

Introduction to General, Organic and Biochemistry I: Online

{Always Be Kind}

For there is always light. If only we're brave enough to
see it. If only we're brave enough to be it.

—Amanda Gorman

Chem. 30A:25Z, 26Z Su 2021 - Syllabus

Lecture 25Z, 26Z: MTWR 5:30 PM – 7:20 PM (Sync) – Zoom Link: <https://fhda-edu.zoom.us/j/93286071222>

Meeting Code: 932 8607 1222, passcode: LADYBUG

Lab 25Z-MTWR: 2:30-3:20 PM (Sync)—Zoom Link: <https://fhda-edu.zoom.us/j/93994783594>

Meeting Code: 93994783594, passcode; BEAKER

Lab 26Z-MTWR 4:00-4:50 PM (Sync)—Zoom: <https://fhda-edu.zoom.us/j/91569102090> ;

Meeting Code: 915 6910 2090 , passcode: FLASK

Instructor : Dr. James Maxwell, phone: (773) 454-7779 (texts also), email: maxwelljames@fhda.edu , email best way to contact, rapid response.

Description: An introduction General Chemistry for Allied Health Fields with Laboratory.

Evaluation: Your grade will be based on your performance in the following:

10 best Quizzes out of 11 quizzes (10 pts each)	110 points
2 pre-labs	20
8 Labs (20 pts each)	160
1 Lab Final (100 pts)	100
3 Exams (100 pts each)	300
1 Final (200 pts)	200

Total **890 points**

Letter grades will be assigned according to the *approximate* scale:

A	90%
B	80%
C	70%
D	50%
F	< 50%

Attendance: When a class is listed as Synchronous, your attendance is expected. **You must be present each day for the first week of class or you will be dropped.**

Quizzes: Quizzes will be given as scheduled in syllabus, and will have a time limit. Answer keys will be available after the quiz. *If you miss the quiz, you will **not** have a chance to make it up after the KEY is posted in Canvas.* The best 10 quiz scores will be used in determining your final grade.

Exams: There will be three exams and one final exam. You must bring your own calculator (if you need one), pencil and eraser for exams. Cell phones may not be used at any time during the exam. **Calculators** may be used if approved by instructor. **No Mobile Phones during Exam! Answer Keys will be available after the exam in Canvas. Please be on your honor. NO CHEATING**

Lecture Text: **REQUIRED** Janice G. Smith, **General, Organic and Biological Chemistry**, 4th ed., 2018, McGraw-Hill. You can acquire a digital text for \$30 for the course from the following link:

Here is the link for purchasing the \$30 ebook (Smith, 4th Ed Chem 30A-ISBN: 9781307601619-\$30)

<https://www.mheducation.com/highered/custom/product/9781307601619.html>

Please delete cookies and use Firefox or Safari. Call *Create* if you have any issues at 1-800-962-9342.

Lab Experiments: Three Lab Quizzes plus five Science Interactive Lab Kit Experiments (**REQUIRED**), **free** from **DeAnza bookstore** on for experiments performed at home. Please order on **July 1st**. Delivery after July 6th. Use this link to create a Science Interactive account at:

<https://myhol.holscience.com/enroll/hwfz-ndtb-cfhd-mnxf>

You can create an account before you have the kit. Please do so ASAP and complete Getting Started and Laboratory Safety and submit the .pdf for each one to CANVAS Assignments. **After you finish the SI labs, save as a .pdf and submit to Canvas Assignments.** All 8 labs count towards your grade (Three Labs that are entered into ZipGrade and the Five labs from SI Kit that are entered into CANVAS assignments and the two intro labs entered into CANVAS assignments). Late labs will incur a penalty. You **MUST** wear eye protection during lab. You must complete Getting Started and Laboratory Safety before you can perform the first lab, **Limiting Reagents.**

Lab Reports: Lab reports will be filled out in the form provided by each HOL experiment, saved as a .pdf and submitted to Canvas Assignments in the proper place. **Lab Reports are DUE AFTER Lab is COMPLETE. See Calendar and Canvas Assignments for exact dates on which each experiment is due.**

Calculator: A scientific calculator, not our smart phone, will be necessary to complete quizzes and exams. You can purchase them for about \$20. My favorite is the TI-30XIIS shown here:



Academic Dishonesty: "Academic dishonesty is a serious offense, which includes but is not limited to the following: cheating, complicity, fabrication and falsification, forgery, and plagiarism. Cheating involves copying another student's paper, exam, quiz or use of technology devices to exchange information during class time and/or testing. It also involves the unauthorized use of notes, calculators, and other devices or study aids. In addition, it also includes the unauthorized collaboration on academic work of any sort. Complicity, on the other hand, involves the attempt to assist another student to commit an act of academic dishonesty. Fabrication and falsification, respectively, involve the invention or alteration of any information (data, results, sources, identity, and so forth) in academic work. Another example of academic dishonesty is forgery, which involves the duplication of a signature in order to represent it as authentic. Lastly, plagiarism involves the failure to acknowledge sources (of ideas, facts, charges, illustrations and so forth) properly in academic work, thus falsely representing another's ideas as one's own."

Word Processing: If you are looking for a **free** word processor compatible with WORD, checkout www.openoffice.org .

Online Help: Some suggested websites for help. <http://chemistry.about.com/od/homeworkhelp/a/chemistry101.htm> or <http://antoine.frostburg.edu/chem/senese/101/tutorials/>


Final Grades: DeAnza will publish your final grades. **Please do not ask your professor.** If there are extenuating circumstances requiring your final grade early, please discuss with your professor before you take the final exam.

