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**Course Website: [www.csebcc.org/CHM11.html](http://www.csebcc.org/CHM11.html)**

**Office Hours:**  
**Thursday 2-4 pm or by appointment**

**Class Hours:**

**Tuesday**  
**6:00-6:50 Recitation Section 51827**  
**7:00-8:50 Lecture Section 51829**  
**ME 804**

**Thursday**  
**6:00-8:45 Laboratory Section 51828**  
**ME 703**

**Required Course Texts:**

***Chemistry: The Molecular Nature of Matter***  
**Jespersion, Brady, Hysop. 6<sup>th</sup> Edition. Wiley Publishers**

***Experiments in General Chemistry***  
**Murov. 6<sup>th</sup> Edition. Cengage Publishers**

## Lecture & Recitation

<b>Date (Quiz chapter(s))</b>	<b>Subject</b>	<b>Book Chapter</b>	<b>Homework</b>
1-28	<b>The Atomic &amp; Molecular View of Matter</b>	<b>1</b>	<b>30, 32, 34, 36, 38, 48, 50, 52</b>
2-4 (1, 2)	<b>Scientific Measurement</b>	<b>2</b>	<b>26, 28, 30, 34, 24, 36, 38, 40, 46, 48, 54, 56, 60, 64</b>
2-11	<b>Elements, Compounds &amp; The Periodic Table</b>	<b>3</b>	<b>2, 4, 6, 8, 10, 12, 16, 18, 20, 22, 24, 26, 69, 73, 75, 87, 89, 91, 93, 97, 101, Memorize Table 3.5</b>
2-18 (3, 4)	<b>Mole Calculations &amp; Stoichiometry</b>	<b>4</b>	<b>28, 31, 33, 41, 43, 51, 57, 59, 65, 67, 75, 81, 85, 91, 103, 105, 109, 113, 115, 121, 127, 129, 131</b>
2-25 (5)	<b>Reactions in Aqueous Solution</b>	<b>5</b>	<b>51, 53, 57, 59, 65, 67, 69, 71, 75, 81, 84, 85, 87, 91, 93, 101, 103, 105, 111, 113, 115</b>
3-4 (6)	<b>Oxidation-Reduction Reactions</b>	<b>6</b>	<b>1, 2, 5, 10, 17, 24, 26, 35, 37, 41, 43, 47, 61, 63, 69, 77, 79, 83, 85, 101, 111</b>
3-11 (7)	<b>Energy &amp; Thermochemistry</b>	<b>7</b>	<b>40, 42, 46, 48, 50, 52, 58, 64, 66, 68, 72, 76, 78, 82</b>
3-18	<b>Introduction to Quantum Mechanics</b>	<b>8</b>	<b>73, 75, 77, 81, 85, 87, 91, 95, 99, 111, 113, 115, 119, 121, 125, 129, 131</b>
3-25 (8,9)	<b>Chemical Bond Basics</b>	<b>9</b>	<b>60, 64, 66, 68, 70, 72, 76, 78, 80, 84, 88, 90, 94, 98, 102, 106, 108, 110</b>
4-1 (10)	<b>Chemical Bonds Theory and Structure</b>	<b>10</b>	<b>76, 78, 80, 82, 84, 86, 88, 90, 94, 96, 100, 104, 106, 108, 114</b>
4-7 (11)	<b>Properties of Gasses</b>	<b>11</b>	<b>25, 27, 29, 31, 35, 37, 39, 43, 45, 49, 53, 59, 61, 63, 65, 67, 69, 73, 77</b>
4-29	<b>Intermolecular Forces of Liquids &amp; Solids</b>	<b>12</b>	<b>83, 85, 87, 89, 91, 93, 97, 99, 101, 103, 105, 107</b>
5-6 (12, 13)	<b>Properties of Solutions</b>	<b>13</b>	<b>42, 44, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 74</b>
5-13	<b>Review for Final</b>		

## Laboratory

<b>Date</b>	<b>Subject</b>	<b>Experiment Number</b>	<b>Lab Manual Page</b>
<b>1-30</b>	<b>Measurement and Identification Techniques</b>	3	33
<b>2-6</b>	<b>Density, Precision, Accuracy and Graphing</b>	4	43
<b>2-13</b>	<b>Classification of Chemical Reactions</b>	6	71
<b>3-6</b>	<b>Empirical Formula of a Hydrate</b>	5	57
<b>3-13</b>	<b>Periodic Relations Among the Elements</b>	Computer Lab	Handout
<b>3-20</b>	<b>Molecular Fluorescence of Quinine</b>	Research Lab	Handout
<b>3-27</b>	<b>Lewis Structure of Molecular Compounds</b>	Models	Handout
<b>4-3</b>	<b>Gas Laws: Boyle's Law</b>	17	205
<b>4-10</b>	<b>Gas Laws: Determination of "R"</b>	17	205
<b>4-24</b>	<b>TBD</b>		
<b>5-1</b>	<b>TBD</b>		
<b>5-8</b>	<b>TBD</b>		

**Attendance Policy:** You are to arrive to class on time, every week, with no exceptions. Tardiness will not be tolerated at lecture, lab or recitation.

**Grading Policy:** Grades will be determined based on the following assignments

**Homework:** 5% of final grade. HW is graded on a pass/fail basis and is due after recitation.

**Quizzes:** 7 total quizzes over the semester accounting for 35% of final grade. Quizzes will be given at the beginning of lecture, immediately following recitation, and quiz problems will be based on problems found in the HW.

**Lab Reports:** 7 total lab reports, 25% of the final grade is based on lab reports. Reports should follow the following format. Introduction (1-2 paragraphs explaining the experimental theory and reasoning), Procedure/Results (all experimental setups/diagrams, individual and class data including calculations for standard deviation/error), Conclusions (1-2 paragraph summary of the experiment's success or failure and reasoning)

**Final Exam:** 35% of final grade. Comprehensive for Chapters 1-13.