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
Darkness can't survive in the presence of light.
—Lara Hope & the Ark-Tones
"Darkness cannot drive out darkness:
Only light can do that.
Hate cannot drive out hate:
Only love can do that."
--Martin Luther King, Jr.
"Any book worth banning is worth reading."
--Isaac Asimov
"When a foreigner resides among you in your land, do not mistreat them. The foreigner residing among you must be treated as your native-born. Love them as yourself, for you were foreigners in Egypt."
--Leviticus 19: 33-34 NIV

Chem. 30A:25,26 Summer 2026 **Syllabus**
Lecture (Everyone): Mon,Tues,Wed,Thur 5:30 PM – 7:20 PM (In Person) – Room SC1102
Lab 25-Mon&Wed: 2:30-5:20 PM (In Person)—Room SC2204
Lab 26-Tues&Thur 2:30-5:20 PM (In Person)—Room SC2204
Office Hours: No Office Hours during Summer session

Instructor: Dr. James Maxwell: email: maxwelljames@fhda.edu

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 out of quizzes + quiz 12 (20 pts)	100 points
9 Labs (20 pts each)	180
SIGNED Lab Safety Contract for Chem 30A W 25	20
Safety Quiz	20
1 Lab Final (100 pts)	100
3 Lecture Exams (100 pts each)	300
1 Lecture Final (200 pts)	200
Lab Clean-up	20
Total	940 points

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

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

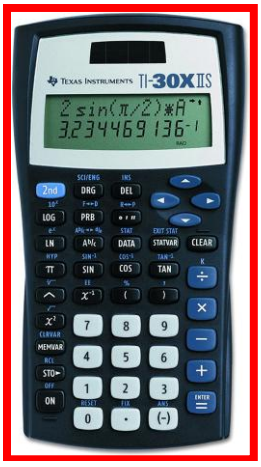
Attendance: **You must attend the first day and the following two weeks of classes or you will be dropped by your instructor. If there is an extenuating circumstance, contact your instructor at once**. Your attendance is urged for all lectures and required for all quizzes, exams, and labs. Always sign the roll sheet to register your attendance at all lectures or labs. Unexcused exam, quiz and lab absences score **0**. It is the responsibility of the student to contact the professor regarding missed work. If an absence is anticipated, the student should make arrangements to complete the missed assignments prior to the absence. In an emergency, it is the student's responsibility to contact the instructor within one class period of an exam. *There are no laboratory make-up days*. **Attendance will be taken each class and lab.**

Quizzes: Quizzes will be available on Canvas 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*. The best 10 quiz scores will be used in determining your final grade.

Exams: There will be **three** exams and one **comprehensive** final exam. You must bring your own calculator (NOT YOUR PHONE), pencil and eraser for exams. A Periodic Table is attached to each exam. 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. PLEASE DO NOT send emails asking for your grade or exam score. Your grades exams will be available the next class period.**

Lecture Text: **Free Online Text: McMurry's Fundamentals of General Organic and Biological Chemistry (LibreTexts)**
https://chem.libretexts.org/Bookshelves/Introductory_Chemistry/Fundamentals_of_General_Organic_and_Biological_Chemistry_(LibreTexts)

Calculator: Recommend the calculator shown (TI-30XIIs). A black one is listed at $9.99 from Amazon.com. Different colors are more expensive.



TWO (2) Notebooks for Lab Reports: **REQUIRED.** You will need two composition notebooks: lined, unlined, graph is your choice. Color is your choice. Try **NOT** to get **BLACK**.
One notebook for the even numbered labs in one notebook and the odd numbered labs in the other notebook.
Below are examples. They are not expensive. Shop at Safeway or Amazon.

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Sa**fety Document:**

This Document will be available to you. Please read and sign it and return it to your instructor. You must cooperate according to this safety document to be allowed continuous participation in lab. Please Sign and return this Document by **6 July**

Lab Videos and Safety Quiz: Safety videos and Quiz must be completed before lab work can begin. The Safety Videos are here: https://www.youtube.com/watch?v=DWSymRPCDN4 . The Safety Quiz is 20 questions based on the videos. You must score 100% (20/20) and have 4 attempts to achieve this. It is totally possible to score 100% on the safety quiz. Please contact your instructor if after 3 attempts you have not scored 20/20 for assistance. The quiz is on **Canvas under Quizzes.** This quiz is **DUE 6 July or you cannot participate in Lab.**

Lab Experiments: **The lab experiments are located on Canvas under Lab Experiments.**

Labs: All 9 labs count towards your grade. No make-up labs. Late labs will incur a penalty. You **MUST** wear eye protection during lab.

