

CHEMISTRY 128 THE CHEMISTRY OF LIFE

FALL 2021

Syllabus

Textbook: General, Organic, and Biochemistry

James Armstrong, Second Edition

Lecture	Dates ¹	Topic	Reading ²	Problems ³
1	9/1	Measurement, Units	Pp 1-33, A1-A13	1.11, 15, 27,31,47,53, 83
2	9/8	Atoms, Electrons	Pp 35-49	2.3,11,17,23,25,89,91
3	9/13	Compounds, Moles	Pp 49-63	2.37, 49, 51, 63, 91,101
4	9/15	Covalent Compounds	Pp 64-79	3.5-6,17-18,23-26,78-79
5	9/20	Ionic Compounds	Pp 80-99	3.41-42,45-46,57-58, 63-64,85-86
6	9/22	Energy, States of Matter, Gases	Pp 100-117	4.9-10,29-30,39-44,105,110
7	9/27	Intermolecular Forces, Solutions	Pp 117-138	4.47,50,54.57-58,71-72,77-78,118,121
8	9/29	Concentration Quiz (35 min) Pp 1-117, A1-A13	Pp 141-159	5.7-8,15-16,21-24,29,89,94
9	10/4	Solution Properties	Pp 159-179	5.35,43,53,55,63,65,107
10	10/6	Reactions. Mass and Heat	Pp 181-200	6.3-4,12-16,21-22,31.37,76, 84
11	10/11	Kinetics, Equilibrium	Pp 200-207	6.43-45.49,53,55,87
12	10/13	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	10/18	Nuclear Chemistry	Pp 246-272	8.5,13,19,33,39.47,55,61,97,104
	10/20	Review		
	10/25	Exam I	Ch 1-7	

14	10/27	Intro to Organic	Pp 274-295	9.9,15,17,27, 29. 33, 37, 39, 113, 115
15	11/1	Organic	Pp 296-319	9.45, 55, 57, 67, 69, 73, 87, 118, 120, 121
16	11/3	Hydration, Alcohols,	Pp 320-352	10.3, 7, 9, 11,17, 27, 33, 41, 71, 73,76
17	11/8	Carbonyls, Redox	Pp 353-376	11.3, 11, 15, 22, 27, 33, 83,
18	11/10	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	11/15	Condensation, Hydrolysis,	Pp 418-456	13.2, 8, 17, 27, 29, 41, 69, 71, 78, 95, 97
20	11/17	Proteins	Pp 458-493	14.3, 9, 11, 29, 43, 51, 69, 103, 117
21	11/22	Carbohydrates	Pp494-520	15.5, 15, 23, 37, 41, 43, 77, 87, 95
	11/29	Review		
	12/1	Exam II	Ch 8-13	
22	12/6	Lipids	Pp521-546	16.5, 7, 13, 27, 33, 49, 81, 91, 93
23	12/8	Nucleic Acids Heredity	Pp554-590	17.1, 3, 9, 15, 19, 29, 31, 41, 47, 57. 59, 63, 65, 73, 81, 87, 123, 137,139, 143
	12/13	Review		
	TBD	Final Exam		

¹ These dates are the latest you should listen to the lecture the first time; ²Read before and after the lecture; ³Core and Challenge Problems. Answers will be posted in Canvas only to the odd numbered problems.