Chemistry 236 Syllabus Organic Chemistry II Laboratory Spring 2016

TEXT: Laboratory Experiments for Organic Chemistry, WVU Faculty. Available Online at: http://community.wvu.edu/~josbour1/pages/Chem236.html

COREQUISITE: You must be enrolled in Chemistry 234 at the same time as Chemistry 236.

GENERAL INSTRUCTIONS:

- <u>Safety and Laboratory Rules:</u> Before any laboratory work is permitted, you must read the WVU "Safety and Laboratory Rules for Organic Chemistry" and then sign a statement that you will abide by these rules.
- <u>Clothing:</u> NOTE: SAFETY GOGGLES AND LABORATORY APRONS ARE REQUIRED FOR ORGANIC CHEMISTRY LABORATORIES. They can be purchased at the University Bookstore. Proper lab attire is the equivalent of a T-Shirt, Pants that cover from the waist to the ankles, and shoes that cover the entire foot. Tank tops, muscle shirts, spaghetti strap tops, tube tops, backless shirts, are all on the UNACCEPTABLE list. Slip on shoes that cover the tops of their feet but leave the heel area exposed are also UNACCEPTABLE.
- <u>Notebook:</u> Use a "Chemistry Spiral Bound Carbonless Copy Lab Notebook" for outlining your experiment each week. You can simply continue with the notebook you started in Chem 235. You must record all of your pre-lab plans, experimental observations and results, conclusions, and answers to pre-lab and post-lab questions (found in the laboratory manual).
- <u>Attendance:</u> If you are forced to miss a laboratory period due to illness or an emergency, contact your instructor and teaching assistant. There are no makeup labs for Chemistry 236.
- Quiz: A quiz will be given each week at the beginning of the laboratory period, so be on time! Study the experiments before you come to the laboratory! You are expected to understand the principles of the experiment and to know what you are going to do before coming to the laboratory.
- <u>Final Exam:</u> The final exam will cover material from the first lab to the last lab. Missing the final exam counts for zero.
- Your Teaching Assistant is in charge of your laboratory section. Follow instructions made by your TA concerning lab safety, keeping the lab clean, procedures, handing in assignments, etc. Do not be hesitant about asking your TA questions-- he/she is there to help you. Failure to heed the instructions of your TA will result in a lower TA subjective grade.

Fill in your TAs contact information incase you need to get in touch with him or her.

Lab TA:			
Email:	 	 	
Office:			

Schedule of Experiments Spring 2016

	Scheduled Date							
Week	Tuesday	Thursday	Friday	Expt.	Subject			
	Sections	Sections	Section					
1	1/12/16	1/14/16	1/16/16		Check-In			
					Laboratory Safety Discussion			
2	1/19/16	1/21/16	1/22/16	10	Infrared Spectroscopy			
3	1/26/16	1/28/16	1/29/16	11	NMR Spectroscopy			
4	2/2/16	2/4/16	2/5/16		Relative Reactivities of Aromatic			
					Compounds			
5	2/9/16	2/11/16	2/12/16		Arene Diazonium Ion Reactions			
6	2/16/16	2/18/16	2/19/16		The Grignard Reaction			
7	2/23/16	2/25/16	2/26/16		Synthesis of an analgesic: Aspirin and			
					Acetaminophen			
8	3/1/16	3/3/16	3/4/16		Fischer Esterification			
9	3/8/16	3/10/16	3/11/16		Wittig Reaction			
10	3/15/16	3/17/16	3/18/16		Solvent Free Reductive Amination			
Spring Break – No Lab								
11	3/29/16	3/31/16	4/1/16		Aldol Condensation			
12	4/5/16	4/7/16	4/8/16	36,37	Qualitative Organic Analysis			
13	4/12/16	4/14/16	4/16/16	36,37	Qualitative Organic Analysis			
14	4/19/16	4/21/16	4/22/16		TA Evaluations, Lab Final, and			
					Checkout			

^{*}Please note that new experiments are currently being investigated and incorporated into the Chem 236 lab course. The list of experiments above is subject to change during the course of the semester.

See $\frac{\text{http://community.wvu.edu/}\sim josbour1/pages/Chem236.html}{\text{pages/Chem236.html}}$ for the most up-to-date list of experiments.

Grade Calculation

Notebook (pre-lab questions, experimental write-up, calculation, etc.)		
Experimental Results (data sheets are provided in the back of your lab manual)		
Quizzes	20%	
Lab Final Exam	20%	
TA Subjective Grade (neatness, attitude, etc.)	10%	