

CHEMISTRY 360 PROBLEMS, Assuming McMurry Volume 6

<u>Chapter</u>	<u>Recommended Book Problems</u>
14	2, 3, 5-9, 20, 23, 25, 27 (major), 33, 34 (ignore stereo of phenyl group), 35, 37 (predict major), 38, 40
15	1, 2a,c,d, 3, 8, 9, 18b-d,f, 19c-e, g, 38a
16	1, 6, 9, 10, 13, 15, 23, 24b, 28, 29a,c-f, 30a,b, 31, 32a,c,d, 33b-d, 34 (just rank), 36, 45, 47-49, 50d, 51b,d, 52a, 53a
13	3, 6 (assume decoupled C-13 spectra for all C-13 problems), 7, 14, 16a-e, 17, 19, 21, 32, 37, 39-43, 49-51, 53, 55-57
12	10a,c, 11a,c
19	1a,b,f-h, 2a,b,e,f, 3a,b, 4, 5, 10 (ethylamine part), 11, 14, 28a, c-I, 30a, c-e, 32a-e,h, 36, 38, 39
22	1, 7a-c, 11, 14, 17a,c,f, 21, 22, 23a,b, 24a,b,d, 25, 28, 29, 30a-c, 37
23	1, 3, 5, 8, 11, 14, 28a-c, 29, 35, 37, 39 (major)
24	2, 4, 5 (stronger), 6, 7, 10, 18c, 25, 26, 27a-d, 31a-c, 36a-c,e,f
20	1a-d, 2a,b,d, 3, 5, 8, 9a,c, 10, 11, 20b,d,f,g, 21a-d, 23b,c, 24a,c, 25a-c, 26, 36, 40a-c
21	1c,f, 2a, 3, 4, 6, 10, 12, 13, 15, 16, 32d,g, 33d, 36a,c-e,g,h, 37-39 (parts e-g for each)

Chemistry 360, Jasperse, Assuming McMurry Volume 6	Reading Assignment
Topic	
No Class	
Intro; Conjugation, Molecular Orbitals, Dienes, Allylic Cations, Additions to Dienes	14.1-4
More allylic cations/radicals/conjugation and Applications; Diels-Alder Reaction	14.3-6
Diels-Alder Reaction, Aromaticity	14.5-6
Aromaticity; Huckel's Rule, Complex Aromaticity, Application, Nomenclature	15.2-9
Skip: 14.7-11	
Electrophilic Aromatic Substitution: Intro, Mechanisms	16.1-6
Reactions in Detail: Halogenation, Nitration, Sulfonation, Alkylation, Acylation	16.1-6
Catchup; Addition to Disubstituted Benzenes; Synthetic Applications	16.7,10-12
Synthetic Applications; Practice	Practice
1H NMR Overview: Chemical Shift, Integration, and Splitting; 1H NMR Problem Solving	13.1-3, 8-11
1H NMR Problem Solving	13.8-11
Skip 10.12	
1H NMR Problem Solving	13.8-11
13C NMR	13.4-5
Infrared Spectroscopy	12.7,9
Integrated Practice Problems	Practice
1H NMR Overview: Chemical Shift, Integration, and Splitting; 1H NMR Problem Solving	13.1-3, 8-11
1H NMR Problem Solving	13.8-11
Ketones/Aldehydes. Nomenclature, Properties, Intro, Synthesis	19.1-2
No Class	
Synthesis and Reactions of Ketones/Aldehydes.	19.2, 4-8
Test #2 Covering Chapters 17 and 10.	Test 2
Reactions of Ketones/Aldehydes	19.4-11
Reactions of Ketones/Aldehydes	19.4-11, 2
Enols and Enolates Intro. Acid/Base Considerations; Proton as Electrophile	22.1, 5-6
Skip: 19.12-16	
Halogenation; Alkylation; Ester Hydrolysis; Decarboxylation	22.5,8
The Aldol Reaction (Aldehyde/Ketone as Electrophile)	23.1-7
Claisen Reaction (Ester as Electrophile);	23.8-10
The Wittig Reaction; Catchup.	19.12
Catchup, Integrated Practice Problems.	Catchup
Skip: 22.4, 23.11-14	
Amines, Nomenclature, Properties, Basicity	24.1-5
Amines, Basicity	24.4-5
Test #3 Covering Chapters 19, 22, and 23.	Test 3
Reactions of Amines	24.7-8
Synthesis of Amines	24.6
Skip: 24.9-10	
Carboxylic Acid Nomenclature and Acidity	20.1-8
Reactions and Synthesis of Acids	21.1-7
Interconversions Among Acids and Derivatives	21.1-7
Practice Problems	-
Test #4 Chapters 24, 20, 21	Test 4
Skip: 20:9-10, ch 21: 8-10	

