

Spokane Falls Community College

COURSE LEARNING OUTCOMES

Prefix and Course Number: CHEM&161
Course Title: General Chemistry with Lab I
Version Date: 4/2/2019

Course Learning Outcomes

Upon successful completion of the course, the student will be able to:

1. State the fundamental assumptions of atomic theory and explain the composition of atoms using quantum mechanics, including electronic configuration.
2. Explain the formation of ionic and covalent bonds. Name molecular and ionic compounds and compare/contrast their physical and chemical properties.
3. Perform stoichiometric calculations.
4. Recognize and predict the products of precipitation, acid-base neutralization, and redox reactions. Write balanced chemical equations and net ionic equations.
5. Explain concepts of thermochemistry and solve related problems.
6. State the assumptions of kinetic molecular theory and apply the gas laws to predict the behavior of gases.
7. Perform pertinent laboratory experiments, record observations, analyze data, and present the results in written form.