

# CHEM 343: Introductory Organic Chemistry

## Contact Information

Matt (Doc) Bowman  
262-2519  
Chemistry 5232  
bowman@chem.wisc.edu

## **3 credits**

## Lecture:

MTWR 10:20-11:35 AM  
Room: Chemistry 1351

## Office Hours

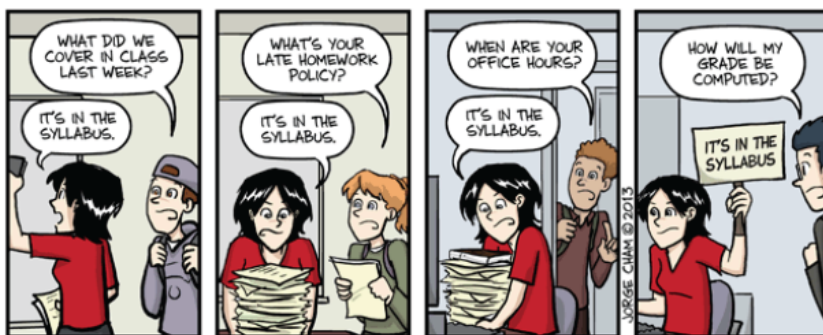
Scheduled  
MW 9-10 am Chem 2377  
MW 1-3 pm Chem 2311  
(or by appointment)

## Teaching Assistants

Jackie Brown      jackie.brown@chem.wisc.edu  
Vivian Trang      vtrang@chem.wisc.edu

**Piled Higher and Deeper by Jorge Cham**

[www.phdcomics.com](http://www.phdcomics.com)



# IT'S IN THE SYLLABUS

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

[WWW.PHDCOMICS.COM](http://WWW.PHDCOMICS.COM)

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

## TA Office Hours

TA office hours on the day following exams will be cancelled as the TA's will be grading then.

TA office hours are held in Chemistry B317 (Organic TA Office)

Textbook: *Organic Chemistry*, 5<sup>th</sup> Ed., Marc Loudon

Quite a few of my course evaluations in the past stated that they never read or opened the book. I do not recommend this course of action, but I do understand it. I follow a different order than the textbook, but a majority of the material from Chapters 1-11, 14-15 and some reactions and concepts outside the book will be covered. The course schedule has page numbers containing relevant information from the text along with key words that you can use in an index of any organic textbook for other explanations. Copies of the textbook are on reserve in the chemistry library for you to read. Instructors of Chem 344 may expect you to have this textbook for that lab course as well. Exams 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.

## 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.

## 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.

## Practice exams

I will make at least 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.**

#### Electronic Homework:

We will be using McGraw Hill's electronic homework system. There will not be any points associated with it. It is for your practice only. Details regarding the electronic homework will be available soon.

#### Exams:

There are three regular exams plus the final exam. Each regular exam will be worth 100 points. The regular exams will be Wednesday in class in a lecture hall to be announced. Please check your schedules for potential conflicts. The dates are June 25, July 9, and July 30. You may not drop any exam. The final exam is worth 200 points and will be held on August 7. There are two times to take the exam 9:35-11:35 and 10:20 to 12:20. Please email Matt when you wish to take the exam.

*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.

*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. A zero on an exam due to cheating cannot be dropped. 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.

**DO NOT TRY TO CHEAT. I have failed students in the past and I will not hesitate to do so this semester. I have no patience or respect for those that cheat.**

## 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.

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. If you wish a classroom to meet in, I can see about reserving one for you.

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 between the TAs, 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.

### 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.

There will be points associated with the discussion sections (24 points total). You earn them by attending and participating in discussion. 1 point per attendance per day and 1 point if you participated that week. 3 points per week = 24 points total. The participation points are at the sole discretion of the TA and should not be argued. For discussion sections to be truly useful to you and others, there must be a critical number of students present. I hope these points will be an additional incentive.

If you miss lecture or your discussion section, it is very likely that you will have poor results come exam time. 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. It looks like there will be at least one instance where I will need the TAs to cover a topic that I won't be able to cover. There will be advance notice should this occur.

In addition, the TAs in this course have a lot of experience in teaching organic chemistry. They have both taught with me in the past and with other lecturers. 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. All discussion sections are held in the chemistry building.

Section 301 TR	8:55-10:10	B351	Vivian Trang
Section 302 TR	11:45-1:00	B351	Vivian Trang
Section 303 TR	1:10-2:25	B357	Jackie Brown
Section 304 TR	8:55-10:10	B357	Jackie Brown

**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. 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 343.

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](mailto: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.

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 343 site by using the visitor login. They should go to [learnuw.wisc.edu](http://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.

# JUNE 2014

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16 Periodic Trends Bonding Pages 1-45	17 Hybridization Functional Groups Pages 122-146, 646-648	18 Resonance Isomers Pages 709-715	19 Alkanes Conformations Pages 46-86, 268-298	20	21	22
23 Bronsted Acid/Base Chemistry Pages 87-121, 355-360	24 Lewis Acid/Base Chemistry Pages 87-121, 355-360	25 Exam I	26 Stereoisomers Pages 226-267	27	28	29
30 Substitution: $S_N1$ Pages 377-423		NOTES:				

# JULY 2014

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
	1 Substitution: S <sub>N</sub> 2 Pages 492-495	2 Elimination: E2 Pages 378-380, 400-411	3 Elimination: E1 Pages 412-420, 436-440	4	5	6
7 Carbocation Rearrangements Pages 154-157 439-441	8 Ether Synthesis Pages 482-484	9 Exam II	10 Alkyne Synthesis 644-649, 662-668 Alkynes to Alkenes 122-146, 659-662	11	12	13
14 Addition of HX and H <sub>2</sub> O to alkenes Pg 147-166, 169- 171B	15 Markovnikov/ AntiMarknikov Addition Pg 187-196, 312-314, 484-485B, 654-659	16 AntiMarkovnikov Addition of HBr Pages 200-214, 652- 653	17 Alkene halogenation halohydrin formation Pages 178-225, 308-311	18 Drop Date	19	20
21 Epoxides Pages 495-499 Neighboring group Pages 510-517	22 Grignard Reactions Organolithiums Pages 361-364, 500-501	23 Good Leaving Groups HBr, PBr <sub>3</sub> , TsCl Pages 440-451	24 Dihydroxylation Oxidation OsO <sub>4</sub> , HIO <sub>4</sub> Pages 503-507	25	26	27
28 Ozonolysis Pages 196-199	29 Alcohol Oxidation PCC and Chromic Acid Pages 459-464	30 Exam III	31 Radical Halogenation Pages 364-365			
		NOTES:				

# AUGUST 2014

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
				1	2	3
4 Conjugated Systems Diels-Alder Pages 676-709	5 Aromaticity Pages 690-700	6 Review	7 Final Exam	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
		NOTES:				

### **Chem 343: Survey**

Please answer the following questions so I can adapt Chem 343 to better suit your needs. Please turn this page in to Matt Bowman's mailbox in Chemistry 1146 by June 18.

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)

When is the ideal time for office hours (day and time)?

Do you learn a lot from textbooks?

What other classes are you currently enrolled in?

Organic Chemistry resembles Math.

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