

Chemistry 360, Jasperse, Spring 2012 (43 class days)			Reading Assignment
Date	Topic		
1	9-Jan	Intro; Structure, Nomenclature, Properties, Weak Acidity of Alcohols	10.1-10.6
2	11-Jan	Synthesis of Alcohols; Organometallic Reactions.	10.7-10.9
3	13-Jan	Synthesis of Alcohols; Organometallic Reactions.	10.7-10.9
	16-Jan	No Class. Martin Luther King Day.	no class
4	18-Jan	Side Reactions; Reduction of Carbonyl Compounds	10.10-10.11
5	20-Jan	Oxidation of Alcohols	11.1-11.3
		Skip 10.12	
			Skip 11.4, 11.11-13
6	23-Jan	Conversion of Alcohols to Tosylates or Halides; Uses of Tosylates and Halides	11.5-11.9
7	25-Jan	Miscellaneous; Chemical Tests; Multistep Synthesis	11.10, 11.14
8	27-Jan	Retrosynthetic Analysis	
9	30-Jan	Catchup, Multistep Synthesis Problems	Catchup
10	1-Feb	Review for Test 1	---
11	3-Feb	¹ H NMR Overview: Chemical Shift, Integration, and Splitting; ¹ H NMR Problem Solving	13.5-8
12	6-Feb	¹ H NMR Overview: Chemical Shift, Integration, and Splitting; ¹ H NMR Problem Solving	13.5-8
13	8-Feb	Test #1 Covering Chapters 10-11.	Test 1
14	10-Feb	¹ H NMR Problem Solving	13.5-8
15	13-Feb	More Problem Solving; Complex Splitting; Stereochemical Nonequivalence of Protons	13.9-10
16	15-Feb	¹³ C NMR; Infrared Spectroscopy	13.12-13; 12.11-12
17	17-Feb	Spectroscopy Catchup, Integrated Problems	catchup
		(Focus on 13.5-8, 12-13; Skim 13.1-4, 9, 10; Skip 11, 14)	
18	20-Feb	Ketones/Aldehydes. Nomenclature, Properties, Intro.	18.1-7
19	22-Feb	Test #2 Covering Chapters 12-13. 50 points.	Test 2
20	24-Feb	Synthesis of Ketones/Aldehydes.	18.7-11
21	27-Feb	Reactions of Ketones/Aldehydes	18.12, 14-17, 18-19
22	29-Feb	Reactions of Ketones/Aldehydes	18.20-21
23	2-Mar	Catchup; Enols and Enolates Intro. Acid/Base Considerations; Proton as Electrophile	22.1-2, 22.15
		(Skip 18.13, for now....)	
24	5-Mar	Enols and Enolates Intro. Acid/Base Considerations; Proton as Electrophile	22.1-2, 22.15
25	7-Mar	Halogenation; Alkylation; Double Activation; Ester Hydrolysis; Decarboxylation	22.3, 5, 15-17
26	9-Mar	The Aldol Reaction (Aldehyde/Ketone as Electrophile)	22.7-11
	12-Mar	Spring Break	
	14-Mar	Spring Break	
	16-Mar	Spring Break	
		(Skip 22.4,6. 18, 19)	
27	19-Mar	Claisen Reaction (Ester as Electrophile)	22.12-17
28	21-Mar	Catchup	
29	23-Mar	The Wittig Reaction and Alkene Synthesis; Catchup	18.13
30	26-Mar	Catchup, Integrated Practice Problems.	Catchup
31	28-Mar	Amines. Intro, Nomenclature, Properties; Basicity of Amines; Structural Factors; Salts	19.1-7
32	30-Mar	Test #3 Covering Chapters 18 and 22.	
33	2-Apr	Reactions of Amines	19.10-13, 17-18
34	4-Apr	Diazonium Chemistry; Amine Synthesis by Reductive Amination of Carbonyls	19.17-19
	6-Apr	No Class, Easter Friday	
		(Skip 19.8-9,14-16,24-25)	
	9-Apr	No Class, Easter Monday	
35	11-Apr	More Synthesis of Amines	19.19
36	13-Apr	Carboxylic Acids: Nomenclature; Properties; *ACIDITY*; Salts; Soap; SYNTHESIS	20.1-5
37	16-Apr	Acid Synthesis; Reactions	20.8-11
38	18-Apr	Reactions of Acids: Nucleophilic Acyl Substitution; Carboxylic Acid Derivatives	20.13-15; 21.1-3
39	20-Apr	Interconversions Among Acids and Derivatives; Synthesis and Mechanism; Catchup (Skip 20.6,7,12)	21.5-7
40	23-Apr	Interconversions Among Acids and Derivatives; Synthesis and Mechanism; Catchup	21.5-7
41	25-Apr	Practice Problems	-
42	27-Apr	Test #4 Chapters 19-21	Test 4
		(Skip 21.4)	
43	30-Apr	Significant Special Topics; Preview of ACS Final Exam; Course Evaluations	Practice
	7-May	Final Exam, 12 noon., Monday	Final Exam