

Week	Week of	Topics	New Techniques	Readings
	16-Jan	Fri introduction		Chapter 2, 26.1, 26.4-26.7 Text NMR,IR
1	23-Jan	NMR theory & practice: Check in, safety lecture;. \$5 Exp 1: Spectroscopic Analysis of Unknown 1	Safety, Laboratory Notebook, NMR Sample Prep	Chapter 2, 26.1, 26.4- 26.7 Text NMR,IR
2	30-Jan	Exp 2: Regioselectivity in Metal Hydride Reduction	IR spectroscopy	Chapter 12, 20, 29, 26.10, 26.8
3	6-Feb	Exp 3: Electrophilic aromatic substitution: Analysis of mixtures	NMR Coupling Constants, Extraction & Drying Agents	Ch 18, 12, 22
4	13-Feb	Exp 4 Fragrance analysis-MS fragmentation	Gas chromatography-mass spectroscopy	Chapter 7,14
5	20-Feb	(no lab)	Writing labs 3 & 4	
6	27-Feb	Exp 5: Fisher Esterification	Simple Distillation	Chapter 9,11
7	5-Mar	Exp 6 Grignard reaction	Recrystallization, melting point Midterm Exam (Friday Mar 9)	
	12-Mar	Exp 7: Diels-Alder Library Project	SciFinder Scholar Computational Chem	Appendix D
8	19-Mar		Spring break	
9	26-Mar	Exp 8 Amino acid synthesis		Handout
10	2-Apr	Exp 9: Enzymatic resolution and capillary electrophoresis		Handout
11	9-Apr	Exp 10: Multi-step antibiotic synthesis week 1		Handout
12	16-Apr	Multi-step synthesis week 2		
13	23-Apr	Antibiotic testing		Handout
14	30-Apr	Check out		
15	7-May		Final Exam 1-3 PM Wednesday, May 9	