

Chem 111  
Lecture Schedule  
Spring 2012

WEEK OF	LECTURE TOPICS	READING		ASSIGNED TEXTBOOK PROBLEMS *
		CHAPT	SECTIONS OR PAGES	
Jan 9	Measurements, Chemical Nomenclature, Chemical Reactions	<b>3</b> <b>4</b>	<b>3.5-3.6</b> <b>4.6, 4.8</b>	<b>3:</b> 17,39,40,41,43,47,49,64,70,72,93, 95,99 <b>4:</b> 71,73,74,85 Worksheets: Formulas, Equations
Jan 16	Chemical Formula Calculations and Stoichiometry	<b>3</b> <b>4</b>	<b>3.7-3.9</b> <b>4.1-4.3</b>	<b>3:</b> 68,70,72,80,82,88,90,92,112,113,118, 119, 121,122, 123,127,129,132,134 <b>4:</b> 37,38,41,43,44,45,47,49,50,51 Worksheet: Stoichiometry
Jan 23	Chemical Bonding and Intermolecular Forces.	<b>3</b> <b>8</b> <b>11</b>	<b>3.2, 3.4</b> <b>8.6,8.7</b> <b>11.3</b>	<b>3:</b> 29,30 <b>8:</b> 71,72,73,75,79,81 <b>11:</b> 49,51 Worksheet: Lewis Structures
Jan 30	Gases	<b>5</b>	178-207, 212- 217	<b>5:</b> 33,41,45,63,67,69,71,73,75,77,81,89,91,101, 103,105,107
Feb 6	Solids, Born-Haber Cycle	<b>11</b> <b>9</b>	<b>11.10-11.12</b> <b>9.4</b>	<b>11:</b> 99,101,103,105,107 Worksheet: Solids
Feb 13	Liquids, Changes of State	<b>11</b>	<b>11.5-11.9</b>	<b>11:</b> 67,69,85,86,87
Feb 20	Mixtures: Colloids.	<b>12</b>	<b>12.8</b>	<b>12:</b> 26,27,28
Feb 27	Mixtures: Solutions Concentration, Ionic Equations, Electrolytes	<b>4</b> <b>12</b>	<b>4.4, 4.5, 4.7</b> <b>12.5</b>	<b>4:</b> 67,68,75,77,55,56,57,59,60,61,63,65,66,83 <b>12:</b> 51,52,53,54,55,59,60,63,64,68 Worksheet: Molecular and Ionic Equations
Mar 5	Colligative Properties	<b>12</b>	<b>12.6-12.7</b>	<b>12:</b> 18,19,20,21,22,23,24,25,69,70,71,73,75,77, 79,81,83,85,87,88,89,91,92,109,110,111 Worksheet: Solutions and Colligative Properties
Mar 12	Acids and Bases pH, pOH, $K_w$ .	<b>15</b>	<b>15.3, 15.5-15.6,</b> <b>15.11</b>	<b>15:</b> 33,35,37,39,45(a,b) 49,51,55,57,77,81,83, 121,122,123,124
Mar 19	Equilibrium, Weak Acid/Base Equilibria	<b>14</b> <b>15</b>	<b>14</b> <b>15.4, 15.6-15.7</b>	<b>15:</b> : 61,65,67,69,73,87,91 Worksheet: Acid-Base Equilibria
Mar 26	Common Ion, Buffers	<b>16</b>	<b>16.2-16.3</b>	<b>16:</b> 27,29,31,35, 37,39 41,43,45,47,49,53,57,59 Worksheet: Buffers
Apr 9	Polyprotic Acids, Hydrolysis	<b>15</b>	<b>15.8, 15.9</b>	<b>15:</b> 109-111, 88,93,95,97,99,101,103,105 Worksheet: Chemical Equilibrium
Apr 16	Titration	<b>16</b>	<b>16.4</b>	<b>16:</b> 61,63, and other problems that may be assigned by the instructor
Apr 23	Solubility Equilibria	<b>16</b>	<b>16.5</b>	<b>17:</b> 87,89,91,93,95,97,99,101,103,105,107
Apr 30	Heterogeneous and Gas Equilibria	<b>14</b>	<b>14.</b>	<b>14:</b> 21,23,27,29,33,37,39,41,43,45,51,53,57,61, 63,65, 67,69
May 7				
Final Exam Week	Consult Final Exam Schedule			Exam 5

\* Homework collected at your instructor's discretion. Expect to find these problems on exams and quizzes.