Professor:  Ned B. Bowden

Class Times:  MTWThF 1:00-1:50 in W55 CB
Tests are scheduled on Wednesdays and Fridays.
Final exam is scheduled for Friday, July 29\textsuperscript{th}
Note: I do not have a make-up final. If you miss the final, you have to either take a zero or take the final at the end of the Fall 2011 session.

Contact Info:  W425 Chemistry Building
335-1198
ned-bowden@uiowa.edu

Office Hours and Problem Solving Sessions
I reserved these time for you and am happy to meet and discuss problems you are having. If these times do not work for you, we will set an appointment by email to meet another time.

My office hours are Mondays from 1:50-3:00 in my office.

We will have “Problem Solving Sessions” every Tuesday and Thursday from 11:20-12:50 in W128 CB. I will bring other organic chemistry books so that we may work through questions that are not in your textbook but cover the same material. I strongly encourage you to come with questions; we can tailor these meetings to cover what you are struggling with.

This time period is specifically designed to give you a chance to work problems with some assistance or to clarify a concept that you are struggling with. You will get the most out of these sessions if you have done the homework, read the chapters, and applied yourself towards learning the material prior to each session. I am holding these sessions in a large lecture hall so that everyone may come and partake. I want everyone to do well in this class and learn to appreciate some of the depth of organic chemistry. It is a tough subject for many, but there are
unifying concepts that greatly simplify the learning process and allow one to organize their thinking.

These problem solving sessions will also be review sessions for exams.

**Discussion Sections**

Tyler Graf will lead these discussions. This time is reserved for problem solving, discussion of lecture material, and explanations of exam answers. I strongly encourage you to attend these sections as the TA is excellent and can help you learn the material.

Tyler’s office hours are in w410 CB on the fourth floor of the chemistry building. He can be reached at tyler-graf@uiowa.edu. His office hours are from 3:00-4:00 on Wednesday and Thursday.

**Why Are You in This Class?**

Organic chemistry is a beautiful subject! I taught this class before and know that most of you are “pre” students. By this statement I mean that you are premed, prenursing, prepharmacy, prelaw, or another variant. This class is required for entrance into a professional school or is needed to prepare you for a nationwide test. These are all fine reasons for taking this class and I am glad you are here. My goal is to teach you some of the most beautiful parts of organic chemistry in hopes that you may remember it down the road when I am one of your patients in an emergency room, dental office, or pharmacy.

In this class you are going to learn how to think critically. Organic chemistry is more than the memorization of a bunch of facts and it is certainly more than applying a few simple rules to get the right answer. **Organic chemistry is 90% science and 10% art;** I can teach you the right rules and how to think about problems in organic chemistry, but you must learn how to apply these rules. This class is considered tough because it is unlike others that you have taken before. You will not have a series of equations from which you may derive answers. You will have a bunch of facts and you must learn how to think critically to solve problems. Therefore, you must learn to think like a detective and piece answers together with everything that you know. I will help you as much as I can to learn these skills.

**How to Study for This Class**

This class is not one where you can look over the material right before the exam and expect to do well. This class requires constant and diligent effort in order to do well. I compiled a list of suggestions to help you succeed. These are only suggestions; some of you may be naturals at organic chemistry and can get by with less work, but for the other 99% of the class this list will help you get the grade that you want.

If you need extra tutoring, it is available through the University Housing Tutoring Program at [http://housing.uiowa.edu/departments/reslife/academic_initiatives.html](http://housing.uiowa.edu/departments/reslife/academic_initiatives.html). I am not affiliated with this program; I am passing the information to you nonetheless.

1. Study for this class at least one hour a day. Organic chemistry is hard to learn but with consistent effort you can do it. This is a three semester hour class so you should spend six hours
a week outside of class learning this material. Some of you will spend more time; others will spend less time depending on your abilities, motivation, and expectations for a grade.

2. Do all of the homework and suggested problems. You will learn from doing the homework, you will learn by struggling with the homework! Learning occurs when you are forming questions in your mind and seeking the answers; learning does not happen when you are copying someone else’s work. Your grade in this class depends on your test taking skills so use the homeworks to learn the material.