Grading App: ZipGrade.com will be used for grading some Quizzes and all Exams. Your instructor will send you your access code. Deadlines will be followed.

Changes to Syllabus: **This syllabus may change according to the instructor and the needs of the class.** Please check with the syllabus posted in the Canvas Files. Changes will be noted by a date. Use the most current date. An announcement in Canvas will be made to announce changes.

Class Calendar For 25Z and 26Z (28 June-5 Aug)

Lecture (Black); Lab (Blue); Quizzes, Exams & Deadlines (Red); Holidays (Green)

Date (M)	Date (T)	Date (W)	Date (Th)
28 June Ch. 1: Matter and Measurement Lab: Getting Started + Laboratory Safety DUE Before you can do Laboratory Techniques and Measurements lab Enroll in the SI website first	29 Jun Lecture: Ch. 1: Cont. Ch. 2: Atoms and the Periodic Table Lab1a: Math Review (pt 1)	30 June Lecture: Ch. 2: Cont. Lecture Quiz 1: Ch. 1 Lab1b: Math Review (pt2)	1 July Lecture: Ch. 3: Ionic Compounds Lecture Quiz 2: Ch. 2 Lab 2a: Nomenclature (pt1) Lecture Quiz 1: Ch. 1 DUE in ZipGrade Order your Lab Kit TODAY from the DeAnza Bookstore. Delivered after 6 July
5 July Independence Day holiday: offices closed; no classes 	6 July Ch. 3: Cont. Lecture Quiz 2: Ch. 2 DUE in ZipGrade Lab 2b: Nomenclature (pt 2) Lab1: Math Review Due in ZipGrade	7 July Lecture: Ch. 3: Cont. Ch. 4: Covalent Compounds Lab 3a: Balancing Reactions (pt1) Lecture Quiz 3: Ch. 3	8 July Lecture Ch. 4: Cont. Lecture Quiz 4: Ch. 4 Lecture Quiz 3: Ch. 3 DUE in ZipGrade Lab 3b: Balancing Reactions (pt 2) Lab 2: Nomenclature Due in ZipGrade
12 July Review Exam 1: Chap 1-4 Lecture Quiz 4: Ch. 4 DUE in ZipGrade Lab 4a: Limiting Reagents (pt 1)	13 July Lecture EXAM 1: Chap 1-4 in ZipGrade Lab 4b: Limiting Reagents (pt 2) Lab 3: Balancing Reactions Due in ZipGrade	14 July Lecture: Ch. 5: Chemical Reactions Lecture Quiz 5: Ch. 5 Lab 5a: Laboratory Techniques and Measurements (pt1)	15 July Lecture: Ch. 5: Cont. Ch. 6: Energy Changes, Reaction Rates and Equilibrium Lecture Quiz 6: Ch. 6 Lecture Quiz 5: Ch. 5 DUE in ZipGrade Lab 5b: Laboratory Techniques and Measurements (pt 2) Lab 4: Laboratory Techniques and Measurements DUE in Canvas Assignments

<p>19 July Lecture: Ch. 6: Cont. Ch. 7: Gasses, Liquids, and Solids Lecture Quiz 7: Ch.7 Lecture Quiz 6: Ch. 6 DUE in ZipGrade Lab 6a: Observations of Chemical Changes (pt 1)</p>	<p>20 July Lecture: Ch. 7: Cont. Lecture Quiz 7: Ch. 7 DUE in ZipGrade Lab 6b: Observations of Chemical Changes (pt 2) Lab 5: Observations of Chemical Changes DUE in Canvas Assignments</p>	<p>21 July Lecture: Review Exam 2: Ch. 5-7 Lab 7a: Introduction to Chemical Compounds (pt1)</p>	<p>22 July Lecture Exam 2: Ch. 5-7 in ZipGrade Lab 7b: Introduction to Chemical Compounds (pt 2) Lab 6: Limiting Reagents DUE in Canvas Assignments</p>
<p>26 July Lecture: Ch. 8: Solutions Lab 8a: Solutions and Dilutions (pt 1)</p>	<p>27 July Lecture: Ch. 8 Cont. Ch. 9: Acids and Bases Lecture Quiz 8: Ch. 8 Lab 7: Introduction to Chemical Compounds DUE in Canvas Assignments Lab 8b: Solutions and Dilutions (pt 2)</p>	<p>28 July Lecture: Ch. 9: Cont. Lecture Quiz 9: Ch. 9 Lecture Quiz 8: Ch. 8 DUE in ZipGrade NO LAB</p>	<p>29 July Lecture: Ch. 10: Nuclear Chemistry Lecture Quiz 10: Ch. 10 Lecture Quiz 9: Ch. 9 DUE in ZipGrade Lab 8: Solutions and Dilutions DUE in Canvas Assignments NO LAB</p>
<p>2 Aug Lecture: Review Exam 3 (Ch. 8-10) Lecture Quiz 11 (20 pts, cannot be dropped) Lecture Quiz 10: Ch. 10 DUE in ZipGrade Lab: Lab Final Exam in ZipGrade NO LAB</p>	<p>3 Aug Lecture Exam 3: Ch. 8-10 in ZipGrade NO LAB</p>	<p>4 Aug Review for Final Lecture Quiz 11: Ch. 11 DUE in ZipGrade NO LAB</p>	<p>5 Aug Lecture Final Exam in ZipGrade NO LAB</p>

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.