Chemistry 236 Syllabus Organic Chemistry II Laboratory West Virginia University Fall 2019

TEXT: Laboratory Experiments for Organic Chemistry by WVU Faculty. Available through WVU eCampus.

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 must record all of your pre-lab plans, experimental observations and results, conclusions, and answers to pre-lab and post-lab questions. You may continue to use the notebook you started in Chem 235 if you wish.
- <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: Periodic quizzes (see lab schedule) will be given at the start of the lab period. A given quiz will cover the experiments performed since the previous quiz as well as the experiment that you are performing that day. There are no makeup quizzes.
- <u>Final Exam:</u> The laboratory final exam will cover material from the first lab to the last lab. Study your old quizzes and the pre- and post-lab questions to help prepare for the lab final. There is no makeup lab final exam and missing the final exam counts as a grade of 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 in case you need to get i	n touch with him or her.
TA:	
Email:	-

Mailbox: Clark 217

Schedule of Experiments Fall 2019 Section 002 (Monday Section)

Week	Date	Expt.	Topic	Quiz
1	Aug 19	-	No Lab	
2	Aug 26	-	Check-In Laboratory Safety Discussion	
3	Sept 2	1	Labor Day – No Lab	
4	Sept 9	14	The Diels-Alder Reaction	
5	Sept 16	15	Synthesis of a Polymer: Nylon-6,6	Quiz 1
6	Sept 23	16	Electrophilic Aromatic Substitution	
7	Sept 30	17	Aromatic Side Chain Oxidation	
8	Oct 7	18	Arene Diazonium Ion Reactions	Quiz 2
9	Oct 14	19	To Be Determined	
10	Oct 21	20	A Solvent Free Wittig Reaction	
11	Oct 28	21	Synthesis of an Analgesic: Aspirin	Quiz 3
12	Nov 4	22	The Fischer Esterification	
13	Nov 11	23	The Aldol Condensation	
14	Nov 18	24	Qualitative Organic Analysis	Quiz 4
	Nov 25	-	Fall Recess – No Lab	
15	Dec 2	-	Lab Final, and Checkout	
16	Dec 9	-	No Lab	

Grade Calculation				
Notebook and Experimental Results	60%			
Quizzes	15%			
Lab Final Exam	20%			
TA Subjective Grade (neatness, attitude, etc.)	5%			

Your TA is the authority when it comes to the due dates for experimental report sheets and experimental write-ups in your lab notebook. Lab work that is turned in late will be subject to a 10% (1-7 days late) or 25% (more than 7 days late) penalty.

Schedule of Experiments Fall 2019 Section 001 (Friday Section)

Week	Date	Expt.	Topic	Quiz
1	Aug 23	-	No Lab	
2	Aug 30	-	Check-In Laboratory Safety Discussion	
3	Sept 6	14	The Diels-Alder Reaction	
4	Sept 13	15	Synthesis of a Polymer: Nylon-6,6	Quiz 1
5	Sept 20	16	Electrophilic Aromatic Substitution	
6	Sept 27	17	Aromatic Side Chain Oxidation	
7	Oct 4	18	Arene Diazonium Ion Reactions	Quiz 2
8	Oct 11	-	Fall Break – No Lab	
9	Oct 18	19	To Be Determined	
10	Oct 25	20	A Solvent Free Wittig Reaction	
11	Nov 1	21	Synthesis of an Analgesic: Aspirin	Quiz 3
12	Nov 8	22	The Fischer Esterification	
13	Nov 15	23	The Aldol Condensation	
14	Nov 22	24	Qualitative Organic Analysis	Quiz 4
	Nov 29	-	Fall Recess – No Lab	
15	Dec 6	-	Lab Final, and Checkout	

Grade Calculation				
Notebook and Experimental Results	50%			
Quizzes	20%			
Lab Final Exam	20%			
TA Subjective Grade (neatness, attitude, etc.)	10%			

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