

**Organic Chemistry II Laboratory, CHM 3150L**  
**RE-REVISED Schedule of Experiments – Fall 2022 (Starkey)**

Week	Date	Experiment	Student Reading (section number)	Safety Captain
1	8/31	Check-In, Safety Rules, & Notebook Review NMR Spectroscopy	Gilbert/Martin 8.3 (NMR pgs. 258-293) Klein Ch. 14 (IR) and Ch. 15 (NMR)	
2	9/7	Mass Spectrometry	Gilbert/Martin pgs. 301-308	
3	9/14	Reductive Amination of <i>ortho</i> -Vanillin <i>See Handout</i>	Gilbert/Martin Review: Filtration Techniques (section 2.17)	Group #1
4	9/21	Grignard Reaction <b>Miniscale pg. 719-721, 728</b>	Gilbert/Martin Review: Heating Methods & Reflux (2.9), Filtration Techniques (2.17), Extraction (2.21), Drying Agents (2.24)	Group #2
5	9/28	Grignard Reaction (cont'd): triphenylmethanol isolation/purification		Group #3
6	10/5	Esterification: using unknown alcohol <i>See Handout</i>		Group #4
7	10/12	Lidocaine Part B: Synthesis of alpha-chloro-2,6-dimethacetanilide <b>Miniscale pg. 846</b>	Gilbert/Martin Synthesis of an Anesthetic Agent 839-843	Group #5
8	10/19	Lidocaine Part C: Addition of diethylamine <b>Miniscale pg. 847 -848</b>	“ See Fig. 2.66a for Reflux Apparatus Review “Extract 3x with Ether” module	Group #6
9	10/26	Lidocaine (cont'd): workup, column chromatography and characterization	“	
10	11/2	Hand Cream Formulation/ Surfactants	See Handout	
11	11/9	Aldol – Synthesis of Dibenzalacetone <b>‘Discovery’ (0.05 mol benzaldehyde, 0.025 mol acetone) p. 693</b>	Reaction of stabilized carbanions from carbonyl compounds pgs. 689-691	Group #7
12	11/16	Friedel-Crafts Acylation of Ferrocene <i>See Handout</i>	Gilbert/Martin Electrophilic Aromatic Substitution Reactions pgs. 499-500 Friedel-Crafts Acylation pgs. 511-513	Group #8
13	11/23	Thanksgiving Holiday (extended)		
14	11/30	Friedel-Crafts Acylation (cont'd) column chromatography		
15	12/7	<b>Check-Out &amp; Final Quiz</b>		