

CHEMISTRY 26605
Spring 2013, MWF 1:30-2:20, WTHR 104

Professor

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- Text:** Loudon, "Organic Chemistry", 5th Edition, 2009
- Readings:** The assigned readings should be completed *before* attending lectures.
- Problems:** Weekly homework assignments on the www.saplinglearning.com website *should be solved on a regular basis by yourself!* There is no better way to prepare for the examinations than by solving the homework problems as soon as possible after reading the relevant text in Loudon and its coverage in lecture to improve your comprehension and familiarity with the material.
- Quizzes:** Although no lecture quizzes are scheduled, should attendance in any given class fall below 50%, a short quiz will be administered during that lecture.
- Notes:** Lecture notes and cribs for quizzes & exams can be obtained on the course Blackboard site.
- Exams:** There will be three Hour Exams (100 points each), a special project (100 pts) and a Comprehensive Final (200 pts). Your grade for the course will be based on your point total out of a maximum 600 pts. The lowest score from your exams (i.e. one of the Hour Exams or 1/2 of the Comprehensive Final) will be dropped prior to the final point tally.

Grading:	1. Lecture quizzes (as needed, 20 pts each)	???
	2. Homework (10 x 10 pts)	100 pts
	3. Hour Exams (3 x 100 pts)	300 pts
	4. Special Project (100 pts)	100 pts
	5. Comprehensive Final Exam	200 pts
	6. Drop lowest exam (one Hour Exam or 1/2 Final)	-100 pts
	Total 1-6	600+ pts

Guaranteed Grade Cutoffs

(out of a total of 600 pts)	A	540
	B	480
	C	420
	D	360
	F	<360

Exams:	Jan. 30	in class
	Mar. 4	in class
	April 8	in class

Evening review sessions will be scheduled prior to each exam.

NO MAKE-UP EXAMS WILL BE GIVEN! Excuses for missing an exam are ONLY those coming from the Dean's office. Missing an exam for personal reasons, short-term illness or injury, field trips, etc. will not be excused. In these cases, the missed exam will serve as your exam to be dropped.

Regrades: If you feel that a quiz or exam problem has been graded incorrectly, or that an addition error has been made, check the crib first. If you still believe an error exists, bring the exam and a written statement of the error to Professor Lipton for regrading within two weeks of its return to you. It should be noted that the entire exam/quiz will be regraded and the final score may be revised up or down. ***Only exams completed in pen are eligible for regrades.***

Cheating: Any student found cheating will receive an F for the course.

Model Kits: Organic molecules have complicated 3-dimensional structures that you need to be able to see and understand. We will try to teach you how to interpret 2-D drawings into 3-D space and vice-versa, but it is often made easier if you have a 3-D model to examine and consider. We *strongly* recommend that you use a chemistry model kit to help you visualize molecular structures. Personally, I like the Molecular Visions set by Darling Models, but whatever works for you is fine. You will be allowed to use your model kits in any of the exams in CHM 26200.

ChemDraw: Purdue has a site license for ChemDraw, which is a convenient molecule drawing program. You may find it handy for drawing molecular structures, and you are welcome to use it for the take-home problem sets. However, it will be important that you are able to draw structures for exams. To download ChemDraw, you will need to go through the software company using this link:

<http://sitelicense.cambridgesoft.com/sitelicense.cfm?sid=168>

More information can be found here:

<http://www.lib.purdue.edu/chem/services/software.html#chemdraw>

General Comments: “taming the thicket”

Welcome to CHM 26605! You have survived CHM 26505, and have moved on to the next level. By now, you should be familiar with the new language that is Organic Chemistry, and have begun to learn how to think like an organic chemist. This semester we will build upon what you learned in CHM 26505 and take it to the next level. However, as with CHM 26505, our focus will still be on reactivity, mechanism, and characterization. We will talk about a lot more reactions in this course, but, fortunately, you have actually seen a lot of them already in the context of other functional groups. Therefore, a lot of what we will be talking about will not really be new, only viewed from a different perspective. Of course, we will encounter some new concepts, but I hope the new stuff won't be as “new” as what you encountered in CHM 26505.

Still, I'm sure at times you will feel a little overwhelmed. When you do, you might recall these comments:

ORGANIC CHEMISTRY just now is enough to drive one mad. It gives me the impression of a primeval tropical forest, full of the most remarkable things, a monstrous and boundless thicket with no way to escape, into which one well may dread to enter."

This was said by Freidrich Wöhler. If that name sounds familiar, it is because you read about him on page 1: he is the person credited with starting the field of organic chemistry. Clearly, if he found it something that one may “dread to enter,” then what hope is there for the rest of us? Well, there is plenty of hope. We just need to “tame the thicket” so that we can find our way!

HELP FOR “TAMING THE THICKET”

Study Problems: There is no better way to tame the thicket than to pull out the machete and start hacking away. In the organic chemistry world, that means doing practice problems. We will not assign any problems from the text. However, it is safe to say that *all* of the questions at the end of the chapters will provide you with good practice in solving problems in organic chemistry.

On-Line Resources: There are plenty of on-line resources for Organic Chemistry, but one I like is here: http://wps.prenhall.com/esm_organic_wade_5/5/1360/348272.cw/index.html
It is for the Wade text, but still covers most of what we are doing.

Flash Cards: It would be wonderful if everyone could just learn the theory and fundamental principles very well, and then apply them in every situation. Alas, it doesn't work quite that easily. One approach that has been used by Organic students for time eternal is to use flashcards, in order to get the repetition needed to help you recognize the situation. This is especially useful for things like reactions, where you can write the reactants on the front of the card and the products on the back. I will place flash cards on Blackboard that you can download and use. Take your note cards with you everywhere, and flip through them during your free moments, either between classes or on the bus, or at meals, or whenever.

Office Hours: We can do our best to help, but only if you show up.