CHEM 237B **Autumn 2011** Schedule, Additional Information, Reading Assignments

Classes meet MWF 3:30 in Kane 120; ***Instructor: Niels Andersen***

Office hours, rm CHB204E: M, W, Th 12:50 – 1:40 // by appointment Tues., 5:45 – 6:45 PM.

(andersen@chem.washington.edu) I do answer questions sent by e-mail, typically within hours

Quiz sections, all on Tuesday's, meet every week.

TAs: quiz section instructors will announce office hours): at uw.edu - Gower (BA,BC,BG,BK – gowerc@), Dixon (BB,BE,BI,BL – bdixon@), Pilkerton (BD,BH,BM,BO – mpilkert@), Byrne (BF,BJ,BN,BP – aimee9@u.washington.edu).

Class website : go to http://depts.washington.edu/chem/courses/ and click on Chem 237B in the Autumn 2011 list. **Winter '06 provides the set of lecture notes from which I will be lecturing.** ***These will likely be updated and reposted. The earlier versions of my CHEM237 course pages (***Aut09/10, Win08/06 listings***) also provide numerous example tests and quizzes.***

All reading assignments are from the text, Carey/Giuliano; "Organic Chemistry" 8th Ed. ***(Note you can get by with the 7th, or probably even the 6th ,edition)*** For the 7th and 8th ed., specific sections within chapters that will ***not*** be covered on tests will be indicated on the course web page, as the quarter progresses. Suggested study problems (7th & 8th ed.) will be listed for each chapter. The coverage handouts, which will be posted, will indicate the problems in the text that are candidates for inclusion on tests and quizzes.

The coverage will be Chapters 1 – 9. So, we'll need to cover about one chapter per week. There will be **NO** graded homework. *Models are useful* [HGS Molecular Struc Model Kit (Freeman and Co.) available on-line] .

Preview -- Most Important stuff from the first three chapters *[xx, xx, are pages in 7th ed.]*

Valency (how many bonds different atoms make, Resonance and Lewis Structures (Table 1.2, Fig. 1.5, Table 1.6, prob. 1.15*[1.16]*), Arrow pushing mechanisms (p. 29-32, 39-40 *[33-5, 46]*), oxidation states (Tables 2.4 *[& 2.5 in 7th ed.]*, 'useful generalization' on p. 83-5*[85-7]*). acidity/basicity* (sections 1.13-8 *[1.12-7]* , parts of Table 1.8), Structure, shape (Table 1.7, p. 86-89*[89-92]*), conformation and dynamics (Figs. 3.4, 3.7, 3.12, 3.16-18 + p. 112-117 *[114 – 118]*), Thermochemistry (Tables 2.3, 3.1, relative energies, we'll use these qualitatively rather than quantitatively; main stuff is later in Table **4.3** and on p. 167*[169]*. ***I'll provide a Table that can be used during tests.***).

* It's much easier to judge relative basicity (rather than acidity) from a Lewis structure. My presentation will be different from that in the book. Yes, you need to understand Lewis basicity. The Lewis definition is much broader than the Brønsted one and more widely applicable to organic reactions.

Exams: Three 40 pt quizzes will count (four will be given), two one-hour exams (~115 pts/each), and a final (scheduled for Thurs., Dec. 15th at 2:30 – 4:20 in KNE 120). There will be no "make-up" exams or quizzes. If you miss the final, you get an incomplete which must be made up when CHEM237 is next offered.

Partial Working Schedule // reasonably certain only for the A-term.

