5. No food or drink allowed in the lab.

4. No frames or smoking allowed in the lab.

3. No shorts.

2. Wear proper attire: gloves and lab coats when necessary; shoes (no sandals).

1. Safety glasses must be worn at all times.

The following safety rules will be in effect at all times:

THINK:

1. Use your common sense and above all, THINK. If you have questions, ask. Make sure you understand each step of the experimental procedure and any potential dangers. If you do not understand, do not proceed. Special instructions that are described for each experiment. Pay particular attention to the why. Read the directions given in each experiment carefully and in advance. Pay attention."Safety: The organic laboratory is a potentially dangerous place. However, no accidents need occur if you are careful and are consistently aware of what you are doing and need to do.

READ PP. 4-20 IN YOUR LAB TEXT.

The schedule of experiments for the quarter is attached. Please read the assigned sections in your lab book before coming to lab. Also read the "required sections that are indicated for each experiment."

Reading the schedule to the experiment to be done that day.

Lab is scheduled from 2:00 to 5:30 on Monday.


Instructor: Joseph M. Hombeck

MAJORS LAB SECTION
Fall 2003
Chem 2463
Organic Chemistry Laboratory
Lab notebook. Other than pre-lab work-ups:

- Lab Reports and Products (if applicable) 80 pts./expt. 720 points
- Completion of Experiment 20 pts./expt. 180 points
- Pre-lab work-ups, 10 pts./expt. 90 points

Your grade will be based on a total of 1,000 points, distributed as follows:

Grading:

and on the bottom of the product:

the report. The label should have your name and the structure, weight, percent yield.

For synthesis experiments, submit the product in a clean, labelled vial along with:

Products:

Reports:

Pre-labs are to be done in the same manner as last quarter.

Pre-labs are to be done in the same manner as last quarter.

same style as last quarter.

You must have a bound lab notebook. You may use the same notebook and the

Notebooks:

unmodified experiments are to be done.

1. No chemicals, glassware or equipment are to be removed from the lab. No

stockroom without explicit permission of the TA.

2. No student is allowed in the lab unless the TA is present. Only students

assigned to that lab section are allowed in the lab. No student is allowed in the

room when the experimental directions so instruct.

3. Wear frames, work in the hoods when the experimental directions so instruct.

4. Avoid getting them on your skin or clothing and avoid excessive breathing of.

5. Most organic chemicals are toxic to some extent. Treat them all with respect.

6. Be sure to read the labels on chemical containers carefully. Many chemical

use.

7. Be careful to avoid contaminating the reagents. Close all containers snugly after

solutions.

8. Use proper disposal procedures, as specified by your TA, for all chemicals and

tabe and the hoods. Clean up all chemical spills immediately.

9. Keep all work areas clean and orderly. This includes your bench, the reagent

10. Many names are very similar.
that you were assigned. Procedures were essentially done in the lab. Also include the identity of the other unknown included at the beginning of the identification of one unknown, just as though the

Each test is a thought. This is an experiment done in the lab. Your report should allow you to organize the results of the IR and NMR spectra of your unknown. If they are available, record the results of the IR and NMR spectra of your unknown. If they are not available, record the results of the IR and NMR spectra of your unknown. If they are available, record the results of

compound. Since these results can be done easily, this experiment will be assigned two unknown organic compounds to identify on the computer. In order to identify each compound you must tell the computer which test to run on the

unknown. The computer will tell you the results of the test. You then have to decide which test to run next. You continue this process until you have identified the

unknown. The computer provides you with the results of the test. You then have to decide which test to run next. You continue this process until you have identified the

unknown.

Experiment 5: Simulated Identification of an Unknown

To do Experiment 5: Use it to complete the syntheses next week. During the next week, you have time to synthesize the benzylidencyclopropene dichloride (VWIG sells) this week. Save the VWIG sell and prepare it for next week. Read pp. 333-338, Do Experiment 3.

Experiment 4: Preparation of 1,4-Diphenyl-1,3-butadiene

Sept 29

Experiment 3: Michael and Aldehyd Condensation Reactions

Sept 22

Experiment 2: Estimation Reactions of Vanilline

Sept 15

Experiment 1: Synthesis of Benzoquinone

Sept 8

Fall Quarter: 2003

Schedule of Laboratory Experiments
Forget to turn in your lab notebook any equipment you have broken or you will receive an I as your Labs grade. Do not
You must check out of lab at this time. Turn in your breakage card and pay for
Clean up, Check Out.

Nov. 10

and the report counts twice the normal amount.
and step 10. This is a two-week experiment.
mp confirms the identity of your unknown (and step 10. This is a two-week experiment.
step 9) prepare one solid derivative whose
must do part one, step 7, 2, 4, and 6 (at least one positive and definitive functional

The is no problem for this experiment. This time you will be given a sample of a
Experiment 8 Identification of an Unknown
Oct 27

spectroscopy to identify which position has been acylated in your product.

Read pp. 43-49. Do Experiment 7, Friedrichs Acylation

Experiment 7
Oct 20

Complete Experiment 3
Oct 13

Read pp. 33-38. Do Experiment 38, Part B.

Complete Experiment 4
Oct 6