

Chemistry 360, Jasperse, Spring 2020 Wade 8 (43 class days, 39 lectures)			Reading Assignment
	Date	Topic	
1	13-Jan	Intro; Structure, Nomenclature, Properties, Weak Acidity of Alcohols	10.1-10.6
2	15-Jan	Synthesis of Alcohols; Organometallic Reactions.	10.7-10.9
3	17-Jan	Synthesis of Alcohols; Organometallic Reactions.	10.7-10.9
		Skip 10.12	
	20-Jan	No Class. Martin Luther King Day.	no class
4	22-Jan	Side Reactions; Reduction of Carbonyl Compounds	10.10-10.11
5	24-Jan	Oxidation of Alcohols	11.1-11.3
		Skip 11.4, 11.11-13	
6	27-Jan	Conversion of Alcohols to Tosylates or Halides; Uses of Tosylates and Halides	11.5-11.9
7	29-Jan	Miscellaneous; Chemical Tests; Multistep Synthesis	11.10, 11.14
8	31-Jan	Retrosynthetic Analysis	
9	3-Feb	Catchup, Multistep Synthesis Problems	Catchup
10	5-Feb	Review for Test 1	---
11	7-Feb	¹ H NMR Overview: Chemical Shift, Integration, and Splitting; ¹ H NMR Problem Solving	13.5-8
12	10-Feb	¹ H NMR Overview: Chemical Shift, Integration, and Splitting; ¹ H NMR Problem Solving	13.5-8
T1	12-Feb	Test #1 Covering Chapters 10-11.	Test 1
13	14-Feb	¹ H NMR Problem Solving	13.5-8
14	17-Feb	More Problem Solving; Complex Splitting; Stereochemical Nonequivalence of Protons	13.9-10
15	19-Feb	¹³ C NMR; Infrared Spectroscopy	13.12-13; 12.11-12
16	21-Feb	Spectroscopy Catchup, Integrated Problems	catchup
		(Focus on 13.5-8, 12-13; Skim 13.1-4, 9, 10; Skip 11, 14)	
17	24-Feb	Ketones/Aldehydes. Nomenclature, Properties, Intro.	18.1-7
T2	26-Feb	Test #2 Covering Chapters 12-13. 50 points.	Test 2
18	28-Feb	Synthesis of Ketones/Aldehydes.	18.7-11
	2-Mar	Reactions of Ketones/Aldehydes	18.12, 14-17, 18-19
	4-Mar	Reactions of Ketones/Aldehydes	18.20-21
	6-Mar	Catchup; Enols and Enolates Intro. Acid/Base Considerations; Proton as Electrophile	22.1-2, 22.15
		(Skip 18.13, for now....)	
19	9-Mar	No Class, Spring Break	
20	11-Mar	No Class, Spring Break	
21	13-Mar	No Class, Spring Break	
22	16-Mar	Enols and Enolates Intro. Acid/Base Considerations; Proton as Electrophile	22.1-2, 22.15
23	18-Mar	Halogenation; Alkylation; Double Activation; Ester Hydrolysis; Decarboxylation	22.3, 5, 15-17
24	20-Mar	The Aldol Reaction (Aldehyde/Ketone as Electrophile)	22.7-11
		(Skip 22.4, 6, 18, 19)	
25	23-Mar	Claisen Reaction (Ester as Electrophile)	22.12-17
26	25-Mar	Catchup	
27	27-Mar	The Wittig Reaction and Alkene Synthesis; Catchup	18.13
28	30-Mar	Catchup, Integrated Practice Problems.	Catchup
29	1-Apr	Amines. Intro, Nomenclature, Properties; Basicity of Amines; Structural Factors; Salts	19.1-7
T3	3-Apr	Test #3 Covering Chapters 18 and 22.	
30	6-Apr	Reactions of Amines	19.10-13, 17-18
31	8-Apr	Diazonium Chemistry; Amine Synthesis by Reductive Amination of Carbonyls	19.17-19
	10-Apr	No Class, Easter Friday	
	13-Apr	No Class, Easter Monday	20.8-11
32	15-Apr	More Synthesis of Amines	19.19
33	17-Apr	Carboxylic Acids: Nomenclature; Properties; *ACIDITY*; Salts; Soap; SYNTHESIS	20.1-5
		(Skip 19.8-9, 14-16, 24-25)	
34	20-Apr	Acid Synthesis; Reactions	20.8-11
35	22-Apr	Reactions of Acids: Nucleophilic Acyl Substitution; Carboxylic Acid Derivatives	20.13-15; 21.1-3
36	24-Apr	Interconversions Among Acids and Derivatives; Synthesis and Mechanism; Catchup	21.5-7
		(Skip 20.6, 7, 12; Skip 21.4))	
37	27-Apr	Interconversions Among Acids and Derivatives; Synthesis and Mechanism; Catchup	21.5-7
38	29-Apr	Practice Problems	-
39	1-May	Catchup	
T4	4-May	Test #4 Chapters 19-21	Test 4
	12-May	Final Exam, 11:30am., Tuesday	Final Exam