Description: This course will consist of a general survey of elementary theory, preparation, reactions, and properties of the compounds of carbon, both aliphatic and aromatic, containing the most important functional groups. We will accomplish this survey by exploring the underlying principles of reactivity of organic compounds.

Goals: My goals for you this semester are:
1) to learn how to identify compounds through spectroscopic methods;
2) to add to your existing knowledge base a series of new organic reactions;
3) to use these reactions to synthesize molecules; and
4) to continue to understand and interpret these reactions mechanistically so that you can apply your knowledge of existing systems to new areas.

Office hours: I will almost always be in or near my office Monday, Wednesday, and Thursday afternoons from 1:30-4 (check with Dr. Loprete if you can't find me Wednesday or Thursday afternoon). I am available at many other times, but since it is not guaranteed that I will be in my office, please make an appointment. I usually get in at 9:30-10 on Tuesday/Thursday; leave by 4 on Wednesday-Friday; and have lunch 11:45-12:45. Otherwise, I rarely get to leave Kennedy.

Class Material: The Brown, W. H.; Foote, C. S. Organic Chemistry, 2nd ed text and solutions manual will continue to be used. As a supplement, you can download and print a copy of the class lecture notes from the academic volume (Faculty Folders- Works). Each chapter will be available shortly before we start it in class. These notes are designed to assist you in your in-class note-taking. They also contain the assigned problems and any corrections to the answer book.

We have some computer software to aid you this semester (detailed in the class notes). For help in understanding reactions: Ogre; Organic Reaction Mechanisms; Chem TV; Reaction Driller. For help in understanding spectroscopy: Spectra Deck; Introduction to Spectroscopy; IR Tutor. All programs are available only in the Mac lab.

Evaluation: Your final grade will be based on four hour-long exams (100 points each) and the final exam (ACS standardized, 150 points). An optional 1 point quiz will be given daily- these quiz points are extra points which will be added on to your final point total. The grading scale is:

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<tr>
<th>Grade</th>
<th>Percentage</th>
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<tr>
<td>A</td>
<td>(100-93%)</td>
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<td>A-</td>
<td>(92-90%)</td>
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<td>B+</td>
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<td>D+</td>
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D (62-56%);
D- (55-50%).

Policies: I expect that you will conduct yourself in full accordance with the Honor Code. Please speak to me ahead of time if you need to miss an exam; in almost all cases, the make-up exam will be given before the regular class exam. Missed exams can be made up only in case of emergency or prior permission. Quizzes missed due to illness or a college-sanctioned event must be made up through your own initiative before the next class.

Tip: As you now know and believe, the greatest impediment to doing well in organic chemistry is falling behind. We must cover too much material this semester for catch-up to be easily done. The consequences of falling behind in the third week of classes will still be felt in the sixth week. So please, keep up!

Class Schedule:

January 12  Chapter 14: Infrared and Ultraviolet-Visible Spectroscopy
January 14  Chapter 14
January 19  Chapter 12: Mass Spectroscopy
January 21  Chapter 12
January 24  Chapter 12
January 26  Chapter 12
January 28  Chapter 13: Nuclear Magnetic Resonance Spectroscopy
January 31  Chapter 13
February 2  Chapter 13
February 4  Chapter 13
February 7  Chapter 22: Conjugated Dienes
February 9  Chapter 22
February 11  Exam I
February 14  Chapter 15: Aldehydes and Ketones. No quiz.
February 16  Chapter 15
February 18  Chapter 15
February 21  Chapter 16: Carboxylic Acids
February 23  Chapter 16
February 25  Chapter 16
February 28  Chapter 16
March 1  Exam II
March 3  Chapter 17: Functional Derivatives of Carboxylic Acids. No quiz.
March 13  Chapter 17
March 15  Chapter 17
March 17  Chapter 18: Enolate Anions and Enamines
March 20  Chapter 18
March 22  Chapter 18
March 24  Chapter 18
March 27  Chapter 19: Aromatics I: Benzene and Its Derivatives
March 29  Exam III
March 31  Chapter 19 No quiz.
April 3            Chapter 19
April 5            Chapter 20: Aromatics II: Reactions of Benzene and Its Derivatives.
April 7            Chapter 20
April 10           Chapter 20
April 12           Chapter 27: Amino Acids and Proteins
April 17           Chapter 27
April 19           Chapter 27
April 24           **Exam IV**
April 26           Review. No quiz.
April 28           Review. No quiz.
May 1              **C hr Final Exam, 1 - 3:30 pm.**
May 3              **A hr Final Exam, 5:30 - 8 pm**