

Chemistry R340: Survey of Organic Chemistry (3 cr.)

Fall Semester 2009
MWF, 1:25 pm - 2:15 pm
Class No. 7986

Professor Thomas Tolbert
Chemistry 001

PREREQUISITE: C117

REQUIRED TEXT: Bruice, Essential Organic Chemistry (2nd Ed.).

SUPPLEMENTARY MATERIAL (not required):

Solutions Manual: Study Guide & Solutions Manual, Essential Organic Chemistry, Bruice (2nd Ed.).

Molecular Model Kit: Molecular Model Set for Organic Chemistry by Prentice Hall. ISBN 0-205-08136-3

OFFICE HOURS: Fridays 2:15 pm - 3:15 pm, Chemistry A563. (856-1887) tolbchem@indiana.edu

COURSE WEBSITE: <http://courses.chem.indiana.edu/r340/>

DISCUSSION SECTION:

The discussion session will be given by your AI at 2:30 – 3:20 pm on Wed. in BH 344. **It is strongly advised that you attend your discussion section every week!** You **must** turn in worksheets and pick up graded worksheets and exams during your discussion section. Your AI will inquire during the first discussion section about preferences for office hours in an attempt to accommodate the majority of schedules.

ASSOCIATE INSTRUCTOR: Mark Pawlicki, mpawlick@indiana.edu, office hours TBA

HOMEWORK:

For every chapter you will be given suggested problems in the lecture notes. Work as many of them as you need to master the concepts involved. Problem sets will not be graded, but some exam questions may come directly from homework assignments.

EXAMINATIONS AND GRADING:

There will be **three 100 point examinations** given during the semester. Please note that these exams will be given during the regularly scheduled class period (September 23, October 21, and November 18). **Ten 10 point worksheets** will be given during the semester, and only the best 8 will be counted toward your grade (allowing you 2 missed worksheets). These worksheets will cover current course topics and will be given weekly except during exam weeks. **A comprehensive final exam will count for 150 points** (currently scheduled for Friday December 18, 5:00-7:00 pm). **BRING YOUR STUDENT ID CARD AND STUDENT ID NUMBER TO ALL EXAMS AND QUIZZES!!!**

Available points:

Three Exams	=	300 points
Best 8 Worksheets	=	80 points
Final Exam	=	150 points
Total Points	=	530 points

A tentative grading scale is shown below. The final grading scale will be normalized based upon average grades of the class. Plus and minus grades will be determined at the end of the semester, but please note that a 90% represents the lowest of the A range (therefore the lowest A-).

A	>90%
B	>80%
C	>70%
D	>60%
F	<60%

MISSED EXAMS AND WORKSHEETS:

No Makeup Exams or Worksheets will be given. In order to accommodate those forced to miss turning in a worksheet due to unavoidable personal commitments, illness, etc., only the best 8 worksheets will be counted toward the final grade. The remaining and/or missed worksheets will be dropped. If you miss one exam, your course grade will be calculated by substituting the percentage grade of your comprehensive final exam for the missed exam. Your score of zero on the missed midterm will stand as an F until the final exam is completed. If you enter the exam room you must turn in the exam for a grade. **The final exam is not optional.**

REGRAIDING OF EXAMS AND WORKSHEETS

Any regrading requests must be made to the AI during the same discussion session in which the exam or worksheet is passed back. **No exam or worksheet that has left the classroom in possession of the student will be considered for regrading - NO EXCEPTIONS.** Note, the entire exam or worksheet will be regraded when a request for regrading is made.

HELPFUL TIPS FOR LEARNING ORGANIC CHEMISTRY

1. **Your textbook is a primary learning resource.** Read the assigned chapters and make an attempt to understand the material prior to coming to class.
2. **Work the assigned problems.** You cannot learn to do organic chemistry without the practice of doing problems. Don't just look at the answer keys, make sure that you can work the problems and understand them yourself.
3. **Don't leave studying for the last minute!** Organic chemistry is a cumulative subject where understanding new material is based upon an understanding of previous material. This course covers a lot of material and it is very difficult to cram all of the material in this course into a couple of days of intense studying. Studying the night before an exam will result in poor grades!

TENTATIVE SCHEDULE OF TOPICS:

1. Lewis Structures
2. Bonding, Hybridization, Functional Groups, Acid/Base Chemistry
3. Organic Compounds: Nomenclature, Physical properties, Structures
4. Alkenes and Alkynes
5. Isomers and Stereochemistry
6. Aromatics
7. S_N1 and S_N2 , E_1 and E_2
8. Reactions of Alcohols, Amines, Ethers, and Epoxides
9. Carbonyls: Acyl Substitutions and Other Reactivities
10. Spectroscopy
11. Carbohydrates
12. Amino Acids, Peptides, and Proteins