A. C. Whalley Chem 242

Advanced Organic Chemistry 2 (Chem 242) – Spring 2013

Instructor: Adam C. Whalley Office: Cook A330 Phone: (802)656-8246

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Office Hours: For *quick* questions, just drop by. Other times are *by appointment only*.

Class Meetings: 11:45 am – 12:35 pm MWF, Angell B203

UVM Holidays: Classes will not be held on: January 21, February 18, March 4–8

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.

600-Point Scale: Named Reaction Quizzes 100 points 10 quizzes – given ~weekly

Content Quizzes 200 points Feb 6th, Feb 27th, April 3rd, April 29th

Problem Sets 200 points 4 sets – one before each quiz

Cumulative Final 100 points Tuesday, May 7th, 2013 from 7:30 am

to 10:15 am in Angell B203

Named Reactions: Named reactions are the toolbox of the organic chemist. Developing a 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 FIVE named reactions to learn. At the beginning of class the following Friday, your knowledge of ONE of these named reactions will be tested with

a quick 5-10 minute quiz.

Content Quizzes: A series of four 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 600-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. Overview of Olefin Synthesis g. Functional Group Conversions

b. Elimination Reactions h. Oxidation Reactions

c. Sigmatropic Rearrangements j. Reduction Reactions

d. Wittig and Related Reactions k. Protecting Groups

e. Transition Metal Mediated Processes 1. Organometallic Reagents

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