

CHEMISTRY 209, ELEMENTARY ORGANIC CHEMISTRY

FALL 2022

Syllabus

Textbooks: Hart et al "Organic Chemistry, A Short Course" 13th Edition, Cengage

Hart et al "Study Guide and Solutions Manual" accompanying the textbook

Lec	Dates ¹	Topic	Reading ²	Problems ³
0	8/22-9/5	Get Ready	Pp 1-13, xxv-xxviii	Gen Chem as needed
1	9/6	Drawing Structures (DS); Resonance(R)	Sec 1,9, 1.11-1.13, Canvas Files	DS; R on Canvas; In Chapter
2	9/8	Condensed Formulas (CF); Carbon Skeletons(CS); Orbitals (O); Classification	Sec 1.10, 1.14-1.16, Canvas Files	CF, CS, O on Canvas; In Chapter
3	9/13	Alkanes, Nomenclature	2.1-2.8	In Chapter 2.26, 27, 31, 35, 38
4	9/15	Conformations, Cycloalkanes	2.8-2.12	In Chapter 2.40, 42, 45, 46, 47, 54
5	9/20	Alkenes	3.1-3.10	In Chapter 3.33-35, 38-39
6	9/22	Quiz 1 Lec 1-4; Alkenes, Reactions	3.11-3.16	In Chapter 3.43,44, 50, 52, 53
7	9/27	Aromatic Compounds	4.1-4.7	In Chapter 4.20, 21,25,26
8	9/29	Aromatic Compounds Stereoisomerism	4.8-4.13 5.1-5.4	In Chapter 4.30a, 31,32, 44, 49
9	10/4	Stereoisomerism	5.5-5.12	In Chapter 5.27,31,33,36,39,44,54,58
10	10/6	Organic Halogen Cpd Pre-Exam Review	6.1-6.9	In Chapter 6.11, 17, 20, 26

	10/11	Exam I Lec. 1-9		
11	10/13	Alcohols, Phenols, Thiols	7.1-7.14, 7.17	In Chapter 7.26, 29, 36, 40, 42, 43, 47
12	10/18	Ethers, Epoxides	8.1-8.9	In Chapter 8.16, 19, 24, 29, 34, 37, 40
13	10/20	Aldehydes, Ketones	9.1-9.11	In Chapter 9.30-32, 41, 43, 45, 47
14	10/25	Aldehydes, Ketones	9.12-9.19	In Chapter 9.48-50, 53, 56, 57
15	10/27	Carboxylic Acids	10.1-10.7	In Chapter
16	11/1	Quiz 2 Lec 10-13 Carboxylic Acid Derivatives	10.8-10.17	In Chapter 10.37; 38; 42a,b,e; 43
17	11/3	Carboxylic Acid Derivatives	10.18-10.22	In Chapter 10. 44; 45; 49; 52; 55; 60; 61; 62
18	11/8	Amines	11.1-11.5	In Chapter 11.23-26
19	11/10	Amines	11.6-11.13	In Chapter 11. 27; 29, 33, 34, 40, 42, 43
20	11/15	Spectroscopy	12.1-12.3	In Chapter
21	11/17	Spectroscopy	12.4-12/6	In Chapter 12.19, 22, 28, 31, 34, 35, 37, 39, 48, 49
22	11/22	Heterocyclic Compounds Pre-Exam Review	13.1-13.7	In Chapter 13.11, 13-15, 17, 19, 22, 27
	11/29	Exam II Lec 10-19		
23	12/1	Carbohydrates	16.1-16.17	In Chapter 16.16, 23, 25, 30, 36, 37, 39, 42, 52
24	12/6	Proteins	17.1-17.10a, 17.13-17.15	In Chapter 17.24, 26, 28, 38, 51, 59-61.
25	12/8	Nucleic Acids	18.1-18.12	In Chapter 18.9, 11, 13-15, 19, 20, 27, 29, 32

	12/13	Review	Ch 1-13, 16-18	
	12/22 4- 7PM	Final Exam		

¹ These are the dates of the class connected to the listed lecture ² Pp and Sec refer to pages or sections in your textbook. Canvas refers to a folder in Files with the name of one of the topics of the lecture Read before and after listening to the lecture.

³ You should do all the in-text problems in the assigned reading sections and check your answers in the Solutions Manual **after** you make a serious attempt to solve the problem.

The same applies to the assigned End-of-Chapter problems in the book. Problems from Canvas start with the initials of their file followed by numbers. There will be an assignment for every chapter we cover. Each one will have a due date about a week after the lectures on the chapter. It is very likely that some of the homework problems will appear on quizzes and exams.