

Chemistry 10: Introductory Chemistry
Dr. Brophy**Fall 2020****Instructor:** Dr. Megan Brunjes Brophy (she/her or they/them)**E-mail:** brophymegan@fhda.edu

Please note that **Canvas Messages** are the most reliable way to get in touch with me.

Course Webpage: Canvas. *Turn on Canvas notifications to receive class announcements. Following the welcome e-mail, all class information will be communicated through Canvas.*

Class Meeting Times

10.03Z (CRN 21939) Monday 07:30 pm – 8:20 pm

Virtual Office Hours: TuTh 2:00 pm – 3:45 pm

To schedule an appointment with me during office hours, please use <https://dr-brophy-office-hours.appointlet.com>

Zoom Meeting Room: <https://cccconfer.zoom.us/my/drbrophy>

We will use this meeting room for all class meetings and office hour meetings. I do utilize a waiting room—make sure that your display name matches your registration name for the first day of class. You may use your preferred name after the first day.

Important Dates

Add Day	October 3, 2020	Last day to <i>add</i> .
Drop Day	October 4, 2020	Last day to <i>drop</i> the course with a refund <i>and</i> without a withdraw being recorded.
Withdraw	November 13, 2020	Last day to <i>withdraw</i> from the course. A “W” will be recorded on your transcript.

Academic Integrity

Students are expected to adhere to the policy on academic integrity that is outlined in the De Anza College manual (<https://www.deanza.edu/studenthandbook/academic-integrity.html>). ***I expect all submitted work to represent your own understanding of the material and to be written in your own words.*** Cheating, copying, plagiarizing, etc. will not be tolerated, and the minimum consequence will be receiving a zero on that assignment and the incident will be reported to the Dean of Student Services. Cheating on a Quiz or other assessment will result in automatically failing the course.

Examples of cheating include, but are not limited to:

- Looking up answers for any assignment in Chegg, Course Hero, or any similar website.
- Asking another person to take a quiz or exam for you, or taking a quiz or exam for another student.
- Using unauthorized notes during an exam or quiz.
- Copying another person’s words without quotations or footnotes.
- Using information that is not considered common knowledge without acknowledging the source.

Required Materials

- **Textbook** The textbook for this class is *Hill's Chemistry for Changing Times* (14th edition). You can rent a copy of the ebook through the De Anza College bookstore for \$39.99. This rental will grant you access to eBook for 180 days, and activated eBooks are non-refundable.
- **Calculator** A scientific calculator with natural log functionality is necessary and sufficient for this class. If you have already purchased a graphing calculator for another class, you may use it on exams and quizzes; however, *we will not use the graphing functionality*. Recommended models:
<https://www.amazon.com/Texas-Instruments-MultiView-Scientific-Calculator/dp/B000PDFQ6K>
https://www.amazon.com/dp/B005QXO8J0/ref=dp_cerb_3
I do not recommend using Google as a calculator. There have been recent reports of the unit conversion function “breaking”, and performing the order of operations correctly is non-trivial.
- **Computer and printer access.** All Fall 2020 classes at De Anza College are being conducted online due to the COVID-19 crisis. You will require a computer with internet access and a printer throughout this course.
- **Genius Scan** Throughout the quarter, you will turn in handwritten assignments by creating a PDF file and uploading this file to Canvas. Recommended apps include GeniusScan and CamScanner. *Do not use any Adobe apps to turn your assignments in—the files end up being too big for me to read!*

Syllabus Statement

This course syllabus is a contract. Please read it carefully and completely in its entirety before asking me any questions regarding the course schedule, content, requirements, grading, etc. You are expected to adhere to the De Anza College Student Code of Conduct Administrative Policy 5510 at all times. This syllabus is a living document. **All corrections and changes to this syllabus will be announced through Canvas.**

This class is divided into two separate instructional periods: a lecture period devoted to the primary course material and a lab period for conducting lab experiments. Everyone will have the same lecture period, but a different lab period depending on which section you are enrolled in. At De Anza College, the lab and lecture may not be taken as separate courses under any circumstances.

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.

