

## **Review sheet for Exam 2 Chemistry 101 Fall 2010**

### **Introduced in Chapter 4 and continued in later chapters**

1. Basic understanding of a chemical equation.
2. Balancing chemical reactions and conservation of mass.
3. Mole ratio in chemical reactions.
4. Limiting reactant.
5. Percent yield.
6. Percent composition and empirical formula.

### **Introduced in Chapter 5 and continued in later chapters**

1. Net ionic equations.
2. Acid-base reactions and titrations.
3. Molarity.

### **Introduced in Chapter 6 and continued in later chapters**

1. Kinetic, thermal, and chemical energy.
2. Energy transfer and conservation of energy.
3. Temperature, heat transfer, exothermic, endothermic, and enthalpy.
4. Energy transfer for T changes, phase changes, and chemical changes.
5. State function, path function, and Hess's Law.

### **Exam questions can be**

1. Quantitative problems (e.g., finding a numerical result, using significant figures, etc.)
2. Qualitative problems (e.g., drawing pictures, estimating an answer, etc.)
3. Open-ended response (e.g., naming a compound, explaining a concept, explaining how to solve a problem, etc.)

### **Exam questions based on**

1. Lecture material, examples and practice problems,
2. Homework (OWL, textbook, group), and
3. Recitation quizzes.