

Dr. Davies  
 Chem. 1010 - Introduction to Chemistry  
**Spring 2004** - Tentative Schedule

**K** = Key Terms      **R** = Review Questions      **E** = Exercises      **P** = Problems

**week #1**

<b>Date</b>	<b>Content</b>	<b>pp.</b>	<b>Homework problems</b>
Mon 1/12	Course introduction	1-10	<b><i>Ch. 1 Chemistry is a Science</i></b>
	What is chemistry?		<b>K:</b> All
	Scientific Method		<b>R:</b> 2,5,6,7,8,11,12,19,21,23,24,28,29,32,34,35,36,38,39,41,43,44
Wed 1/14	Measurements	10-29	<b>E:</b> 8,11,19,23,27,28,33
	Phases		<b>P:</b> 1,2,3,5,6
Fri 1/16	Physical/Chemical change	38-47	<b><i>Ch. 2 Elements of Chemistry</i></b>
	Atoms & Elements		<b>K:</b> All
	Intro. to periodic table		<b>R:</b> 4,5,7,9,10,11,12,13,17,20,22,23,28,30,31,32
	Periodic trends	57-62	<b>E:</b> 2,3,4,5,8,11,13,14,15,16,17,18,20,23,24,25,28

**week #2**

<b>Date</b>	<b>Content</b>	<b>pp.</b>	<b>Homework problems</b>
Mon. 1/19	<b>Martin Luther King Day</b> - No Class		
Wed. 1/21	Compounds Nomenclature <b>Quiz #1</b>	47-50	
Fri. 1/23	Mixtures Heterogen. / Homogen. Electrons, protons, neutrons Atomic orbitals	50-56  83-92 146-159	<b>Ch. 3: E:27,28,31</b>

**week #3**

<b>Date</b>	<b>Content</b>	<b>pp.</b>	<b>Homework problems</b>
Mon. 1/26	Electromagenetic Spectrum Periodic trends	<b>137-142</b> 159-164	<b>Ch. 5 Atomic Models</b> <b>K:3,4,5,6,12,13,18</b> <b>R:7,8,10,15,25,32,33, 37,</b> <b>E:9,26,28,29</b>
Wed. 1/28	Catch Up & Review		
Fri. 1/30	<b>Exam #1 - Chapters 1,2,3,5</b>		

**week #4**

<b>Date</b>	<b>Content</b>	<b>pp.</b>	<b>Homework problems</b>
Mon. 2/2	Valence electrons ionic / covalent bonds	173-186	<b>Ch.6 Chem. Bond. &amp; Mol. Shape</b> <b>R:</b> 2,5,6,7,10,11,13,15,16,17,19,21,24, 26,28,29,30,31,32,34,37,38
Wed. 2/4	bond polarity VSEPR Molecular dipole	186-198	<b>E:</b> 2,4,5,11,12,15,16,18,19,20,21,22,24, 25,26,27,29,31,32
Fri. 2/6	Molecular attractions Solutions Concentrations	205-217	<b>Ch.7 Molecular Mixing</b> <b>K:</b> 1,2,3,4,8,9,10,14 <b>R:</b> 1,3,6,11,12,14,15,16,19,20,21,22,24, 27,29,30,31,32,33

**week #5**

<b>Date</b>	<b>Content</b>	<b>pp.</b>	<b>Homework problems</b>
Mon. 2/9	Solubility Soaps & Detergents	218-230	<b>E:</b> 2,4,5,6,9,11,12,13,16,19,20,21,23,24, ,25,26,28 <b>P:</b> 1,2,3,4
Wed. 2/11	Catch up & Review <b>Quiz #2</b>		
Fri. 2/13	Ice Stickiness of water	237-250	<b>Ch.8 Water Molecules</b> <b>R:</b> 1,3,4,7,10,11,14,16,17,18,20,21,23, 24,25,26,27,29,31,32,33,34 <b>E:</b> 1,3,5,6,9,10,11,12,13,14,16,17,21,22, ,24,26,30,32,34,36,38,39

**week #6**

<b>Date</b>	<b>Content</b>	<b>pp.</b>	<b>Homework problems</b>
Mon. 2/16	<b>President's Day</b> - No Classes held		
Wed. 2/18	Water (gas phase) Specific heat capacity Energy changes	250-265	
Fri. 2/20	Catch Up & Review		

**week #7**

<b>Date</b>	<b>Content</b>	<b>pp.</b>	<b>Homework problems</b>
Mon. 2/23	<b>Exam #2 - Chapters 6,7,8</b>		
Wed. 2/25	Chemical equations moles Rate factors	271-288	<b><i>Ch.9 Chemical Reactions</i></b> <b>R:</b> 2,3,5,6,8,10,11,12,14,15,17,18,19,20 ,22,25,26,27,28,29,33,36,37 <b>E:</b> 1,2,3,4,5,6,7,8,17,21,22,25,26,28,29, 31,32,34 <b>P:</b> 1,2,3,4
Fri. 2/27	Endothermic/Exothermic	288-300	

