

**Spring 2011
CHEM 273L**

“Organic Chemistry Laboratory II”

Instructor: T. Hemscheidt
Bilger Hall 240

This laboratory is concerned with the techniques of structure determination of unknowns as well as the synthesis of organic molecules.

The experiments are based on the text by Williamson “Microscale and Macroscale Organic Experiments” (any edition is acceptable), which will be supplemented by handouts.

Grades will be assigned on the basis of quizzes administered at the beginning of the lab (30%) and lab reports (40%) that are due as announced by your TA. The remaining 30% of the final grade will be assigned on the basis of the solutions to an assigned problem to be solved in class. Lab notebooks are hard-cover and reports are hand-written in such a fashion that your TA can reasonably be expected to be able to read these. Your TA will be explaining the format of the lab reports to you. Experiments may at times be performed in pairs. It is your duty to make sure that you have all the data to write a lab report, which will be prepared and submitted by the individual student.

By submitting a lab report you indicate that you yourself have prepared the text of the report. Verbatim copying or paraphrasing of publicly available information or the work of others without attribution constitutes plagiarism and will result in the assignment of the grade of “F” for the lab and course. This is not to suggest that a report consisting entirely of copied but attributed material would be acceptable.

The following is the schedule of experiments:

Week	Dates		Experiment	Reading
1	Monday section	Tuesday-Friday sections		
2	01/24/11	01/18/11-01/21/11	Unknown #1	IR, MS and NMR chapter
3	01/31/11	01/25/11-01/28/11	Unknown #1	
4	02/07/11	02/01/11-02/04/11	Diels-Alder Reaction	
5	02/14/11	02/08/11-02/11/11	Friedel Crafts	
6	02/28/11	02/15/11-02/18/11	Unknown #2	
7	03/07/11	02/22/11-02/25/11	Unknown #2	
8	03/14/11	03/01/11-03/04/11	NaBH ₄ reduction of cyclic ketone	
9	03/28/11	03/08/11-03/11/11	Grignard reaction	
10	04/04/11	03/15/11-03/18/11	Wittig reaction	
11	04/11/11	03/29/11-04/01/11	Unknown #3	
12	04/18/11	04/05/11-04/08/11	Unknown #3	
13		04/12/11-04/15/11	No lab	
14	04/25/11	04/26/11-04/29/11	Final Unknown	