

Chemistry

Cornerstone Tutorial

The topical outline of the course:

Date	Week	Topic	Exams
9/12/2011	1	Measurements & significant figures; unit analysis & density	Module 1
9/19/2011	2	Heat, energy, temperature, specific heat	Module 2
9/26/2011	3	Conservation of mass, classification of matter	Module 3
10/3/2011	4	Writing formulas & naming compounds	Module 3
10/10/2011	5	Classifying matter; kinetic theory & phase change	Module 4
10/17/2011	6	Writing & balancing chemical equations	Module 4
10/24/2011	7	Types of reactions	Module 5
		<i>Mid-Semester grades issued</i>	
10/31/2011	8	Mole concepts & calculations	Module 5
11/7/2011	9	Stoichiometry; limiting reactants	Module 6
11/14/2011	10	% composition, empirical/molecular formulas	Module 6
11/28/2011	11	Atomic structure, isotopes, models of the atom,	Module 7
12/5/2011	12	Electron configuration	Module 7
12/12/2011	13	Periodic table & properties	Module 8
12/19/2011	14	Lewis structures of ionic & covalent compounds	Module 8
1/9/2012	15	Molecular geometry	Semester Exam
		<i>End of 1st Semester- grades issued</i>	
1/23/2012	16	Polar and nonpolar bonds	Module 9
1/30/2012	17	Acid/Base definitions & pH scale	Module 10
2/6/2012	18	Titration & normality	Module 10
2/13/2012	19	Solution; dissolving process	Module 11
2/27/2012	20	Solubility curves; solution concentration	Module 11
3/5/2012	21	Define pressure; begin gas laws	Module 12
		<i>Mid-semester grades issued</i>	
3/12/2012	22	Gas laws & gas stoichiometry	Module 12
3/19/2012	23	Enthalpy	Module 13
3/26/2012	24	Entropy, Gibbs free energy; energy diagrams	Module 13
4/2/2012	25	Reaction rates	Module 14
4/16/2012	26	Catalyst & factors that affect chemical reactions	Module 14
4/23/2012	27	Equilibrium, K_{eq} , K_{sp}	Module 15
4/30/2012	28	Le Chatlier's Principle	Module 15
5/7/2012	29	Redox reactions	Module 16
5/14/2012	30	Electrochemical reactions	Semester Exam
		<i>End of 2nd Semester-grades issued</i>	

*Mrs. Reid reserves the right to make changes to this and all other assignments in the syllabus presented. Currently the plan is to assign a project in the first quarter and another in the third quarter.