Chemistry 112 Review Outline

Chapter 4:Atomic Structure

- 4.1-Defining the Atom
- 4.2-Structure of the Nuclear Atom
- 4.3-Distinguishing Among Atoms

Chapter 5:Electrons In Atoms

- 5.1-Models of Atoms
- 5.2-Electron Arrangement in Atoms

Chapter 6:The Periodic Table

- 6.1-Organizing the Elements
- 6.2-Classifying the Elements
- 6.3-Periodic Trends

Chapter 7:Ionic and Metallic Bonding

- 7.1-Ions
- 7.2-Ionic Bonds and Ionic Compounds

Chapter 8:Covalent Bonding

- 8.1-Molecular Compounds
- 8.2-The Nature of Covalent Bonds
- 8.3-Bonding Theories (VSEPR Theory)
- 8.4-Polar Bonds and Molecules

Chapter 9: Chemical Names and Formula

- 9.1-Naming Ions
- 9.2-Naming and Writing Formulas for Ionic Compounds
- 9.3-Naming and Writing Formulas for Molecular Compounds
- 9.4-Naming and Writing Formulas for Acids and Bases

Chapter 10:Chemical Quantities

- 10.1-The Mole: A Measurement of Matter
- 10.2-Mole/Mass and Mole/Volume Relationships
- 10.3-Percent Composition and Chemical Formula

Chapter 11:Chemical Reactions

- 11.1-Describing Chemical Reactions
- 11.2-Types of Chemical Reactions
- 11.3-Reactions in Aqueous Solutions

Chapter 12:Stoichiometry

- 12.1-The Arithmetic of Equations
- 12.2-Chemical Calculations
- 12.3-Limiting Reagent and Percent Yield