



<p>Organic Chemistry 330 Summer 2014</p>

Meetings: MTWR, 9:00-11:50 am
 Location: FR 143

Instructor: Dr. Douglas A. Klumpp
 Office: FR 356
 Office Hours: MW, 12:00-1:00 pm
 and by appointment.

Textbooks: **Organic Chemistry**, 9th Ed
 by Francis Carey and Robert M. Giuliano
 McGraw Hill Publishers, 2011

Study Guide to Accompany Organic Chemistry
 By Francis Carey and Robert Atkins
 McGraw Hill Publishers, 2011

Grades:

The course grade will be assigned based on your point totals from the four exams and four quizzes. No quizzes or exams may be dropped, and no make up exams or quizzes will be given. If an exam or quiz is missed, a score of zero will be assigned. NOTE: by enrolling in this class, you are agreeing to take the exams and quizzes on the scheduled dates. The quizzes will be on Tuesday and the exams will be on Thursdays. The point total is as follows:

Exams (four at 100 pts each)	400 points
Quizzes (four at 50 pts each)	200 Points
Total Points	600 Points

Approximate Scale:

Average grade: A (100-85%), B (84-65%), C (64-50%), D (49-40%)

TENATIVE SCHEDULE

Dates	Chapters.sections	Subjects
6/16-17	1.1-17 2.1, 2.6-18	Atomic structure, electron configuration, covalent and ionic bonding, multiple bonds, organic functional groups, formal charge, hydrogen bonding, hybridization (sp ³ , sp ² , sp), Bronsted-Lowry acids, Lewis acids, structure of acids, equilibrium in acid/base reactions, K _a and pK _a , Nomenclature
6/18-19	2.19-22, 4.13-17, 3.1-11	Chemistry of alkanes (oxidation, cations/radicals/anion, halogenation); isomers; conformational isomers of alkanes and cycloalkanes.
6/23-4	7.1-13 (skip 10)	Chirality, enantiomers, diastereomers, optical activity, configurations of stereoisomers, cis and trans, stereochemistry in reactions, racemic mixtures, optical purity.
6/24-6/26	4.4-13, 8.1-12,	Alcohol chemistry, S _N 1 and S _N 2 reactions mechanisms, transition state, electrophiles and nucleophiles, energetics of reactions.
6/30-7/2	5.2-4,6,8-16,18 6.1-20, 22	Structures of alkenes and cycloalkenes; E1 and E2 (synthesis of alkenes); addition reactions (reactions of alkenes)
7/3	9.5-13	Preparation and reactions of alkynes
7/7	10.1-7,10-13	Chemistry of conjugated systems
7/8-10	11.1-9, 18-23	Benzene, aromaticity and anti-aromaticity (time permitting)

Suggested homework problems:

Chap. 1: 40, 43, 44, 47, 50a,c, 53c, 56, 57, 63, 65.

Chap 2: 24, 27, 28, 29, 30, 35, 43, 45.

Chap 3: 21, 27, 28, 34a, 40, 44, 46, 48

Chap 4: 25a, 36, 39, 40, 43, 44, 49a

Chap 5: 33b,f, 35a,d, 37b, 39, 41a-d, 43

Chap 6: 27, 34a-j, 39a-i, 47c,d, 58, 61

Chap 7: 33, 36, 38, 42, 44, 47, 51

Chap 8: 21, 23, 32c, 33a,b, 34b-d, 49, 50

Chap 9: 22c,d, 25a-e and g-k, 29d, 31

Chap 10: 28, 32a-e, 43,