CHEM 1120 Lecture Schedule - Spring 2012

lec #	date	Lecture topics	Quiz* numbers
1	1/18	Strong and Weak Electrolytes, Spectator ions	1-10,11
2	1/23	Le Châtelier's principle, React;ion Quotient, General Equilibrium	12, 13-14, 15-21
3	1/25	pH strong acids, pH strong bases,Brønsted-Lowry acids and bases	22-23, 24-26, 27-29
4	1/30	pH of weak acids, pH weak bases, pH of acids and bases	30-31, 32-33, 34-37
5	2/1	pH of salts of weak acids or weak bases, pH of the end points of titrations.	38-41, 42-44
6	2/6	Polyprotic acids and amphoprotism	45-47
7	2/8	Test 1 -	
8	2/13	Arrhenius Reactions and pH	1-6
9	2/15	Slightly Soluble Salts type I, Slightly Soluble Salts type II	7-8, 9-12
10	2/20	pH insoluble hydroxides	13-18,
11	2/22	Complex Ions type I, Complex Ions type II	19-21, 22-24
12	2/27*	Acid Buffers, Polyprotic Acid Buffers, Base Buffers	25-28, 29-32,33-36
13	2/29*	Indicators	37-40
14	3/12	Test 2 -	
15	3/14	Zeroth Law and Heat Capacity, First Law, Enthalpy of Reaction, Enthalpy of Solution	1-4, 5-6, 7-12, 13-14
16	3/19	Heat across the Phase Diagram, Entropy of Reaction, Entropy of Solution	15-16, 17-20,21-22
17	3/21	Gibbs' Free Energy of Reaction, Gibbs' Free Energy of Solution, Equilibrium Constants	23-26, 27-28, 29-34
18	3/26	van't Hoff Equation and Plots, Extracting Thermodynamic Data from Experiments	35-38, 39-42
19	3/28	Academic Festival - quizzes due on 4/2	

20	4/2	Enthalpy of Reactions from Bond Energies	43-46
21	4/4	Test 3 -	
22	4/9	Cell diagrams, Faraday's Law	
23	4/11	Standard cell potentials, Nernst Equation - cell potentials	
24	4/16	Chemical kinetics - initial rate and integrated rate methods	
25	4/18	Activation energy, Arrhenius equation, Arrhenius plot	
26	4/23	Reaction Mechanisms	
27	4/25	Test 4 -	
28	4/30	Retake 4	

* Due date of quizzes are the next lecture time. See the Momentum schedule for any exceptions.