Chemistry 2
Revised May 2020

Course Description: Chemistry II is a course designed to be the equivalent of a college introductory chemistry course. This course emphasizes chemical calculations and the mathematical formulation of principles. Areas to be studied are the structure of matter, states of matter, and reactions. A variety of assessments are used throughout the course including laboratory work, special activities and projects.

Big Ideas:
1. Accuracy in measurements is essential.

2. All chemical reactions have equal amounts of products and reactants.

3. All gases behave in a similar fashion with respect to pressure, temperature, volume, and number of particles.

4. Utilizing gas laws, you can understand complex chemical reactions.

5. Acid/Base reactions are an essential life process, and common in the world around us.

Essential Learner Outcomes:

ELO #	Essential Learner Outcome Description	Standards
1	Statistics -Be able to utilize Student's "t" test and the "Q" test to analyze relatedness in a number set	**9-12-PS1-8**
2	Significant Figures -Be able to analyze a group of measurements and report the correct accuracy	**9-12-PS1-8**
3	Stoichiometry -Be able to balance equations and relate it to mass calculations	**HS-PS1-7** **HS-PS1-8**
4	Gases -Be able to utilize gas laws to calculate mass changes in a chemical reaction	**9-12-PS1-6** **9-12-PS1-8**
5	Chemical Equilibrium -Be able to generate equilibrium equations of chemical reactions	**HS-PS1-6** **HS-PS1-7** **HS-PS1-8**
6	Acid/Bases -Be able to calculate changes in pH when an acid base reaction occurs	**HS-PS1-6** **HS-PS1-7** **HS-PS1-8** **HS-PS1.A.1-5**