Syllabus for Chemistry 310N, Spring 2011

Class: Beginning Organic Chemistry
Welch 2.224
TTh 12:30 – 2:00pm
Unique #: 52440

Instructor: Eric V. Anslyn
Office Hours – Monday 1:45pm-2:45pm, and Thursday 2:00pm-3:00pm.
NHB 5.114
But, office hours will be in the common area outside of NHB 5.202
anslyn@austin.utexas.edu - The instructor’s and TA’s e-mails are to be used only for organizational questions about the class. We will not respond to e-mails about questions on organic chemistry, material on the exams, homework answers, or questions about the chemical content in the notes. You must go to office hours and recitation sessions to get chemistry questions answered.

Web Site:
http://courses.cm.utexas.edu/eanslyn/ch310n/
Lecture TA notes, syllabus, old exams, exam keys (after administering the exams) and other stuff to help you out.

Teaching Assistants (TAs):
Justin Dragna, jmdragna@mail.utexas.edu
Office hours: Friday 1:00-2:00pm

Leo Joyce, lajoyce@mail.utexas.edu
Office hours: Wednesday 3:00-4:00pm

Pedro Metola, david_owes@hotmail.com
Office hours: Monday 9:00-10:00am

Michelle Adams, mmadams@mail.utexas.edu
Office hours: Tuesday 10:00-11:00am

Vanessa Williams Patman, williams.patman@gmail.com
Office hours: Tuesday 2:00-3:00pm

All office hours will be held in cubicle A on the 1st floor of Welch, just outside of Welch 1.308.

Text: "Organic Chemistry" by Brown, Foote, Iverson, and Anslyn, 5th Edition
Please also purchase Student Study Guide and Solutions Manual, along with a molecular model set.

Attendance: Attendance in class is strongly recommended but not mandatory (no attendance will be taken). However, you will likely not do very well in the class unless you attend. The instructor reserves the right to interact with you in front of the class if you are sleeping. In addition, I will randomly ask questions of individuals in the class during lecture. Questions from the audience are highly encouraged. Please turn off all cell phones during class. If your cell phone rings during class, I will take it to the front of the classroom until after class.

Recitation Sessions: There are also 5 weekly recitation/review sessions held by the TAs. These are optional, but highly, highly recommended! Review sessions begin the second week of class. These will help you a lot! If you are struggling a lot, or even just a little, or you just want to learn more, you should take advantage of these recitation sessions. Each session will start with practicing the kinds of problems that we put on exams, and then lecturing on the problems, and then taking questions.

Leo Joyce: Mondays 5:00-6:00 pm. (Welch 3.502)
Pedro Metola: Tuesdays 6:00-7:00 pm. (WCH 1.120)
Justin Dragna: Wednesdays 5:00-6:00 pm. (Welch 3.502)
Michelle Adams: Thursdays 6:00-7:00 pm. (PAI 4.42)
Vanessa Williams Patman: Mondays 3:00-4:00pm, (WCH 1.120)
Section changes, adds, and drops: All registration matters are handled by the Undergraduate Office (Welch 2.212), and not by me. The University rules are stringent with regard to drops, and I do not make exceptions. In general they are as follows, but you must check the policy for yourself (don’t rely on what is typed below, it is a paraphrasing of the University rules).

The student must remain in conformity with the quantity of work rule and must obtain all required approvals. International students must obtain written permission from the International Office, in addition to other required approvals, to drop a course. On the recommendation of the instructor, and with the approval of the student's academic dean, a student may be required to drop a course at any time because of neglect or for lack of preparation.

Subject to the conditions below, an undergraduate may drop this course through February 15th, 2010. The following rules apply from the first class day through the twelfth class day of a long-session semester. To drop a course during this period, the student must have the approval of the chair of the department offering the course. In some colleges and schools, the student must also have the approval of his or her adviser and Dean; each student must consult the regulations of his or her college or school. Normally, the approval of the chair of the department during this period is routine, and the student may initiate the drop through the registration system. However, in some circumstances a department may disapprove requests to drop certain courses. If a drop request is not accepted by the registration system, the student should consult the department that offers the course for more information.

The following rules apply from the thirteenth class day through the twentieth class day of a long-session semester. To drop a course during this period, the student must have the approval of his or her dean. In some colleges and schools, the approval of the student's adviser is also required; each student must consult the regulations of his or her college or school. If the student is allowed to drop the course, the symbol Q appears on his or her academic record to indicate a drop without academic penalty.

