

University of Pittsburgh Course Syllabus
Chem 0320 Organic Chemistry 2
Summer 2018 (2187)

Course Title: Chem 0320: Organic Chemistry 2

Instructor: Dr. Jackie Powell

Email: jrp113@pitt.edu (please include "Chem 0320" in the subject title)

Lecture Times: Monday, Tuesday, Thursday, and Friday 9:00 – 10:45 A.M.; CSC 150

Recitation Time: Wednesday 11:00 – 11:50 A.M.; CSC 150

Office Hours: Mon, Tues, Thurs, and Fri 11:00 A.M. – 12:00 P.M. or by appointment; CSC 309

Course Description: This course is a continuation of Chem 0310. The reactions of aromatic molecules and more complex functional groups such as alcohols, aldehydes, ketones and carboxylic acids will be considered. Molecules of biological interest may be discussed toward the end of the term.

Prereqs: Chem 0310 or 0730 or 0206 or 0231

Course Objectives: Upon completion of Chem 0320, students will be able to:

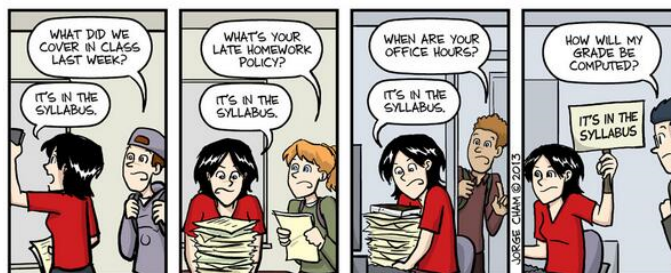
- Use a chemical's structure to predict general reactivity
- Utilize reaction mechanisms to predict reactivity of unknown reactions
- Use empirical product mixtures to deduce chemical reactivity
- Apply learned synthetic skills to create complex molecules.

Required Subscription: Top Hat account (<https://tophat.com/pricing/>) for at least one semester

Optional Texts: Vollhardt, P. and Schore, N. (2014) *Organic Chemistry: Structure and Function*. W.H. Freeman and Company. 7th Ed.

Vollhardt, P. and Schore, N. (2014) Study Guide and Solutions Manual for *Organic Chemistry: Structure and Function*. W.H. Freeman and Company. 7th Ed.

Organic Chemistry I & II: A Top Hat Interactive Text. (ISBN: 978-0-9948021-7-0)



IT'S IN THE SYLLABUS

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

WWW.PHDCOMICS.COM

Grading: Your grade for this course will be based on **five quizzes, one mid-term exam, one comprehensive final examination, and Top Hat points.** Grades will be weighted as follows:

Quizzes (lowest dropped)	48%
Midterm Exam	20%
Final Exam	22%
Top Hat Points	10%
<i>Problem Sets</i>	<i>N/A</i>
Extra Credit	TBD

The following formula can be used to determine your course percentage:

$$\text{Course Grade} = 48 \times (\text{quiz pts}/\text{total quiz pts}) + 20 \times (\text{midterm exam percentage}) + 22 \times (\text{final exam percentage}) + 10 \times (\text{Top Hat pts}/\text{total Top Hat pts}) + \text{extra credit points}$$

Letter grades are assigned according to the table below. Grade cutoffs are subject to adjustment, but will never be adjusted upward. For example, if your course percentage is an 89.99%, you are guaranteed a B+ but may receive an A or A- depending on class trends. In order to pass the class (i.e. get a D grade), you must receive at least 40.00% of the total course points. This cutoff is a strict cutoff and will never be adjusted downwards.

You are not competing against your classmates for your grade- focus on making the cutoffs posted below, as they are an excellent benchmark of where you currently stand in the class. **If you do not make the cutoffs posted here, you are only guaranteed the grade you earned.**

A+ = 100.00 – 97.00%	B+ = 89.99 – 87.00%	C+ = 79.99 – 77.00%	D = 69.99 – 60.00%	F = below 60.00%
A = 96.99 – 93.00%	B = 86.99 – 83.00%	C = 76.99 – 73.00%		
A- = 92.99 – 90.00%	B- = 82.99 – 80.00%	C- = 72.99 – 70.00%		