Lab Notebook: You will need to purchase a *Composition notebook*. They are about $1. The pages are sewn in. Not spiral bound. Not perforated pages. Be sure you buy the correct Composition notebook; no other notebook will be allowed. First, number **all** pages, front and back, at the upper right-hand corner. Number **ALL** pages. Number every single page, front and back.

Contents of book: (This composition book can be used on your lab final. Keep it in up to date.)

-Front page, put your name, Course, and section number.
-After your complete any page, you will sign and date that page at the bottom right.
-Mistakes are lined out with a single line, for example: ~~single~~ single. Don't make a huge mess if you make an error. A simple single line or X is adequate. **Do Not Use WHITE-OUT correction fluid**.
-Front page: Table of contents below your name that gives the experiment name and pages (beginning and end) for that experiment.

Before you come to class for each Experiment have the following in your notebook, and get a stamp from your professor for these items before you begin lab. You CANNOT copy and paste. This must be handwritten:

-Title
-Learning Outcomes
-Brief Introduction to the experiment
-Supplies, Procedure
-Empty Data Tables
(After class and before the experiment is graded complete the following.)
-Fill in Data Tables during lab
Results & Summary (including analysis or errors-sources of error and how to prevent them)

When you arrive at lab, you will receive a stamp to indicate that you have *Title, Learning Outcomes, Brief Introduction, Experimental Design, and Empty Data tables*. The week after the experiment is completed, your book will be graded for completion of the experiment, worth 20 points.

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 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."

Online Help: Some suggested websites for help. **http://chemistry.about.com/od/homeworkhelp/a/chemistry101.htm**.

Absences: **In case of any absence, please contact me as soon as possible. Contact your instructor before your absence, if possible, otherwise within 24 hours afterwards.**

Important Dates:

Last Day for Adds	July 05, 2025
Census Date	July 6, 2025
Last Day for Drops w/ Refund	July 5, 2025
Last Day for Drops w/o W	July 5, 2025
Last Day for Drops	July 30, 2025

Changes to Syllabus: **This syllabus may ch**ange according to the instructor and the needs of the class. Please check with the syllabus posted in Canvas. Updated changes will be published in Canvas and noted by a date. Use the most current date. Please notify your instructor if you find any errors.

INSTRUCTIONS for the Laboratory:

1. **WASH YOUR HANDS** with soap and water before leaving lab.
2. Leave the lab and balance room in pristine condition. If this becomes a problem, the entire class will be assessed penalty points to your lab grade. Wipe up all spills in the lab and balance room, close all the doors on the balances, wipe of all water, replace all chemicals and materials to their original storage spaces. Remember: there is not such thing as "NOT MY JOB." Everything if everyone's job if you are enrolled in this class.
3. Sign and follow the Lab Safety Contract that will be handed out in class.
4. Watch the Safety Videos listed on this syllabus
5. Score 100% on the Lab Safety Quiz available in Canvas.
6. **Thanks for a safe and clean lab.**

