

Organic Chemistry II Laboratory, CHM 3150L
Tentative Schedule of Experiments – Fall 2025 (Starkey)

Week	Date (Mon)	Experiment	Student Reading (section number)	Safety Captain
1	8/25	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	9/1	LABOR DAY HOLIDAY		
3	9/8	Reductive Amination of <i>ortho</i> -Vanillin <i>See Handout</i>	Gilbert/Martin Review: Filtration Techniques (section 2.17)	Group #1
4	9/15	Grignard Reaction Miniscale, pages 719-721, 728	Gilbert/Martin Review: Heating Methods & Reflux (2.9)	Group #2
5	9/22	Grignard Reaction (cont'd): triphenylmethanol isolation/purification	Gilbert/Martin Review: Filtration Techniques (2.17), Extraction (2.21), Drying Agents (2.24)	Group #3
6	9/29	Esterification: using unknown alcohol <i>See Handout</i>		Group #4
7	10/6	Lidocaine – Synthesis of alpha-chloro-2,6-dimethylacetanilide Miniscale pg. 846	Gilbert/Martin Synthesis of an Anesthetic Agent pg. 839-843	Group #5
8	10/13	Lidocaine (cont'd): Addition of diethylamine Miniscale pg. 847 -848	Gilbert/Martin Review: Acid/Base Extraction (5.3)	Group #6
9	10/20	Lidocaine (cont'd): column chromatography and characterization Mass Spectrometry	Gilbert/Martin (8.5) Mass Spectrometry pgs. 301-308	Group #7
10	10/27	Hand Cream Formulation/ Surfactants <i>See Handout</i>	See Handout	
11	11/3	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	11/10	Aldol Condensation (cont'd)	Gas Chromatography Theory	
13	11/17	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 #9
14	11/24	Friedel-Crafts Acylation (cont'd) column chromatography <i>See Handout</i>	Gilbert/Martin Review: Column Chromatography (6.3)	Group #10
15	12/1	Check-Out & Final Quiz		