Week of	Monday	(Tues)	Wed.		Friday
Sept 26th			start Chap. 1		
Oct. 3rd	acidity	**(1st Sec Mtg)**			Chap. 2
Oct. 10th	finish Ch2	**(1st Quiz)**	Ch. 3 (conformations and stereoisomers, 1st time)		
Oct.17th	start Ch. 4		Chap. 4 (Alcohols & R-X)		
Oct. 24th	Chap. 5	**(2nd Quiz)**		Chap 5	
Oct. 31st	start Ch. 6	E/Z & alkene mech	**1st Exam**		Chap. 6
Nov. 7th	Ch. 6	exam return	Ch 7	**GONE**	**HOLIDAY !**
Nov. 14th	Ch. 7	**(3rd Quiz)**	start Chap. 8 ??		**→ ?**
Nov. 21st	Ch. 8	(review)	**2nd Exam**	**HOLIDAY**	**→_____**
Nov. 28th	Ch. 8	**go over exam** key +	Ch 8 start 9?		**Chap. 9 + lots of synthesis**
Dec. 5th		**(4th Quiz)**	finish Ch9, 1st rev		(NHA review lecture)

How to get the best possible grade in Chem 237. Note the mean for Chem 237 is set at 2.6 ± 0.2 by departmental policy. I can't deviate from this. *Likely to place class gpa at 2.6 – 2.7.*

1) **keep up to date**, read at least the first part of each chapter before the lecture session that covers that chapter, do the in chapter problems in that section
2) ***keep up to date***, cramming for organic chemistry tests does not work, see point 4) for the implications
3) ***Reduce the need for note taking during lecture*** *by printing out Prof. Andersen's lecture notes for Chem 237 Win '06 and bringing them to class to add comments*
4) ***make use of the quiz sections*** – this is your only real chance to ask questions and see how the problems are worked. The quizzes will only take 20 – 35 minutes, so there will be time for questions at all quiz section meetings.
5) **Do lots of problems**. You are being assigned all the in the chapter problems (and the majority of the "additional problems" at the end of each chapter as suggested homework. These will not be handed in, but they are the only way you'll know whether you're getting the material. In principle, you need to do 6 – 8 problems per weekday to keep up. Quiz section TA will have the answers to all problems. ***Another reason to do the suggested problems – during the course at least one suggested question from each chapter will appear*** *(exactly as written in the text)* ***on a test and/or quiz.***
6) Rewrite you lecture notes, make sure they make sense – compare them to the text and to any posted examples in the lecture notes.
7) **Prepare a 3" by 5" note card (written on one side only) for each test (or quiz) -- be selective. No calculators, electronic notebooks (or electronic devices of any kind) are allowed during tests.** ***You will NOT need to do numeric calculations.***
8) Don't panic when you see a test. I try to write them such that the mean student performance is 55-60%. You can probably still get an A even if you draw a complete blank on one or two questions on the in-quarter exams.

Classroom Etiquette: be seated and quiet by the ringing of the bell (3:30). Turn off all cell phones and pagers, but I have no objection to eating or drinking (or reading the Daily for that matter).

Academic Accommodations. If you need to request accommodations due to a disability, contact Disabled Student Services, 448 Schmitz, 545-8925. If you have a letter from Disabled Student Services indicating a disability and the suggested accommodations, please present it to me early in the course so we can develop the appropriate work-around.

Exam Policies:
You will have an assigned seat for exams. Let me know, by Oct. 18th, if you need a left-handed seat. Know the location of your assigned seat before the 1st exam. The seating chart will appear on the course website. You may bring and use a 3 by 5" notecard and molecular models, do **not** bring *electronic devices or calculators*. You may use pencil, black or blue ink on tests. ***No other colors are allowed.*** Your full name (last, first) must be printed on ALL exam pages. Exams will be returned only by your TA (in quiz sections).

Requesting a regrade – All requests must be made within one week of exam return. Exams will not regraded if you have added material on the test. When a regrade is requested, the entire exam will be evaluated, and regrades could occur on questions besides that highlighted by the student. Discuss a regrade with your TA prior to requesting one. The ***signed*** form below must be attached to your exam when you submit it for a regrade.

Please regrade question(s) _____

Please check addition on page(s) _____ question(s) _____

I understand that my exam may have been photocopied before it was returned to me. I certify that I have not altered anything on my exam after it was returned. I understand that if I am found to have altered anything on my exam, I will receive a grade of 0 (zero) on the complete exam.

_____ UW ID # _____

Signature Date