

Organic Chemistry
Chemistry 141
Fall 2020

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Welcome to Organic Chemistry. The reactions and structures you learn throughout this semester are cumulative and will be applied to discussions later in the semester and into the spring.

AIMS: At the end of this course (and Chem142) a successful student will have developed skills and knowledge that allow them to answer the following questions:-

I:- Recognize the atoms and bonding present in common functional groups, their resultant chemical properties and likely reactions.

II:- Be able to create rational curved-arrow mechanisms to predict the likely products of reactions.

Students that can combine these skills will be most successful, as this skillset will allow them to communicate with scientists in many other fields.

LECTURES: Lectures will be held 'live' on MS Teams. I will use Notability and have the meeting Chat on another device so I can answer your questions. If your question is complicated, you may turn on your mic/video to ask. Generally, it will be better for bandwidth if you mute your mic/video. I will record the lecture. Please do not record the lecture yourself. Videos of the lectures will be posted on Teams after class each day. You can join the meeting through the Teams Calendar or the link that will be emailed to you. The Chat tends to get clogged after a couple of lectures, so I will send out invites on a weekly basis. The class notes will be posted on Blackboard and Teams. It is easier to find on Blackboard.

Section A 10:50AM-11:40AM Mon/Wed/Fri

Section B 3:30PM-4:45PM Mon/Wed

OFFICE HOURS: I am happy to meet, get to know you, chat about your challenges and resolve topics from class. I suggest you email me two times that would work for you and we can meet on Teams.

WEEKLY REVIEW: Starting Thursday 9/24 I will host a Review on Teams. I will post a few problems on Blackboard for us to chat about.

EXAMS: Exams will be posted on Blackboard. You will have 2hrs within a 24hr period to complete the exam.

Exam 1	October 1st
Exam 2	October 29th
Exam 3	November 19th
Final Exam	December 7-11th TBD

ONLINE HOMEWORK: We will be using TopHat Learning for graded quizzes associated with the lectures. These must be completed by 11:55pm on the due date, no late quizzes for any reason. [Sign-up on TopHat \(\\$50 for one semester, \\$65 for both Chem 141/142\)](#)

REQUIRED SUPPLIES:- "*Organic Chemistry*", Klein, 3rd edition, Wiley (study guide included from UVM bookstore \$145) or e-book (\$135) available from vitalsource.com

[Download MS Teams software](#) will be required on your computer or iPad (it works on phones too but that's not ideal to view a lecture).

A notebook is better than making notes on an iPad. Research shows you learn better, by physically writing. I will use Notability on my iPad, to present. You should plan to write notes (there are no Powerpoints, those are boring!).

RECOMMENDED:- “Organic Chemistry I” As a Second Language, Klein, any edition
Molecular Structure Model Kit, HGS

LABS In-person labs will have an ABABABAB format for the semester. Your lab section will be split into two halves to reduce the number present in the lab. Group A will be in-person on odd weeks, with online experiments on weeks when Group B is in the lab (even weeks). You will have 4 in-person lab experiments and 4 on-line/video lab experiments.

Students taking the at-home lab section will have 8 on-line/video lab experiments.

	Date	Group A	Group B
Week 1	14-Sep	In-P Distillation	On-L Ingredients in Headache Medicines
Week 2	21-Sep	On-L Ingredients in Headache Medicines	In-P Distillation
Week 3	28-Sep	In-P Extraction and Recrystallization	On-L Molecular Models
Week 4	5-Oct	On-L Molecular Models	In-P Extraction and Recrystallization
Week 5	12-Oct	In-P Sn2 1-bromobutane from 1-butanol	On-L Catalytic Hydrogenation
Week 6	19-Oct	On-L Catalytic Hydrogenation	In-P Sn2 1-bromobutane from 1-butanol
Week 7	26-Oct	In-P Dehydration of 2-methyl-2-butanol	On-L Synthesis of an Alkyne
Week 8	2-Nov	On-L Synthesis of an Alkyne	In-P Dehydration of 2-methyl-2-butanol

In-P = in-person labs On-L = on-line/video lab

COURSE GRADE: The course grade will be based on three mid-semester exams and a compulsory, cumulative final exam. Of the three mid-terms the lowest grade will be dropped. No curves are applied to the mid-semester exams and the class average for the exams may vary depending on the complexity of the material. Try your best on all the exams. The final exam grade will not be dropped.

Each mid-semester exam will constitute 20% of your grade, the Final will constitute 25%, providing 65% of your course grade. The lab component of the course will deliver 25%. The final 10% will come from the TopHat online homework.

3 exams (best two mid-terms (20% each) and the final (25%))	65%
Lab grade	25%
TopHat graded homework	<u>10%</u>
	100%

COURSE ETIQUETTE:

Organic chemistry has a scary reputation. It is best thought of as a new language or skill. As with any skill some people can become skillful faster than others. All of you are capable of successfully completing this course with the right attitude and determination.

Recommendations:-

1. Attend class with a clear and inquisitive attitude.
2. While in class FOCUS on understanding the material. Do NOT text, check Facebook or emails. This is a waste of your time, money, disrespectful to me and the other students around you who are trying to learn. I know everyone gets distracted at times. Try to reengage as quickly as possible.
3. After class review the material, read the sections in the textbook. Try the recommended problems, complete the graded online problems early so you can ask questions should you have any.
4. Speak respectfully to your fellow students, your TA and me. All the challenges presented to you are designed to encourage you to learn this useful material.
5. Try to find answers to your own problems by checking the course syllabus, lab logistics or Blackboard. Then, if you still don't find the answer, after looking, check in with me or your TA. "Would you stand in-line to have this question answered?"
6. All course materials (both yours and mine) are protected by copyright. I cannot copy or post your written material and you cannot post any course materials such as blanks of the exam, reviews or notes online. Lectures may not be recorded without permission.
7. All students are expected to honor the UVM codes of conduct and academic integrity.

8. Post-bac premed students: do NOT solicit letters of recommendation. I will make offers as merited.
9. Changes to the course may occur. As much notice, as possible, will be provided if changes are required.
10. Work hard and have fun!! A.W.