

Chemistry 1

Revised May 2020

Course Description: Chemistry I is an introductory course emphasizing the properties, organization, and phases of matter. Topics to be studied are measurements, atomic structures, the Periodic Table, bonding, nomenclature, and reaction equations. Laboratory activities are performed to incorporate the knowledge of scientific facts into an understanding of principles and concepts. A variety of assessments are used throughout the course including laboratory work, special activities and projects.

Big Ideas:

1. Chemistry is the central science, and has applications across all segments of society.
2. Chemical reactions are constantly occurring in the world around us.
3. Matter comes in several forms that are interchangeable.
4. Matter in a reaction is neither created nor destroyed, it only changes form.
5. Biological processes are the results of chemical reactions.

Essential Learner Outcomes:

ELO #	Essential Learner Outcome Description	Standards
1	Know the parts of the atom -mass -location -charge	HS-PS1-1
2	Understanding Ionic Compounds -determining formula -determining the ratio	HS-PS1-1
3	Understanding Covalent Compounds -determining the formula -naming the compound	HS-PS1-2
4	The Mole -Converting grams to particles	HS-PS1-7, and HS-PS1-8
5	Stoichiometry -balance equations	HS-PS1-7, and HS-PS1-8