Syllabus

Onground Class SLN 70635 : Hybrid Class SLN 74903

Learning Objectives.
• Basic representations of organic structures, bonding and stereochemistry, role of electronegativity.
• Molecular orbital descriptions of bonding and reactivity
• Organic reactions and mechanisms in terms of fundamental thermodynamic and kinetic principles.
• Bronsted and Lewis Acid/base chemistry as a fundamental concept in organic chemistry
• Structures and conformational analysis of hydrocarbons.
• IUPAC Nomenclature.
• The chemistry of the carbon-carbon double bond, electrophilic addition reactions.
• Radical reactions in organic chemistry.
• Chirality, assignment and understanding of configuration.
• Reactions and properties of alkyl halides, substitutions and eliminations.
• Organic structure determination using mass spectrometry, infrared spectroscopy and nmr spectroscopy

Textbook. This class does NOT use a textbook. This does not mean that you cannot use a textbook, by all means get one if you would like a reference book. A good book is Organic Chemistry by Paula Bruice, however, just about all of the organic chemistry textbooks are the same. Used older editions of textbooks are just as good as the most recent editions and are available for just a few dollars on Amazon. It should be easy for you to find the appropriate reading and problems that relate to the material that we are covering in any textbook, although some textbooks do not cover pericyclic reactions, a second semester topic (the Bruice one does).

Many students will ask me if they should get a textbook. Unfortunately, I am not able to give a satisfactory answer, since different students have very different needs. Some students want a permanent reference book to study for the MCAT, for example. You have to make your own decision on this I am afraid.

Model Kit. A Molecular Model Kit, IS REQUIRED for CHM 233. You should ONLY get one of the HGS model kits. One of these is available from the ASU Bookstore. They are also available directly from the manufacturer. Either the 1013Alpha kit, or the slightly more expensive 1003Alpha kit. You can also get the 1013Alpha kit on Amazon. You will not be able to use a model kit that you inherited from a sibling/friend etc. if it is not the HGS kit. The HGS kit is the ONLY one that will work for this course (AND the lab course). A model kit by Moelcular Visions, or in particular Pearson will NOT WORK.

Examinations and Grading. Three midterms will be given from 7:30 - 8:20 AM on Monday Sept. 18th, Monday Oct. 16th, and Monday Nov. 6th. The final exam is on Monday Dec. 4th, 7:30 - 9:20 AM. I will not change an exam date for ANY reason since changes will merely result in new conflicts. Although the emphasis of the midterms will be on the most recent material, all exams are necessarily cumulative. The final exam will be on material from the entire course. No late or early exams will be given, you must be present for ALL exams, none are dropped!

Weekly Quizzes/Homework. There will be 14 multiple-choice online quizzes, roughly one each week. The deadline for submission of most of the quizzes will 6:00 PM each Sunday, so that the answer key can be posted on the Sunday before each Monday midterm as a study aid. No excuses will be accepted for missing quizzes, you will not be able to make them up, please do not ask. However, the lowest FOUR quiz scores will be dropped. If you are ill, have a job interview etc. just forgot to submit in time or missed the deadline or had computer/internet problems, that is what the dropped quizzes are for, that way I don't have to decide whether
your excuse is legitimate or not. Note that there will NOT be any multiple-choice questions on any of the exams. Your quiz score (after dropping the lowest 4) will be normalized to a maximum of 50 points at the end of the semester. You will be awarded credit up to a maximum of 50 points for using an online homework/practice problems website that accompanies this course, details will be given in class and on the website.

I do not award grades in this class, you earn your grade. It is my job to help you earn the highest grade that you are capable of. Grades are earned on the basis of 1000 total points:

- Quizzes = 50 pts.
- Homework = 50 pts.
- Midterm Examinations 3 x 175 pts. = 525 pts.
- Final Examination 1 x 375 pts. = 375 pts.
- Total = 1000 pts.

You will need to obtain the following points totals to earn the grades as shown.

- Grade A : 890 points
- Grade B : 780 points
- Grade C : 620 points
- Grade D : 500 points

There are NO +/- grades for this class!

