are administered **online** using **LockDown Browser** and are **proctored via webcam**. The first two exams will be held during the scheduled lecture times. The final exam will be administered during the designated final exam period: **Tuesday, March 24, 6:15 PM – 8:15 PM**.

### Laboratory

#### Online Laboratory Policy

Chemistry is an experimental science, and the laboratory is a required component of this course. All labs are conducted **online via Zoom**, and **make-up labs are not offered**.

- **Attendance:** One excused lab absence is allowed without penalty. A second absence results in a zero for the lab and all associated assignments. A third absence results in an automatic “F” for the course.
- **Timeliness:** Students must join the Zoom lab on time and remain present for the full session to receive credit.
- **Lab Work:** Requirements include pre-lab quizzes, active participation during the Zoom lab, and completion of post-lab assignments using provided data. All lab work is submitted via Canvas.

Adherence to these policies is required for successful completion of the course.

### Lab Safety

**Safety Contract:** All students must review and sign the laboratory safety contract before participating in any lab activities, even though the labs are conducted online. The contract is available on Canvas and must be signed, scanned as a PDF, and uploaded to Canvas by the end of the first lab session. Students should keep the original signed copy for their records. Submission is mandatory, and students who fail to comply will not be permitted to participate in lab activities until the requirement is met. Adherence to safety policies is strictly enforced.

**Safety Video:** All students are required to watch the designated safety video playlist, available on Canvas, at the beginning of each quarter, even if they have viewed the videos in a previous class. After watching, students must complete the **safety quiz** and achieve a score of 100%. This

requirement is mandatory, and students who do not complete the quiz successfully will not be permitted to participate in lab activities until it is fulfilled.

### Lab Preparation and Submission Guidelines

- **Preparation:** You are expected to arrive at the lab fully prepared to complete each experiment efficiently and with minimal delays.
- **Submission:** lab assignments must be submitted on Canvas as PDF file (single file) uploads and are generally due as specified on the **Canvas Calendar**.
- **Grading:** Refer to the **Canvas submission rubric** to understand how your lab assignments will be evaluated before submitting your work.

### Lecture Schedule

Week	Tuesdays	Thursdays
1	The Chemical World / Measurement and Problem Solving ( <i>Chapter 1 &amp; 2</i> ), Jan 6	Measurement and Problem Solving ( <i>Chapter 1 &amp; 2</i> ) – <i>Chapter 1 Quiz</i> , Jan 8
2	Atoms and Elements ( <i>Chapter 4</i> ), Jan 13	Atoms and Elements ( <i>Chapter 4</i> ) – <i>Chapter 4 Quiz</i> , Jan 15
3	Molecules and Compounds ( <i>Chapter 5</i> ), Jan 20	Molecules and Compounds ( <i>Chapter 5</i> ) - <i>Chapter 5 Quiz</i> , Jan 22
4	Chemical Composition ( <i>Chapter 6</i> ), Jan 27	Chemical Composition ( <i>Chapter 6</i> ) - <i>Chapter 6 Quiz</i> , Jan 29
5	<b>EXAM 1 (Chapter 1-6; February 3) 5:30 pm – 6:30 pm (online via zoom)</b>	Quantities in Chemical Reactions ( <i>Chapter 8</i> ), Feb 5
6	Quantities in Chemical Reactions ( <i>Chapter 8</i> ) – <i>Chapter 8 Quiz</i> , Feb 10	Electrons in Atoms and the Periodic Table ( <i>Chapter 9</i> ), Feb 12
7	Electrons in Atoms and the Periodic Table ( <i>Chapter 9</i> ) – <i>Chapter 9 Quiz</i> , Feb 17	Chemical Bonding ( <i>Chapter 10</i> ), Feb 19
8	Chemical Bonding ( <i>Chapter 10</i> ) – <i>Chapter 10 Quiz</i> , Feb 24	Liquids, Solids, and Intermolecular Forces ( <i>Chapter 12</i> ), Feb 26
9	Liquids, Solids, and Intermolecular Forces ( <i>Chapter 12</i> ), <i>Chapter 12 Quiz</i> , March 3	<b>EXAM 2 (Chapter 8-12; March 5) 5:30 pm – 6:30 pm (online via zoom)</b>
10	Solutions ( <i>Chapter 13</i> ), March 10	Solutions ( <i>Chapter 13</i> ) – <i>Chapter 13 Quiz</i> , March 12
11	Acids and Bases ( <i>Chapter 14</i> ), March 17	Acids and Bases ( <i>Chapter 14</i> ) – <i>Chapter 14 Quiz</i> , March 19

Final Exam: Tuesday March 24 from 6:15 PM to 8:15 PM (*Chapter 8 – 14*)

## Laboratory Schedule

Week of	Week	Tuesdays
01/04/2026	1	CHECK-IN, Jan 6
01/11/2026	2	Taking Measurements, Jan 13
01/18/2026	3	% Water In Popcorn, Jan 20
01/25/2026	4	Electron Dot Structures, Jan 27
02/01/2026	5	Molecular Shapes, Feb 3
02/08/2026	6	Solutions, Feb 10
02/15/2026	7	Upset Stomach, Feb 17
02/22/2026	8	How Much Fat, Feb 24
03/01/2026	9	Organic Molecules, March 3
03/08/2026	10	DNA Capture, March 10
03/15/2026	11	Check-out and Lab Final, March 17
03/22/2026	12	No Lab, March 24

## Grading Policies and Schemes

To succeed in this course, you will need to exhibit *consistent and sustained effort* throughout the quarter. This will be demonstrated through in-class participation, laboratory preparation and data analysis, and examinations. Assignment types are assigned a weight; not all points are created equally!

<b>Lecture</b>	<b>71 % of total grade</b>	
12 Canvas Homework's - online via Pearson	20.0 %	
3 Exam – online via Canvas - proctored	30.0 %	
3 Worksheets – Exam Practice Questions via Canvas	5.0 %	
12 online Quizzes – via Canvas	16.0 %	
<b>Lab</b>	<b>30 % of total grade</b>	
9 Pre-labs – upload to canvas	5.0 %	
9 Lab report – upload to canvas	25.0 %	
	<b>Final Percentage</b>	<b>Grade</b>
	> 100	A+
	> 90	A
	88 – 89.9	A-
	85 – 87.9	B+
	80 – 84.9	B
	78 – 79.9	B-
	75 – 77.9	C+
	68 – 74.9	C
	63 – 67.9	C-
	55 – 62.9	D
	<55	F

**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	1:30 PM - 2:00 PM	Zoom
TH	8:30 PM - 9:30 PM	Zoom