

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:63,64 Winter 2025 Syllabus

Lecture: Tu(63)/Th(64) 5:30 PM – 7:20 PM (In Person) – Room SC1102

Lab 63-Tu: 7:30-10:20 PM (In Person)—Room SC2208

Lab 64-Th 7:30-10:20 PM (In Person)—Room SC2208

Office Hours: Tu(63)/Th(64) 4 pm-4:50 pm—SC1 Second Floor

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:

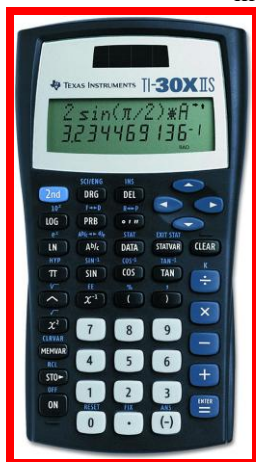
10 best Quizzes out of quizzes 1-12 + Math Quiz (10 pts each) + quiz 12 (20 pts)	100 points
9 Labs (20 pts each)	180
SIGNED Lab Safety Contract for Chem 30A W 25	20
1 Lab Final (100 pts)	100
3 Lecture Exams (100 pts each)	300
1 Lecture Final (200 pts)	200
Lab Clean-up	20
Total	920 points

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))
[https://chem.libretexts.org/Bookshelves/Introductory_Chemistry/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 around at Safeway or Rite Aid or Amazon.



Safety Document:

This Document will be printed and available to you. Please read and sign it. You must cooperate according to this safety document to be allowed to participate in lab. Please Sign and return this Document by **24 Jan**

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% and have 3 attempts to achieve this. It is totally possible to score 100% on the safety quiz. This will be explained in more detail in first Lecture. The quiz is on Canvas under Quizzes

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	January 20, 2025
Census Date	January 21, 2025
Last Day for Drops w/ Refund	January 19, 2025
Last Day for Drops w/o W	January 19, 2025
Last Day for Drops	February 28, 2025

Changes to Syllabus: This syllabus may change 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 is 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:63,64 Winter 2025 Class Calendar

All Quizzes are on Canvas. Exams are in person in class

Date (Tu)	63/64: Lecture (RM SC1102) 63:Lab (RM SC2208)	Date (Th)	63/64: Lecture (RM SC1102) 64:Lab (RM SC2208)
7 Jan	Lecture: Intro to Course and Lab; & Math Skills Ch. 1: Matter and Measurements 63 Lab Check-in Safety Videos Safety Quiz in Canvas (3 attempts and must pass w/100%) 63/64 Lab: Sign and Return Safety Doc	9 Jan	Lecture: Ch. 1: Cont. Ch. 2: Atoms, and the Periodic Table Math Quiz 64 Lab Check-in Safety Videos Safety Quiz in Canvas (3 attempts and must pass w/100%) 63/64 Lab: Sign and Return Safety Doc
14 Jan	Lecture: Ch. 2: Cont. 63 Lab 1: Density Quiz 1: Ch. 1	16 Jan	Ch. 3: Ionic Compounds Quiz 2: Ch. 2 Math Quiz : <u>DUE</u> Quiz 1: <u>DUE</u> 64 Lab 1: Density
21 Jan	Lecture: Ch. 3: Cont. Ch. 4: Molecular Compounds 63 Lab 2 Nomenclature Quiz 2: <u>DUE</u> 63 Lab 1: <u>DUE</u>	23 Jan	Lecture: Ch. 4: Cont. Quiz 3: Ch. 3 Quiz 4: Ch. 4 64 Lab 2: Nomenclature 64 Lab 1: <u>DUE</u>
28 Jan	Review Exam 1: Chap 1-4 63 Lab 3: Structures Quiz 3 & 4 <u>DUE</u> 63 Lab 2: <u>DUE</u>	30 Jan	<u>EXAM 1: Chap 1-4</u> 64 Lab 3: Structures 64 Lab 2: <u>DUE</u>
4 Feb	Lecture: Ch. 5: classification and Balancing Chemical Reactions 63 Lab 4: Sand/Salt Separation 63 Lab 3: <u>DUE</u>	6 Feb	Lecture: Ch. 5: Cont. Ch. 6: Chemical Reactions – Mole and Mass Relationships Quiz 5: Ch. 5 64 Lab 4: Sand/Salt Separation 64 Lab 3: <u>DUE</u>
11 Feb	Lecture: Ch. 6: Cont. Ch. 7: Chemical Reactions – Energy, Rates, and Equilibrium Quiz 6: Ch. 6 63 Lab 5: Chemical Reactions 63: Lab 4 <u>DUE</u>	13 Feb	Lecture: Ch. 7: Cont. Quiz 7: Ch. 7 64 Lab 5: Chemical Reactions 64: Lab 4 <u>DUE</u>
18 Feb	Lecture: Ch. 8: Gases, Liquids, and Solids 63 Lab 6: Yield of Sodium Carbonate 63 Lab 5: <u>DUE</u>	20 Feb	Lecture: Ch 8: Cont. Quiz 5: Due 2/23 Quiz 6: Due 2/23 Quiz 7: Due 2/23 Quiz 8: Ch. 8 64 Lab 6: Yield of Sodium Carbonate 64 Lab 6: <u>DUE</u>
25 Feb	Review Exam 2: Ch. 5-8 63 Lab 7: Synthesis of Alum Quiz 8: <u>DUE</u>	27 Feb	<u>EXAM 2: Ch. 5-8</u> 64 Lab 7: Synthesis of Alum

4 Mar	Lecture: Ch. 9: Solutions Quiz 8: Ch. 8 63 Lab 8: Gas Formation Reaction 63 Lab 6 & 7: <u>DUE</u>	6 Mar	Lecture: Ch. 9: Cont. Lecture: Ch. 10: Acids and Bases 64 Lab 8: Gas Formation Reaction 64 Lab 6 & 7: <u>DUE</u>
11 Mar	Ch. 11: Nuclear Chemistry Quiz 9: Ch. 9 Quiz 10: Ch. 10 Quiz 11: Ch. 11 Quiz 12: Mini Final (Ch. 1-11) 63 Lab 9: Citric Acid Titration 63 Lab 8: <u>DUE</u>	13 Mar	Lecture: No Class! 64 Lab 9: Citric Acid Titration 63 Lab 8: <u>DUE</u>
18 Mar	Review for Exam 3: Ch. 9-11 Review for Final: Ch. 1-11 Quiz 9: <u>DUE</u> Quiz 10: <u>DUE</u> Quiz 11: <u>DUE</u> 63/64 Lab: Lab Final in ZipGrade <u>Due 25 June 22 11:30 pm</u> 63 Lab 9 <u>DUE</u> 63 Lab: Check-Out	20 Mar	Exam 3: Ch. 9-11 Quiz 12: <u>DUE</u> 64 Lab: NO Check-Out. Will be done by 63 Lab 63 & 64 Labs 9 <u>DUE</u>
25 Mar	Lecture Final Exam: Ch. 1-11 ***6:15-8:15 PM***For All In Class <u>All labs due!!!!</u>	27 Mar	Class Over (No Class)

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:

T,TH 04:00 PM 04:50 PM In-Person SC1 Second Floor