I reserve the right to change these point totals (although I almost never do). Grades are earned based on the points totals only. For example, if your score on the first midterm is low but is high on the final, there is no way for you to earn a higher grade than you deserved based on your points total. In this way, no student will earn a higher grade than another even though his or her points total is lower. Note that you are NOT competing against anybody else in this class, in principle EVERYBODY could get an A, although this is unlikely to happen.

Once the final course grades have been posted there will be no mechanism for you to get a higher grade, no extra credit, nothing. Don’t ask! If you missed a grade by a few points it will not have gone unnoticed by me. Your final exam will have been entirely regraded by me and I will not have been able to find enough points to raise your grade. You earn your grade by EXCEEDING the required number of points, NOT by getting close!

Procedures. This class uses "gapped" lecture notes, see the web site for details under "Lecture Material". These should be purchased at the bookstore, see class for details. Use the Gapped notes in class, completed versions of the notes will be posted on the web site at the end of each section.

Studying. The course moves fast, please read the study suggestions on the web site. By far the most important way that you will study is by DOING PROBLEMS ON THE CLASS HOMEWORK WEBSITE! If you do not understand something, come and see me during office hours as soon as possible. I want to help you! To get help, you must come and see me BEFORE an exam, I can’t help you after the exam is over.

If you need to get a certain grade in this class to maintain a scholarship, or to graduate, you need to tell me about this at the beginning of the semester! I will do whatever I can to help you. However, do not come to me at the end of the semester, or after you have failed 2 midterms to ask for help. By then it is too late! I cannot give grades to "deserving" cases or out of sympathy, you have to earn your grade.

Material Covered. Exam material will be taken from your lecture notes, the website problems and any other materials distributed to the class.

Voluntary Review Sessions. Voluntary review sessions will be held before the exams, look for announcements in class and on the web site for times and locations.

Incomplete Policy. An incomplete will only be given under exceptional or catastrophic circumstances, usually for medical reasons that force you to miss multiple classes or tests. I will not give you an incomplete because you do not want a W on your record. Please note the University withdrawal deadlines:

- Course Withdrawal Deadline Nov. 1st
- Complete Withdrawal Deadline Dec. 1st
INFORMATION Specific to Hybrid/Online Class Students (SLN 74903). This is a hybrid class. All lecture and other class materials are online, you are only required to come to class to take the 3 midterm and the final exams, dates and times given below.

This hybrid class runs in parallel with the regular on-ground CHM 233 class. The two classes will share the same website, lectures and all class materials. The two classes will have same midterm and final exams. Both classes will take the exams on the same dates at the same times. All exams will be held in PS H-152, do NOT come to LSA-191, only the regular/on-ground students take their tests in that room.

Each class period, the on-ground class lectures will be recorded and posted the same day on the class website for use by both the online and on-ground students. Online quizzes will be assigned each week (see above). The quizzes will be the same for the online and on-ground classes.

The regular on-ground classroom is unlikely to be full, and you are welcome to attend lecture if you like. These are held in LS-A191, 7:30 - 8:20 AM, Mon, Wed, Fri.

Office hours have been scheduled on Wednesday evening and also Saturday afternoon to help those of you with complex schedules. In general, voluntary review sessions will be held on Saturday afternoons, and also Thursday evening before the midterm and the final exams.

A critical issue with any demanding online class is making sure that you have the discipline to keep up with the material and work. For most students this will not be a big issue in this class, since most of you will be motivated towards getting a good grade in organic chemistry anyway to help in your application to pre-professional school etc.

**Academic integrity**
Plagiarism, using unauthorized aids on an exam or altering an exam for regrading is obviously considered cheating. Exams will be photocopied for record-keeping purposes so it is not very smart to consider alteration. Academic honesty is expected of all students in all examinations, papers, and laboratory work, academic transactions and records. The possible sanctions include, but are not limited to, appropriate grade penalties, course failure (indicated on the transcript as a grade of E), course failure due to academic dishonesty (indicated on the transcript as a grade of XE), loss of registration privileges, disqualification and dismissal. For more information, see [http://provost.asu.edu/academicintegrity](http://provost.asu.edu/academicintegrity)

**Students with disabilities**
Students who feel they will need disability accommodations in this class but have not registered with the Disability Resource Center (DRC) should contact DRC immediately. The DRC Tempe office is located on the first floor of the Matthews Center Building. DRC staff can also be reached at: (480) 965-1234 (V) or (480) 965-9000 (TTY). For additional information, visit: [www.asu.edu/studentaffairs/ed/drc](http://www.asu.edu/studentaffairs/ed/drc).

