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Office Hours: Tuesdays 3-4, questions by e-mail, or e-mail to make appointment

Reread and review: pages 1-12 of lab manual and chapters 1-3 of Mayo et.al. Review, too, the techniques covered in 6A as well as the spectroscopy covered in that class.

Texts: Mayo, Pike, and Trumper, Microscale Techniques, 2nd Ed. (Wiley, 2001) or 1st Ed. Lab Text: Chemistry 6AB Organic Chemistry Laboratory (UCSB Chem Dept, UCSB bookstore, 2001 or 2002-3 Ed. $6.00)

Grading: Efforts are made to try to make the different laboratory section grading practices as comparable as possible, although they are necessarily somewhat subjective. In my experience, class averages are likely to be approximately 70-80% and letter grades will be on a scale with C’s(C-,C,C+) starting at 60%, B’s 72%, A’s 85. This scale may be adjusted somewhat according to my judgment, but grades will not be explicitly curved, i.e. all could theoretically A’s if all were to go ideally, (or all get C’s and D’s). It’s up to you. Generally, most get A’s and B’s, with a class average grade of about B for this class. Numerical laboratory grades will be reported to me by each TA on a 100-point scale, renormalized as needed to make sections comparable. The lab grade will be made up of points for reports/notebooks(40 pts), technique, lab neatness, preparation for lab(30 pts), quality, purity, appearance, quantity of products(15 pts), in-lab quizzes(15 pts).

Laboratory Experiments:
• Fischer esterification (week 1)
• Oxidation (week 2)
• Olefination using the Horner-Emmons-Wadsworth reaction (cf. the Wittig reaction) [week 3]
• Hydroboration (note stereo- and regiochemistry; compare with addition of H3O(+)). [week 4]
• Grignard chemistry – study, again, your text. These are exceptionally important and useful reagents. [week 5]
• Diels-Alder reaction – perhaps the most useful and versatile means of assembling a 6-membered ring. Be certain to consult your classroom text here, too. [week 6]
• multistep synthesis (three weeks)

Advice
Review, throughout the quarter, the following (chapter/pages in Mayo, et. al.): Mass spectrometry (pp.237-252) Infrared (IR) Spectroscopy (pp. 146-178) (Bruice, Ch. 12.6-12.15 probs 13-26, 32, 34, 36, 39, 41, 43, 45, 47-49, 51,55, 56, 58, 59, 60.) [Expt 7] Nuclear Magnetic Resonance Spectroscopy (pp.179-216) (Bruice, Chap 13 and problems therein) [Expts 8, 9]. From time-to-time, refer to the Chem 6A web site. As you know, 6A emphasizes spectroscopy. Try the problem sets that will be posted there throughout the quarter.

Be certain to study the chemistry and learn the reactions and reaction mechanisms in each instance. Correlate with your classroom textbook.