

Organic Chemistry 223 - Fall 2012

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Lecture	Tu/Th 2:30 – 3:45 p.m.	FH-133 (Sect 011)
Discussion	Wed 12:35 – 1:25 p.m.	Cuneo 002 (Sect 012)
	Wed 2:45 – 3:35 p.m.	Cuneo 109 (Sect 013)

Office Hours Tu/Th 3:45 – 5:00 p.m.

Required Text: L.G. Wade, Jr., "Organic Chemistry" 7th Ed. ISBN 978-0-321-59231-6
or 6th Ed. ISBN 0-13-147871-0

Required Key: J.W. Simek, "Solutions Manual Organic Chem.", 7th Ed. ISBN 978-0321598714
or 6th Ed. ISBN 0-13-147882-6

Recommended: Your favorite molecular modeling kit. Here are just a few options. (\$ not guaranteed)

- Darling \$19.25 new, \$14.50 used in LUC Bookstore
- Prentice Hall Molecular Model Set for Organic \$58.75 (colorful & pretty)
- HGS Fundamental Organic Set \$16.00

Extra help: *Organic Chemistry as a Second Language* by David Klein
Pushing Electrons by Daniel Weeks for extra help with *mechanisms*
OrgoCards by Barron's ISBN 0-7641-7503-3 or make your own

Do you have an interest in human health, prescription medicines and drugs? Organic chemistry is utilized by medicinal organic chemists for the design and construction of new molecules that are prescribed by doctors and dispensed by pharmacists to treat diseases. Organic chemistry is also the essential science for inventing new soaps and detergents, dyes, plastics, and resins, and it is also used in creating certain types of new photoreceptors for renewable solar energy.

1. *Exam Dates (subject to change):*

September 20, 2012	Mid-term Exam 1
October 18, 2012	Mid-term Exam 2
November 29, 2012	Mid-term Exam 3
December 13, 2012	<u>Cumulative Final Exam, 9:00-11:00 a.m.</u>

2. *Exams and Grading:*

There are three 1-hour mid-term exams and one 2-hour final exam. The lowest of the three mid-term exams will be dropped. If you miss an hourly exam, that is the exam that will be dropped. No make-up mid-term exams will be given under any circumstances. The final exam is cumulative and cannot be dropped.

Mid-term exam	100 points	(Best two out of three mid-term exams)
Mid-term exam	100 points	
Final Exam	150 points	
TOTAL	350 points	

I generally grade on a curve based on the average and the standard deviation. I will give statistics including the mean, the median, and the standard deviation for each exam. I do not predict cutoffs, but can tell you what the cutoff was for a previous test or class.

You must bring a form of photo identification, such as your Loyola Student ID or your driver's license, with you to the exam, which you may be asked to show. During exams, you will be required to leave your books, backpacks, notebooks, etc. at the front of the room. Please sit in straight rows front to back, skipping every other seat. All exams are closed book and without notes unless otherwise noted. When you are finished with your exam, please bring your completed exam to the front, and leave the room quietly without disturbing the other students.

Exams will be graded and returned to you as quickly as possible, usually by the following class period. All grading questions, points of clarification, and grading errors must be brought to the instructor's attentions during office hours no later than one week after return of the exam.

3. *Homework: Organic chemistry is a new language that is spoken in words and in structures. The best way to learn a language is to work problems every day. Many homework problems are assigned for each chapter, but will not be collected. You must take responsibility to work problems in a timely manner, based on the course & career goals that you have set for yourself. Experience proves that success in orgo results from working homework problems, which is your responsibility, and passing organic chemistry is your choice, and depends on the work you put into it consistently.*

4. *Discussion: Discussion will be devoted to answering your questions on homework and lecture, so bring your questions. Attendance and participation are expected and will help you succeed.*

5. *Blackboard Materials: All handouts given in class are mirrored on Blackboard.*

6. *Academic Integrity: All students in this course are expected to have read and to abide by the demanding standard of personal honesty, drafted by the College of Arts & Sciences, that can be viewed at: http://www.luc.edu/cas/pdfs/CAS_Academic_Integrity_Statement_December_07.pdf Anything you submit that is incorporated as part of your grade in this course (e.g., quiz, examination, homework, lab report) must represent your own work. Any students caught cheating will, at the very minimum, receive a grade of "zero" for the item that was submitted and this grade cannot be dropped. If the cheating occurred during a course exam, the incident will be reported to the Department Chair and the CAS Dean. Depending on the seriousness of the incident, additional sanctions may be imposed. Note that I grade all exams individually and I can easily spot where copying has occurred.*

7. *Strategies and Suggestions:*

- Skim the current chapter before the corresponding lecture, so that you follow the lecture. Please do not waste time outlining the Chapters which does not work. (Work problems instead!)
- Work assigned problems, at least 10-12 hours/week to pass, and write out the answers. Then check your answers versus Simek's *Solutions Manual.*
- Flash cards are helpful to some, but only as a supplement to working problems
- Use your model set regularly to become comfortable with the 3-dimensional shape of molecules.
- Bring your questions to the Discussion. To study for exams, rework representative problems and sample exams