Dropping a course after the fourth week of classes. The following rules apply from the twenty-first class day through the mid-semester deadline. To drop a course during this period, the student must have the approval of the instructor, the student's adviser, and the student's dean. If the instructor approves the drop, he or she will assign the symbol Q or a grade of F. The symbol Q indicates that the student has a grade of at least C in the course, that no final grade has yet been assigned, or that no academic penalty is in order because of the student's performance and the nature of the course. In compelling circumstances, the student's dean may assign the symbol Q for nonacademic reasons.

After the mid-semester deadline for dropping courses in a long-session semester, an undergraduate may not drop a course except with the approval of his or her dean, and then only for urgent and substantiated, nonacademic reasons.

Courses Info: CH 310 and 318 may not both be counted. 310N course is for premedical sciences, pre-dental, life sciences, and pharmacy majors.

Pre- and Co requisites: CH 204 or 317 with a grade of C or better, CH 310M with a grade of C or better, and credit or registration for CH 210C.

Incompletes: An incomplete (X) is a temporary delay in reporting the final course grade. An X can be assigned for students that miss the final exam due to illness or other imperative nonacademic reasons. You will be required to have a written medical excuse signed by the person that treated you if the reason for missing the final is due to illness. An X may be assigned if a student has not completed other required assignments, but only if the student has a passing grade on the other assignments. The reason for assigning an X due to having a low grade is not allowed.

Homework: Homework problems are assigned for each Chapter (see last page of this syllabus). These assignments will be turned in after the last lecture dealing with the Chapter. For example, when we are done with Chapter 13, the homework for Chapter 13 will be turned in on the next class. You must keep track of when the homework is due. This assures that you are keeping up in the class and attending. NO LATE HOMEWORK IS EVER ACCEPTED! If you plan to study from the homework, please copy it before passing it in.

The homework will be given a grade of +, -, or 0. A + means that you did all the required problems, a - means that you did not get to all these problems, and a 0 means you did not turn in the homework. To not get a 0, the homework must be turned in on time and in class. The tally of these +, -, and 0 will be used to help or hinder your grade if your grade is borderline as follows. If you are 0.50 T-score points (see below) from a grade cut off (high or low), then the homework tally will be examined. Mostly +'s will boost your grade, mostly -'s will not affect the grade, whereas mostly 0's will drop your grade. Indeed, your grade can be dropped based upon not turning in homework!
You will note when taking the exams that about 1/3 of the test is directly out of the tougher homework problems, 1/3 is similar to the notes, and 1/3 makes you think. Therefore it is highly recommended that you do the homework and study your notes. Do as much homework as possible, especially the advanced problems. Working out the homework (not copying the answers from the answer key) will prepare you for the exams.

**EXAMS AND GRADING:** The final grade will be based upon the grades from two midterms and one final exam. Two midterms out of the three are mandatory. The lowest midterm (or one missed midterm) will be dropped from your final average. The final exam cannot be dropped. Failure to complete at least two midterms will result in a grade of F, as will missing the final exam. No make-ups will be held for the final exam regardless of the reason. Please arrange your schedule accordingly. Two midterm scores will comprise 60% of your grade, with the final making up the other 40%. Due to the nature of the course, the final exam is inherently comprehensive and no area is intentionally stressed. A valid UT ID must be brought to each examination. Questions are to be answered on the exam pages only.

The only items allowed at your seat are pencils, pens, and model sets; no calculators or cell phones are allowed. If you are caught with a cell phone on your desk during the exam you will automatically receive a letter grade of F on that exam. Just to reiterate, the following are not allowed at your desk at an exam: any kind of paper, baseball caps cannot be worn, electronic devices of any kind, food, large jackets or sweaters, backpacks, etc.

Early exams (on the same dates as below but from 5:00-7:00pm) are given only for individuals that have classes during the regularly scheduled exam times. If you work during these times, please ask your employer to give you these evenings off. If you cannot get these evenings off, you need to get a notarized letter from your employer and show it within the first two weeks of class and register with us for the early exams. To take an early exam due to class scheduling conflicts, you must show documentation to the Professor, and be registered for early exams, within the first two weeks of class. You will not be allowed to leave the exam room earlier than 7:00pm.

The three regularly scheduled examinations will be on the following dates from 7:00-9:00pm. Be aware of the classroom listed based upon the first letter of your last name. Sit in every other seat, not next to anyone.

