

## **CHEM 211 Principles of General Chemistry**

### Assignment #1: Periodic Trends and Elemental Reactions

#### **Assignment and Purpose:**

The assignment serves as a recap of all the topics learnt in the past few lectures and designed to assess the learners' knowledge and comprehension. The quiz includes 10 multiple-choice questions worth 50 points spanning various topics covered in the lecture: molarity, molality, periodic properties, trends and elemental reactions. Some of the questions might contain multiple answers and the specific instructions and prompts for them are provided.

#### **Due date:**

Submit the online quiz in the module section of canvas site by 11.59 pm on March 25, 2019. You have two attempts to complete the quiz, with each one having an hour.

#### **Required Materials:**

- Chapter 1 of "Principles of General Chemistry," 1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup> Edition, by Silberberg; McGraw-Hill; ISBN: 9780073402697
- Chapter 2 of "Chemistry: The Molecular Nature of Matter and Change," 4<sup>th</sup>, 5<sup>th</sup> or 6<sup>th</sup> Edition, by Silberberg; McGraw-Hill, ISBN: 9780073101699
- Lecture/Instructor Notes

#### **Learning Objectives:**

The students will recap the lecture and be able to –

- concisely identify the fundamental definitions of basic concepts of general chemistry
- perform basic math involved in chemical reactions and analysis

- classify and identify the periodic trends of the elements
- apply the concepts on case study type of problems

**Learning Activities:**

- The interactive figures for some of the questions provides personal experience with the chemistry concepts which enhances the student learning.
- The video descriptions of the chemical concepts on the atomic scale provides an imaginary picture to drive home the point.
- The questions demand the intuitive skills of students to use the right concept for the question.

**Scoring Rubric:**

The points for each question are provided next to the question. The multiple answer questions have partial credit while the yes/no or true/false questions do not. The total score will be displayed after submitting the quiz. You can choose to attempt the quiz once more. The best score of two attempts will be considered.

**Academic Dishonesty:**

Answer the questions on your own. Discussing and sharing the answers with your classmates is considered as dishonest.

**Contact:**

Any questions or concerns should be directed to the instructor through email or during his/her office hours.