Adam C. Whalley **Instructor: Office:** Cook A330 **Phone:** (802)656-8246 Adam.Whalley@uvm.edu Email: **Office Hours:** For quick questions, just drop by. Other times are by appointment only. 11:45 am - 12:35 pm MWF, Cook A402 **Class Meetings:** Classes will not be held on: February 15th, March 7th – 11th, April 1st **UVM Holidays:** Recommended Texts: Carey, F. A., and Sundberg, R. J. Advanced Organic Chemistry, Part A: Structure and Mechanism, 5th ed. Carey, F. A., and Sundberg, R. J. Advanced Organic Chemistry, Part B: Reactions and Synthesis, 5th ed. Kürti, L. and Czakó, B. Strategic Applications of Named Reactions in Organic Synthesis: Background and Detailed Mechanisms, 1st ed. **500-Point Scale:** 10 quizzes – given ~weekly Named Reaction Quizzes 100 points Feb 19th, March 18th, April 22nd Content Quizzes 150 points **Problem Sets** 150 points 3 sets – one before each quiz Friday, May 13th, 2016 from 10:30 am to Cumulative Final 100 points 1:15 pm in Cook A402 **Name Reactions:** Name reactions are the toolbox of the organic chemist. Developing knowledge of these reactions will allow you to have a greater understanding of potential transformations and mechanisms. Each week (with the exception of content quiz weeks) you will be given THREE name reactions to learn. The following Friday, your knowledge of ONE of these name reactions will be tested with a quick 5–10 minute quiz. **Content Quizzes:** A series of three in-class quizzes will be given regularly throughout the semester on the dates listed above. Prior to each of these quizzes you will be given a problem set to aid in your learning of the course material. **Course Grading:** Course grading will be structured according to the 500-point scale above. Failure to complete an assignment or quiz on the assigned date will result in a numerical score of zero. Proposals for "extra credit" will not be considered. **Academic Conduct:** Cheating or plagiarism will be considered grounds for failing the course (a numerical score of zero). All graded assignments must be your own work. Cases of cheating or plagiarism will lead to further disciplinary action, which may include dismissal from the University according to the rules set forth in the University of Vermont's Code of Academic Integrity: http://www.uvm.edu/policies/student/acadintegrity.pdf **Course Topics:** a. Sigmatropic Rearrangements g. Functional Group Conversions b. Enolate Chemistry h. Oxidation Reactions c. Overview of Olefin Synthesis i. Reduction Reactions d. Elimination Reactions j. Protecting Groups e. Wittig and Related Reactions k. Organometallic Reagents f. Transition Metal Mediated Processes 1. Natural Product Synthesis

Advanced Organic Chemistry 2 (CHEM 242) – Spring 2016

The instructor reserves the right to change everything, with appropriate notice.