Syllabus for CHEM 141C — Organic Chemistry 1

1. General Information. Course Number: 93250 Credit Hours: 4.00 Semester: Fall 2020

	Meeting Time	*Meeting Days*	*Location*	*Meeting Dates**
Lecture	2:50 – 4:05 PM	T/R	Remote	Aug. 31 – Dec. 4
Review Sessions	6:40 – 7:30 PM	W	Remote	Starting Sept. 9
Labs	See Registration	See Registration	Discovery (4th fl.) / Remote	Starting the week of Sept. 14

*: No class on Nov. 26 (Thanksgiving)

2. Instructor. Severin T. Schneebeli, Ph.D. (He/Him), Associate Professor of Chemistry

	Contact Information	*Office Hours**
Office	Remote, via MS Teams	Mondays: 1 – 2 PM
E-mail	Severin.Schneebeli@uvm.edu	Thursdays: 4:10 – 5:10 PM
Phone	(802) 656-0252	Fridays: 4 5 PM

*: All office hours will be held remotely, via Microsoft Teams.

3. Supplemental Instructor (SI). Eve Pomazi

	Contact Information	*Office Hours*
Office	Remote, via MS Teams	Mondays: 12 – 1 PM
E-mail	Eve.Pomazi@uvm.edu	Wednesdays: 2:15 – 3:15 PM

Please see the "SI" folder on blackboard for more information regarding the review sessions held by the SI as well as for additional resources offered by your truly outstanding SI.

4. Teaching Assistants (TAs). Please see the "TA Office Hours" PDF file in the "Syllabus" folder on blackboard for the TAs' contact information and office hours.

5. Prerequisites and Credit Duplication. No credit if taken concurrently with, or following receipt of, credit for CHEM 042, CHEM 044, CHEM 047, CHEM 143. Prerequisite: CHEM 032 or CHEM 036.

6. Course Description. This course discusses the properties and the reactivity of organic compounds with consideration of bonding, stereochemistry, and reaction mechanisms. It is designed primarily for premedical and biological sciences students. The course is structured into lecture (3 credits) and laboratory (1 credit) components.

7. Course Learning Objectives. This course will help strengthen the following core competencies: Ethical Reasoning & Decision Making, Analytical & Critical Thinking, as well as Quantitative Reasoning/Applied Data Interpretation. In addition, this course teaches you the

basic organic chemistry needed to work in any field that involves current medicine, biology or materials science. These vital skills involve:

(i) Recognizing the atoms and bonding present in common functional groups, their resultant chemical properties, and likely reactions.

(ii) Creating rational curved-arrow mechanisms to predict the likely products of reactions.

All skills, reactions, and structures you learn throughout this semester are cumulative and will be applied to discussions later in the semester and into the spring. After completion of this course you will be able to understand how Organic Chemistry influences the lives of a diverse group of people on a daily basis.

8. Required Course Materials

Textbook	David R. Klein, *Organic Chemistry*, 3rd ed., 2017, John Wiley & Sons, Inc, ISBN: 978-1-119-31615-2. Available either from the UVM bookstore or as an e-book together with the study guide.
Study Guide	David R. Klein, *Organic Chemistry Student Solution Manual/Study Guide,* 3rd ed., 2017, John Wiley & Sons, Inc, ISBN: 978-1-119-42253-2. Available either from the UVM bookstore or as an e-book together with the textbook.
Online Quizzes	Online access to TopHat (homework, $50 for one semester, $65 for two semesters, please sign up on tophat.com). Join code: 340740.
Lecture	You will need a device with internet access and the Microsoft Teams software installed (provided for free by UVM: https://www.uvm.edu/it/kb/article/teams/. I recommend participating in the lectures with your computer or iPad. While Microsoft Teams works on phones too, participating in a lecture on a phone is not ideal.
Laboratory	Laboratory Notebook and SAFETY GLASSES. Available from the UVM bookstore.

