

Organic Chemistry II Laboratory, CHM 3150L
Tentative Schedule of Experiments – Fall 2024 (Starkey)

Week	Date	Experiment	Student Reading (section number)	Safety Captain
1	8/28	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	9/4	Reductive Amination of <i>ortho</i> -Vanillin See Handout	Gilbert/Martin Review: Filtration Techniques (section 2.17)	Group #1
3	9/11	Grignard Reaction Miniscale pg. 719-721, 728	Gilbert/Martin Review: Heating Methods & Reflux (2.9)	Group #2
4	9/18	Grignard Reaction (cont'd): triphenylmethanol isolation/purification	Gilbert/Martin Review: Filtration Techniques (2.17), Extraction (2.21), Drying Agents (2.24)	Group #3
5	9/25	Esterification: using unknown alcohol See Handout		Group #4
6	10/2	Lidocaine: Synthesis of 2,6-dimethylaniline Miniscale pg. 844	Gilbert/Martin Synthesis of an Anesthetic Agent pg. 839-843	Group #5
7	10/9	Lidocaine (cont'd): Synthesis of alpha-chloro-2,6-dimethylacetanilide Miniscale pg. 846	“	Group #6
8	10/16	Lidocaine (cont'd): Addition of diethylamine Miniscale pg. 847 -848	Gilbert/Martin Review: Acid/Base Extraction (5.3)	Group #7
9	10/23	Lidocaine (cont'd): column chromatography and characterization Mass Spectrometry	Gilbert/Martin (8.5) Mass Spectrometry pgs. 301-308	
10	10/31	Hand Cream Formulation/ Surfactants See Handout	See Handout	
11	11/6	Aldol–Synthesis of Dibenzalacetone ‘Discovery’ (0.05 mol benzaldehyde, 0.025 mol acetone) p. 693	Gilbert/Martin: Recrystallization (3.2) Reaction of stabilized carbanions from carbonyl compounds pgs. 689-691	Group #8
12	11/13	Friedel-Crafts Acylation of Ferrocene See Handout	Gilbert/Martin Electrophilic Aromatic Substitution Reactions pgs. 499-500 Friedel-Crafts Acylation pgs. 511-513	Group #9
13	11/20	Friedel-Crafts Acylation (cont'd) column chromatography See Handout	Gilbert/Martin Review: Column Chromatography (6.3)	Group #10
14	11/27	No lab – Thanksgiving Holiday		
15	12/7	Check-Out & Final Quiz		