CHEM 331
FALL 2005

INSTRUCTOR: Dr. Rhonda Dillman
OFFICE: Sci 217
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OFFICE HRS: 7:00-8:00 am MWF, 10:30 am-12:00 noon MW or by appt

MATERIALS:
1. Lab text: “Macroscale and Microscale Organic Exps.” 4th ed. by Williamson
2. SAFETY GLASSES!! These are mandatory—you will not be allowed in lab without them.
3. Organic Chemistry Lab Notebook – spiral bound
4. Waterproof Sharpie pen
5. Lab coat or apron is optional but recommended.

COURSE OBJECTIVES:
1. To learn how to handle organic compounds (including hazardous waste) properly and safely.
2. To learn the techniques most commonly used in organic lab.
3. To learn to read and interpret written experimental procedures.
4. To learn to organize and explain experimental data collected in the lab.
5. To learn to write a scientific lab report.

OUTCOMES ASSESSMENT (GRADING):
1. Lab reports will be worth 100 points per week which is broken down in the following way:
   40% - performing the experiment (a report must be turned in)
   60% - lab write-up
2. There will be a pre-lab discussion at the beginning of each experiment. You are expected to have read through the lab and participate in the discussion. You will receive a grade for your participation in these discussions.
3. The grading scale will be as follows:
   A 90-100
   B 90-89
   C 70-79
   D 60-69
   F 59 and below
   **This scale is NOT subject to a curve**
   **Incompletes will be given for medical excuses only**
4. Lab reports will be due on Fridays by 10:30 am. Late labs will lose 20 pts/day unless excused beforehand.

The Material Safety Data Sheets (MSDS) for any chemical used in this laboratory can be obtained from Science Technical Services in Sci 241. These sheets contain information on the hazards associated with the chemical as well as information on its proper handling and storage.
<table>
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<tr>
<th>DATE</th>
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| SEPT 13    | CHECK IN, SAFETY, NOTEBOOKS  
Read Ch 1 and 2 |
| SEPT 20, SEPT 27 | CH 3 – CRYSTALLIZATION (Read pgs 38-56; 62-63)  
Exp 5 - pg 60  
Exp 7 – pgs 61-62  
CH 4 – MELTING POINTS (Read pgs 65-69)  
Exp 2 – pgs 70-71  
Exp 4 – pgs 71-72 |
| OCT 4      | CH 4 – BOILING POINTS (Read pgs 72-74)  
CH 5 – DISTILLATIONS (Read pgs 80-85)  
Exp 2A – pg 89  
Exp 3A – pg 90 |
| NO LAB on OCT 11 | |
| OCT 18, OCT 25, NOV 1, NOV 8 | CH 8 – EXTRACTIONS (Read pgs 126-138; 141-143)  
Exp 3 – pgs 143-144  
Exp 5 – pgs 145-149 (macroscale ½ scale, crystallization)  
Exp 8 – pgs 152-154 |
| NOV 15, NOV 22 | CH 6 – STEAM DISTILLATION (Read pgs 98-100)  
Exp 4 – pgs 106-108 |
| NOV 29     | CH 9 – THIN LAYER CHROMATOGRAPHY (Read pgs 156-160)  
Exp 1 – pgs 160-162 |
| DEC 6      | CH 38 – GRIGNARD SYNTHESIS OF BENZOIC ACID  
(Read pgs 461-465)  
Exp 1 – pgs 465-468  
Exp 3 – pgs 470-471 |

Anyone not planning on returning next semester must check out of their lab drawer by the end of the last week of classes. Failure to do so will result in a $20 checkout fee being charged to you.