Quizzes: There will be five quizzes during the semester. These quizzes will be 20 minute in-class quizzes or take-home quizzes due at 8:45 A.M. on the specified dates (see the course schedule on page 5). Your lowest quiz score will be automatically dropped at the end of the semester. Since you can drop one quiz, **no make-up quizzes will be given.** For in-class quizzes, you must be in your seat, ready to take the quiz at the beginning of class (i.e. 9:00 A.M.). If you show up late to the quiz, you will only be allowed to use the remaining quiz time- no exceptions. If you come to the room after the first student has turned in their quiz and left the room, you will not be allowed to take the quiz. Out-of-class quizzes are due at 8:45 A.M. (*not* 8:46 A.M. or later) on the specified dates. **No late quizzes will be accepted.**

Mid-Term and Final Exams: There will be one mid-term and one final exam this semester. These exams will be on Monday, July 16th and Friday, August 3rd. Due to the rapid pace of this course, **no make-up exams will be given.** You must be in your seat, ready to take the exam at

the beginning of class (i.e. 9:00 A.M.). If you show up late to the exam, you will only be allowed to use the remaining exam time. If you come to the room after the first student has turned in their exam and left the room, you will not be allowed to take the exam and you will not be allowed to make it up. The material we cover will build on previous knowledge; both the mid-term and the final exam will be cumulative. You may use a model kit, but no cell phones or calculators will be permitted. Write legibly so that your answers are unambiguous to the graders- illegible work will not receive credit.

Regrade Policy: If you see a factual error on your exam or quiz (miscalculated points, correct answer marked as incorrect), you may submit your exam for a regrade. To request a regrade, you must fill out the regrade form posted on CourseWeb and physically attach it to your exam. Regrades will only be considered up to one week after the exam is returned. **Your entire exam will be regraded to ensure no further errors are affecting your grade.**

Top Hat Points: Attendance at each scheduled lecture is critical to your success in this course. Changes in the class schedule and other notices will be given in the lectures. It is your responsibility to keep up with these changes. Engagement will be assessed via the Top Hat (www.tophat.com) classroom response system in during class. You will submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text message. Top Hat points will be assigned based on participation and accuracy. Participation will be worth 50% of the assigned Top Hat questions; the remaining 50% will be graded on accuracy. Each individual Top Hat question will be graded based on this 50/50 grading scheme.

You can visit the Top Hat Overview (<https://success.tophat.com/s/article/Student-Top-Hat-Overview-and-Getting-Started-Guide>) within the Top Hat Success Center which outlines how you will register for a Top Hat account, as well as providing a brief overview to get you up and running on the system.

An email invitation will be sent to you by email. If you do not receive this email, you can register by simply visiting our course website: <https://app.tophat.com/e/562323>.

Note: Our Course Join Code is 562323.

Top Hat will require a paid subscription, and a full breakdown of all subscription options available can be found here: www.tophat.com/pricing.

Should you require technical assistance with Top Hat at any time, please contact their Support Team directly by way of email (support@tophat.com), the in app support button, or by calling 1-888-663-5491.

If you experience a Top Hat issue that prevents you from answering during class, you must submit a completed “Top Hat Issues” form to me in class (no emails). **You are responsible for making sure that your phone, laptop, etc. is charged and in working order- only connectivity issues or issues with the Top Hat platform itself will be considered legitimate issues.**

Additionally, you have the option of using the custom-built interactive textbook “Organic Chemistry I & II” within Top Hat for this class. While you are not required to purchase this online textbook, you may use it as a class resource.

Problem Sets: A problem set covering the topics of each lecture will be distributed for each lecture. *These problem sets will not be collected nor will they be graded.* However, their completion will be important preparation for exams. Keeping your problem sets organized and handy will also provide you a convenient study aid in preparing for exams and quizzes.

Missed Coursework: Be responsible for your own education. If you miss a lecture, please get the notes from another student and consult CourseWeb for any announcements made in lecture. **I will not post the class notes** online for pedagogical reasons. Make-up exams, quizzes, and Top Hat points will not be given. If you have a legitimate, documented reason for missing the final exam, you must notify me before July 20th to schedule a make-up final.

CourseWeb: The online course management system, CourseWeb (<https://courseweb.pitt.edu>), will be used as a mechanism for posting announcements, notes, solutions to assignments, and grades. You are responsible for knowing how to access CourseWeb and using it. If you have any questions about CourseWeb, please see me.

