Welcome to organic chemistry lecture
This class welcomes participation from any student who has met the prerequisites, described below. Your input is necessary to a healthy teaching and learning environment. If you are experiencing a barrier that prevents your full participation in this course, contact me, christine.dimeglio@yale.edu, to discuss strategies for your best performance.

Important Notice Regarding O-Chem Lab:
O-Chem Lab is a separate course, with its own unique course number, syllabus and cost. Students are not required to take lab with the lecture course. For more info: see YSS CHEM 222L

Prerequisites: After two terms of college level general chemistry or exam placement into organic chemistry

Lectures: M, T, W, T, F: 9:30-10:45 a.m. ROOM: 160 SCL
Discussion Sections: M, W, F* 11:00 a.m. -noon ROOM: 160 SCL
*F discussion sections are reserved for special topics/occasions/make-ups, etc.
SCL = Sterling Chemistry Lab at 225, Prospect Street

Instructor: Christine DiMeglio, Ph.D., christine.dimeglio@yale.edu
Office 213 Sterling Chemistry Lab
Office hours daily after lecture

Teaching Assistant: TBA

Required Materials

Suggested Materials
A) Organic molecular modeling kits at amazon.com for inexpensive options (by Mega Molecules as an example). Instructor will have models students can handle/share while in class.
Past students found this helpful.

Lecture Schedule | Topics | Textbook Chapter
May 25* | Lewis Structures, Electronegativity Bond Polarity, Resonance, Bonding Theories | 1A, B (*double lecture today, no discussion)
May 26 | Alkanes | 2A
May 27 | Alkanes/ Acids and Bases | 2B, 3A
May 28 | Acids and Bases | 3B
May 29 | Alkenes, Alkynes | 4A, CH14 (selected topics)
June 1 | 4A cont. and transition states |
June 2 | Addition Reactions of Alkenes and Alkynes | 5A, CH14 (selected topics)
June 3 | continued from previous lecture | 5B, CH 14 (selected topics)
| June 4 | Exam 1: CH 1-5A and 14 selected topics (tentative; specific topics TBA) |
| June 5 | Stereochemistry, Stereoisomer, R/S 6A |
| June 8 | 6A cont. and EE and Inversion 6B |
| June 9 | Cyclic Compounds and Stereochemistry 7A |
| June 10 | Stereochemistry of Reactions 7B |
| June 11 | Intermolecular Interactions 8 |
| June 12 | Alkyl Halides and SN2 9A |
| June 15 | Alkyl Halides E2, 9B |
| June 16 | Exam 2: CH 5B-9A and 14 selected topics (tentative; specific topics TBA) |
| June 17 | SN1/E1, Alkyl Halides, Other Reactions 9C |
| June 18 | Alcohols and Thiols 10 A |
| June 19 | Reactions of Alcohols 10 B |
| June 22 | Ethers, Epoxides and Glycols 11 A |
| June 23 | Organic Synthesis Problem Solving 9-11 |
| June 24 | Organic Synthesis Problem Solving Comprehensive |
| June 25 | Exam 3: Comprehensive: CH 9A-11 and 14 selected topics, CH1-8 |
| June 26 | Exams returned |

**Exam 1 (25%) and Exam 2 (25%):** 1 hour each, beginning at 9:30 a.m. on their scheduled day.

**Exam 3 (40%):** 2 hours, beginning at 9:30 am on its scheduled day.

**Participation (10%)**
Students earn participation points based on attendance and entries into a problem-solving journal. If you are more than 15 minutes late, you do not get the participation points.

**Letter Grades**
Scenario 1: Exam 1 (25%) + Exam 2 (25%) + Exam 3 (40%) + Participation (10%)

Scenario 2: Students may drop their lower exam score from Exam 1 or Exam 2 if this improves their letter grade, in which case letter grades are calculated as Exam (35%) + Exam 3 (55%) + participation (10%)

**Policy regarding attendance:** Attendance is mandatory, per summer school policy.

**Policy regarding missed Exam 1 or Exam 2:** Students who miss Exam 1 or Exam 2 drop the missed exam; the letter grade will be calculated according to Scenario 2. Students missing both Exam 1 and Exam 2 will need to discuss their status with YSS Dean Jeanne Follansbee.
**Midterm assessment:** Students are required to keep a homework notebook, which, along with the problem-solving journal, will be used to provide midterm feedback to any student missing Exam 1, and ongoing feedback to all students requesting additional assessment.

**Academic Integrity:**
Students are welcome use any resources they choose, anytime they choose, **except on Exams**. On exams, students must work independently, without other people, texts, notes, electronic helps, etc. Independently = alone. Nobody, nothing, just you.

**Useful websites**

http://www.chem.wisc.edu/areas/organic/index-chem.htm
http://www.organic-chemistry.org/
http://www2.chemistry.msu.edu/faculty/reusch/VirtTextJml/intro1.htm (some practice problems with answers)
http://www.departments.bucknell.edu/chemistry/courses/chem211/problem_sets/ (practice problems with answers for org. chem I)
https://legacyweb.chemistry.ohio-state.edu/flashcards/ (organic chemistry flash cards)
http://evans.harvard.edu/cgi-bin/problems/search2a_selectKeywords.cgi (challenging problems in organic chemistry)