CHEM 345: Intermediate Organic Chemistry

Contact Information
Matt Bowman
262-2519
Chemistry 5232
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Lecture 1

MTWR 11:45-1:00 PM
Chemistry 1361

Office Hours

Mondays 8:00-10:00 AM Chem 2307
Mondays 3:00-5:00 PM Chem 2307
Thursdays 9:00-10:00 AM Chem 2307
Thursdays 2:00-3:00 PM Chem 2377
(or by appointment)

Textbook

Organic Chemistry, 5th Ed., Marc Loudon
**Problem sets**

There will be a problem set for each lecture day except for the day of an exam or the day preceding an exam. These problem sets will not be graded and are there to help you out. Keys will be available by the next lecture day on Learn@UW. Some problem sets contain review material from 343 (which can be fair game on an exam) or hyperconjugation sheets. The hyperconjugation sheets should be turned in to my mailbox in Chem 1146 anonymously. No one will receive credit. But I will post a few of them that contain wrong answers on Learn@UW for you to take a look at. I will later post why a particular answer is wrong. For this to work, I will need a majority of you to turn in these specially labeled sheets.

**Video lectures**

Learn@UW will host a variety of video lectures. These are typically 5-10 minutes long. They are there to highlight important concepts or clarify points in organic chemistry.

**Practice exams**

I will make three practice exams available for each exam. The exams will be very similar to the practice exams in terms of directions. Answer keys for these exams will also be available. **DO NOT SIMPLY LOOK AT THE KEY. ATTEMPT THE PRACTICE EXAM FIRST. HAVE ANOTHER STUDENT IN THE CLASS GRADE IT AS YOU GRADE THEIRS. DISCUSS DISCREPANCIES AND ONLY THEN LOOK AT THE KEY.**

**Grading**

The total number of points available will be 530 points.

There will be four take-home quizzes worth 10 points each. They will be handed out on June 20, July 3, July 18, and August 1. You can drop one quiz. They will be due the following Monday in Matt Bowman’s mailbox in Chemistry 1146. The take home quiz is open book, open note, open classmate, but is not open TA/tutor/me. By open classmate I mean it is okay to converse with one another, but it is absolutely **NOT** okay to dissect each other or figure out answers by the use of haruspicy. In any event, I suggest you try the quiz on your own first.
There are three regular exams plus the final exam. Each regular exam will be worth 100 points. The regular exams will be held during class time. The final exam will be two hours long and be worth 200 points. The final exam will be on Thursday, August 8. The exam will be held either from 11:00 to 1:00 pm or from 11:45 to 1:45 pm depending on your schedules. The exam room for the final exam is to be determined. Please check your schedules for potential conflicts. Please notify me of any conflicts so alternative arrangements can be made for the final exam.

**ABCDF SIMPLY STATED**

If you earn 90% of the total points, you will receive an A.  
If you earn 77% of the total points, you will receive at least a B.  
If you earn 59% of the total points, you will receive at least a C.  
If you earn 40% of the total points, you will receive at least a D.

So if you receive an 88%, this can be an A, AB, or B depending on the final distribution.  89.5% is considered to be 90%.  
89.4% is considered to be 89%.  That is just how it is.

The actual lines are determined by a mixture of factors: final distribution, the historical grade history of all of the sections of Chem 345, the phase of the moon, where the darts end up on the board, improvement in the course, etc... There are a few things that I can say with certainty:

The 40% line is a hard line. Any score below that will be an F.  
*Regardless what exam averages are.*  
The C line will never be lowered below 50%. A 52% may be a C or D.

Confusion about curves and AB’s and BC’s. The AB range and BC range is very small. Historically for organic chemistry it is small. For my classes, it has typically been one or two percentage points.
Exam regrade policy: Mistakes in exam grading will occasionally be made. You will have one week after receiving the exam to submit the entire exam for regrading. Keep in mind, since mistakes may or may not be in your favor, the exam grade can actually be lowered. All decisions on the regrades are final.

Regrade submittal procedure: Email Matt Bowman that you are submitting an exam for a regrade. Write on the exam score sheet which problem needs to be regraded and why. Place the exam in Matt Bowman’s mailbox in Chemistry 1146.

Academic Misconduct

You are all adults. There is no reason to cheat, but plenty of reasons not to. An F in the course is one of many reasons. Cheat sheets, notes, textbooks, someone else's paper, iPods, cell phones, a crystal ball bearing the disembodied spirit of the Great Organic Chemist R. B. Woodward, etc… are prohibited from the exam. Use of these prohibited materials during an exam will result in a zero for the exam score. You will only be allowed pencils/pens and model kits for the exams.

A percentage of the exams will be photocopied. Should an answer be changed and submitted for a regrading, academic misconduct has occurred and the perpetrator will receive an F in the course and be reported to the Dean’s office.

I have been advised by the staff (some of them legal staff) that I cannot use pepper spray in dealing with wandering eyes. I will try to remember to remind the TAs proctoring the exams of that advice. If the TAs suspect anyone of this condition, they will announce for everyone to keep their eyes on their paper. If the problem persists, the TAs have the discretionary power to move any student suspected during an exam. Exams of adjacent students will be examined, and should there be ample evidence, lower exam scores including zeroes will be given to the perpetrator. Please fight against wandering eyes. Please shield your paper the best you can to remove any temptation from others.
Study tips

Between 1-4 hours after each lecture, start the problem set. Between 4-8 hours after each lecture, recopy your notes for that lecture. Look for the patterns.

In the course schedule, the relevant page numbers from the text are listed. The exams are going to be based on the material from the lectures, lecture notes, problem sets, and discussions. The text is there to help you understand the material. I strongly suggest that you read the relevant pages either before or after lecture.

Make flash cards. Carry these with you wherever you go. Flip through them throughout each day.

