

The Chemistry course is designed to develop scientifically literate citizens who can use technology to investigate and explain the world around them. Using the scientific approach of observing, hypothesizing, testing, and analyzing students explore the properties of matter and energy. The Chemistry Honors course is aligned for students planning, continuing and enhancing their studies in physical or biological sciences to advance into college level courses. The course will provide a descriptive and in-depth study of scientific measurement, safety, atomic structure, periodic law, chemical equations, chemical formulas, chemical bonding, molecular structure, solubility, gas laws, quantum theory, kinetic molecular theory, stoichiometry, energy and matter, acid-base theory, chemical reaction rates and equilibria, oxidation-reduction reactions, and thermodynamics. In both courses, students will need to learn and know how to perform labs based on scientific methodology, use efficiency in solving mathematical formulas along with interpreting and identifying the concept mastery of chemistry terms and processes. Students will analyze and define the study of matter based on the studies of chemistry. This will provide the students with good structural and mathematical backgrounds. Overall, students will be able to make real world application connections to society as to what occupations require connections to chemistry in society today