Chem 30A:24,25 Summer 2026 Class Calendar

All Quizzes are in ZipGrade. Exams are in person in class

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

Late Assignments will receive a penalty

Date (M) Lecture (25 & 26) Lab 25	Date (T) Lecture (25 & 26) Lab 26	Date (W) Lecture (25 & 26) Lab 25	Date (Th) Lecture (25 & 26) Lab 26
29 June Lecture: Intro to Course and Lab; & Math Skills Ch. 1: Chemistry, Matter, and Measurement **25-Lab: Introduction & Check-in**	30 June Lecture: Ch. 1: Cont. Ch. 2: Elements, Atoms, and the Periodic Table 26-Lab: **Introduction & Check-in**	1 July Lecture: Ch 2. Cont. **Math Quiz: Math Skills** **Quiz 1: Chemistry, Matter, and Measurement** **Quiz 2 Elements, Atoms, and the Periodic Table** **Quiz 3: Ionic Bonding and Simple Ionic Compounds** **Quiz 4: Covalent Bonding and Simple Molecular Compounds** **25-Lab 1: Density**	2 July Lecture: Ch. 3: Ionic Bonding and Simple Ionic Compounds **26- Lab 1: Density**
6 July Lecture: Ch. 3: Cont. **25 & 26: ACS Lab Safety Quiz For Everyone! (In Canvas)** **25-Lab 2: Nomenclature** **25: Lab 1: Due**	7 July Ch. 3: Cont. **26-Lab 2: Nomenclature and** **26: Lab 1: DUE**	8 July Ch. 4: Covalent Bonding and Simple Molecular Compounds **25-Lab 3: Molecular Structures** **25: Lab 2: DUE**	9 July Lecture Ch. 4: Cont. **26-Lab 3: Molecular Structures** **26: Lab 2: DUE**
13 July Lecture: Review for Exam 1, Math Quiz and Quizzes 1-4 **Math Quiz: Due on ZipGrade** **Quiz 1: Due on ZipGrade** **Quiz 3: Due on ZipGrade** **Quiz 4: Due on ZipGrade** **25-Lab 4: Salt and Sand Separation** **26 Lab 3: DUE**	14 July **EXAM 1: Math Quiz and Quizzes 1-4** **26-Lab 4: Salt and Sand Separation 26** **26 Lab 3: DUE**	15 July Lecture: Ch. 5: Introduction to Chemical Reactions **25- Lab 5: Chemical Reactions** **Quiz 5: Introduction to Chemical Reactions** **Quiz 6: Quantities in Chemical Reactions** **Quiz 7: Energy and Chemical Processes** **Quiz 8: Solids, Liquids, and Gasses** **Lab 4: DUE**	16 July Lecture: Ch. 5: Cont. Ch. 6: Quantities in Chemical Reactions **26- Lab 5: Chemical Reactions** **Lab 4: DUE**

20 July Lecture: Ch. 6: Cont. Ch. 7: Energy and Chemical Processes **25-Lab 6: % Yield Sodium Carbonate** **25 Lab 5: DUE**	21 July Lecture: Ch. 7: Cont. Ch. 8: Solids, Liquids, and Gases **26-Lab 6: % Yield Sodium Carbonate** **26 Lab 5: DUE**	22 July Lecture: Review Exam 2: Quizzes 5-8 **Quiz 5: DUE in ZipGrade** **Quiz 6: DUE in ZipGrade** **Quiz 7: DUE in ZipGrade** **Quiz 8: DUE in ZipGrade** **25-Lab 7: Synthesis of Alum** **25 Lab 6: DUE**	23 July **Exam 2: Quizzes 5-8** **26-Lab 7: Synthesis of Alum** **26 Lab 6: DUE**
27 July Lecture: Ch. 9: Solutions **Quiz 9: Solutions** **Quiz 10: Acids and Bases** **Quiz 11: Nuclear Chemistry** **Quiz 12: Mini Final (20 pts)** **25-Lab 8: Gas Forming Reaction** **25 Lab 7: DUE**	28 July Lecture: Ch. 9 Cont. Ch. 10: Acids and Bases **26-Lab 8: Gas Forming Reaction** **26 Lab 7: DUE**	29 July Lecture: Ch. 10: Cont. **25-Lab 9: Vinegar Titration** **Lab Check-Out-DUCKS** **25 Lab 8: DUE**	30 July Lecture: Ch. 11: Nuclear Chemistry **26-Lab 9: Vinegar Titration** **Lab Check-Out-DUCKS** **26 Lab 8: DUE**
3 Aug Lecture: Review Exam 3 (Quizzes 8-11) **Quiz 9: DUE in ZipGrade** **Quiz 10: DUE in ZipGrade** **Quiz 11: DUE in ZipGrade** **25 NO LAB** **25 Lab: All Labs Due!!! Including Lab 9 (Missing Labs will reveive a 0 and Incomplete Labs will receive a penalty)** **25 & 26: Lab Final In ZipGrade (2 August-7 August)**	4 Aug **Exam 3: Quizzes 9-11** **Quiz 12: DUE in ZipGrade** **26 NO LAB** **26 Lab: All Labs Due!!! Including Lab 9 (Missing Labs will reveive a Zero and Incomplete Labs will receive a penalty)**	5 Aug Lecture: Review for Final **25 No LAB** **25 & 26 Lab Final DUE in ZipGrade**	6 Aug **Final Exam (Quizzes 1-11) During Normal Class Time** **26 No LAB**

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.

Office Hours: