

**CHMY 322  
FALL 2009**

**INSTRUCTOR:** Dr. Rhonda Dillman

**OFFICE:** Sci 245

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**OFFICE HRS:** 10:30 am-12:00 noon MWF or by appt

**MATERIALS:**

1. Lab text: "Macroscale and Microscale Organic Exps." 5<sup>th</sup> ed. by Williamson/Minard/Masters
2. **SAFETY GLASSES!!** These are mandatory-you will not be allowed in lab without them.
3. black composition notebook with graph paper pages
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 quiz given at the beginning of each experiment. Questions will come from readings assigned for each experiment. Each quiz will be worth 25 points and contain all short answer/essay type questions.
3. The grading scale will be as follows:  
A 90-100  
B 80-89  
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.**

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LAB SCHEDULE**

<b>DATE</b>	<b>EXPERIMENT</b>
SEPT 15	CHECK IN, SAFETY, NOTEBOOKS
SEPT 22	CH 4 –RECRYSTALLIZATION (Read pgs 61-79;85-87) Exp 5 - pg 83 Exp 7 – pg 85 CH 3 – MELTING POINTS (Read pgs 38-51) Exp 2 – pgs 52-53 Exp 4 – pg 53
SEPT 29	CH 3 – BOILING POINTS (Read pgs 54-56) CH 5 – DISTILLATIONS (Read pgs 88-94) Exp 1A – pg 96 Exp 2A – pg 98
OCT 6, OCT 13 OCT 20, OCT 27	CH 7 – EXTRACTIONS (Read pgs 135-145; 147-150) Exp – partition coefficient of benzoic acid pgs 145-146 Exp 3 – pgs 154-155 Exp 6 – pgs 162-165 (macroscale ½ scale) Exp 9 – pgs 169-170
NOV 3	CH 8 – THIN LAYER CHROMATOGRAPHY (Read pgs. 172-183) Exp 1 – pgs 183-185
NOV 10, NOV 17	CH 6 - STEAM DISTILLATION (Read pgs 105-108) Exp 5 – pgs 115-118
NOV 24, DEC 1	EXTRACTION OF CHOLESTEROL FROM HUMAN GALLSTONES – handout CH 20 – BROMINATION/DEBROMINATION: PURIFICATION OF CHOLESTEROL (Read pgs 358-360) Exp. 2 – pgs 361-362 half scale Exp. 4 – pg 363 half scale
DEC 8	CH 11 – INFRARED SPECTROSCOPY – read entire chapter

Anyone not planning on returning next semester must check out of his or her 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.