

ORGANIC CHEMISTRY LABORATORY
CHEMISTRY 311L-012
SPRING 2009
Wed., 2-5

PRE-REQ: 310-L; PRE-REQ or CO-REQ: 311 Lecture

Instructor: Dr. Robert J. Kempton
Office: SC 450
Office Hours: Open-door policy and by appointment
Phone: 572-5116; e-mail: Kempton@NKU.edu

Text: Mohrig *et al.* "Techniques in Organic Chemistry", 2nd Ed.
"Organic Chemistry I Laboratory Supplements" (Pages must be downloaded from the dept's website and studied **before** the lab starts: nku.edu/~chemistry/che311l.htm)

Equipment: Safety glasses and BOUND composition notebook.

Copying information (answers to questions, mechanisms, etc.) from another student's lab report is a violation of the Honor Code.

EXPERIMENT	DATE
CHECK-IN; Luminol Preparation (P)	1/14
Sep'n and Spectroscopy (P)	1/21
Sep'n and Spectroscopy (P)	1/28
Ether Synthesis	2/04
Aldehydes and Ketones	2/11
Aldehydes and Ketones	2/18
Hydrolysis of Benzonitrile	2/25
Acetylation of Benzoin	3/04
Spring break	3/11
Midterm	3/18
Multistep Synthesis	3/25
Multistep Synthesis	4/01
Multistep Synthesis	4/08
Aldol Condensation	4/15
Wittig Synthesis	4/22
Final Examination (Covers entire semester)	4/29
Checkout	4/29

(P) = The lab will be performed with a partner.

Note: During quizzes and exams calculators may be used, but not shared.

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 (simple distillation, melting points, extraction, and recrystallization). *The instructor will, in general, not answer questions about these techniques.*

The pre-lab lecture will consist of a very 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 reports will represent about 45% of your final grade. Mid-term and final exams will be given. These tests will represent about 40% of your final grade. Pre-lab quizzes will be given occasionally and these 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**.

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

THIS SYLLABUS IS SUBJECT TO CHANGE