

CHEM 345: Intermediate Organic Chemistry

3 credits

Lectures on T & R: 9:30 – 10:45, Room: Chemistry 1361

Discussion 50 min once per week

Instructor: Prof. Dr. Ive Hermans

Office: 6311 Chemistry Building

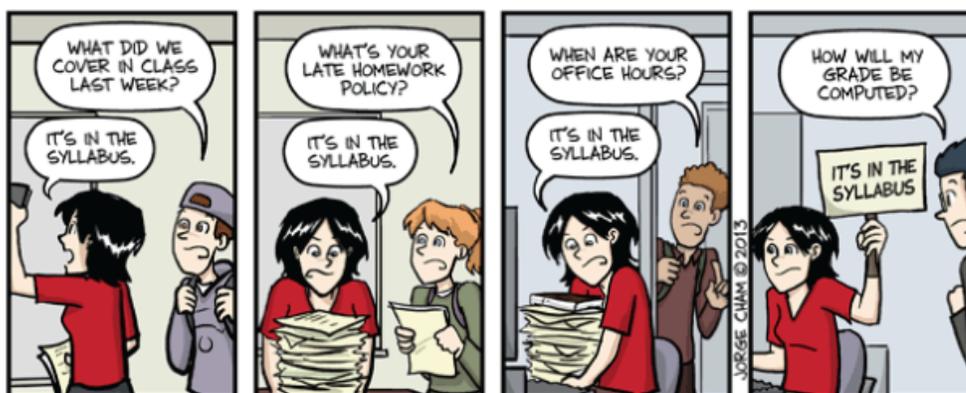
E-mail: hermans@chem.wisc.edu

Office Hours: Tuesday 11-12 (or by appointment)

Please consult the syllabus before contacting your TA or Dr. Hermans

Piled Higher and Deeper by Jorge Cham

www.phdcomics.com



IT'S IN THE SYLLABUS

This message brought to you by every instructor that ever lived.

WWW.PHDCOMICS.COM

title: "It's in the syllabus" - originally published 5/10/2013

Please state in any **email correspondence** with Dr. Hermans that you are enrolled in chem345. Please be patient and only write in case of an urgent question that cannot wait until next lecture or office hour.

Teaching Assistants and their Office Hours

Samuel Kougias Fri 4:35 and 5:40 pm

Madeline Herman Tue 4:35 and 5:40 pm

Textbook: *Organic Chemistry*, 6th Ed., Marc Loudon

Strongly Recommended: study guide and molecular models

I follow a different order than the textbook, but we will cover a majority of the material from Chapters 12-13, 16-27, and some reactions and concepts outside the book. Copies of the textbook are on reserve in the library for you to read. Instructors of Chem 344 may expect you to have this textbook for that lab course as well. Exams and quizzes are based on the material from lectures, power point tutorials, video lectures, discussion sections, and problem sets. The book is there to provide alternative explanations/approaches to help you understand the material covered.

Problem sets

There will be a problem set for each lecture day except for the day of 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.

Exams:

There are three regular exams plus the final exam.

Each *regular* exam will be worth 100 points. The regular exams will be during class time, so no need to try to accommodate it to your schedule. The final exam is worth 200 points. The time and location of the final exam will be announced.

Exams will be graded and returned at the next discussion section. **PLEASE, PICK THEM UP AND LOOK AT THEM. MAKE SURE THE SCORES WERE ENTERED CORRECTLY AND THAT YOU UNDERSTAND WHAT YOU MISSED.**

Exam regrade policy: Mistakes in exam grading will occasionally be made. You will have one week after exams are returned 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. **DO NOT UNDER ANY CIRCUMSTANCES CHANGE AN ANSWER AND SUBMIT IT FOR A REGRADE. THIS IS ACADEMIC MISCONDUCT AND WILL BE DEALT WITH HARSHLY.** Out of principle, we refuse any exam regrade requests that use the word "deserve." Argue based on facts, not emotions.

Regrade submittal procedure: inform your TA that you are submitting an exam for a regrade. Write on the exam score sheet which problem needs to be regraded and why. **DO NOT CHANGE ANYTHING ELSE.** Hand the exam back to your TA within one week.

Any student that falls just below a cutoff will have their final exam automatically regraded.

Exam Penalties:

Though technically, the regular exams are worth 100 points apiece and the

final exam is worth 200 points, it is possible to score a negative value on the exam. There are four exam penalties that you should be aware of and **AVOID** at all costs. **CONSIDER YOURSELF WARNED AND DON'T COMPLAIN WHEN IT HAPPENS TO YOU.**

Texas Carbon Penalty (TCP): If one of your answers has a carbon drawn that has five bonds to it, that is an affront to organic chemistry. Such a blasphemous creation will result in a five point penalty in addition to missing any points on that question.

Name Penalty: The most important question on any exam is the one that has you fill in the following blank: Name:_____ Yet, the number of people that do not do this is staggering. (8% of the exams last spring left this blank or missed it). EIGHT PERCENT!!!!!!! There is no excuse for this. **THIS IS YOUR WARNING!** There will be a five point penalty for not writing your name on the exam.

Time Penalty: Writing on the exam before the TAs say start or after time is called can be a five point penalty.

Contact your TA and me as soon as possible **if you are not able to make an exam** due to illness, religious holidays, or any other justified reason.

Practice exams

I will make at least three practice exams available for each exam. The exams will be 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.

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. **Forgetting that you changed an answer and submitting it for a regrade is still academic misconduct.**

If the TAs suspect anyone of cheating, 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. **You must be above reproach.** 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.

Since not all students will take the exam/quiz at the same time, it is theoretically possible for some students to receive advance knowledge of a quiz/exam. Students leaking test/quiz questions to other students that have not taken the exam is also regarded as academic misconduct and shall be dealt with accordingly.