The best way to understand organic chemistry is constant practice. The TA's and I will do our best to provide quite a bit of practice in the form of problem sets and practice exams. Should you desire more practice, there are the problems at the end of each chapter in the book as well as multiple websites on the internet. Should you find a discrepancy in what the TA's, book, internet, or myself say, please bring it to our attention immediately. It may be a case of a subtlety, an outright error, or an over generalization. Regardless, we'll try to explain the discrepancy.
Lectures
There are 24 usable days during a summer semester (compared to about 40 in a typical semester). To compensate, lectures are 75 minutes long. Saturation will unfortunately happen. I will try to break up the long lectures as much as possible. Moreover, they are on consecutive days. It does not allow much time for material to sink in, but plenty of time to burn out (me, especially). To be frank, the forty days in a typical semester are not enough to thoroughly cover what needs to be covered. My goal is to get you to the point where you can look at a reaction (rather it be in biochemistry or advanced synthetic chemistry or polymer science or 11th century Nordic studies) and be able to work it out. I will not cover every single reaction in organic chemistry because there are just too many of them. The TAs and I have met to find the most important ones (and those deemed by others as traditional organic reactions) and have done are best to organize them in a somewhat coherent manner. We have done that pretty well in weeks 1-6. Weeks seven and eight are a hodgepodge set of reactions that are important (some downright cool like spiropyrans and Bullvalene) but are different enough from the other reactions discussed that an adequate segue is not possible.

Due to the large amount of material to cover, I will be going quite quickly. Some of the details will be left for the TAs to go over in discussion. Please feel free to ask questions. Some answers might be better left after class or in office hours, but still ask them. Interrupt me if necessary.
Discussion Sections

Due to the generous funding by the Madison Initiative for Undergraduates and the College of Letters and Science, we are able to offer discussion sections. All rooms are in chemistry. I am pleased to work with three well-qualified TAs (Jackie Brown, Andrew Maza, and Stephanie Knezz). All three have been taught from someone other than me. As a result, they may have a different way of thinking about a problem than I do. Therefore, discussion sections may provide a unique insight on how to look at a concept. Sometimes (probably almost all of the time), they may have a better way of explaining it. The discussion sections are a good time to work through problems with your peers, as well as get other insight into organic chemistry. I highly encourage you to attend your registered discussion section.

The discussion sections are 75 minutes long. Wow. The TAs will be there to give quick lectures to clarify things, but then will work with you to tackle problems. **There are a couple of topics that I will leave to them to cover, as I would just butcher the topics or they are rather boring.** Please attend your discussion section as much as possible.

<table>
<thead>
<tr>
<th>Section</th>
<th>Room</th>
<th>Time</th>
<th>TA</th>
</tr>
</thead>
<tbody>
<tr>
<td>301</td>
<td>B355</td>
<td>8:55-10:10 am</td>
<td>Steph Knezz</td>
</tr>
<tr>
<td>302</td>
<td>B355</td>
<td>10:20-11:35 am</td>
<td>Steph Knezz</td>
</tr>
<tr>
<td>303</td>
<td>2377</td>
<td>1:10-2:25 pm</td>
<td>Andrew Maza</td>
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<tr>
<td>304</td>
<td>B355</td>
<td>2:35-3:50 pm</td>
<td>Andrew Maza</td>
</tr>
<tr>
<td>305</td>
<td>B357</td>
<td>10:20-11:35 am</td>
<td>Jackie Brown</td>
</tr>
<tr>
<td>306</td>
<td>B357</td>
<td>2:35-3:50 pm</td>
<td>Jackie Brown</td>
</tr>
</tbody>
</table>

Jackie Brown     jackie.brown@chem.wisc.edu
Andrew Maza      amaza@chem.wisc.edu
Steph Knezz      sknezz@chem.wisc.edu
Additional Help

In addition to the TAs during discussion and my office hours, there are a couple of places where you can find assistance.

The Peer Learning Association helps students by having you work problems and present them to each other. Learn by doing, learn by teaching. Signup at www.surveymonkey.com/s/SummerChemistry by noon Wednesday.

Alpha Chi Sigma Chemistry Fraternity has offered tutoring for chemistry classes in the past. Please contact them about their current help sessions.

GUTS offers tutors as well. They can be contacted at:
Student Activity Center
Office #4413
333 E Campus Mall
Madison, WI 53715-1380
Phone: 608-263-5666
E-mail: guts@rso.wisc.edu

There are also private tutors available. The General Chemistry Office (Room 1328) has a list of tutors and prices.

If you do work with a tutor, please let them know that I post notes, problem sets, practice exams, and tutorials on Learn@UW. Anyone can access the Learn@UW Chem 345 site by using the visitor login. They should go to learnuw.wisc.edu and click on visitor login. The login to use is orgchem.pseudo and the password is orgchem.pseudo. They will be able to access any handouts using that login.

A very good way to study is to study in groups. Multiple problem sets will be available to work on along with several practice exams. I suggest you form groups to study in. You can go about this by using the course email address (chem345-1-su13-dhh@lists.wisc.edu) or talking to classmates in discussion, etc... The sooner you set up these groups the better off you will be. If you wish a classroom to meet in, I can see about reserving one for you.
Chem 345: Survey

Please answer the following questions so I can adapt Chem 345 to better suit your needs. Please turn this page in to Matt Bowman's mailbox in Chemistry 1146 by June 20.

What is your year? (Freshman, Grad Student, Returning Adult, etc...)

What is your major?

What do you hope to get out of this class? (Besides a good grade)

Have you purchased an iclicker (for another class)?

Do you learn a lot from textbooks?

What other classes are you currently enrolled in?

Who was your Chem 343 instructor?

When would you like me to hold office hours?