

# Chemistry 10, Introductory Chemistry: Winter 2018

Instructor: Arthi Srinivasan

Lecture: MW 9:30-11:20 am Room G6

Lab: W 11:30- 2:20 pm Room SC2208

Email: [srinivasanarthi@fhda.edu](mailto:srinivasanarthi@fhda.edu) or [cheenu\\_arthi@yahoo.com](mailto:cheenu_arthi@yahoo.com)

Office hours: MW 11:45-12:45 Faculty offices

## Prerequisites:

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Mathematics 212 or the equivalent.

## Required Materials:

Scientific Calculator

Lab Goggles (ONLY chemistry type)

Lecture Textbook:

Chemistry in context: Applying Chemistry to Society (Ninth Edition) *A Project of the American Chemical Society*

Or you can buy the e-book at <https://connect.mheducation.com/class/a-srinivasan>.

You need to register at Connect in order to buy the book and do the assignments. There will be more information regarding this during our first lecture.

## Attendance:

Attendance is expected during all lectures, all lab lectures, and all laboratory periods. Students are expected to be prompt and to leave only when lecture or lab is concluded. Arriving late to lecture is disruptive to the class and **strongly** discouraged. **If you miss lecture, laboratory lecture, or a laboratory period for any reason within the first two weeks of class, you will be dropped from the course.**

## Dropping the Course:

If you choose to drop the course **at any point** during the quarter, it is **your** responsibility to withdraw from the course through Admissions and Records by the appropriate deadline. You are required to officially check out of your lab locker whether you remain in the course or drop the course. Failure to check out of lab by the scheduled check-out date will result in an administrative fee and a block will be placed on your future registration.

## Lab:

There will be a total of nine labs during the course of this quarter. The lowest lab score will be dropped. Each lab is worth ten points, and will predominantly be graded on data collection and your performance in the lab.

You are expected to write a detailed procedure of each lab on a lab notebook before coming to the lab, and get it signed by me. Failure to do so will result in loss of two points. This is to encourage you to read up on the procedure before coming to the lab.

There will be a lab final at the end of the quarter. It will be a written test with questions based on labs that you will be doing this quarter.

***If you miss a laboratory period during the first week of the quarter, you will be dropped from the course. Missing one lab will not affect your grade. It will be considered your lowest lab score, and will be dropped. Missing a second lab will result in losing 10 points. THERE AFTER TWO OR MORE UNEXCUSED ABSENCES FROM LAB WILL RESULT IN AN AUTOMATIC "F" FOR THE ENTIRE COURSE (lab and lecture, combined).***

***If you are dropped from the course during the first week of class your locker will be inspected and may be reassigned to another student. You will be held responsible for any broken or missing lab equipment prior to reassignment.***

**IF YOU FAIL TO CHECK OUT OF LAB YOU WILL ALSO BE CHARGED AN ADMINISTRATIVE FEE AND A BLOCK WILL BE PLACED ON YOUR REGISTRATION.**

When you are working in the lab, you must wear **Safety GOGGLES**. No **SHORTS** or **OPEN TOE SHOES** will be allowed in the lab. **NO FOOD OR DRINKS ARE ALLOWED IN THE CHEMISTRY LAB**. Hair longer than the bottom of your neck must be securely tied back.

***You may not be in the laboratory unless an instructor is present.***

*Notify the instructor immediately in cases of illnesses while in the lab.*

*Personal headphones, cell phones or i-phones may not be used while in the lab or lectures.*

*Dispose off waste material and broken glassware as per instructions from your instructor.*

The first part of class will be lecture and discussion. The remaining class time will be experiments.

**Punctuality in labs:**

You have to be on time for the lab. *You can come no later than 10 minutes once a lab begins. Once the door is closed, you will not be allowed to enter the class.*

**Reading:**

A tentative lecture schedule is provided with the syllabus. You will see, due to the rapid pace of this class, that we will not be able to cover all the material contained in the text during lecture. Thus, it is vital that reading for the current chapter be completed before you come to class. This will make following class discussions much easier.

**Canvas:**

Registered students will automatically get access to my Canvas account. My Canvas account contains lecture power points, practice chapter assignments (not graded), and other important information pertaining to the course. Please let me know if for some reason you are unable to access it.

**Testing:**

There will be three 1-hour exams worth a total of 300 points (100 points each). The exams will be closely modeled after the Supplement practice problems (not graded) uploaded on Canvas and Connect assignments (graded).

