Course Instructor: Joy Johnston
Office: 256 Chemistry Building
E-mail: joyfuljaj@excite.com
Phone: 6-2611
Office Hours: 10 – 11 am, 2-3 pm MWF or by appt.

Course Description: Organic Chemistry I is a 3 credit hour course with one 1hour recitation per week. The lab is a separate course and is 1 credit hour with one 4 hour lab period per week. The prerequisite for this course is successful completion of CH 117 and concurrent enrollment in CH 236.

Course Goals: This course is the first semester of a two-semester sequence. It is designed to introduce the basic concepts of bonding and structure. Alkanes, cycloalkanes, alkyl halides, alkenes, and alkynes will be introduced. Stereochemistry and reaction mechanisms will be emphasized in this course.

Molecular Model Set for Organic Chemistry. ISBN 0-534-49465-x

Lecture: Monday Wednesday, Friday, 11:20 am- 12:40 pm, Room 101 Chemistry Building
Recitation Sections:
   - CH 235R-K2, Wednesday, 9:30-10:30 am
   - CH 235R-N7, Thursday, 5:30-6:30 pm
   - CH 235R-Q2, Friday, 9:30-10:30 am
NOTE: Attendance at recitation is mandatory, and will contribute to the course grade.

Laboratory: The laboratory portion of this course is now a separate course. A detailed syllabus will be given out during check in. If you are not enrolled in a lab section because of scheduling difficulties, try and take the lab course next semester. The lab will be easier to understand, and more enjoyable, if the concepts you learn this semester are fresh in your mind.

*Organic Chemistry Laboratory Notebook*, C.E.R., Inc.
**Important Dates:**
June 1 Classes begin
June 8 Last day to drop w/o paying tuition and fees
June 9 Last day to add a class
July 4 Independence Day Holiday
July 12 Last day to withdraw with a “W”
Aug 3 Last day of classes for semester
Aug 10 Final exam 8 am – 10:30 am

**Date of Exams:**
June 20 Exam – I Chapters 1-4
July 8 Exam – II Chapters 5-7
July 29 Exam – III Chapter 8-10
Aug 10 Final exam Chapters 1-11, 8 am – 10:30 am

**Class Philosophy:**
Organic chemistry is a cumulative course. What you learn from the first day carries through until the very end of the course. There must be a daily regimen of studying in order to prepare for exams. **Cramming is strongly discouraged!** How do you study for this course? Read the chapter carefully. Think about what you are reading and if it does not make sense, read it again. Take notes on what you read. Merely underlining with a highlighter is not enough. Work the suggested problems, which are given in the syllabus. Yes, there are a lot of problems, but this is a course where the old saying “Practice makes perfect.” really applies. Be careful, the solutions manual should be a learning aid, not a crutch! Work the problem to the best of your ability before consulting the manual. Remember, there will not be a solutions manual available during an exam. Ask questions! Students often say, “This is a really stupid question, but….”. There are no stupid questions! Also, you are probably not the only person in the class with a question about a particular topic. If you are uncomfortable asking in class, ask before, after, or come by my office. But, ask questions!

Regular attendance in the lecture is not only required, it is necessary. There are several reasons why this is the case. First, there will be times when some of the questions on an exam are derived from something I have covered in lecture. Second, I sometimes present material that is not covered in the text during the lecture. Finally, there will be unannounced quizzes throughout the semester.

**Recitation:**
A recitation problem set will be available one week prior to each session. It will be due at the end of each session. You will be asked to form a group with some of the students in your recitation section. No group should have more than 5 members. Groups of 3 or 4 students are preferable. It is in your best interest to attempt to work the problem set before coming to recitation. There will be teaching assistants available to answer questions. The teaching assistants are there to help, not do the work for you. Everyone in the group should actively participate in solving the problems. Remember, you will not be tested in a group!
Recitation sections are also an excellent place to get help with the assigned problems in the textbook. Working these problems is essential to understanding the
material. Again, sometimes problems which are similar to the problems at the end of the chapter will appear on exams.

Why work in groups? In real life, you will most likely have to work with other people. There are several advantages to working in a group. First, if you can't find a solution for a problem, chances are that someone else in the group probably will. Second, sometimes you are better at explaining a concept to one of your classmates than I am. If you can explain or teach an idea to another person, you really understand that concept or idea. Working in groups will provide you with a support network of other students encountering the same academic challenges. You will find that friendships form quickly within a group. All members of the group will develop good interpersonal and communication skills, which are necessary to the success of the group.

However, you may encounter a few problems. Do not let a mole hill turn into a mountain! If something is bothering you, talk it out with the group. Try and set down some group ground rules concerning participation. This may prevent some misunderstandings from occurring. Above all, be patient and tolerant. Not everyone learns at the same rate or in the same way. Remember,” We will all hang together, or we will surely hang separately!”

Examinations
There will be three one-hour exams given on the dates listed in the syllabus. The class schedule gives the material, which will ideally be covered on these exams. However, if we have not finished the lecture material by the exam date, I will adjust the amount of material covered on the exam. I will not move the exam date.

The final will be given on the date predetermined by the registrar. This date is set in stone, and is not subject to change for any reason!

Grading of Exams
There will be no regrades of exams. I take a lot of time determining partial credit, and have a reason for taking off points when I do. Use it as an opportunity to learn from your mistake.

The single point that may be taken off an exam in error will very likely not impact your final grade, so don’t stress about it. As well, graders are just as likely to help you out with a grading mistake as to hurt you.

