Week	Lecture	Date	ALEKS milestone	ACS Chemistry sections	Notes on General Chemistry/3e pages
For CH101 A3 (Tuesday and Thursday), topics for each Wednesday will be split across the Tuesday and Thursday lectures.					
1. Water: A Natural Wonder					
1	1	Wednesday, September 02, 2009		1.1 Phases of matter	App 1: Significant figures (all); App 2: Working with logarithms (all)
	2	Friday, September 04, 2009		1.2 Atromic models	1: Builidng blocks of matter, pp 1--10
2	3	Wednesday, September 09, 2009	1	1.3 Molecular models & 1.4 Lewis structures	4: Molecular models, Lewis structures, polarity, pp 101-110
	4	Friday, September 11, 2009		1.5 3D models & 1.6 polarity	
3	5	Monday, September 14, 2009	2	1.7, 1.8, 1.9 Hydrogen bonding	
	6	Wednesday, September 16, 2009		1.10, 1.11 Phase changes, molar amounts	
	7	Friday, September 18, 2009		1.12 Specific heat; 1.14 Viscosity	
2. Aqeuous Solutions and Solubility					
4	8	Monday, September 21, 2009	3	2.1, 2.2 & 2.3 Solutions and solubility	
	9	Wednesday, September 23, 2009		2.4 Ionic compounds & 2.5 Energy balance	
	10	Friday, September 25, 2009		2.6 & 2.7 Precipitation and solubility rules	8: Solubility, pp 207--13
5	11	Monday, September 28, 2009	4	2.8 & 2.9 Calculation precipitation	1: Moles, solutions, molarity, pp 6--18
	12	Wednesday, September 30, 2009		2.10 Limiting reagent	
	13	Friday, October 02, 2009		2.12 pH & 2.13 acids and bases aqueous solution	7: Aqeuous acids and bases, pp 177--181
6	14	Monday, October 05, 2009	5	2.14 Le Chatelier's principle	
	15	Wednesday, October 07, 2009		2.16 Extent of proton transfer and CO2	
3. Origin of Atoms					
	16	Friday, October 09, 2009		3.1 Spectroscopy and stellar composition & 3.2 Nuclear atom	2: Absorption and emission spectra, pp 19--21
7	17	Tuesday, October 13, 2009	6	3.3 Evolution of universe & 3.4 Nuclear reactions	13: Balancing nuclear reactions, pp 321--322
	18	Wednesday, October 14, 2009			12: Half-life calculations, pp 306--308
	19	Friday, October 16, 2009		3.5 Reaction energies & 3.6 Abundance	2: Energy-matter relation, pp 48--51: Energetics of nuclear reactions, pp 322--323
4. Structure of Atoms					
8	20	Monday, October 19, 2009	7	4.1 Periodicity	
	21	Wednesday, October 21, 2009		4.2 Emission and absorption	2: Absorption and emission spectra, pp 19--21
	22	Friday, October 23, 2009		4.3 Light as wave	2 Waves, light wave interaction with matter, pp 21--27
9	23	Monday, October 26, 2009	8	4.4 Light as particle	2: Energy exchange between light and matter, pp 27--29
	24	Wednesday, October 28, 2009		4.5 Quantum atoms	2: Quantum picture of atoms, pp 29--41
	25	Friday, October 30, 2009		4.3 & 4.4	2: Photoelectric effect, pp 39--44
10	26	Monday, November 02, 2009	9	4.6 De Broglie & 4.7 Wave model	2: Electron in a box, pp 43--47
	27	Wednesday, November 04, 2009		4.8 Atom collapse	3.3: Why atoms don't collapse, pp 81--85
	28	Friday, November 06, 2009		4.11 Orbitals	3.1: Atomic wavefunction albums, pp 65--71
11	29	Monday, November 09, 2009	10	4.9 Spin & 4.10 Electron configurations	3.2: Energies of electrons in atoms, pp 75--78
5. Structure of Molecules					
	30	Friday, November 13, 2009		5.1 & 5.2 Isomers	
12	31	Monday, November 16, 2009	11	5.3 Sigma molecular orbitals	4: Bonding and anitbonding molecular orbitals, pp 117--123
	32	Wednesday, November 18, 2009			
	33	Friday, November 20, 2009		5.13 Antibonding in O2	
13	34	Monday, November 23, 2009	12	5.4 Sigma framework & 5.8 Molecular shape	4: Hybrid atomic orbitals, pp 111--116
14	35	Monday, November 30, 2009		5.5, 5.6 & 5.7 Multiple and delocalized bonds	4: Recipe for π bonds in polyatomic molecules, pp 124--129
	36	Wednesday, December 02, 2009			
	37	Friday, December 04, 2009			
15	38	Monday, December 07, 2009	13		
	39	Wednesday, December 09, 2009		5.9 Stereoisomerism	
	40	Friday, December 11, 2009	final assessment	5.10 Functional groups & 5.11 Molecular recognition	