**There will be a quiz during the first 10 minutes of EACH and EVERY lecture, except on the days we have exams. Each quiz will be worth 10 points. I will be dropping the lowest 4 quizzes at the end of the quarter. There WILL NOT be any quizzes the first two weeks of the quarter.**

***Quizzes are multiple choices. But exams (midterm and final) will be a mix of free-response and multiple-choice questions.***

If you must miss an exam for legitimate reasons (documented proof required), inform me as soon as you are aware of the conflict- hopefully, in advance of the conflict- and arrange a make-up exam within one week of its scheduled date. If you fail to arrange a make-up within that time, you will receive a zero on the exam. Only absences due to documented circumstances will be granted this privilege and only one exam can be made up in the semester. There is no make-up policy for missed quizzes.

**Graded Assignments:**

Assignments will be frequently uploaded on Connect. Each assignment should be completed by the due date. It is your responsibility to keep track of all the deadlines. The lowest assignment score will be dropped. Rest of the assignment scores will be totaled, and converted to maximum points of 130 at the end of the quarter.

**Extra credit:**

I will be asking questions during each lecture from time to time. This is to have you actively participate in class to make the lectures more interesting and to ensure you are following whatever is being taught to you. This is extra credit, and hence is in addition to the total score mentioned above. You **WILL NOT** lose points for non-participation in class.

**Grading:** This is the split up:

<i>Lab Data collection</i>	<i>80</i>
<i>Lab Final</i>	<i>50</i>
<i>Quiz Scores</i>	<i>Subject to change</i>
<i>3 Exams</i>	<i>300</i>
<i>1 Final Exam</i>	<i>150</i>
<i>Connect Assignments</i>	<i>130</i>
<i>+ Extra credit</i>	

The score will be converted to percentage, and your grade will be assigned according to the grading scale (scroll down for the grading scale).

**Grading Scale:**

<u>% of Total Points Possible</u>	<u>Grade</u>
<i>90 and above</i>	<i>A</i>
<i>80 -89.9</i>	<i>B</i>
<i>65 – 79.9</i>	<i>C</i>
<i>58 -64.9</i>	<i>D</i>
<i>Any score less than 58</i>	<i>F</i>

**Dr. Srinivasan reserves the right to change exam dates as well as modify the grade scale at any point during the quarter.**

**Classroom Courtesy:**

As a courtesy to your classmates and to me, please refrain from talking to other students during lecture (except if it pertains to the lecture), and please remember to turn off your cell phones, pagers, etc before entering the classroom. If you do behave in a manner that seems disruptive to me or to other students, I will ask you to stop. If such behavior persists, I will ask you to leave the class and not return without written authorization from the math/science dean.

**Academic Integrity:**

Please refer to the De Anza College Student Handbook: <http://www.deanza.edu/studenthandbook/academic-integrity.html> To summarize the policies provided in the handbook- 1) no cheating will be tolerated 2) consultation of any form must be authorized by the instructor 3) cheating will be reported to appropriate officials 4) cheating will result in an automatic “F” in the class.

*Lecture, Quizzes and Exams Schedule (Tentative and subject to change)*

<b>Week</b>	<b>Date</b>	<b>Chapter schedule</b>	<b>Exams</b>
1	01/08	<b>Introduction to course</b>	
	01/10	<b>Chapter 1</b>	
2	01/15	<i><b>Martin Luther King's Day (Holiday)</b></i>	
	01/17	<b>Chapter 2</b>	
3	01/22	<b>Chapter 3</b> <i>Exam 1 Review session</i>	<i>Quiz 1</i>
	01/24		<b>Exam 1</b>
4	01/29	<b>Chapter 3 contd</b> <b>Chapter 4</b>	<i>Quiz 2</i>
	01/31	<b>Chapter 4 contd.</b> <b>Chapter 5</b>	<i>Quiz 3</i>
5	02/05	<b>Chapter 5 contd.</b> <b>Chapter 6</b>	<i>Quiz 4</i>
	02/07	<b>Chapter 6 contd.</b> <b>Chapter 7</b>	<i>Quiz 5</i>
6	02/12	<b>Chapter 7 contd.</b> <b>Chapter 8</b>	<i>Quiz 6</i>
	02/14	<b>Chapter 8 contd.</b> <b>Chapter 9</b> <i>Exam 2 Review session</i>	<i>Quiz 7</i>
7	02/19	<i><b>President's Day (Holiday)</b></i>	
	02/21		<b>Exam 2</b>
8	02/26	<b>Chapter 9 contd.</b> <b>Chapter 10</b>	<i>Quiz 8</i>
	02/28	<b>Chapter 10 contd.</b> <b>Chapter 11</b>	<i>Quiz 9</i>
9	03/05	<b>Chapter 11 contd.</b> <b>Chapter 12</b>	<i>Quiz 10</i>
	03/07	<b>Chapter 12 contd.</b>	<i>Quiz 11</i>
10	03/12	<b>Chapter 13</b>	<i>Quiz 12</i>
	03/14	<b>Chapter 13 contd.</b> <i>Exam 3 Review session</i>	<i>Quiz 13</i>
11	03/19		<b>Exam 3</b>
	03/21	<b>Review session</b>	
12	03/26		<b>Final Exam: 9:15-11:15 a.m.</b>

