

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:01Z, 02Z Sp2021 - Syllabus

Lecture: M/W 2:30 PM – 4:20 PM (Synchronous) – Zoom Link: <https://fhda-edu.zoom.us/j/95469036210>

Lab 01Z-M: 1:30-2:20 PM (Synchronous)—Zoom Link: <https://fhda-edu.zoom.us/j/95339442414>

Lab 02Z-W 1:30-2:20 PM (Synchronous)—Zoom Link: <https://fhda-edu.zoom.us/j/97500667513>

Office Hours: M/W 12 noon-1 pm—Zoom Link: <https://fhda-edu.zoom.us/j/91595402854>

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 12 quizzes (10 pts each)	100 points
2 pre-labs	20
7 Labs (20 pts each)	140
1 Lab Final (100 pts)	100
3 Exams (100 pts each)	300
1 Final (200 pts)	200
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Total	860 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 two weeks of class or you may 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. You are permitted to bring a molecular model kit, the instructor must approve if it is assembled in any way. Cell phones may not be used at any time during the exam. **Calculators** may be used if approved by instructor. Once the exam begins you may not leave the room unless you turn in the exam, so plan to take a bathroom break *before* class. **No Mobile Phones during Exam! Answer Keys will be available after the exam in Canvas.**

Lecture Text: Janice G. Smith, **General, Organic and Biological Chemistry**, 4th ed., 2018, McGraw-Hill.

Lab Experiments: Two Lab Quizzes plus five Science Interactive Lab Kit, free from bookstore on for experiments performed at home. They can be ordered on April 20. Use this link to create a Science Interactive account:

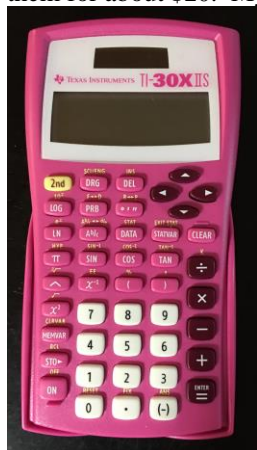
<https://myhol.holscience.com/enroll/cmmd-tzcw-kbns-pfp>

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. All 7 labs count towards your grade. 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.

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 and Quizzes are DUE ONE WEEK AFTER Lab is COMPLETE**

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 your take the final exam.

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

Attendance App: CATQR will be used for attendance tracking. Please get an account at the app CATQR class attendance tracker or at <https://www.classattendancetracker.com/>

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 Course Studio. Changes will be noted by a date. Use the most current date.

Class Calendar

Date (M)	01Z,02Z: Lecture 01Z:Lab	Date (W)	01Z,02Z: Lecture 02Z:Lab
5 April	Lecture: Intro to Course and Lab; & Math Skills Ch. 1: Matter and Measurement Lab 01Z Intro, Science Interactive: Getting Started & Laboratory Safety	7 April	Lecture: Ch. 1: Cont. Ch. 2: Atoms and the Periodic Table Lab 02Z Intro, Science Interactive: Getting Started & Laboratory Safety
12 April	Lecture: Ch. 2: Cont. 61 Lab 1: Measurements Quiz 1: Ch. 1 01Z LAB: Lab Quiz 1 (Math)	April 14	Ch. 3: Ionic Compounds Quiz 1: DUE Quiz 2: Ch. 2 02Z Lab: Lab Quiz 1 (Math)
19 April	Lecture: Ch. 3: Cont. Ch. 4: Covalent Compounds Quiz 3: Ch. 3 Quiz 2: DUE 01Z Lab: Lab 2-Nomenclature	April 21	Lecture: Ch. 4: Cont. Quiz 3: DUE Quiz 4: Ch. 4 02Z Lab 2: Lab Quiz 2-Nomenclature
26 April	Review Exam 1: Chap 1-4 Quiz 4: DUE SI Getting Started: DUE SI Laboratory Safety: DUE Lab 01Z: SI Kit-Laboratory Techniques and Measurements	May 28	EXAM 1: Chap 1-4 SI Getting Started: DUE SI Laboratory Safety: DUE Lab 02Z: SI Kit-Laboratory Techniques and Measurements
3 May	Lecture: Ch. 5: Chemical Reactions Lab 01Z: SI Kit-Observations of Chemical Changes	5 May	Lecture: Ch. 5: Cont. Ch. 6: Energy Changes, Reaction Rates and Equilibrium Lab 02Z: SI Kit-Observations of Chemical Changes
10 May	Lecture: Ch. 6: Cont. Ch. 7: Gases, Liquids, and Solids Quiz 5: Ch. 5 Lab 01Z: SI Kit-Limiting Reagents	12 May	Lecture: Ch. 7: Cont. Quiz 5: DUE Quiz 6: Ch. 6 Lab 02Z: SI Kit-Limiting Reagents
17 May	Lecture: Ch. 8: Solutions Quiz 6: DUE Quiz 7: Ch. 7 Lab 01Z: SI Kit-Introduction to Chemical Compounds	19 May	Lecture: Chap 8: Cont. Quiz 7: DUE Lab 02Z: SI Kit-Introduction to Chemical Compounds
24 May	Review Exam 2: Ch. 5-7 Lab 0Z: SI Kit-Solutions and Dilutions	26 May	EXAM 2: Ch. 5-7 Lab 02Z: SI Kit-Solutions and Dilutions
31 May	Memorial Day Holiday (No Class) 	2 June	Lecture: Ch. 9: Acids and Bases Quiz 8: Ch. 8
7 June	Ch. 10: Nuclear Chemistry Quiz 8: DUE Quiz 9: Ch. 9	9 June	Lecture: Ch. 10: Cont. Review for Exam 3: Ch. 8-10 Quiz 9: DUE Quiz 10: Ch. 10
14 June	Review for Exam 3: Ch. 8-10 Review for Final: Ch. 1-10 Quiz 11: Ch. 1-10 (Take-Home) 01Z Lab: Lab Final	16 June	Exam 3: Ch. 8-10 02Z Lab: Lab Final Quiz 11 DUE

21 June	<u>Study Day: No Class</u>	23 June	Final Exam: Ch. 1-10 1:45 – 3:45 pm
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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.