

CHEMISTRY 128 THE CHEMISTRY OF LIFE

FALL 2022

Syllabus

Textbook: General, Organic, and Biochemistry

James Armstrong, Second Edition

Lecture	Dates ¹	Topic	Reading ²	Problems ³
1	9/7	Measurement, Units	Pp 1-33, A1-A13	1.11, 15, 27,31,47,53, 83
2	9/12	Atoms, Electrons	Pp 35-49	2.3,11,17,23,25,89,91
3	9/14	Compounds, Moles	Pp 49-63	2.37, 49, 51, 63, 91,101
4	9/19	Covalent Compounds	Pp 64-79	3.5-6,17-18,23-26,78-79
5	9/21	Ionic Compounds	Pp 80-99	3.41-42,45-46,57-58, 63-64,85-86
6	9/26	States of Matter, Gases	Pp 105-127	4.39-44, 4.47,50,54.57-58,71-72,77,110, 118,121
7	9/28	Energy, Intermolecular Forces, Solutions	Pp 100-105, 127-138	4.9-10,29-30,78, 105
8	10/3	Concentration Quiz (35 min) Lectures 1-6 Pp A1-A13	Pp 141-159	5.7-8,15-16,21-24,29,89,94
9	10/5	Solution Properties	Pp 159-179	5.35,43,53,55,63,65,107
10	10/10	Reactions. Mass and Heat	Pp 181-200	6.3-4,12-16,21-22,31.37,76, 84
11	10/12	Kinetics, Equilibrium	Pp 200-207	6.43-45.49,53,55,87
12	10/17	Acids and Bases	Pp 208-245	7.7-8, 19-21,35,37,100, 7.41-44,51,53,55-56,75-76,100-101,111
13	10/19	Nuclear Chemistry	Pp 246-272	8.5,13,19,33,39.47,55,61,97,104
	10/24	Review		

	10/26	Exam I	Ch 1-7	
14	10/31	Intro to Organic	Pp 274-295	9.9,15,17,27, 29. 33, 37, 39, 113, 115
15	11/2	Organic	Pp 296-319	9.45, 55, 57, 67, 69, 73, 87, 118, 120, 121
16	11/7	Hydration, Alcohols,	Pp 320-352	10.3, 7, 9, 11,17, 27, 33, 41, 71, 73,76
17	11/9	Carbonyls, Redox	Pp 353-376	11.3, 11, 15, 22, 27, 33, 83,
18	11/14	Redox, Acids & Bases Quiz (35 min) Ch 8-10	Pp 377-388, 389-417	11.43, 49, 93. 12.11, 17, 27, 29, 39, 41, 83, 87
19	11/16	Condensation, Hydrolysis,	Pp 418-456	13.2, 8, 17, 27, 29, 41, 69, 71, 78, 95, 97
20	11/21	Proteins	Pp 458-493	14.3, 9, 11, 29, 43, 51, 69, 103, 117
	11/28	Review		
	11/30	Exam II	Ch 8-13	
21	12/5	Carbohydrates	Pp494-520	15.5, 15, 23, 37, 41, 43, 77, 87, 95
22	12/7	Lipids	Pp521-546	16.5, 7, 13, 27, 33, 49, 81, 91, 93
23	12/12	Nucleic Acids Heredity	Pp554-591	17.1, 3, 9, 15, 19, 29, 31, 41, 47, 57. 59, 63, 65, 73, 81, 87, 123, 137,139, 143
	12/14	Review		
	12/19 4-7PM	Final Exam		

¹ These are the dates of the class connected to the listed lecture; ²Read before and after the lecture; ³Core and Challenge Problems. Answers to the odd numbered problems can be found at the end of your textbook.