

CHE 310-L-014
ORGANIC CHEMISTRY LABORATORY
Fall 2003 Thurs; 9:25-12:25 Room SC 461

Prerequisite: CHE 121 and 121L
Co-requisite: CHE 310

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Office Hours: *by appointment*

Text: "Experiments in Organic Chemistry," J. S. Nimitz
"Organic Chemistry I Laboratory Supplement"
Equipment: Safety glasses
Laboratory research notebook

LABORATORY SCHEDULE

DATE	EXPERIMENT	Pgs.	TEXT
08/28	Check in / Melting Point	1-28	1
09/04	Recrystallization	1-30	1.1
09/11	Unknown-Purification and Identification	1-33	1.3
09/18	Fractional Distillation	34-44	2.1
09/25	Acid-Base Extraction	45-61	3.1
10/02	Thin-Layer Chromatography	63-71	4.1
10/09	Column Chromatography	supplement	
10/16	Nuclear Magnetic Resonance	Ege, sect. 5.4	
10/23	MID-TERM EXAM		
10/30	Molecular Modeling	supplement	
11/06	Nucleophilic Substitution (S _N 1)	120-124	11.1
11/13	Bromination/Stereochemistry	95-101	8.1
11/20	Dehydrohalogenation	supplement	
11/27	Thanksgiving; no lab		
12/04	Carbocation Rearrangement	246-252	23.2
12/11	FINAL EXAM (covers entire semester) / Check out		

Note: Lab write-ups are due at the end of every lab; lab data sheets are due at the very beginning of the following lab period.

THERE ARE NO MAKE-UP LABS

ORGANIC LABS

GRADING SYSTEM

It is expected that each student enter the lab with a very good understanding of the theory behind the lab experiment and sufficient knowledge of the procedure so that he or she can begin working immediately.

Each student is also expected to know how to set up and perform the basic techniques in organic chemistry lab (melting points, distillation, extraction, and recrystallization). The instructor will, in general, not answer questions about these techniques **once they have been performed**.

The pre-lab lecture will consist of a brief review of the theory behind the experiment, safety features, and changes in the experimental procedure, if any.

Grading of your lab reports will be based on your write-ups (completeness, clarity, brevity, sentence structure, style, and format), observations, conclusions, calculations, and yield and purity of products. These lab report grades will represent about 45% of your final grade. A written mid-term and final exam will be given. These tests will represent about 40% of your final grade. Pre-lab quizzes will be given occasionally. They will represent about 15% of your final grade. In the past, students who have obtained greater than *ca.* 83% of the total points in the lab have received an **A**; between *ca.* 71-83% **B**; between *ca.* 56-71% **C**; less than *ca.* 56% **D**.

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This Syllabus Subject to Change