

INSTRUCTOR: Prof. E. Schoffers, 3148 Wood Hall, schoffer@wmich.edu (only use first 8 letters of last name, "schoffer" (no "s"))

WEBSITE <http://homepages.wmich.edu/~schoffer/>

OFFICE HOURS: T 2-4 PM, W 11-noon, or by appointment

TEXTBOOK: *Organic Chemistry*, 5th Ed., by W.H. Brown; C.S. Foote; B.L. Iverson; E.V. Anslyn (**Required**)
Student Study Guide and Solutions Manual for Brown, Foote, Iverson & Anslyn, by J. W. Simek (**Required**)
Pushing Electrons – A Guide for Students of Organic Chemistry, 3rd Ed., by Weeks (**Optional**)

CLICKERS: The "ResponseCard *RF* from TurningPoint is **required**. A maximum of 50 pts out of 65 clicker questions will account for 10% of the grade.

MOLECULAR MODELS (**Required**): It is necessary to build molecular models in order to understand key concepts such as stereochemistry. Effective, inexpensive models are available in the bookstore or online. Students will be allowed to use molecular models during exams.

PREREQUISITE: **A PASSING GRADE OF "C" OR BETTER** is required for CHEM 1100, 1110, 1120 and 1130. It is strongly recommended that students take CHEM 3760 concurrently. **Transfer students need to contact me and provide a transcript copy. Prerequisites for this course will be enforced.**

STUDENT NEEDS: A student with a diagnosed disability requiring assistance must contact the instructor and the *Disabled Student Resources And Services* office for special services. **Students with other concerns must contact the instructor ASAP.**

COURSE GOAL: Along with the second semester course CHEM 3770, this course is intended for students preparing for careers in chemistry, biochemistry, biotechnology, chemical engineering, medicine, pharmacy, and other professions. The goal is to equip students with a thorough understanding of the concepts and the skills of organic chemistry. Topics include, among others, molecular structure and bonding, fundamental molecular orbital theory; hydrocarbons such as alkanes, alkenes and alkynes and other functional groups; stereochemistry (3-dimensional aspects), stereoisomerism, stereoselectivity of reactions, nomenclature; fundamental reaction mechanisms, strategies of organic synthesis, as well as spectroscopic methods like infrared (IR), nuclear magnetic resonance

(NMR) and mass spectrometry (MS). CHEM 3750 assumes a strong background in general chemistry

EXAMS: **Are closed book, no memory aid allowed. Four one-hour exams** will be given during class time as listed in the class schedule. **The FINAL EXAM will be given on Monday, April 20, 2009, 8-10 AM.** The lowest hour exam score will be dropped automatically and **NO MAKEUP EXAMS WILL BE GIVEN.** Additional points can be collected through **CLICKER POINTS.**

HOMEWORK: Appropriate reading assignments are assigned in the schedule along with textbook problems. Answers are given in the *Solutions Manual*, but **this manual should be consulted only as a last resort.** Answers will not be collected or graded, but it is necessary to work many problems to learn organic chemistry. One or more questions on each exam will be based on assigned problems.

HANDOUTS: Will be provided in lectures and sometimes online. Leftover handouts are available from the white desk outside my office.

CLASS ETIQUETTE: Please arrive on time because class will start promptly at 10:00 AM. You should be in your seats and ready to take notes. Late comers and those leaving early unnecessarily disrupt the class. Students are encouraged to attend all lectures during which they can also collect clicker points. Students with good attendance records generally achieve higher course scores. Missed lecture material is the student's responsibility. Cell phones, pagers and computers are to be turned off. **It is the student's responsibility to be familiar with the syllabus.** The syllabus may be subject to change. Visit online for important updates and changes.

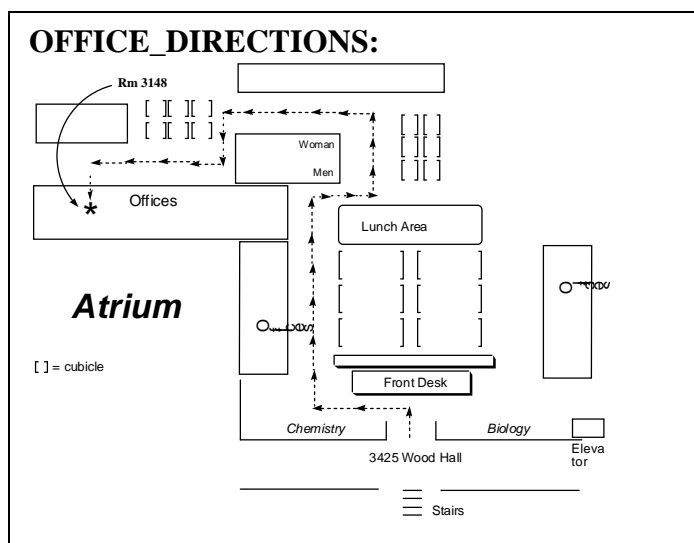
GRADING: The course grade will be determined from scores on three hour-exams (100 pts each), the final exam (200 pts) and through clicker questions (50 pts, 1 point for each correct clicker answer, out of a total of 65 questions). Course grades on a simple A-E scale are based on the class curve. ***The grade ranges vary from year to year.*** The tentative course grading scale is as follows: A (88-100), B (75-87), C (60-74), D (50-60), E (< 50). In-between grades (BA, CB, DC) will also be given. **Remember that there will be no make up exams.**

