

# September/October 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
<p><b>20</b></p>	<p><b>21</b> Lecture 1: Introduction to atomic and molecular structure 11-11:50a BraunAud 1:15-2:05p BraunAud <b>PS 1 Assigned</b> Outreach: 6-7 Braun Aud</p>	<p><b>22</b> Section sign-up close at 5pm  OH: 2:15-3:30 (Mudd 235)</p>	<p><b>23</b> Reading: Sections 1.1-1.14, Notes on Significant Figures, Notes 1, Notes 2 Problems: Ch 1: 14, 35, 38, 40, 44, 48, 50, 52 Lecture 2: Number in chemistry: stoichiometry 11-11:50a BraunAud 1:15-2:05p BraunAud OH: 2:15-3:30 (Keck 125) Register your PRS by 11:00 a.m. Outreach: 6-7 Braun Aud</p>	<p><b>24</b> Section 1 Stoichiometry</p>	<p><b>25</b> Section 1 (con't) Reading: 1.19-1.21, 2.1-2.4, Notes 3 Problems: Ch1: 136d.; Ch2: 92, 8, 17b, 19 Lecture 3: Reaction tables and limiting reactants 11-11:50a BraunAud 1:15-2:05p BraunAud OH: 3:15-4:30 (Stauffer II 102)</p>
<p><b>27</b></p> <p>OH: 7-10 (380-380X)</p>	<p><b>28</b> Lecture 4: Applications of stoichiometry 11-11:50a BraunAud 1:15-2:05p BraunAud <b>PS 1 Due</b> Outreach: 6-7 Braun Aud</p>	<p><b>29</b></p> <p>OH: 2:15-3:30 (Mudd 235)  OH: 7-10 (380-380Y)</p>	<p><b>30</b> Lecture 5: Review 11-11:50a BraunAud 1:15-2:05p BraunAud OH: 2:15-3:30 (Keck 125)  <b>EXAM 1 7-8pm</b></p>	<p><b>1</b> Section 2 Reactive Metals and Potential Energy</p>	<p><b>2</b> Section 2 (con't) Lecture 6: Atomic structure and ionization energies 11-11:50a BraunAud 1:15-2:05p BraunAud OH: 3:15-4:30 (Stauffer II 102) <b>PS 2 Assigned</b></p>
<p><b>4</b></p> <p>OH: 7-10 (380-380X)</p>	<p><b>5</b> Reading: 3.1, 3.8-10 Problems: Ch3: 2, 4, 34a&amp;b, 43, 45, 54, 55(first "F"<math>\rightarrow</math>"F"), 56 Lecture 7: Developing a model of electronic structure 11-11:50a BraunAud 1:15-2:05p BraunAud <b>Activity Due</b> Outreach: 6-7 Braun Aud</p>	<p><b>6</b></p> <p>OH: 2:15-3:30 (Mudd 235)  OH: 7-10 (380-380Y)</p>	<p><b>7</b> Reading: 3.2-5, 3.11-25 Problems: Ch3: 70, 76, 84, 147, 150, 155, 160, 186 Lecture 8: Photoelectron spectroscopy, electron configurations, periodic trends and average valence electron energy 11-11:50a BraunAud 1:15-2:05p BraunAud OH: 2:15-3:30 (Keck 125) Outreach: 6-7 Braun Aud</p>	<p><b>8</b> Section 3 Electronic structure</p>	<p><b>9</b> Section 3 (con't) Reading: 4.1-12 Problems: Ch4: 2, 14, 17, 22, 28, 42, 57 Lecture 9: Bonding, drawing Lewis structures and assigning formal charges 11-11:50a BraunAud 1:15-2:05p BraunAud OH: 3:15-4:30 (Stauffer II 102) <b>Study list (add/drop) deadline</b></p>