Recitation: A weekly recitation will be held in CSC 150 on Wednesdays from 11:00 – 11:50 A.M. Recitation activities will include problem-solving activities, reviews, Q&A sessions, etc. Attendance and active engagement during recitation is highly recommended for success in this course.

Special Accommodations: Students needing reasonable accommodations should notify the Office of Disability Resources and Services (140 William Pitt Union, 412-624-7890) during the first week of class. The DRS office will provide specific information on the University of Pittsburgh’s ADA policy and application procedures to the student. More details can be found at <https://www.studentaffairs.pitt.edu/drs/>. It is your responsibility to notify me of any accommodations in a timely manner, i.e. at least one week before they are required.

Recording: No video/audio recording of the lectures is permitted without prior written consent of the instructor.

Classroom Etiquette: To maintain an atmosphere conducive to everyone’s learning, please

- (1) Be on time for class. Do not prepare to leave until class is over, i.e. do not pack up your materials until class is over.
- (2) Refrain from sleeping, eating, private conversation, snapchatting, face-swapping, tweeting and any other activity that may be distracting to your classmates or the instructor (above list is not all-inclusive).
- (3) Silence your phone. You may use electronic devices only in the context of accessing Top Hat, course material, and taking notes. Please don’t distract your neighbors by looking at GIFs of teacup pigs- wait until lecture is over to share.

Students who, in the opinion of the instructor, exhibit unprofessional, inappropriate and/or disruptive behavior in the classroom or laboratory will be dismissed from the class. Please don't be that person.

Academic Misconduct: Academic dishonesty, in any form, will not be tolerated. Academic misconduct includes (but is not limited to) using unauthorized resources (e.g. cell phones and notes) on exams, plagiarism, and altering graded exams. You are adults at the college level and are expected to produce your own work with academic integrity. More information is available at www.as.pitt.edu/fac/policies/academic-integrity.

A first-time offense will result in a grade of 0 for that assignment and will be reported to the Dean's office. If the first offense is on a quiz, it cannot be dropped. A second offense will result in a course grade of F being issued. In addition, the student will be referred to the university with a recommendation for dismissal.

DO NOT TRY TO CHEAT. I have failed students in the past for cheating and will not hesitate to do so again if warranted.

Tentative Course Schedule: The lecture content and schedule below is subject to change. Changes will be announced in class or on CourseWeb.

	Day	Date	Topics	Suggested Reading	In-Class Assignments/ Due Dates
1	M	June 25	Delocalized Pi Systems	Chapter 14	
2	T	June 26	Diels-Alder and Electrocyclic Rxns	Chapter 14	
3	Th	June 28	Diels-Alder and Electrocyclic Rxns	Chapter 14	
4	F	June 29	Benzene and Aromaticity	Chapter 15	In-Class Quiz 1
5	M	July 2	Electrophilic Aromatic Substitution	Chapter 15	
6	T	July 3	Electrophilic Aromatic Substitution	Chapter 15	
7	Th	July 5	Reactions with Substituted Benzenes	Chapter 16	
8	F	July 6	Reactions with Substituted Benzenes Continued	Chapter 16	In-Class Quiz 2
9	M	July 9	Carbonyl Properties	Chapter 17	
10	T	July 10	Carbonyl Reactivity	Chapter 17	
11	Th	July 12	Enols and Enolates	Chapter 18	
12	F	July 13	Aldol and α,β -Unsaturated Carbonyls	Chapter 18	Take-Home Quiz 3 Due
13	M	July 16	β -Dicarbonyl Compounds	Chapter 23	In-Class Midterm Exam
14	T	July 17	Carboxylic Acids	Chapter 19	
15	Th	July 19	Carboxylic Acid Derivatives	Chapter 19	
16	F	July 20	Carboxylic Acid Derivatives	Chapter 20	In-Class Quiz 4
17	M	July 23	Chemistry of Benzene Substituents	Chapter 22	
18	T	July 24	Chemistry of Benzene Substituents	Chapter 22	
19	Th	July 26	Properties and Synthesis of Amines	Chapter 21	
20	F	July 27	Reactions with Amines	Chapter 21	Take-Home Quiz 5 Due
21	M	July 30	Selected Topics	Chapters 24-26	
22	T	July 31	Selected Topics	Chapters 24-26	
23	Th	Aug 2	Selected Topics	Chapters 24-26	
	F	Aug 3	Final Exam <i>9:00-10:45 A.M. in CSC 150</i>		