Welcome to organic chemistry lecture.

Any student who has met the prerequisites as described below is welcome in this class. Students journey to this course along different pathways and possess a range of abilities, skills, knowledge, experiences, and expectations. We invite students to ask questions. 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. We endorse, applaud, and enthusiastically commit to the Chemistry Department Diversity Statement, found here: https://chem.yale.edu/diversity

Canvas

Course content is organized, managed, delivered, and archived at https://canvas.yale.edu/, the learning management system employed at Yale. Canvas allows students to access curricular content 24/7 throughout the duration of the course. Students are required to use Canvas, and to bring technology for accessing Canvas to class every day. Canvas/Syllabus describes the course schedule and policies, Canvas/Modules is the central hub for accessing curricular content and Canvas/Announcements for sharing course-wide, time sensitive information.

Prerequisites

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

Attendance

Attendance and participation are mandatory in Yale Summer Sessions, including lecture sessions, problem-solving sessions, and assigned asynchronous lectures. We may utilize both in-person and remote modalities during the term, so students need access to zoom software and reliable internet access. Students facing illness, injury, family emergency, or Covid-related isolation will contact the instructor and Dean Alexander Rosas by email as soon as possible.

Emergency Absences

When a student needs to be absent for the reasons above, they will contact the instructor if they are absent for 1 day, and Dean Alexander Rosas if their absence is extended to more than 1 day. The plan of action will vary with circumstances.

Student Accessibility Services

Students who require accommodations related to timed assessments (quizzes, exams, etc.) work with the Student Accessibility Services Office in advance of the summer term. Students forward their accommodation, and their letter from SAS, to Christine.dimeglio@yale.edu. Reach out by email ASAP to explain your needs and we will put accommodations in place while awaiting paperwork.

Course Scheduled Events (Eastern Time)

- Lectures: M, Tu, W, Tr, F: 9:30-10:45 AM. ROOM 160 Sterling Chemistry Lab
  (Friday meetings may include asynchronously delivered recorded lecture)
- Q and A: Brief time for clarifying lecture points following each lecture, M-Tr 10:45-11:00 am
- Problem Solving Discussion Session: Tu/Tr 11am-noon;
- Email and Zoom: Both tools are employed as needed to engage in Q and A. Questions of interest to the group will be made available to all using the Canvas/Announcements feature.
**Materials**

**Required Materials**

**Suggested Materials**
Corresponding Solutions Manual: ISBN 9781319363772

Organic molecular modeling kits at amazon.com for inexpensive options (by Mega Molecules as an example).

Please use the 7th edition since earlier editions use a different arrangement of material.

**Schedule**

<table>
<thead>
<tr>
<th>Date</th>
<th>SELECTED TOPICS FROM</th>
<th>Textbook Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 27</td>
<td>Bonding</td>
<td>1A</td>
</tr>
<tr>
<td>28</td>
<td>Bonding</td>
<td>1B PS: Resonance</td>
</tr>
<tr>
<td>29</td>
<td>Alkanes</td>
<td>2</td>
</tr>
<tr>
<td>30</td>
<td>Acids and bases</td>
<td>3A PS: Bronsted/Lowry acids/bases</td>
</tr>
<tr>
<td>31</td>
<td>Acids and bases</td>
<td>3B Quiz 1 CH1-CH3, Canvas, due 6/3, 1 pm Canvas/Quizzing opens 5/31, noon.</td>
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</tbody>
</table>

| June 3     | Alkenes, alkyne                       | 4A               |
| 4          | Reaction rates                        | 4B PS: Making study guides |
| 5          | Addition reactions of alkenes         | 5A               |
| 6          | Addition reactions of alkenes, alkyne | 5B PS: Addition reactions |
| 7          | Stereochemistry                       | 6A Quiz 2 CH4-CH5B, Canvas, due 6/9, 1 pm Canvas/Quizzing opens 6/7, noon.  |

| June 10    | Stereochemistry                       | 6B               |
| 11         | Cyclic compounds and stereochemistry  | 7A PS: Stereochemistry  |
| 12         | Stereochemistry of reactions          | 7B               |
| 13         | Exam 1 CH1A-6B, In person, room 160, 70 minutes |  |
| 14         | Intermolecular Interactions           | 8 Quiz 3 CH7A-CH8, Canvas, due 6/17, 1pm Canvas/Quizzing opens 6/14 noon.  |

| June 17    | Alkyl halides, substitution, elimination | 9A               |
| 18         | Alkyl halides substitution, elimination | 9B PS: SN1, SN2, E1, E2, Solvents, LG |
| 19         | Summary of substitution, elimination OMR reagents, carbenes | 9C 10A |
| 20         | Radical reactions/alcohols            | 10B PS: see 6/18 and carbenes and OMR |
June 24  
Reactions of alcohols  
11B  Optional Review: 11am-noon CH1-8

25  
Ethers, epoxides, sulfides, glycols  
CH12A  PS: Review: CH9-11

26  
Ethers, epoxides, sulfides, glycols  
CH12B  Optional Review: 11am-noon CH9-10

27  
Review CH11-12 and Practice Exam  
PS: Practice Exam

28  
Exam 2  
In person, room 160 SCL, 70 minutes  
comprehensive

Assessments

• Exam 1 (30%) and Exam 2 (30%) are delivered in person.
• The 4 quizzes are delivered by Canvas and are multiple-choice, auto-graded. The lowest quiz score will be dropped. (30%)
• Participation (10% - in class and problem-solving sessions)

Policy regarding missed assessments

• If students miss a quiz, this will count toward a dropped quiz.
• If absent for Exam 1, the final exam will be 60% of the letter grade, with additional questions added to better represent the missed material on Exam 1.
• Students missing multiple assessments, or Exam 2, will need to discuss their status with YSS Dean Alexander Rosas.

Honor Code and Academic Integrity:
Students must work independently on all assessments in this course.

Useful websites
https://www.masterorganicchemistry.com/  
http://www.chem.wisc.edu/areas/organic/index-chem.htm  
http://www.organic-chemistry.org/  
http://www2.chemistry.msu.edu/faculty/reusch/VirtTxtJml/intro1.htm  
http://www.departments.bucknell.edu/chemistry/courses/chem211/problem_sets/  
https://legacyweb.chemistry.ohio-state.edu/flashcards/  
http://evans.harvard.edu/cgi-bin/problems/search2a_selectKeywords.cgi

Note to self: McMillan account rep michael.shelton@macmillan.com