<p><b>11</b></p> <p>OH: 7-10 (380-380X)</p>	<p><b>12</b> Lecture 10: Applications of electronic structure 11-11:50a BraunAud 1:15-2:05p BraunAud <b>PS 2 Due</b> Outreach: 6-7 Braun Aud</p>	<p><b>13</b></p> <p>OH: 2:15-3:30 (Mudd 235)</p> <p>OH: 7-10 (380-380Y)</p>	<p><b>14</b> Lecture 11: Review 11-11:50a BraunAud 1:15-2:05p BraunAud OH: 2:15-3:30 (Keck 125)</p> <p><b>EXAM 2 7-8pm</b></p>	<p><b>15</b> Section 4</p> <p>Electron density maps/Molecul ar geometry</p>	<p><b>16</b> Section 4 (con't)</p> <p>Lecture 12: Predicting and drawing the shapes of molecules 11-11:50a BraunAud 1:15-2:05p BraunAud OH: 3:15-4:30 (Stauffer II 102)</p> <p><b>PS 3 Assigned</b></p>
<p><b>18</b></p> <p>OH: 7-10 (380-380X)</p>	<p><b>19</b> Lecture 13: Partial charge, dipoles and ionic bonding 11-11:50a BraunAud 1:15-2:05p BraunAud Reading: 4.13-4.17 Problems: Ch. 4 78, 85, 86, 105, 114 <b>Activity Due</b> Outreach: 6-7 Braun Aud</p>	<p><b>20</b></p> <p>OH: 2:15-3:30 (Mudd 235)</p> <p>OH: 7-10 (380-380Y)</p>	<p><b>21</b> Lecture 14: Metallic bonding and the bonding triangle 11-11:50a BraunAud 1:15-2:05p BraunAud Reading: 5.1-5.11 Problems: Ch5: 16, 30, 47, 62, 77, 81, 84 OH: 2:15-3:30 (Keck 125) Outreach: 6-7 Braun Aud</p>	<p><b>22</b> Section 5 Polarity</p>	<p><b>23</b> Section 5 (con't)</p> <p>Lecture 15: Oxidation reaction, oxidation numbers &amp; nomenclature 11-11:50a BraunAud 1:15-2:05p BraunAud Reading: 5.12-5.17 Problems: Ch5: 88, 101, 104, 116, 118, 123, 130, 131, 142</p> <p>OH: 3:15-4:30 (Stauffer II 102)</p>

## October/November 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
<b>25</b>  OH: 7-10 (380-380X)	<b>26</b> Lecture 16: Applications of bonding 11-11:50a BraunAud 1:15-2:05p BraunAud <b>PS 3 Due</b> Outreach: 6-7 Braun Aud	<b>27</b>  OH: 2:15-3:30 (Mudd 235)  OH: 7-10 (380-380Y)	<b>28</b> Lecture 17: Problem Solving 11-11:50a BraunAud 1:15-2:05p BraunAud OH: 2:15-3:30 (Keck 125)  <b>EXAM 3 7-8pm</b>	<b>29</b> Section 6 Gases	<b>30</b> Section 6 (con't) Lecture 18: Gases: Pressure and Temperature 11-11:50a BraunAud 1:15-2:05p BraunAud OH: 3:15-4:30 (Stauffer I 103A) Reading: Ch6.1-6.13; Problems: Ch6.1-3, 7-10,13-15, 20-28, 30,34,38,40,44 <b>PS 4 Assigned</b>