9. Recommended Course Materials

Book	David R. Klein, *Organic Chemistry As a Second Language: First Semester Topics*, any ed., 2017, John Wiley & Sons, Inc, ISBN: 978-1-118-01040-2. Available either from the UVM bookstore or online from Wiley VCH.
Modeling Kit	HGS Molecular Structure Model Kit: Organic Chemistry. Available from Amazon.com.

10. Blackboard and Other Course Sites

A) Microsoft Teams. All lectures and review sessions will be hosted 'live' in Microsoft Teams. I will have the meeting Chat on another screen so that I can answer your questions. If your question is complicated, you may turn on your mic/video to ask. Please raise your hand in MS Teams when you would like to ask a question by turning on your mic/video. Generally, it will be better for bandwidth if you mute your mic/video when not asking a question. I will record the lecture. Please do not record the lecture yourself. Videos of the lectures will be posted on MS

Teams after class each day. You can join the meeting through the MS Teams Calendar or the link that will be emailed to you.

B) Blackboard. Blackboard will be used as the central course repository. It will contain your exam and laboratory grades, all syllabi and related information, problem sets, practice exams, answer keys, etc., as well as links to other online resources. We will also use blackboard for pre- and post-lab quizzes. You will be able to access these quizzes from your lab's blackboard page.

C) Piazza. We will be using Piazza as our online discussion forum outside of class. The system is catered to getting you help fast and efficiently from classmates, the SI, the TAs, and myself. Rather than emailing questions to the teaching staff, I encourage you to post your questions on Piazza. If you have any problems or feedback for the developers, email please team@piazza.com. Find our class signup link at: https://piazza.com/uvm/fall2020/202009lqcrosslisted

Alternatively, you can also find our piazza class page in blackboard by simply clicking on "piazza" in your blackboard dashboard.

D) YouTube. I will post one or two short (~5 minutes) flipped lecture videos after most lectures on YouTube. The link to the YouTube playlist is available on our blackboard page in the left sidebar. Please watch these videos regularly. They will help you deepen the material discussed in lecture.

E) TopHat. 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). I will also use the TopHat app to ask questions in lecture. I strongly encourage you to participate in answering these in-class TopHat questions, however, participation in answering these 'live' in-class questions is not mandatory and will not count toward your final grade.

11. Attendance Policy and Classroom Environment Expectations. 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 adept faster than others. All of you are capable of successfully completing this course with the right attitude and determination.

A) Lectures — Tips for Success

1. Attend class in MS Teams with a clear and inquisitive attitude.
2. While in class FOCUS on understanding the material. Do NOT text, check Facebook or read/write e-mails. This is particularly important now, when we are all forced to participate in remote learning due to COVID-19!
3. After class, (i) review the material, (ii) read the sections in the textbook, and (iii) watch any available lecture videos. Furthermore, (iv) try the recommended problems posted on blackboard, (v) work on the weekly problem set for Wednesdays, and (vi) finish the weekly graded online problems on TopHat for Sundays. Remember: You will be required to study for this course at least nine hours per week (three hours for each credit) outside of class.
4. Communicate respectfully with your fellow students, your TAs and me. All the challenges presented to you are designed to encourage you to learn the material.
5. Try to find answers to your own questions by checking the course syllabus, laboratory logistics, blackboard, or the Piazza discussion forum. Then, if you still don't find the

answer, after looking, either start a new discussion thread on Piazza (which I will make a priority to answer) or check in with me, the SI, or your TA. Always ask yourself: "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 my written permission. However, our class sessions will be audiovisually recorded for students in the class to refer back to, and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live.
7. All students are expected to honor the UVM codes of conduct and academic integrity as specified in more detail in section 13.
8. Participate in the virtual lectures as much as possible, either by posing questions in the chat window on MS Teams or by raising your hand in MS Teams, and then unmuting your microphone when called upon. I will try my best to answer all questions received during lecture. Sometimes, this might not be possible due to time constraints, in which case I will answer the remaining questions after lecture.
9. Work hard and have fun!!

