Organic Chemistry
Chemistry 142
Spring 2021

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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: This is a sequential class; successful completion of Chem 141 is a requirement. Skills from that course will be required in Chem 142. At the end of this course a competent student will have developed skills and knowledge that will 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.

INCLUSION STATEMENT: It is my intent to create a learning environment within which everyone is treated respectfully and has a fair opportunity to succeed. In line with that, I intend to enthusiastically welcome you all; wherever you are from, who you are, what you look like or what your beliefs are.
Organic chemistry is challenging. And yet, I think we can approach it with a fun, open mindset. I will probably laugh at some of my own mistakes and/or the challenges of being a human. However, I will not tolerate behavior or communications that marginalize anyone. We are here to work together to learn chemistry to solve problems and better understand the world around us.

LECTURES: Lectures will be held 'live' on MS Teams. I will use Notability and have the meeting Chat on another device so I can see and 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 as a tab on the Teams General page, 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.

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 2/4 I will host a Review in Innovation E105, and on Teams, at 6pm. 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	**March 4th**
Exam 2	**April 1st**
Exam 3	**April 29th**
Final Exam	**May 13-18th 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 course code 079748 ($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 II"* 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	15-Feb	In-P Oxidation	On-L Reduction
Week 2	22-Feb	On-L Reduction	In-P Oxidation
Week 3	8-Mar	In-P Grignard I and II	On-L Tollen's/Benedicts Test
Week 4	15-Mar	On-L Tollen's/Benedicts	In-P Grignard I and II
Week 5	29-Mar	In-P Biodiesel	On-L NMR Tutorial
Week 6	5-Apr	On-L NMR Tutorial	In-P Biodiesel
Week 7	19-Apr	In-P Aspirin	On-L Solventless Aldol
Week 8	26-Apr	On-L Solventless Aldol	In-P Aspirin

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	10%
	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.