<b>1</b> Change of grading basis deadline  OH: 7-10 (380-380X)	<b>2</b> Lecture 19: The Ideal Gas Law 11-11:50a BraunAud 1:15-2:05p BraunAud Reading: Ch6.14-6.18; Problems: Ch6.48,49,51,54-56,59,61-64 <b>Activity Due</b> Outreach: 6-7 Braun Aud	<b>3</b>  OH: 2:15-3:30 (Mudd 235)  OH: 7-10 (380-380Y)	<b>4</b> Lecture 20: Kinetic Theory of Gases and Real Gases 11-11:50a BraunAud 1:15-2:05p BraunAud Reading: Ch6A.2-A.3 OH: 2:15-3:30 (Keck 125) Outreach: 6-7 Braun Aud	<b>5</b> Section 7 Distribution of Kinetic Energy	<b>6</b> Section 7 (con't) Lecture 21: Energy, Heat, Work and Enthalpy in Chemical Reactions 11-11:50a BraunAud 1:15-2:05p BraunAud Reading: Ch7.1-7.9; Problems: Ch7.4-8,10,12,13,15-17,19,21,22,24-27,31  OH: 3:15-4:30 (Stauffer II 102)
<b>8</b>  OH: 7-10 (380-380X)	<b>9</b> Lecture 22: Heat, Work and Enthalpy 11-11:50a BraunAud 1:15-2:05p BraunAud Reading: Ch7.10-7.16; Problems: Ch7.33-38,41-43  <b>PS 4 Due</b> Outreach: 6-7 Braun Aud	<b>10</b>  OH: 2:15-3:30 (Mudd 235)  OH: 7-10 (380-380Y)	<b>11</b> Lecture 23 Problem Solving 11-11:50a BraunAud 1:15-2:05p BraunAud  OH: 2:15-3:30 (Keck 125)  <b>EXAM 4 7-8pm</b>	<b>12</b> Section 8 Calorimetry	<b>13</b> Section 8 (con't) Lecture 24: Thermochemistry 11-11:50a BraunAud 1:15-2:05p BraunAud Problems: Ch7.48,50-52,58,59,66,70,75,78,82 <b>PS 5 Assigned</b> OH: 3:15-4:30 (Stauffer II 102)
<b>15</b>  OH: 7-10 (380-380X)	<b>16</b> Lecture 25: Hess's law 11-11:50a BraunAud 1:15-2:05p BraunAud <b>Activity Due</b> Problems: Ch7.93,96-100,105,106,110,114,115  Outreach: 6-7 Braun Aud	<b>17</b>  OH: 2:15-3:30 (Mudd 235)  OH: 7-10 (380-380Y)	<b>18</b> Lecture 26: Phases of Matter 11-11:50a BraunAud 1:15-2:05p BraunAud  Reading: Ch8.1-8.3; Problems: Ch8.1-9,12-14,19-22  OH: 2:15-3:30 (Keck 125) Outreach: 6-7 Braun Aud	<b>19</b> Section 9 Vapor Pressure and Intermolecular Forces	<b>20</b> Section 9 (con't) Lecture 27: Kinetic theory of liquids 11-11:50a BraunAud 1:15-2:05p BraunAud Reading: Ch8.4-8.9; Problems: Ch8.25,30,33,36-38,43,44,47,50,53,55-58  OH: 2:15-3:30 (Stauffer II 102)

# November/December 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
22	23	24	25	26	27
29	<p><b>30</b> Lecture 28: Solutions and solubility 11-11:50a BraunAud 1:15-2:05p BraunAud Reading: Ch8.10-8.15 Problems: Ch8.61-64,67,70,72,74,77-79,83-85,88-91,98,101-103 <b>PS 5 Due</b> outreach: 6-7 Braun Aud</p>	<p><b>1</b> OH: 2:15-3:30 (Mudd 235)  OH: 7-10 (380-380Y)</p>	<p><b>2</b> Lecture 29: Ionic solutions and reactions 11-11:50a BraunAud 1:15-2:05p BraunAud OH: 2:15-3:30 (Keck 125) Outreach: 6-7 Braun Aud</p>	<p><b>3</b> Section 10  Practice Exercises</p>	<p><b>4</b> Section 10 (con't) Lecture 30: Review 11-11:50a BraunAud 1:15-2:05p BraunAud OH: 2:15-3:30 (Stauffer II 102)</p>
6	7	8	9	10	11
			<p><b>FINAL EXAM</b> <b>3:30 – 6:30pm</b></p>		