## **CHEM 312 - ORGANIC CHEMISTRY LABORATORY - Spring 2020**

<u>WEEK</u>	DATE	EXPERIMENT NUMBER AND TITLE		
1	Mar 30 – Apr 3 ( <b>NOTE 1</b> )	#1 Structure and Isomerism – Model Exercise		
2	Apr 6 – Apr 10	#2 2A - TLC; 2B - Functional groups; 2C - Solubility		
3	Apr 13 – Apr 17	#9 Column Chromatography		
4	Apr 20 – Apr 24	#3 3A - Steam Distillation; 3B - Solubility (Demo)		
5	Apr 27 – May 1	#4 4A - Extraction; 4B - Crystallization;		
6	May 4 – May 8	#5 Stereochemistry – Model Exercise		
7	May 11 – May 15	#6 6A - Polymers; 6B - Polymers (Demo)		
8	May 18 – May 22	#7 Synthesis and Color		
9	May 25 – May 29 ( <b>NOTE 2</b> )	#8 Esters – Soap & Biodiesel		
10	June 1 – June 5	#10 Clean up / Check out / Pick-up Soap		

Note 1: Cesar Chavez day is Tuesday March 31<sup>st</sup>, no labs held. Note 2: Memorial Day is Monday May 25<sup>th</sup>, no labs held.

MATERIALS	Laboratory Manual <u>Organic Chemistry Experiments</u> - Available at El Corral Bookstore.				
SAFETY EQUIPMENT !ABSOLUTELY REQUIRED!	<ol> <li>Wear safety goggles of ANSI rating Z87.1 or better (provided in lab). These must be worn when any experimental work is being performed in lab by anyone. Personal correctional lenses are not sufficient.</li> <li>Wear a lab coat (provided in lab) during all experiments.</li> <li>Wear closed top, hard soled footwear and pants to lab. Sandals, flats, or ballet shoes are not permitted.</li> <li>Chemical resistant gloves must be worn whenever you are handling hazardous chemicals in the lab; gloves will be supplied in lab, but you are welcome to bring your own neoprene gloves.</li> </ol>				
GRADING	<ol> <li>Laboratory work should be done individually; do not work in groups unless indicated by instructor. The laboratory grade will be based primarily on the results of experiments and written quizzes with consideration given to technique.</li> <li>The laboratory grade will count a maximum of 20% of your Chemistry 312 course grade, to be determined by your lecture instructor. In order to ensure fairness, each lab instructor will maintain a lab section average of 75-80%.</li> <li>A lab grade less than 60% will result in a grade of "F" for the course. In other words, you must pass the lab in order to pass the course.</li> </ol>				
MISSED LABS !DAMAGE CONTROL!	<ol> <li>THE MOST COMMON REASON FOR A FAILING GRADE IN LAB IS MISSING LABS WITHOUT ATTEMPTING TO MAKE UP THE MISSED WORK. Contact your lab instructor before the end of the lab that you are missing (phone call, email, etc.)!</li> <li>It is the student's responsibility to make up any labs missed because of absence and to find out about any assignments or lab quizzes before the next lab meeting. It is best to make up the lab as quickly as possible, preferably in a lab section doing the same experiment. Instructor verification of made-up labs is required.</li> </ol>				

## **Weekly View**

	Monday	Tuesday	Wednesday	Thursday	Friday	
Week 1: Mar 30 – Apr 3	Expt 1: Molecular Structures	Cesar Chavez Day NO LAB	Expt 1: Molecular Structures	Expt 1: Molecular Structures	Expt 1: Molecular Structures	
Week 2: Apr 6 – Apr 10	Expt 2: TLC & Functional Groups	Expt 1: Molecular Structures	Expt 2: TLC & Functional Groups	Expt 2: TLC & Functional Groups	Expt 2: TLC & Functional Groups	
Week 3: Apr 13 – Apr 17	Expt 9: Column Chromatography	Expt 2: TLC & Functional Groups	Expt 9: Column Chromatography	Expt 9: Column Chromatography	Expt 9: Column Chromatography	
Week 4: Apr 20 – Apr 24	Expt 3: Steam Distillation	Expt 3: Steam Distillation	Expt 3: Steam Distillation	Expt 3: Steam Distillation	Expt 3: Steam Distillation	
<b>Week 5:</b> Apr 27 – May 1	Expt 4: Extraction & Recrystallization	Expt 4: Extraction & Recrystallization	Expt 4: Extraction & Recrystallization	Expt 4: Extraction & Recrystallization	Expt 4: Extraction & Recrystallization	
<b>Week 6:</b> May 4 – May 8	Expt 5: Stereochemistry	Expt 5: Stereochemistry	Expt 5: Stereochemistry	Expt 5: Stereochemistry	Expt 5: Stereochemistry	
Week 7: May 11 – May 15	Expt 6: Polymers	Expt 6: Polymers	Expt 6: Polymers	Expt 6: Polymers	Expt 6: Polymers	
Week 8: May 18 – May 22	Expt 7: Synthesis & Color  Expt 8: Soap (Optional)	Expt 7: Synthesis & Color				
Week 9: May 25 – May 29	Memorial Day NO LAB	Expt 8: Soap & Biodiesel				
<b>Week 10:</b> June 1 – June 5	Clean-up & Check out					