

## CHEMISTRY 121 MINIMUM COURSE COVERAGE

Text-- *Chemistry: The Central Science, 9<sup>th</sup> ed.*, Brown, LeMay, and Bursten

Read all assigned chapters. While all of the assigned reading material is useful in gaining an understanding of chemical principles, some topics will be covered in less detail in the lecture than they are in the text. The assigned homework is designed to give practice on a range of representative problems and to provide some indication of relative emphasis on the various topics within each chapter. Answers to most, but not all, of the assigned problems can be found in the back of the book. Individual lecturers may assign additional readings and/or problems from the text or other sources (for example, the ChemSkill Builder electronic homework system) for which you will be responsible on quizzes and hour exams.

### FINAL EXAMINATION for all Chemistry 121 sections (Mass Examination) Monday, May 7, 2007, 5:15 – 7:15 p.m.

On the Final Examination you will be responsible for material covered in **both the lecture and the laboratory.**

Assigned Reading	Questions & Problems
<b>Chapter 1</b> Introduction: Matter and Measurement ( <i>Much of Ch. 1 will be covered in the laboratory.</i> )	1, 7, 11, 15, 17, 18, 20, 21, 23, 26, 27, 35, 40, 43, 45, 47, 53, 58, 64, 65, 71, 79. Memorize the names and symbols for the first 38 elements in the periodic table.
<b>Chapter 2</b> Atoms, Molecules, and Ions ( <i>omit Section 9</i> )	1, 14, 15, 17, 19, 21, 23, 37, 42, 43, 47, 49, 54, 55, 57, 67, 76, 78, 83, 86. Memorize the names and formulas (including charges) for the common polyatomic ions - <a href="http://www.utm.edu/departments/cens/chemistry/documents/CO_MMONPOLYATOMICIONS.pdf">http://www.utm.edu/departments/cens/chemistry/documents/CO_MMONPOLYATOMICIONS.pdf</a>
<b>Chapter 3</b> Stoichiometry: Calculations with Chemical Formulas and Equations	2, 3, 5, 7, 11, 13, 15, 17, 19, 23, 29, 33, 37, 39, 44, 45, 49, 53, 55, 56, 59, 62, 65, 69, 72, 75, 77, 98
<b>Chapter 4</b> Aqueous Reactions and Solution Stoichiometry ( <i>omit Section 4</i> )	5, 9, 10, 11, 13, 15, 21, 23, 27, 29, 51, 53, 55, 57, 59, 68, 69, 71, 73, 93
<b>Chapter 5</b> Thermochemistry ( <i>omit Section 8</i> )	11, 17, 19, 21, 28, 29, 32, 33, 39, 41, 47, 49, 51, 53, 57, 61, 67, 71, 75, 77, (103, 111—optional)
<b>Chapter 6</b> Electronic Structure of Atoms ( <i>omit Section 4</i> )	3, 5, 10, 23, 41, 43, 44, 45, 51, 54a, 55, 59, 61, 63, 65, 79, 80
<b>Chapter 7</b> Periodic Properties of the Elements ( <i>omit Sections 7 and 8</i> )	3, 15, 17, 20, 21, 24, 27, 32, 35, 38, 43, 47, 51, 53, 59, 63, 64, 73
<b>Chapter 8</b> Basic Concepts of Chemical Bonding	1, 7, 9, 11, 21, 28, 31, 34, 35, 36, 44, 47, 53, 57, 61, 65
<b>Chapter 10</b> Gases	15, 17, 18, 19, 20, 21, 22, 24, 27, 29, 32, 33, 37, 41, 45, 49, 51, 52, 53, 55, 61, 67, 71, 73, 78
<b>Chapter 11</b> Intermolecular Forces, Liquids, and Solids ( <i>omit Sections 7 and 8</i> )	3, 5, 7, 9, 13, 15, 17, 19, 20, 23, 27, 29, 31, 33, 37, 43 (see figure 11.24), 45, 47, 49, 83, 84, 86, 88
<b>Chapter 13</b> Properties of Solutions ( <i>omit Section 6</i> )	3, 7, 11, 17, 19, 25, 27, 29, 31, 35, 39, 41, 43, 51, 57, 59, 61, 73, 76, 82

The final examination at the end of the second semester of general chemistry (Chemistry 122) is comprehensive of the entire year's work. Be sure to save your notes and study materials from Chemistry 121.

Any student eligible for and requesting academic accommodations due to a disability is requested to provide a letter of accommodation from P.A.C.E. or Student Academic Support Center within the first two weeks of the semester.