Grading scale
3 Hourly exams @ 100 points each 300 pts
1 Final exam @ 150 points 150 pts
8 Recitations @ 10 points each 80 pts
1 Article Project @ 50 pts 50 pts
3 best of 4 quizzes @ 5 pts 15 pts
Total Possible Points 595 pts

Grade Assignments
The following scale will be applied: 90-100% A, 80-89% B, 70-79% C, 60-65% D, and less than 60% F.
Course Homepage
There is a course homepage. It is located at the chemistry department site, www.chem.uab.edu. The syllabus is available as a PDF file, as well as links to helpful sites, and information about the Technology center. Lecture notes, as well as recitation sets will be available at this site. Links to OWL and Organic Chemistry Direct, the companion website for the textbook, are also available on the course page.

Academic Dishonesty
Any acts of academic dishonesty will be handled in accordance with the UAB Undergraduate Academic Honor Code. An act of academic dishonesty includes, but is not limited to, the following types of behavior; abetting, cheating, plagiarism, fabrication, and misrepresentation.
<table>
<thead>
<tr>
<th>Week</th>
<th>Day/ Topic</th>
<th>Problem Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4</td>
<td>W: Introduction to Organic Chemistry Chapter 1 Chemical bond theory, valence bond theory</td>
<td>Chapter 1: 3, 4, 5 a.c.d, 6 c.e 11, 12, 13, 15, 18, 19, 23, b.d, 24.25, 30 c.d, 32 a.d, 34,37 a, d, 38, 39, 41, 43, 44, 46, 47, 48</td>
</tr>
<tr>
<td>2</td>
<td>F: Molecular orbital theory</td>
<td>Chapter 2: 2 a.c.d,f, 46 a.d, 8,10 b.c, 11, 13, 15, 17,19, 20 b, 24, 25, 31, 34, 35 b,c,f, 36 a.d, 37 b.d,e, 39, 41 a,c,f, 43 c, 44 b,c, 46, 48, 53, 55 b,d, 56 a,e, 57 c,</td>
</tr>
<tr>
<td>3-4</td>
<td>F: Chapter 2 Dipole moments, formal charge, resonance</td>
<td>Chapter 3: 4, 6, 8, 9,11d, 12b,c, 15b,d,f, 16d, 18a, 20a, 23, 26, 27, 33, 39 b,d,f, 43 a,c,44, 45 e,g, 47a,c,e, 49 b,c, 52, 55,</td>
</tr>
<tr>
<td>5-8</td>
<td>W: Acid/Base theory, Bronsted/Lowry, Lewis, pKa values, organic acids and bases</td>
<td>Chapter 4: 1, 3, 5, 8, 13, 14, 17 a.d, 18, 22, 24, 26, 27, 30, 31, 32, 33, 36, 40, 42 a, b,e,f, 46, 48, 51, 53, 55,</td>
</tr>
<tr>
<td>6</td>
<td>F: Chapter 3 Alkanes, cycloalkanes properties, nomenclature</td>
<td>Chapter 5: 3, 4, 5, 7, 8, 11, 13, 15, 17, 20, 22, 23 a,c,e, 24, 26, 27, 30, 35, 37, 39 b, 40, 41, 42, 43, 44, 47,</td>
</tr>
<tr>
<td>7-10</td>
<td>F: Chapter 4 Newman projections conformational isomers</td>
<td>Chapters 1-4</td>
</tr>
<tr>
<td>8</td>
<td>W: Conformations of cycloalkanes and ring strain</td>
<td>Chapter 6: 1c, 3a,c,f, 4a,c, 5b,e, 6 a, 7a,c,f, 10, 11 a,c, 13a,b, 14b,c, 15b,c, 16, 18, 19, 22, 24, 25a,b,e, 29a,b,c, 31, 36, 39b,d,e, 40b, 41b,e,f, 42b,d, 44a,c,f, 47, 48, 53</td>
</tr>
<tr>
<td>9</td>
<td>F: Chapter 5 Organic Reaction mechanisms, radical reactions, polar reactions</td>
<td>Chapter 7: 2, 4, 6, 8b, 9b, 10b, 14c, 15, 17, 19, 21, 23, 24b,d, 25a,c,d, 26, 29, 32, 33, 35, 36,c,d, 37, 40, 41, 43, 46, 50b, 52, 54, 56, 57,</td>
</tr>
<tr>
<td>10</td>
<td>M: Test I</td>
<td>Article Topic Due June 29th</td>
</tr>
<tr>
<td></td>
<td></td>
<td>July 4th Holiday</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chapters 5-7 Bibliography Due July 8th</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chapter 8: 1c,d, 3 a.c 4b, 5a, 6b, 7a, 8 a. b, 10, 12, 13,c,d, 14b,d, 16b, 17a, 19c,d, 20c,e,f, 24, 26, 28, 29c,f, 30a, 34, 37c,d, 41, 43, 44, 46</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chapter 9: 1, 2b,c, 4a, 6, 8, 10, 11, 14, 15a,b, 17, 19, 20, 22, 24, 25, 27, 28, 32,c,d, 35, 37, 40, 44, 45c, 46a, 47a, 49, 50a,d, 52, 55, 59, 61, 65, 67, 70, 74, 80, 81, 83</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chapter 10: 1 e.f, 2c,d, 4,5,7b, 9, 11c, 13, 16, 20, 22 b,c,f, 23c,e, 25, 27, 30, 31, 32, 33, 35, 37, 38, 40, 42</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chapter 11: 2, 4, 5, 7, 10, 12, 13, 14, 15, 17, 19, 20, 21, 24, 26d, 27, 28, 30, 32, 34, 35, 36, 37, 39, 40, 43, 45, 49, 50, 56, 57, 62, 64, 67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chapters 8-10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Article Due Aug 1st</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Comprehensive, Chapters 1-11, 8am – 10:30 am</td>
</tr>
</tbody>
</table>