Prerequisites

Advisory: EWRT 211 and READ 211, or ESL 272 and 273; MATH 212 or equivalent

Hours

The study of chemistry combines both macroscopic and microscopic views of the natural world with mathematical models to explain and predict phenomena. This is a 5-unit class, and **I expect you to spend 2–3 hours a day on reading, lecture videos, and class assignments.** Set aside a time and place that you can work on class materials every day.

Attendance Policy

Your *punctual* attendance is expected at all lecture and laboratory sections 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. Class meetings will **not** be recorded—if you miss a class it is your responsibility to check-in with the instructor to find out what you missed.

Late work will not be accepted under any circumstances. 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.

Grading Essentials

To succeed in this course, you will need to exhibit consistent and sustained effort throughout the quarter. Your final grade will be based on your final percentage out of the total points available.

Percentage in Class	Grade ¹
> 93%	A
90 – 92.9%	A–
87 – 89.9 %	B+
83 – 86.7%	B
80 – 82.9%	B–
77 – 79.8%	C+
70 – 76.9%	C
65 – 69.9%	D+
60 – 64.9%	D
<60%	F

NOTE: Dr. Brophy reserves the right to alter the grade scale at any point in the quarter.

The points are broken down into weighted categories—note that not all points are equal weight! Each category is described below.

Assignment Category	Percentage of Final Grade ^{1,2}
Homework	25%
Lab Activities and Discussions	25%
Midterm Exams (2 total)	30%
Final Exam	20%

Homework

In general, homework assignments will be posted by Wednesday and due the following Monday at 7 pm. All answers and work must be handwritten, and assignments shall be submitted through Canvas as a PDF. Late homework will not be accepted, and answers will be posted shortly after the assignment is due. **Do not wait until the last minute to upload your homework.**

Lab Activities and Discussions

Due to the COVID-19 pandemic, all labs will be “dry labs”. Lab activities may consist of a mixture of recorded demonstrations, online simulations, worksheets, and discussion topics. Labs will generally be posted by Tuesdays and are due the following Monday at 7 pm. Any worksheets with handwritten answers must be submitted through Canvas as a PDF. Late labs will not be accepted. **Do not wait until the last minute to complete and upload your work.**

Exams

There will be two midterm exams and one final exam this quarter. The two midterms will be 50-minute exams, and they will be administered as Canvas quizzes on October 12th and November 9th. The exam will open at 7:30 pm and close at 8:20 pm. The final exam will be administered as a Canvas quiz on December 7th. The final will open at 7:30 pm and close at 9:30 pm. Requests for extended time must be approved through Disability Support Programs and Services (DSPS). Once I have verification, I will add extended time to your exam in Canvas. **Make-up exams are not permitted, and you should not sign up for the class if you cannot take the exams.**

Lecture Schedule

Week	Date	Reading	Evaluations
1	9/21	Chemistry and Atoms <i>Hill's Chemistry for Changing Times</i> Chapters 1 and 2 (all sections)	
2	9/28	Atomic Structure <i>Hill's Chemistry for Changing Times</i> Chapter 3	
3	10/5	Chemical Bonds <i>Hill's Chemistry for Changing Times</i> Chapter 4	
4	10/12	Chemical Accounting <i>Hill's Chemistry for Changing Times</i> Chapter 5	Exam 1 October 12th 7:30 pm – 8:20 pm Chapters 1 – 4
	10/19	Gases, Liquids, Solids, and Intermolecular Forces <i>Hill's Chemistry for Changing Times</i> Chapter 6	
6	10/26	Acids and Bases <i>Hill's Chemistry for Changing Times</i> Chapter 7	
7	11/2	Oxidation and Reduction <i>Hill's Chemistry for Changing Times</i> Chapter 8	
8	11/9	Organic Chemistry <i>Hill's Chemistry for Changing Times</i> Chapter 9	Exam 1 October 12th 7:30 pm – 8:20 pm Chapters 5 – 8
9	11/16	Polymers <i>Hill's Chemistry for Changing Times</i> Chapter 10	
10	11/23	Water <i>Hill's Chemistry for Changing Times</i> Chapter 14	
11	11/30	Energy and Biochemistry <i>Hill's Chemistry for Changing Times</i> Chapters 15 and 16	
12	12/7	Final Exam Monday, December 7th 7:30 pm – 9:30 pm Chapters 1 – 10, 14–16	

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.