3. Form study groups.

4. Skim the text before coming to class.

5. Go to the discussion sections and ask questions.

6. Rewrite your lecture notes. You will be surprised as to how much this will help you learn the material.

7. Study with a pencil and paper nearby! You will learn the material best by writing it down in your notebook as you are studying. Most people don’t learn well by sight alone, you must use your hands when you study.

8. Read the book. Reread the book. Rereread the book. The class is based on the material in the book so if you are happy with the material in the book you will do well in the class.

9. Study regularly!

**What You Should Take Away From This Class**
1. The ability to draw mechanisms for simple organic reactions
2. Knowledge of common reactions
3. Understand functional groups and how to convert from one to another
4. Understand how to apply organic chemistry to a variety of fields including most things biological.
5. The ability to name molecules and recognize key functional groups
6. Understand some of the how and why of organic chemistry.

**Exams**
The class is based on the material in the book so if you are happy with the material in the book you will do well in the class.

Exams
There will be four hourly exams on the following days.

June 17th
June 29th
July 8th
July 20th

The tests are in class. The exams will last for 1.5 hours.
Leave all textbooks, models, notes, etc. at home or you will be required to leave them in the front of the classroom during the exam. The tests will be written to require short answers; I have yet to give a multiple choice question on any exam. The exams will be closed book and the answers should be written in blue or black ink. Exams written in pencil will not eligible for a regrade. Exams will be returned following the exam and will be available at the chemistry center on the second floor of the chemistry building (E225 CB) immediately after that class. Your grades will be posted on ICON as soon as possible.

Each exam is comprehensive but will emphasize material since the previous exam. Organic chemistry builds on what was learned before, it is important to continually add to your fountain of knowledge. Exams must touch on material that was learned earlier in the semester, but in most instances I will use concepts that we covered since the previous exam. It is wise to review all of the material since Day 1 for each exam.

Anything that is covered through the end of class on the day before the exam is fair game for the exam. I more or less follow the book, so you will be able to determine where I stopped on the Thursday before the exam. If you have any doubt, study for the whole chapter that we are working on.

I will put old exams and their answer keys on line. Old exams are a poor method to determine what material will be covered on your exam. The reason for this statement is that I may emphasize different material from semester to semester, so the questions and material will differ from year to year. Do not feel that if you did well on an old exam you will do well on the regular exam. Before an exam, I will typically tell you what types of questions to prepare for, but I will not tell you what will or will not be on the exam. If it is in the book or was covered in class, it is fair game.

The final exam will be comprehensive.

Homework
Homework is critical to help you learn the material. I have suggested problems on ICON that I expect you to solve. A poor, but common way, to do the homework is to look at the problem and answer key. Many students will look at a problem in the book, write nothing down, and then look at the answer key. Is this how I will test you? Will I ask you a question, give you the answer, and then ask you if the answer is correct? The best way to do the suggested problems is to look at the problem, write down your best answer, and then look at the answer key. It is O.K. to struggle with the material, that is how you learn! You are expected to not know all of the answers immediately, you will learn quite a bit by determining the correct answer without the answer key.

We will also have on-line homework that will be run through Connect. I posted a page of information on ICON about how to register for Connect, you should do register asap. The on-line homework will require you to draw molecules and you want to be sure that you can do so before the first assignment is due.

I will assign some problems to you before we cover the material, and I will assign problems after we have finished a chapter. Since there will be multiple assignments for each chapter, you will
want to check Connect regularly to look for new assignments. I will try to post all of the assignments for a chapter at one time so you will have some time to work on them.

To eliminate some problems, I will count any individual score on a homework assignment of 90% or higher as 100%. Thus, if you get 9 out of 10 questions correct, you will get all of the points.

**Grading**
The College of Liberal Arts and Sciences strongly suggests the following grade distribution.
18% A
36% B
39% C
5% D
2% F

The grade distribution will be close to these values, but it may vary based on class performance. Plus and minus grades will be given, they are left to the discretion of the instructor at the end of the semester.

You will be graded on the three hourly exams and a final exam. Your final grade will be calculated as follows.

Four hourly exams: 60%
Homework: 20%
Final Exam: 20%

Your test scores will be posted on ICON. I will post the grade distributions for each exam on line so that you know how you did on each exam.

**Regrades**
If you feel that your test has been graded unfairly you can ask for a regrade. Write the reason for your regrade on the front of the test and submit it to me or the chemistry center after class within one week after the exam was available to be returned. The whole exam may be regraded. Regrades are not possible on tests written in pencil or erasable ink.

