

CHEM 233: ORGANIC LAB SCHEDULE

Week of	Experiment	Location in text (suggested questions)	Data Set Due
9/1	<i>ACS Standardized Exam, Check-In, Distillation Intro</i>		
9/8	<i>Experiment [3B] Fractional Distillation</i> Methods: Distillation, Refractive Index (RI), & Gas Chromatography (GC) Changes: Scale = 2x	Mayo pp. 17 – 23, 115 – 117 (12, 14, 17, 20) Zubrick Chs. 1, 5, 7, 11, 21, 27, 30, 32	9/22
9/15 & 9/22	<i>Experiment [4C] Solvent Extraction</i> Methods: Liquid-Liquid Extraction & Melting Point (mp) Changes: Scale = 2x	Mayo pp. 129 – 132 (21, 22, 23, 25) Zubrick Chs. 7, 10, 12, 15, 16	10/13
9/29	<i>Experiment [11A] Isolation and Characterization of Usnic Acid</i> Methods: Recrystallization, Melting Point, IR Change: Scale = 2x, no specific rotation	Mayo pp. 199 – 204, 532 – 547 (66, 67, 68, 70) Zubrick Chs. 13, 14, 15, 34	10/20
10/13	<i>Experiment [9] E1 Elimination - Dehydration of 2-Butanol</i> Methods: Gas Trapping, ¹ H NMR Change: See handout	Mayo pp. 184 – 191, 554 – 573 (57, 58) Zubrick Chs. 35, Handout	10/27 (data set) 12/1 (report)
10/20 & 10/27	<i>Experiment [10] E2 Elimination - Dehydrohalogenation of 2-Bromobutane</i> Methods: Anhydrous Technique, Gas Trapping, ¹ H NMR Change: Scale = 5x Lab Report: Elimination Reactions – include Exp [9]	Mayo pp. 192 – 198 (60, 62, 64, 65) Zubrick Chs. 9, 35	11/10 (data set) 12/1 (report)
11/3 & 11/10	<i>Experiment [5B] cis- and trans-4-tert-Butylcyclohexanol</i> Methods: mp, IR, & ¹ H NMR Change: Scale = 4x	Mayo pp. 139 – 144 (28, 29, 30, 31, 33)	12/1
11/17	<i>Lab Report Workshop</i>	Combined reports for [9] and [10] due 12/1	
12/1 & 12/8	<i>Experiment [13] Hydroboration/Oxidation of an Alkene</i> Methods: Anhydrous Technique, Liquid-Liquid Extraction, Column Chromatography, ¹ H Change: NMR (no GC)	Mayo pp. 223 – 229 (87, 88, 89, 90)	Before 12/19, 4:30 pm

Notes: All questions are from Mayo, Chapter 6. You may find it useful to read relevant sections of Zubrick multiple times.