

# GENERAL CHEMISTRY 1010

Summer 2007

**Instructor:** Dr. Ronald Nohr  
Email: [rnohr@du.edu](mailto:rnohr@du.edu)

**Text:** Chemistry, 4<sup>th</sup> Edition, Silberberg, 2006, McGraw-Hill

**Lecture:** 8:10AM – 10:20AM M,T,W,Th,F Olin 205

**Summer Quarter:** 18 June to 06 July

**Examinations:** There will be three (3) one hour tests, each test counting 200 points. Test problems will be similar to the problems assigned as homework and problems worked in class. THERE WILL BE NO MAKEUP EXAMS.

**Homework:** Homework will not be collected. If you understand and can do the homework, you probably will do well on the tests.

**Grading:** Hour Tests (200 points each): 600 points

There will be no final test as such. The third hour test will be given on July 6 and will only cover the material from the last Test (Test II). The assignment of letter grades depends on your performance on the hour tests and will not be fitted to a statistical bell-shaped normal distribution.

## LECTURE AND HOMEWORK SCHEDULE

<u>DATE</u>	<u>TOPIC</u>	<u>READING</u>	<u>HOMEWORK</u>
<b>June 18</b>	Introduction to the Course		
	The Nature of Light	7.1	8, 9, 10, 16
	Atomic Spectra, Wave-Particle Duality	7.2-7.3	23, 27, 30, 32
<b>19</b>	Quantum-Mechanical Model	7.4	49, 54, 56, 57
<b>20</b>	Many-Electron Atoms	8.1-8.2	9, 10, 11, 14
<b>21</b>	Periodic Table	8.3	25, 31, 34, 42
<b>22</b>	Atomic Properties	8.4	53, 54, 55, 56
	Chemical Reactivity	8.5	74, 83, 84, 87
<b>June 25</b>	Ionic Bonding	9.1-9.2	13, 20, 26, 29
	Covalent Bonding	9.3	34, 38, 39, 40
<b>TEST I</b>			
<b>26</b>	Heats of Reaction, Bond Polarity	9.4-9.5	48, 49, 57, 62
	Lewis Structures	10.1	9: 66, 67

27	Lewis Structures (continued)		16, 17, 21, 22
	VSEPR Theory	10.2	34, 37, 38, 39
28	Molecular Polarity	10.3	40, 41, 56, 57
	Valence Bond Theory	11.1	7, 8, 12, 13
29	Types of Covalent Bonds	11.2	16, 17, 21, 24
	Molecular Orbital Theory	11.3	33, 34, 35, 36
July 2	Water as a Solvent	4.1	16, 21, 29, 30
	Precipitation and Acid-Base Reactions	4.2-4.4	32, 35, 36, 49
3	Oxidation-Reduction Reactions	4.5-4.6	67, 70, 71, 76
	Balancing Redox Reactions	21.1	4: 95, 96 21: 14, 15

## TEST II

4 **HOLIDAY**

5 Oxidation-Reduction Reactions  
Help Session  
Balancing Redox Reactions

6 **REVIEW TEST III**