**Expected classroom behavior**
Be sure to arrive on time for class, arriving late disturbs your classmates. Do not allow your cell phone to ring during class. Disruptive behavior, which includes ringing cell phones, listening to music, text messaging, constant talking, eating food noisily, reading a newspaper will not be tolerated.

**Policy against threatening behavior**
All incidents and allegations of violent or threatening conduct by an ASU student (whether on-or off campus) must be reported to the ASU Police Department (ASU PD) and the Office of the Dean of Students. If either office determines that the behavior poses or has posed a serious threat to personal safety or to the welfare of the campus, the student will not be permitted to return to campus or reside in any ASU residence hall until an appropriate threat assessment has been completed and, if necessary, conditions for return are imposed. ASU PD, the Office of the Dean of Students, and other appropriate offices will coordinate the assessment in light of the relevant circumstances.
Exam/Lecture Schedule: Subject to change as necessary!

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<tr>
<th>Dates</th>
<th>Lectures</th>
<th>Subject</th>
<th>Section</th>
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<tr>
<td>Aug 18 - Sept 1</td>
<td>1 - 7</td>
<td>Bonding and Structure I</td>
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<td>Sept 6 - Sept 11</td>
<td>8 - 10</td>
<td>Bonding and Structure II</td>
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<td>Sept 4, No Class, Labor Day</td>
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<td>Sept 13 - Sept 20</td>
<td>11 - 13</td>
<td>Resonance</td>
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<td>Sept 18</td>
<td>Midterm Exam #1</td>
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<td>Sept 22 - Sept 29</td>
<td>14 - 17</td>
<td>Alkanes</td>
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<td>Oct 1</td>
<td>18</td>
<td>Spectroscopy I</td>
<td>5</td>
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<td>Oct 4 - Oct 13</td>
<td>19 - 22</td>
<td>Spectroscopy II</td>
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<td>Oct 9, No Class, Fall Break</td>
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<td>Oct 16</td>
<td>Midterm Exam #2</td>
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<td>Oct 25 - Nov 3</td>
<td>26 - 30</td>
<td>Alkenes</td>
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<td>Nov 1</td>
<td>Course Withdrawal Deadline</td>
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<td>Nov 6</td>
<td>Midterm Exam #3</td>
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<td>Nov 8 - Nov 13</td>
<td>31 - 32</td>
<td>Radical Reactions</td>
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<td>Nov 10, No Class, Veterans Day</td>
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<td>Nov 15 - Nov 17</td>
<td>33 - 34</td>
<td>Chirality</td>
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<td>Nov 20 - Dec 1</td>
<td>35 - 39</td>
<td>Alkyl Halides</td>
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<td>Nov 24, No Class, Thanksgiving</td>
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<td>Dec 1</td>
<td>Complete Withdrawal Deadline</td>
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<td>Dec 4</td>
<td>Final Exam (7:30 - 9:20 AM)</td>
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Quiz Schedule

*Deadlines are always Sundays 6:00PM EXCEPT Quiz #1*

- **FRIDAY Aug 25 11:59PM** Quiz #1
- **Sunday Aug 27 6:00PM** Quiz #2
- **Sunday Sept 3 6:00PM** Quiz #3
- **Sunday Sept 10 6:00PM** Quiz #4
- **Sunday Sept 17 6:00PM** Quiz #5
- **Sunday Sept 24 6:00PM** Quiz #6
- **Sunday Oct 1 6:00PM** Quiz #7
- **Sunday Oct 8** No Quiz (Fall Break)
- **Sunday Oct 15 6:00PM** Quiz #8
- **Sunday Oct 22 6:00PM** Quiz #9
- **Sunday Oct 29 6:00PM** Quiz #10
- **Sunday Nov 5 6:00PM** Quiz #11
- **Sunday Nov 12 6:00PM** Quiz #12
- **Sunday Nov 19 6:00PM** Quiz #13
- **Sunday Nov 26** No Quiz (Thanksgiving)
- **Sunday Dec 3 6:00PM** Quiz #14