

ORGANIC CHEMISTRY CAS CH203 Lecture Section AA
Fall 2009

Instructor: Professor John A. Porco, Jr.
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Class Location and Meeting Times: Tuesday-Thursday 8:00-9:20 am, STO B50.

Office hours: Mondays 1-2 PM and Wednesdays 4-5 pm in LSEB 802 or by appointment. Please come at the beginning of the office hour. I will also hang around the class for a few minutes afterwards to answer questions.

Objective: Organic Chemistry has been called the “*Central Science*” of the life sciences. In this course, we will use a functional group approach to organic chemistry and will discuss organic compounds, chemical reactions, and synthetic transformations. Particular emphasis will be placed on reaction mechanisms and development of analytical skills to THINK about solutions to organic chemistry problems. Relevance to modern organic synthesis and biomedicine will also be emphasized.

Course Website and Lecture Notes: The CH203 Section A1 website can be found at: <http://people.bu.edu/porcogr/CH203/CH203.htm>. The website will contain lecture notes, suggested problems, representative exams, and other important information.

Discussion sections: Attendance at discussion sections is strongly recommended. Discussions will begin the week of September 7th

CH203 A0 Monday 12:00 – 1:00 pm SCI 111
CH203 A1 Monday 1:00 – 2:00 pm SCI 111
CH203 A2 Monday 2:00 – 3:00 pm SOC B59
CH203 A3 Monday 3:00 – 4:00 pm SOC B57
CH203 A4 Tuesday 9:30 – 10:30 am CAS 312
CH203 A5 Tuesday 5:00 – 6:00 pm SCI 111
CH203 A6 Wednesday 2:00 – 3:00 pm BRB 122
CH203 A7 Wednesday 3:00 – 4:00 pm CAS 223
CH203 A8 Wednesday 4:00 – 5:00 pm SCI 113
CH203 A9 Thursday 12:00 – 1:00 pm SOC B57

Lecture Textbooks and Other Course Material.: (1) *Organic Chemistry* 7th Edition by John McMurry (Brooks/Cole) (2) Study Guide and *Solutions Manual* (Seventh Edition) by Susan McMurry. Molecular Models are also extremely useful and a variety of types are available in the bookstore. Many sets are likely also available from former organic chemistry students.

Examinations: (There are no "make-up" exams, don't even bother to ask) There will be three (3) 'in-class' examinations during the semester (1.5 h) and a final examination (2 h). If the median grade of an examination is less than **75%**, the median grade will be raised to a **75%** by adding a constant amount (**not more than 20%, however**) to the grade of each student. If the median grade is greater than 75%, the grades *will not be changed*. You may drop one of the “in class” examinations for any reason, but *not the final examination*. Each examination is worth 100 pts.

Dates of Examinations: **October 1 (Thurs.), November 5 (Thurs.), and December 3 (Thurs.)** (Locations: **STO B50 and TBD**). **Final Exam: December 17, 2008 12:30-2:30 pm.** Locations: **TBD** (<http://www.bu.edu/reg/dates/exam-fall2009-matrix.pdf>)

Final Grades: The final grades for those students taking both the lecture and laboratory portions of the course will be based on 400 points (300 points for examinations and 100 points for the laboratory). The grades for the students who are only taking the lecture part of the course will be based on 300 points.

Grade Breakdown:

Total Points	%	Letter Grade
>368	>92	A
352<368	88-92	A-
340<352	85-88	B+
324<340	81-85	B
312<324	78-81	B-
288<312	72-78	C+
256<288	64-72	C
232<256	58-64	C-
200<232	50-58	D
<200	<50	F

Incompletes: You must be in good academic standing when you request an incomplete. You must have a legitimate reason for asking for an incomplete. Incomplete grades will be given if and only if you have not taken the final examination but you have taken all the other required quizzes, or if the laboratory portion of the course is incomplete. You must fill out an incomplete form. **If you do not fill out this form a grade of F will be recorded.** In order to discharge an incomplete grade, you make up the incomplete work only. You cannot take the course over. The incomplete grade must be satisfied within one (1) calendar year otherwise the 'I' grade is automatically and irreversibly changed to an 'F'.

Workload: In preparing for the course, there are four recommended study habits to maintain:

- (1) You must plan to spend **4-5 hours** per lecture (**8-10 hours per week**) studying organic chemistry and working on the homework problems.
- (2) I strongly recommend that you read the chapter to be covered in lecture prior to the lecture on that material. In this way, you can pay more attention to the lecture and understand what is being said.
- (3) Do as many problems in the text and at the end of each chapter as you possibly can without referring to the solutions manual. I will point out the particularly good problems that you should draw your attention. To encourage you do as many homework problems as possible, the material on the examinations may be related to these problems and also questions in the text.
- (4) In this semester, we will cover a lot of different reactions. I strongly recommend that you you make up your own set of 4x 6" flashcards, one for each reaction or mechanism. My suggestion would be to put the reaction on one side, and a mechanism on the other.

Rules for Taking Examinations, Cheating and Academic Misconduct (CAS Academic Code of Conduct). We attempt to conduct our examinations in a manner that discourages cheating. Cheating is self destructive, disrespectful to your faculty and terribly unfair to your classmates. Accordingly, we have rules that govern the administration of our examinations.

You are permitted to bring to the examination:

- 1) Molecular Models as long as they are contained in a **colorless and transparent** plastic bag. No paper is permitted in the bag. Nothing can be etched on the models.
- 2) Beverages in a colorless and transparent bottle.

You are not permitted to bring to the examination:

- 1) Any notes or other resources
- 2) Calculators or any other electronic or optical device.
- 3) No wrapped food

During the examination, you must be seated orderly in every other row.

All personal possessions are to be placed at the front of the room.

Hats with visors are to be turned backwards.

There is no talking to other students or sharing of any materials such as molecular models.

If you need to go to the restroom **you must be accompanied by a teaching fellow.**

You may not start the exam late if a student has turned in his/her examination and left the exam room. If you are late you will not be given additional time to take the test.

All other common rules of exam taking are enforced.

Any infraction will **immediately** be reported to University officials who will then take further action

Other Helpful Hints:

- 1) Keep up with the material.
- 2) Review and rewrite your lecture notes after every lecture.
- 3) Form study groups (maximum of four students).
- 4) Find problems at the end of the chapter that correspond to the lecture material.
- 5) Don't cram for exams

Miscellaneous: The following are inappropriate during the lecture period: Cell phones, PDA's, text messaging, Walkmans, CD players, sleeping, and talking.

Tentative Schedule of Topics from McMurry (7th Edition):

Chapter 1: Structure and Bonding

Chapter 2: Polar Covalent Bonds; Acids and Bases

Chapter 3: Organic Compounds: Alkanes and Their Stereochemistry

Chapter 4: Organic Compounds: Cycloalkanes and Their Stereochemistry

Chapter 5: An Overview of Organic Reactions

Chapter 6: Alkenes: Structure and Reactivity

Chapter 7: Alkenes: Reactions and Synthesis

Chapter 8: Alkynes : An Introduction to Organic Synthesis

Chapter 9: Stereochemistry

Chapter 10: Organohalides

Chapter 11: Reactions of Alkyl Halides: Nucleophilic Substitutions and Eliminations

Chapter 13: Structure Determination: Nuclear Magnetic Resonance Spectroscopy

Assigned problems for each chapter will be provided in lecture