Feb. 15th:  
A-K report to Welch 1.308  
L-R report to Welch 1.316  
S-Z report to Welch 3.502  
*Early exams for those previously approved will be 5:00-7:00pm

March 22nd:  
A-K report to UTC 2.102A  
L-Z report to UTC 2.112A  
*Early exams for those previously approved will be 5:00-7:00pm

April 19th:  
A-K report to UTC 2.102A  
L-Z report to UTC 2.112A  
*Early exams for those previously approved will be 5:00-7:00pm

Final exam is on Saturday, May 14th from 2:00-5:00pm (please confirm for yourself later in the semester)

The average on the exams is often between 45 and 60%. I aim for an average of 50 to 55%. This allows a large distribution of grades, and more clearly delineates boundaries between A, B, C, D, and F. Expect the exams to be very challenging but fair.

**T-Scoring:**  
The raw scores earned on each of the exams in this course will be converted to Standard T-Scores. The Standard T-Score is computed as follows:
Using Standard T-Scores allows an effective averaging of grades without introducing a bias in favor of tests with the greatest standard deviations. Since it is based on a normal (Gaussian) distribution, it generally represents the fairest way of grading. (Nearly all national exams such as the SAT, MCAT, and GRE use a similar form of Standard T-Scores)

Your final course grade will be calculated as 30% of your best midterm T-score, 30% of your second best midterm T-score and 40% of your final exam T-score. There will be three midterms during the semester, so this means that your lowest midterm exam T-score will be dropped OR you will be able to miss one midterm for any reason with no penalty. The following conversion table will be used to calculated final course grades:

<table>
<thead>
<tr>
<th>T-Score</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>93.0000</td>
<td>A</td>
</tr>
<tr>
<td>90.0000</td>
<td>A-</td>
</tr>
<tr>
<td>87.0000</td>
<td>B+</td>
</tr>
<tr>
<td>83.0000</td>
<td>B</td>
</tr>
<tr>
<td>80.0000</td>
<td>B-</td>
</tr>
<tr>
<td>77.0000</td>
<td>C+</td>
</tr>
<tr>
<td>73.0000</td>
<td>C</td>
</tr>
<tr>
<td>70.0000</td>
<td>C-</td>
</tr>
<tr>
<td>67.0000</td>
<td>D+</td>
</tr>
<tr>
<td>63.0000</td>
<td>D</td>
</tr>
<tr>
<td>60.0000</td>
<td>D-</td>
</tr>
<tr>
<td>T &lt; 60.0000</td>
<td>F</td>
</tr>
</tbody>
</table>

NOTE: WE DO NOT ROUND SCORES. AN 89.92 IS ENTERED AS 89.92, NOT 90.00. When the instructor makes the final grades in the class, there will also be no rounding of grades. Missing a grade cut off by any fraction of an amount is a miss!

In general, using T-scores increases everyone's grades compared to using absolute percentages. Nevertheless, we will keep track of your percentage scores on every test. If the percentage scores are ever higher than your T-score, we will use the percentage score for your course grade calculation. Thus, if everyone does extremely well in this course, no grade will be lowered by using a curving system!

Regrade Policy. If you use a pencil or erasable ink to take your exam, we will not allow a regrade. You must use permanent ink if you anticipate wanting a regrade. Any exams to be regraded must be presented to Eric Anslyn within one week of the return of the exams. The entire exam will be regraded by Eric Anslyn (not the graders, you must choose who you believe to be tougher or more alert!). You cannot discuss the exam with Eric Anslyn at all prior to the regrade. A higher or lower score can result, but a score will only be changed if it differs by 3 percentage points or more from the original score. Complaints about the final exam grading must be presented within one day of the return of the final exam. Therefore, if you anticipate a complaint, you must be diligent in following the progress of the graders.
**Picking up Old Exams:** We will notify you in class when the exams have been finished being graded, after which you will be able to pick up your exam at the undergraduate office windows (Welch 2.212). If you miss getting your exam back on that specific day that we notified you in class, you will still be able to pick it up at the undergraduate office windows, however, you must fill out an “Exam Request Form”, available at the undergraduate office. Students will fill out this form and leave it in a locked box in the hallway. Each day the forms will be collected, and exams can be picked up the next day at the office windows from 7:30a to 5:00p. Students have a one-business-day turn-around period, but will have the convenience of dropping by anytime they would like for the exam.