B) Wednesday Evening Review Sessions

Each Wednesday, I will post on Blackboard a few problems to be discussed at the following Wednesday evening (6:40 – 7:30 PM, virtual, in Microsoft Teams) review session. This is a perfect opportunity to practice problems and work through some of the tricky points of the new concepts discussed in class. The review questions are not graded but many students find attending the review sessions very helpful. The atmosphere is less formal and more conversational than the regular lectures. I am aware that some of you simply are not able to attend the review session due to unsolvable scheduling conflicts and the review sessions will be recorded as well in MS Teams.

C) Laboratory

Laboratories start the week of September 14. You are required to attend all laboratories. 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

Students must attend the lab section to which you are assigned. Unexcused absences will result in a ZERO graded for the lab experiment. If more than 2 labs are missed, for any reason (even excused absences), you will receive an F for the whole course. An Incomplete can only be granted by the Dean of the College in which you are enrolled.

The Green and Gold Promise clearly articulates the expectations that UVM has for students, faculty, and staff to remain compliant with all COVID-19 recommendations from the federal CDC, the State of Vermont, and the City of Burlington. This include following all rules regarding facial coverings and social distancing when attending class. If you do not follow these guidelines, I will ask you to leave the laboratory. If you forget your mask, you cannot enter the laboratory and should go back and retrieve your mask. The Code of Student Conduct outlines policies related to violations of the Green and Gold Promise. Sanctions for violations include fines, educational sanctions, parent notification, probation, and suspension.

D) Book Problems

The book problems will not be graded and you should do as many problems from the book as possible and grade yourself with the solution manual of your Klein Textbook. While I generally recommend to do all of the problems in the book (you should be able to do most of them fairly quickly), please focus on the ones listed in the "Recommended Book Problems" document posted under the syllabus tab on blackboard. When working on the book problems, DO NOT LOOK AT THE ANSWER KEY UNTIL YOU HAVE COMPLETELY FINISHED A PROBLEM and circle the problem, unless you got it 100% correct.

12. Grading Policy. 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. Attendance at a midterm exam is not required and zero can be considered as your lowest grade. The final exam grade will not be dropped.

Table 1 | Calculation of the final course grade.

Midterm Examinations (best two 20% each)	40%
Final Examination	25%
Laboratory Grade	25%
TopHat weekly graded quizzes	10%
	100%

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

13. Assessments (Graded Work)

A) Weekly Online Quizzes. We will be using TopHat Learning for weekly graded quizzes associated with the lectures. These must be completed by 11:55 pm on the Sunday of the week posted for credit. A schedule for the quizzes will be posted on blackboard under the "Syllabus" tab. NO LATE QUIZZES will be accepted for any reason. The first quiz is due on September 13, 2020.

C) Laboratory. Laboratories start the week of September 14. Logistics will be discussed the week prior. We will use BLACKBOARD for graded prelab and postlab quizzes. Please see section 11C for additional details.

D) Exams. Exams will be posted on Blackboard. You will have 2 hrs within a 24 hr period to complete each exam (including the final). All exams are cumulative.

Midterm Exam 1	Wednesday, Sept. 30
Midterm Exam 2	Wednesday, Oct. 28
Midterm Exam 3	Wednesday, Nov. 18
Final Exam	Dec. 7–11, TBD

Any conflicts with an exam date or time must be resolved at least a week in advance. Alternate exam times/dates will only be considered in exceptional circumstances and must always be PRIOR to scheduled exam times. This policy is in place for fairness and therefore no exceptions can be granted, i.e. there will be no late/makeup exams. Failure to attend an examination (even if explained after the fact) will result in a numerical score of zero for the respective test.

14. Course Evaluation. As for all other UVM courses, all students are expected to complete an evaluation of the course at its conclusion. Your evaluations will be anonymous and confidential, and the information gained (including constructive criticism) will be used to further improve the course.

15. Student Learning Accommodations. In keeping with University policy, any student with a documented disability interested in utilizing accommodations should contact SAS, the office of Disability Services on campus. SAS works with students and faculty in an interactive process to explore reasonable and appropriate accommodations, which are communicated to faculty in an accommodation letter. All students are strongly encouraged to meet with their faculty to discuss the accommodations they plan to use in each course. A student's accommodation letter lists those accommodations that will not be implemented until the student meets with their faculty to create a plan.

