

General Chemistry II
Summer I, 2021

Lectures on-line on Monday, Tuesday, Wednesday, and Thursday, 9:00 am – 10:55 pm

Lecture	Day & Date	Topic	Book*	Suggested Problems
1	T 06/ 01	Types of solutions, concentrations, solubility, Henry's Law	13.1-13.5	Ch13:25,27,29,31,33,35,37,39,41,43, 45, 47,53,55,57,59,61,63,95
2	W 06/02	Raoul's Law, colligative properties, electrolytes	13.6-13.7	Ch13: 67,69,71,73,75,77,79,81, 83,85,87,89,91,93,110
3	Th 06/03	Rates of Reactions, method of initial rates	14.1-14.4	Ch 14: 27,29,33,35,39,41,43,45
4	M 06/07	Integrated rate Laws, temperature dependence of rate	14.5 -14.6	Ch14:47,49,51,53,55,57,59,61,63
5	T 06/08	Reaction mechanisms, catalysis	14.7-14.8	Ch 14: 75,76,77,78
6	W 06/09	Equilibrium, equilibrium calculations	15.1-15.6	Ch 15: 21,23,25,27,29,33, 37,39,41,43,47,49
7	Th 06/10	Approximation methods, Le Chatelier's Principle	15.7-15.9	Ch 15: 53,55,59,61,63,65,67,69,71
	M 06/14	Exam I	13.1-15.9	
8	T 06/15	Acids and bases	16.1-16.4	Ch16: 31,33,35,37,39,41,43,47
9	W 06/16	pH calculations	16.5-16.8	Ch16:49,51,53,55,57,59,61,63,65,67, 69,71,73,75,77,79,81,83,85,87,89
10	Th 06/17	Ions as acids and bases, pH of salt solutions	16.9	Ch16:97,99,101,103,105,107,109,111 , 143
11	M 06/21	Polyprotic acids, Lewis acids and bases	16.10-16.11	Ch 17: 113,115,117,119,121,123
12	T 06/22	Buffers	17.1-17.3	Ch 17: 25,27,29,31,37,39, 41,43,45
13	W 06/23	Titrations and titration curves, indicators	17.4	Ch17: 59,61,63,65,67,69, 71,73,75,79,81,119,121
14	Th 06/24	K _{sp} and solubility, common ion effect, selective precipitation.	17.5-17.6	Ch 18: 83,85,87,89,91,93, 95,97,99,101,103,105
	M 06/28	Exam II	16.1-17.6	
15	T 06/29	Thermodynamics, spontaneity, entropy	18.1-18.6	Ch 18:29,35,37,39,41,43,45,47,49, 51,53,55,57,59,61
16	W 06/30	Free energy, equilibrium, temperature dependence of K	18.7-18.9	Ch 18: 63,65,67,69,71,73,75,77,89
17	Th 07/01	Balancing redox equations	19.1-19.2	Ch19: 33,35,37,99,121
18	M 07/05	Voltaic cells, calculation equilibrium constant	19.3-19.5	Ch 19: 39,41,43,45,47,49,51,53, 55,57,59,61,63,65,67,69,71,73,75
19	T 07/06	Nernst equation, concentration cells, electrolysis, Faraday's Laws	19.6-19.9	Ch 19: 85,87,89,91,93,95,97,119
20	W 07/07	Nature of the nucleus, modes of decay	20.1-20.4	Ch 20: 15,17,21,23,25,26,73,81
	Th 07/08	Final Exam	14.1-20.4	

*Chemistry, Structures and Properties by Tro, Second edition.