**Students with Special Needs:** Any student needing extra time, special environment, aids, etc. for exams is required to notify TA or the instructor in writing at least one week before the examinations. A letter of documentation of special need must be furnished by the Dean of Student’s office before the first exam. Failure to meet these deadlines may result in our inability to meet the special need. For more information, contact the Office of the Dean of Students at 471-6259 or 471-4641.

**Scholastic Dishonesty.** Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of an F in the course, and/or dismissal from the University. Because such dishonesty harms the individual, all students, and the integrity of the University, policies of scholastic dishonesty will be strictly enforced.

**Instructor extended office hours before exams:** Evening review sessions for the midterms will be run by the instructor. Dates and times will be announced during class.

**Traveling:** I will miss class on the following dates, and the Professor listed will cover the class.

- Feb 8th – Dionicio Siegel
- Mar 1st – Dionicio Siegel
- Apr 5th – John Colapret

**The Level of Difficulty of the Class:** This course is known to be hard. The pace is very fast, and it is imperative that you remain current with the material. Do not get behind, this is fatal! The biggest problem is absorbing all the material. Please feel free to ask questions in class, to correct the instructor in class, and to visit the Professor and TA office hours. Eric Anslyn sits in his office during his office hours to help, please take advantage of this offer. He will be available to help you, as will the TAs for this course and your laboratory TAs.

**Course Philosophy:** Organic Chemistry is truly the chemistry of life. It is also, however, the most common chemistry used in the manufacturing of drugs, clothing, plastics, explosives, fuels, and almost all chemical items routinely used in modern life. The goal of this course is to give the student a firm foundation from which to understand chemical transformations, such that specialized courses in polymers and biochemistry can be easily approached, and in order that the common chemical problems confronting society can be understood from a rational and educated basis.

**Homework Assignments:** Remember, the homework is meant to prepare you for an exam, and we use the homework scores to adjust grades if your grade ends up being borderline (see above). The following is a list of all the problems that we feel are relevant to the material that will be covered. This is the homework that is due and must be turned in on the day after a chapter is finished.

- Chapter 13: 14, 15, 16, 19, 20, 21, 22, 24, 28
- Chapter 15: 7, 8, 11, 12, 17, 18, 19, 22, 23
- Chapter 16: 14, 15, 19, 21, 22, 23, 24, 29, 30, 32, 33, 36-39, 41, 43, 45, 46, 50, 51, 54, 55, 57, 59, 61, 62, 65, 66, 68, 72, 73, 74, 77
- Chapter 17: 7-9, 12, 14, 18, 19, 21, 22, 24, 25, 27, 29, 30, 32, 33, 37-39, 41, 42, 44-47, 51
- Chapter 19: 18, 19, 22 – 24, 26, 27, 29, 31, 33, 34, 36, 37, 39, 41, 43, 44, 46, 49, 50, 51, 53, 58, 60, 65, 68, 72, 74, 75, 80
- Chapter 20: 6 - 19
- Chapter 21: 8, 9, 12, 14, 15-17, 32, 33, 35, 36, 40, 43-45, 49, 54, 57, 59, 61
- Chapter 22: 7 – 9, 14-22, 28, 30, 33, 35, 38, 43, 44, 47, 50, 52, 55, 59, 61
- Chapter 23: 16 – 18, 22, 25, 26, 27, 30, 32, 34, 37, 38, 42, 43 – 48, 52, 54, 57, 58, 63, 67
How to Succeed in Chem. 310N
If you were happy with your grade in CH310M/CH318M: Keep up the good work!
If you were not satisfied with your grade in CH310M/CH318M: You will have to change something! If you do not approach this class differently, then the result will probably be the same. So here is my advice.

The following is a list of things you should do:
2. Strive to understand, not memorize the material.
3. Come to class everyday.
4. Do some homework every single day.
5. Keep up with outlining your lecture notes and the book.
6. Keep updating your roadmap for each new reaction as the semester goes along.
7. Learn and understand mechanisms, do not memorize mechanisms.
8. Strive to understand the reactions also, not memorize the reactions.

How to Study Before the Exams.
1. Redo the more difficult homework questions.
2. Study your notes by looking at each topics, mechanism, reaction, etc., then close your notes and reproduce the logic, mechanism, reaction, etc. on a separate piece of paper from your mind. Do not simply look over the notes and say to yourself “yeah, I remember this, I understand this”. You must be able to reproduce it from scratch.
3. If you must memorize the reactions, use flash cards. But do not do them for the mechanisms.