Contact SAS:
A170 Living/Learning Center
Phone: 802-656-7753
E-mail: access@uvm.edu
Web: www.uvm.edu/access

16. Religious Holidays. Students have the right to practice the religion of their choice. If you need to miss class to observe a religious holiday, please submit the dates of your absence to me in writing by the end of the second full week of classes. You will be permitted to make up work within a mutually agreed-upon time. See also: https://www.uvm.edu/registrar/religious-holidays

17. Academic Integrity. Please see https://www.uvm.edu/policies/student/acadintegrity.pdf for the UVM policy, which addresses plagiarism, fabrication, collusion, and cheating.

18. Grade Appeals. We do our best to avoid grading errors. However, a few errors can still occur. If you believe that you have found a grading error on your exam, **please submit a regrade request via Gradescope**. If you would like to formally contest a grade, please follow the procedures outlined in this policy:
https://www.uvm.edu/policies/student/gradeappeals.pdf

19. GPA Calculation. For general information on grading and GPA calculation, please go to:
https://www.uvm.edu/registrar/grades

20. Code of Student Rights and Responsibilities.
http://catalogue.uvm.edu/undergraduate/academicinfo/rightsandresponsibilities/

21. FERPA Rights Disclosure. The purpose of this policy is to communicate the rights of students regarding access to, and privacy of their student educational records as provided for in the Family Educational Rights and Privacy Act (FERPA) established in 1974.
http://catalogues.uvm.edu/undergraduate/academicinfo/ferparightsdisclosure/

22. Promoting Health & Safety. UVM's number one priority is to support a healthy and safe community. The following resources on campus are here to help:

A) Center for Health and Wellbeing. https://www.uvm.edu/health

B) Counseling & Psychiatry Services (CAPS). Phone: (802) 656-3340

C) C.A.R.E. If you are concerned about a UVM community member or are concerned about a specific event, we encourage you to. Contact the Dean of Students Office (802-656-3380). If you would like to remain anonymous, you can report your concerns online by visiting the Dean of Students website at https://www.uvm.edu/studentaffairs

23. Final Exam Policy. The University's final exam policy outlines expectations during final exams and explains timing and process of the examination period. https://www.uvm.edu/registrar/final-exams

24. Statement on Alcohol and Cannabis in the Academic Environment. As a faculty member, I want you to get the most you can out of this course. You play a crucial role in your education and in your readiness to learn and fully engage with the course material. It is important to note, that alcohol and cannabis have no place in an academic environment. They can seriously impair your ability to learn and retain information, not only in the moment you may be using, but up to 48 hours or more afterwards. In addition, alcohol and cannabis can:

- Cause issues with attention, memory, and concentration
- Negatively impact how information is processed and ultimately stored in your brain
- Negatively affect sleep patterns, which interferes with long-term memory formation

It is my expectation that you will do everything you can to optimize your learning and to fully participate in this course.

25. Amendments. The professor reserves the right to make changes to the syllabus, including homework due dates and test dates (excluding the officially scheduled final examination), when unforeseen circumstances occur. These changes will be announced as early as possible so that students can adjust their schedules.

26. Tentative Course Schedule. The tentative course schedule is posted on blackboard under the "Syllabus" tab.

27. General statement regarding potential changes during the semester. http://catalogue.uvm.edu/ The University of Vermont reserves the right to make changes in the course offerings, mode of delivery, degree requirements, charges, regulations, and procedures contained herein as educational, financial, and health, safety, and welfare considerations require, or as necessary to be compliant with governmental, accreditation, or public health directives.

28. Green and Gold Promise. The Green and Gold Promise clearly articulates the expectations that UVM has for students, faculty, and staff to remain compliant with all COVID-19 recommendations from the federal CDC, the State of Vermont, and the City of Burlington. The Code of Student Conduct outlines policies related to violations of the Green and Gold Promise. Sanctions for violations include fines, educational sanctions, parent notification, probation, and suspension.