## **Chemistry 343 - Prof. Blackwell - General Course Information**

**Lecture Location/Schedule:** Lecture 3 - Room 1361, Chemistry Building, TR 9:30-10:45 am

Lecture 2 - Room 1351, Chemistry Building, TR 1:00-2:15 pm

**Discussion Sections:** All students enrolled in Chem 343 lecture must also enroll in a discussion section that meets once per week. Discussion sections, led by experienced graduate student teaching assistants, are largely designed as interactive problem solving sessions where students work on problems with guidance from the teaching assistant and peers. There also will be ample time for student questions.

**Textbook:** "Organic Chemistry" by Marc Loudon, 5<sup>th</sup> Edition. There is an accompanying Study Guide and Solutions Manual. The text and manual are available from the University Bookstore and other campus bookstores. The course will cover Chapters 1-11, 14, and 15 in Loudon. Note, you can easily use earlier or later editions of the textbook if you want (if purchased used, etc.); the content and associated problems are very, very similar from edition to edition.

**Problem sets:** There will <u>13 required problem sets</u> (one for each Chapter) for this course. They will be completed and submitted online using Sapling Learning. Sign-up with Sapling for the term costs \$38.00. Each problem set will be ~15 problems in length. Many of these problems are based on those in the textbook. You should complete one problem set each week; the due dates for each set will be ~one week after the completion of the corresponding Chapter in class, with the final problem set due on the day of (or close to) the Final exam. You are encouraged to complete these problems sets quite a bit prior to their due date. Review problem sets (ungraded) will be available before exams. See the "Required Online Problem Sets" section on this course page for more information

**Quizzes:** Four short, <u>unannounced</u> quizzes will be given in the weekly discussion sections throughout the semester.

**Exams:** Three mid-term exams will be given <u>in-class</u> during our scheduled class period (75 min, closed book/notes). The mid-term exam dates are: Tues Feb 17, Tues Mar 17, and Thurs Apr 23.

Final exams are scheduled for Lecture 3 on Sun May 10 (7:45-9:45 am) and for Lecture 2 on Tues May 12 (7:45-9:45 am).

Rooms for in-class exams and the final will be announced closer to the dates.

**Molecular Models:** Use of molecular models is highly recommended as an aid to understanding organic chemistry. Use of models is allowed during all quizzes and exams. There are a few different kinds of good molecular models available for purchase on campus, including the University Bookstore. Dr. Ieva Reich and the ACS Student Affiliates club sells a good set of models in the Chemistry Department. These model kits (\$30/ea) will be sold directly after Lec 2 in the Mills Street lobby (Chemistry Building) from 2-3 pm (TR) during the first two weeks of class.

PLEASE NOTE: Substantiated evidence for academic misconduct in this course is means for automatic course failure.

# **Lecture Schedule – Chem 343 – Lectures 2 & 3 – Spring 2015**

**JANUARY** Note, dates for topics can shift slightly during the semester depending on course pace.

Tuesday	Thursday
20	22
Intro to course & Chap 1	Chap 1
Bonding & Structure: Lec #1	Lec #2
27	29
Chap 2: Alkanes	Chap 2
Lec #1	Lec #2

### **FEBRUARY**

Tuesday	Thursday
3	5
Chap 3: Acids & Bases	Chap 3
Lec #1	Lec #2
10	12
Chap 4: Intro to Alkenes	Chap 4
Lec #1	Lec #2
17	19
EXAM 1 – In Class	Chap 5: Addition Reactions of Alkenes
	Lec #1
24	26
Chap 5	Chap 6: Stereochemistry
Lec #2	Lec #1

## **MARCH**

Tuesday	Thursday
3	5
Chap 6	Chap 7: Cyclic Cmpds & Stereochemistry
Lec #2	Lec #1
10	12
Chap 7	Chap 8: Intro to Alkyl Halides, Alcohols, Ethers,
Lec #2	Thiols, etc.
17	19
EXAM 2 – In Class	<b>Chap 9:</b> Chemistry of Alkyl Halides (S <sub>N</sub> 2/E2 &
	S <sub>N</sub> 1/E1): Lec #1
24	26
Chap 9	Chap 9
Lec #2	Lec #3

#### Spring Break: March 28-April 5

#### **APRIL**

Tuesday	Thursday
7	9
Chap 9 & start Chap 10:	Chap 10
Alcohols & Thiols	Lec #2
14	16
Chap 10 & start Chap 11:	Chap 11
Ethers, Epoxides, Glycols, and Sulfides	Lec #2
21	23
Chap 11 (start Chap 14 only if time):	EXAM 3 – In Class
Chem of Alkynes	
28	30
Chap 14 (start Chap 15 if time):	Chap 15
Dienes, Resonance & Aromaticity	Lec #2

#### MAY

Tuesday	Thursday	
5	7	
Chap 15	Chap 15 & wrap-up	
Lec #3	Lec #4	
<b>FINAL EXAMS:</b> Lec 3 (9:30 am lecture): Sun May 10 <sup>th</sup> 7:45 – 9:45 am Lec 2 (1 pm lecture): Tues May 12 <sup>th</sup> 7:45 – 9:45 am		

- Book chapters correspond to *Organic Chemistry*, 5<sup>th</sup> Ed., M. Loudon.
- Each book chapter will be covered in roughly 2 lectures, except for Chapters 9 & 15.
- READ the relevant book chapter and WORK the associated problems BEFORE and THROUGHOUT the corresponding lectures. You will get a lot more out of them!
- Midterm exams will focus on the material covered in prior lectures (but concepts of course build throughout the course; i.e., no topic is stand alone).
- The Final exam will be cumulative.