CH302 COURSE OUTLINE

Lecture	Day	Date	Topic	Course packet Lecture number	Quizzes and Exams
Physical and Chemical Equilibria, Intro to Aqueous Equilibria					
1	T	1/20	Physical Equilibria—Vapor Pressure	1	
2	H	1/22	Phases and Phase Transitions	2	
3	T	1/27	Solubility	3	
4	H	1/29	Colligative Properties, Binary Mixtures	4	Quiz 1
5	T	2/3	Reactions at Equilibrium, Mass Action Law	5, 6	
6	H	2/5	Equilbrium and Stress, Van't Hoff Equation	6, 7	
7	T	2/10	Aqueous Equilibria: Water autoprotolysis	8	
8	H	2/12	Aqueous Equilibria: Solubility	9	Quiz 2
9	T	2/17	Aqueous Equilibria: Monoprotic acids and bases	10, 11	
	W	2/18	Exam 1		Lectures 1 - 9
Complex Aqueous Equilibria and Electrochemistry					
10	H	2/19	Buffers Systems and Neutralization	12	
11	T	2/24	Titrations	13	
12	H	2/26	A stepwise approach to pH calculations	14, 14addendum	
13	T	3/3	Solving Complex Equilibria: Dilute Species	15	
14	H	3/5	Polyprotic Acids	16	
15	T	3/10	Balancing Redox Reactions	17	
16	H	3/12	Electrochemical Cell Convention and Famous Batteries	17	Quiz 3
17	T	3/24	Standard Cell Potentials	17	
18	H	3/26	More advanced electrochemistry calculations	18	Quiz 4
19	T	3/31	Famous batteries	18 addendum	
	H	4/2	An overview of exam material Exam 2		
	H	4/2	Exam 2		Lectures 10 - 19
Kinetics, inorganic chemistry and organic chemistry					
20	T	4/7	Reaction rates	19	
21	H	4/9	Differential and Integrated Rate Laws	20, 20 addendum	
22	T	4/14	Kinetic Theory	21	
23	H	4/16	Reaction Mechanisms and Famous catalysts	21,22	Quiz 5
24	T	4/21	Famous Examples of Group I-IV Chemistry	23	
25	H	4/23	Famous Examples of Group V-VIII Chemistry	23	
26	T	4/28	Organic Chemistry-Hydrocarbons	24	
27	H	4/30	Organic Chemistry-Functional Groups	24	Quiz 6
28	T	5/5	Polymers and Biopolymers	25	
	H	5/7	Overview of material on Exam 3		
	H	5/7	Exam 3		Lectures 20-28