ACADEMIC DISHONESTY: All exams are cumulative and closed book. The use of any memory aids will be considered **cheating**. Any cases of academic dishonesty will be treated severely, in accordance with University policy.

“You are responsible for making yourself aware of and understanding the policies and procedures in the Undergraduate and Graduate Catalogs that pertain to Academic Honesty. These policies include cheating, fabrication, falsification and forgery, multiple submission, plagiarism, complicity and computer misuse. [The policies can be found at <http://catalog.wmich.edu> under Academic Policies, Student Rights and Responsibilities.] If there is reason to believe you have been involved in academic dishonesty, you will be referred to the Office of Student Conduct. You will be given the opportunity to review the charge(s). If you believe you are not responsible, you will have the opportunity for a hearing. You should consult with your instructor if you are uncertain about an issue of academic honesty prior to the submission of an assignment or test.”

HOW TO PASS ORGO:

- regularly check your **wmich e-mail** account for updates
- read the preface for **study tips**
- read “with a pencil” **before** lecture
- take copious **notes during the lecture**
- **review** notes after class and **work problems**
- come to **office hours** or make appointments
- the more **HW problems** you work the better you’ll learn
- concentrate on **concepts** to aid memory
- use **molecular models** to understand bonds and 3D aspects
- don’t get behind
- form **study groups**
- check **instructor’s homepage** for notes, updates and interesting links (visit **homepages**, NOT webCT)



CHEM 3750, Organic Chemistry, Spring 2009, WMU

Lecture keywords are posted and updated at <http://homepages.wmich.edu/~schoffer/>
Prof. Schoffers, 3148 Wood Hall, Tel. 387-2265, schoffer@wmich.edu

Date	Chapter	Homework Assignments*
1/5/09, M		Introduction
1/7/09	1	Molecular Bonding and Geometry, HW # 1-21, 24, 25, 26, 28, 36, 38, 48, 52, 55, 56
1/9	1	
1/12, M	1	
1/14	2	Alkanes and Cycloalkanes HW # 1-17, 20, 22, 26, 27, 34, 39, 44, 48, 49, 51
1/16	2	
1/19, M	N/A	MLK recess, no class
1/21	2	
1/23	2	
1/26, M	2	
1/28		Exam 1 (Ch 1, 2)
1/30	3	Stereochemistry, HW # 1-10, 14-18, 20, 26, 27, 30, 31
2/2, M	3	
2/4	3	
2/6	4	Acids and Bases, HW # 1-10, 14-17, 26, 32, 33, 36, 37
2/9, M	4	
2/11	4	
2/13	5	Alkenes, HW # 1-10, 13, 14-16, 20, 31, 32, 35
2/16, M	5	
2/18		Exam 2 (Ch 3, 4, 5)
2/20	6	Reactions of Alkenes, HW # 1-10, 13-17, 20-22, 25-28, 34-39, 41, 44, 47
2/23, M	6	
2/25	6	
2/27	N/A	Spirit Day (Spring Break Recess 3/2-3/6)
3/9, M	6	
3/11	7	Alkynes, HW # 1-12, 17, 20, 23, 27
3/13	7	
3/16, M	8	Halides, HW # 1-10, 13, 18, 22-24, 28 (LAST DAY TO WITHDRAW FROM COURSE)
3/18	8	
3/20		Exam 3 (Ch 6, 7, 8)
3/23, M	9	Substitution and Elimination Reactions, HW # 1-13, 17-20, 22, 25-28, 34, 37-40, 43, 46-47
3/25	9	
3/27	9	
3/30, M	9	
4/1	10	Alcohols, HW # 1-16, 19-21, 25-28, 29, 31, 35, 37
4/3	10	
4/6, M	15	Organometallic Compounds, HW # 1-7, 10-13, 17
4/8	15	
4/10		Exam 4 (Ch 9, 10, 15)
4/13	11	Ethers, Epoxides, Sulfides, HW # 1-12, 15-17, 20, 21, 24, 27, 32, 33, 40
4/15	11	
4/17		Review
4/20, M	8-10 AM	Cumulative Final Exam