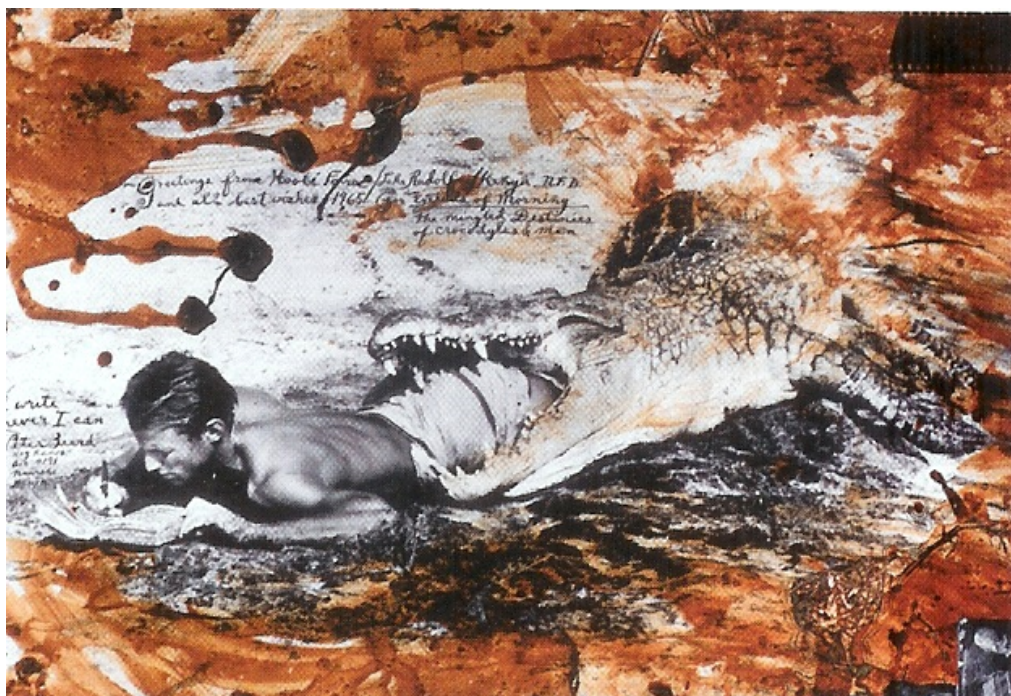
8. The Tutoring Center offers free small group tutoring and lab (drop-in) tutoring for Loyola students. To learn more or request tutoring services, visit the Tutoring Center online at www.luc.edu/tutoring.

Organic Chemistry 223 Tentative Lecture Schedule (subject to change)

8-28	1	Lewis structures & bonding
8-30	2	Structure & properties of organic molecules
9-4	"	"
9-6	3	Structure & stereochemistry of alkanes
9-11	"	"
9-13	4	Reactions & Mechanism: Free radical halogenation
9-18	"	"
9-20	--	EXAM I (chapters 1-4)
9-25	5	Stereochemistry
9-27	"	"
10-2	5/6	Alkyl Halides: S _N 1, S _N 2, E1, E2
10-4	6	"
10-9	--	<i>Mid-Semester Break, No Class</i>
10-11	6	Alkyl Halides: S _N 1, S _N 2, E1, E2 (cont.)
10-16	7	Alkenes: structure and synthesis
10-18	--	EXAM II (<i>focused on Ch 5-7, cumulative</i>)
10-23	8	Alkenes: reactions
10-25	"	"
10-30	"	"
11-1	9	Alkynes
11-6	"	"
11-8	10	Alcohols: structure and synthesis
11-13	"	"
11-15	11	Alcohols: reactions
11-20	"	"
11-22	--	<i>Thanksgiving Holiday</i>
11-27	12	IR and MS
11-29	--	EXAM III (<i>focused on Ch 8-11, cumulative</i>)
12-4	12/13	MS/NMR
12-6	13	"
12-13	1-13	Cumulative Final Exam, FH-133 Thursday, Dec. 13, 9:00-11:00 a.m.

Ch Assigned Problems for Wade 7th Edition (See Blackboard for 6th and 5th Editions)

1. 1-11, 14-32, 34-38, 40-50
2. 1-11, 13-42
3. 1-7, 9-30, 32-44
4. 1-4, 7-19, 21-49
5. 1-11, 14-31
6. 1-27, 29-47, 50-56, 62
7. 1-2, 4-13, 15-25, 27-33, 35-46
8. 1-42, 44-51, 53-55, 57-62
9. 1-37
10. 1-20, 22-44
11. 1-22, 24-48, 51-53, 56-58
12. 2-12, 14-20, 22-29
13. 2-27, 29-44, 46-49
14. TBD....



Never miss an opportunity to work through
some organic chemistry problems