*Lab Schedule (You need to follow the Wednesday Schedule only)*

<b>WEEK OF</b>	<b>WEEK</b>	<b>MONDAY</b>	<b>TUESDAY</b>	<b>WEDNESDAY</b>	<b>THURSDAY</b>
<b>1/7/18</b>	1		CHECK-IN	CHECK-IN	CHECK-IN
<b>1/14/18</b>	2	<b>MARTIN LUTHER KING'S DAY</b>	TAKING MEASUREMENTS	TAKING MEASUREMENTS	TAKING MEASUREMENTS
<b>1/21/18</b>	3		% WATER IN POPCORN	% WATER IN POPCORN	% WATER IN POPCORN
<b>1/28/18</b>	4		ELECTRON DOT STRUCTURES (NO PREP)	ELECTRON DOT STRUCTURES (NO PREP)	ELECTRON DOT STRUCTURES (NO PREP)
<b>2/4/18</b>	5		MOLECULAR SHAPES (NO PREP)	MOLECULAR SHAPES (NO PREP)	MOLECULAR SHAPES (NO PREP)
<b>2/11/18</b>	6		SOLUTIONS	SOLUTIONS	SOLUTIONS
<b>2/18/18</b>	7	<b>PRESIDENT'S DAY</b>	UPSET STOMACH	UPSET STOMACH	UPSET STOMACH
<b>2/25/18</b>	8		HOW MUCH FAT	HOW MUCH FAT	HOW MUCH FAT
<b>3/4/18</b>	9		ORGANIC MOLECULES (NO PREP)	ORGANIC MOLECULES (NO PREP)	ORGANIC MOLECULES (NO PREP)
<b>3/11/18</b>	10		DNA CAPTURE	DNA CAPTURE	DNA CAPTURE
<b>3/18/18</b>	11		CHECK-OUT	CHECK-OUT	CHECK-OUT
<b>3/28/18</b>	12	<b>FINALS</b>	<b>FINALS</b>	<b>FINALS</b>	<b>FINALS</b>

From the American Chemical Society Safety In Academic Laboratories Guidelines, 7th Ed., the following mandatory minimum safety requirements must be followed by all students and be rigorously enforced by the entire Chemistry faculty:

- 1) Chemistry Department-approved safety goggles purchased from the De Anza College bookstore (NOT safety glasses) must be worn at all times once laboratory work begins, including when obtaining equipment from the stockroom or removing equipment from student drawers, and may not be removed until all laboratory work has ended and all glassware has been returned to student drawers.
- 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, are to 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: ankle-length clothing must be worn at all times
- 4) Hair reaching the top of the shoulders must be tied back securely
- 5) Loose clothing must be constrained
- 6) Wearing "...jewelry such as rings, bracelets, and wristwatches in the laboratory..." should be discouraged to prevent "...chemical seepage in between the jewelry and skin...".
- 7) Eating, drinking, or applying cosmetics in the laboratory is forbidden at ALL times, including during lab lecture
- 8) Use of electronic devices requiring headphones in the laboratory is prohibited at ALL times, including during lab lecture
- 9) Students are advised to inform their instructor about any pre-existing medical conditions, such as pregnancy, epilepsy, or diabetes that they have that might affect their performance.
- 10) Students are required to know the locations of the eyewash stations, emergency shower, and all exits
- 11) Students may not be in the lab without an instructor being present
- 12) Students not enrolled in the laboratory class may not be in the lab at any time after the first lab period of each quarter.
- 13) Except for soapy or clear rinse water from washing glassware, NO CHEMICALS MAY BE Poured INTO THE SINKS; all remaining chemicals from an experiment must be poured into the waste bottle provided.
- 14) Students are required to follow the De Anza College Code of Conduct at all times while in lab: "horseplay", yelling, offensive language, or any behavior that could startle or frighten another student is not allowed during lab;
- 15) Strongly recommended: Wear Nitrile gloves while performing lab work; wear a chemically resistant lab coat or lab apron; wear shoes made of leather or polymeric leather substitute.

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By signing below, I, \_\_\_\_\_,  
                                    First Name                                    Family Name

acknowledge that I fully understand and agree to abide by the laboratory safety rules listed above. Further, I acknowledge that my failure to abide by these rules will result in my being dropped from this chemistry class immediately.

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Signature

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Date

**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.