THERE ARE NO ACCEPTABLE EXCUSES FOR ACADEMIC MISCONDUCT.

Grading (As transparent as I can be)

The grade will be based on exams (worth 500 points in total) and attendance and participation in discussion (worth 50 points). The maximum number of points possible will be **550 points**.

ABCD F 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 57% 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.

The actual lines are determined by a mixture of factors: final distribution, the historical grade history of all of the sections of Chem 345, 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.

The Final Cutoffs will not be released. There will always be someone with the highest AB, highest B, and so on. That is the way of the world. It is conceivable that someone will miss a cutoff by one point. We will try to choose the cutoffs so that does not happen. The final exams that end up right below a cutoff will automatically be regraded.

Special accommodations

If you require special accommodations, such as specified in your McBurney VISA, please talk to me as soon as possible. We cannot help you unless we know.

Website: <https://mcburney.wisc.edu>

Discussion Sections

There is a lot of material to cover, and little time to cover it. Sometimes, what I can briefly cover in the lecture will be better covered in your discussion section. The TAs in this course have experience in teaching organic chemistry, through labs, discussion sections, and tutoring. They may have a different way of looking at a topic. As a result, if you do not understand something from me, you may understand it from them.

Meeting Time	Friday
12:05 – 12:55	Sec 424 – (B379) Sam Kougiias
1:20– 2:10	Sec 425 – (B379) Sam Kougiias Sec 426 – (B355) Maddie Herman
2:25 – 3:15	Sec 421 – (2373) Sam Kougiias Sec 427 – (B355) Maddie Herman
3:30 – 4:20	Sec 422 – (2311) Sam Kougiias Sec 428 – (B355) Maddie Herman
4:35 – 5:25	Sec 423 – (2373) Maddie Herman

Proper use of discussion sections:

Make mistakes. People learn from mistakes. Be vocal. Go to the front of the board and write your answers. If they are correct, congratulations. If they are incorrect, *all the better* as it gives an opportunity to learn something and help out your fellow classmates. Remember, you are only really judged by your exams. Not your peers. Do not be afraid making mistakes. Better to make them in discussion than on an exam. There are many correct answers in organic chemistry (and many more incorrect ones). The TA's are there to give insight on the nuances of organic chemistry.

Get to know your fellow students. Set up study sessions with them. Try problems from problem sets independently and then consult on the answers

before looking at the answer key. Try teaching each other.

Improper use of discussion sections:

Just sitting there.

Additional Help

In addition to the TA's and my office hours, there are a couple of places where you can find assistance.

The Organic TA Office is in room B317. There is a schedule posted outside the door of various TA's and when they will be available to help you. Feel free to ask any of them for help even if they are not a TA for Chem 345.

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 <http://guts.studentorg.wisc.edu/>

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

Mental Health Resources:

I realize you are under a lot of pressure. Some of that pressure is internal and some of that is external. Regardless of the source of the pressure, the pressure is very real. Students have a tendency to equate grades with future happiness. It is an understandable connection, but not necessarily a true

one. We have had a student that received an F in organic chemistry and had to retake the class. She is now in medical school. So, a low grade is not the end of the world.

If disaster happens or at anytime you feel that you cannot cope with something, or just need to vent, there are resources available on campus for you. Take advantage of them.

University Health Services (UHS): Offers group, individual, couple/partner therapy stress management, and disordered eating assessments and treatment at no cost. It also provides massage therapy, yoga, and other wellness services. Student Activity Center 7th floor 608-265-5600 www.uhs.wisc.edu/mentalhealth/getting-started

Ask.Listen.Save is a student org that aims to prevent suicide by reducing the stigma of mental illness. Through educating the student body, they aim to increase the awareness and create a safe environment in which students know they are not alone and can feel free to ask for help. Student Activity Center Suite 3196 www.Asklistensave.org

Badgerspill: is a peer-to-peer support network of and for UW-Madison students. You can write in online to “spill” or vent privately about whatever you are going through and get unbiased feedback, empathy, and resources from other students who have dealt with similar situations. Both parties are anonymous to one another and the spiller gets multiple responses within 24 hours. www.badgerspill.com

The importance of organic chemistry:

Most of you after this semester will not use organic chemistry again. A few will use it in biochemistry, and a very few will go on to advanced organic chemistry (547: which is an excellent course). But most of you, will not use it

that much again, so why go through with it. Well, because organic chemistry is unlike anything you have encountered up to this point. It has its own written and verbal communication, its own logic processes, its own visualization, and its own headaches. Essentially, it has a bit of every subject you have taken as a kid, but weirdly warped and twisted. Your brains are different now than you were a kid. It is not as easy to memorize or recall information. Therefore, you have to learn about yourself and how to learn all over again. We will provide as many resources as we can. It is up to you to find out what works for you and apply it. This self-knowledge will help you in your future courses even if it has nothing to do with benzene.

Study tips

Between 1-4 hours after each lecture, start the problem set. ***Do not wait for the answer key to be posted to start the problem set.*** Between 4-8 hours after each lecture, recopy your notes for that lecture. Look for the patterns.

Organic chemistry is very cumulative. Once you start, you cannot stop. (Oh and you need to start right away). Material on exam I will be tested again on exams II, III, IV, and the Final. Likewise, with subsequent topics. The problem sets will not only cover current material but past material as well. **You may feel pressure after an organic exam to stop studying ochem and focus on other classes. I suggest you resist this urge, as once you fall behind it is very difficult to catch up.**

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.

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 talking to classmates in discussion, etc... The sooner you set up these groups the better off you will be.

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. Should you find a discrepancy in what the TA's, book, internet, or myself, 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.