**Make-up exams**
Make-up exams will only be provided under exceptional circumstances. A valid, written excuse must be provided prior to a missed exam to the instructor. If you anticipate having a conflict with an exam, please see me ahead of time. If you miss an exam for unforeseen reasons and have not provided a valid, written excuse to the instructor prior to the exam, you have one week after the exam to provide me with a valid, written excuse. There will only be one make-up exam for each hourly exam.

**Cheating**
Our scientific environment is maintained through the actions of its members and the trust we place in one another. Scientists are expected to remain honest in their words and actions. When this trust is broken the results are often severe and career threatening. One should not cheat on
the false assumptions that 1) no one is harmed if no one is aware of the cheating or 2) it is alright to cheat if you aren’t caught. A good scientist will hold themselves to a higher standard where cheating, even if it isn’t discovered, is wrong.

With this important responsibility comes the privilege of being a member of a community that values openness and truth. As you are all scientists in training I will expect you to act accordingly and with an upright manner. Anyone caught cheating will flunk and will be reported to the administration.

**Attendance**
Attendance is not mandatory but encouraged. I may introduce material outside of the book, you are responsible for learning that material as it may appear on an exam.

**Course Objective**
Organic chemistry books are written such that someone can earn money from their sale, to sell a book it must cover more material than is reasonable for a one year course. We will try to cover as much of the book as possible without going too fast. We will cover up to and including chapter 25 and some of chapter 30. We may or may not get to the remaining chapters.

**Required Textbook**

**Suggested Textbook**
David R. Klein, Organic Chemistry II as a second language, 2nd edition, John Wiley and Sons. This book is an excellent vehicle to help you learn organic chemistry and would be wise to purchase.

**Suggested Model Kit**
The bookstore offers model kits and I strongly suggest purchasing one. It will greatly help you to “see” organic molecules in three-dimensions.

**Disabilities**
I would like to hear from anyone who has a disability which may require some modification of seating, testing, or other class requirements so that appropriate arrangements may be made. Please contact me during my office hours.
Required Announcements

Administrative Home
The College of Liberal Arts and Sciences is the administrative home of this course and governs matters such as the add/drop deadlines, the second-grade-only option, and other related issues. Different colleges may have different policies. Questions may be addressed to 120 Schaeffer Hall, or see the CLAS Student Academic Handbook.

Electronic Communication
University policy specifies that students are responsible for all official correspondences sent to their University of Iowa e-mail address (@uiowa.edu). Faculty and students should use this account for correspondences. (Operations Manual, III.15.2. Scroll down to k.11.)

Accommodations for Disabilities
A student seeking academic accommodations should first register with Student Disability Services and then meet privately with the course instructor to make particular arrangements. See www.uiowa.edu/~sds/ for more information.

Academic Fraud
Plagiarism and any other activities when students present work that is not their own are academic fraud. Academic fraud is a serious matter and is reported to the departmental DEO and to the Associate Dean for Undergraduate Programs and Curriculum. Instructors and DEOs decide on appropriate consequences at the departmental level while the Associate Dean enforces additional consequences at the collegiate level. See the CLAS Academic Fraud section of the Student Academic Handbook.

CLAS Final Examination Policies
Final exams may be offered only during finals week. No exams of any kind are allowed during the last week of classes. Students should not ask their instructor to reschedule a final exam since the College does not permit rescheduling of a final exam once the semester has begun. Questions should be addressed to the Associate Dean for Undergraduate Programs and Curriculum.

Making a Suggestion or a Complaint
Students with a suggestion or complaint should first visit the instructor, then the course supervisor, and then the departmental DEO. Complaints must be made within six months of the incident. See the CLAS Student Academic Handbook.

Understanding Sexual Harassment
Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. All members of the UI community have a responsibility to uphold this mission and to contribute to a safe environment that enhances learning. Incidents of sexual harassment should be reported immediately. See the UI Comprehensive Guide on Sexual Harassment for assistance, definitions, and the full University policy.

Reacting Safely to Severe Weather
In severe weather, class members should seek appropriate shelter immediately, leaving the classroom if necessary. The class will continue if possible when the event is over. For more information on Hawk Alert and the siren warning system, visit the Public Safety web site.