**week #8**

<b>Date</b>	<b>Content</b>	<b>pp.</b>	<b>Homework problems</b>
Mon. 3/1	Acid/Base pH scale	307-323	<b>Ch.10 Acids and Bases</b>  <b>R:</b> 1,2,4,5,6,8,10,11,13,14,16,17,18,19, 20,21,22,23,24,27,28
Wed. 3/3	Acid rain Buffers	323-331	<b>E:</b> 2,3,4,5,6,9,10,12,13,14,16,18,19,20, 21,22,23,24,25,26
Fri. 3/5	Oxidation / Reduction	337-342	

**week #9**

<b>Date</b>	<b>Content</b>	<b>pp.</b>	<b>Homework problems</b>
Mon. 3/8	Batteries  <b>Quiz #3</b>	342-353	<b>Ch. 11 Oxidation &amp; Reduction</b>  <b>K:</b> All  <b>R:</b> 1,2,3,4,5,6,9,10,11,12,16
Wed. 3/10	Electrochemistry Combustion Corrosion	353-357	<b>E:</b> 1,2,3,4,7,8,9,10,12,16,17,18
Fri. 3/12	Discovery of radiation Radioactive sources  Nuclear forces  Half life  <b>Last Day to Withdraw</b>	99-116	<b>Ch. 4 The Atomic Nucleus</b>  <b>K:</b> all  <b>R:</b> 3,4,5,6,7,8,9,10,11,12,13,15,16,18, 19,20,23,24,25,28,29,29,30,31,32,39, 40  <b>E:</b> 2,3,4,7,8,9,17,19,22,24,25,27,28, 34,35

**Spring Break 3/15 - 3/19 - No classes**

**week #10**

<b>Date</b>	<b>Content</b>	<b>pp.</b>	<b>Homework problems</b>
Mon. 3/22	Tracers and imaging Isotope dating Energy source	116-128	
Wed. 3/24	Catch up and review		
Fri. 3/26	Electricity Nonrenewable fuels	617-634	<b>Ch.19 Energy Resources</b>

**week #11**

<b>Date</b>	<b>Content</b>	<b>pp.</b>	<b>Homework problems</b>
Mon. 3/29	Sustainable energy	634-653	<b>R:</b> 1,2,4,5,6,7,9,10,11,12,13,14,15,16, 17,18,21,22,25,26,28,29,30,36,37,38, 40  <b>E:</b> 1,3,4,5,6,8,9,10,11,12,13,16,18,19
Wed. 3/31	Catch up and review		
Fri. 4/2	<b>Exam #3</b> Chapters 9,10,11,4,19		

**week #12**

<b>Date</b>	<b>Content</b>	<b>pp.</b>	<b>Homework problems</b>
Mon. 4/5	Atmosphere Air pollution	559-570	<b>Ch.17 Air Resources</b>  <b>K:</b> all  <b>R:</b> 2,3,4,5,6,7,8,10,11,12,13,15,16,17, 18,19,20,21
Wed. 4/7	Ozone layer	570-574	<b>E:</b> 1,2,3,4,7,8,9,11,12,15,16,19
Fri. 4/9	Global warming	575-582	

**week #13**

<b>Date</b>	<b>Content</b>	<b>pp.</b>	<b>Homework problems</b>
Mon. 4/12	Organic chemistry Hydrocarbons	361-370	<b>Ch. 12 Organic Compounds</b> <b>R:</b> 1,2,8,10,11,13,14,15,16,17,18,19, 21,22,23,26,27,28,30,31
Wed. 4/14	Functional groups	370-382	<b>E:</b> 2,3,4,5,6,9,12,14,15,16,17,18,20,21, 23,25,26,29
Fri. 4/16	Polymers	382-392	

**week #14**

<b>Date</b>	<b>Content</b>	<b>pp.</b>	<b>Homework problems</b>
Mon. 4/19	Classification of Drugs <b>Quiz #4</b>	451-454	<b>Ch. 14 The Chemistry of Drugs</b> <b>K:</b> all
Wed. 4/21	Lock and key Drug discovery Chemotherapy	454-466	<b>R:</b> 1,3,4,5,7,8,9,10,11,15,16,17,18,19, 20,21,22,23,24,25,26,27,28,29,30,33, 34,35 <b>E:</b> 2,3,5,10,11,17
Fri. 4/23	Nervous system Psychoactive drugs <b>Term Paper Due</b>	467-483	

**week #15**

<b>Date</b>	<b>Content</b>	<b>pp.</b>	<b>Homework problems</b>
Mon. 4/26	Pain Relievers	483-487	
Wed. 4/28	Review		
Fri. 4/30	Review		
Thur. 5/6	<b>Comprehensive Final</b>	9:30 - 11:30 a.m.	