

Bristol Public Schools Office of Teaching & Learning

Department	Science
Department Philosophy	Bristol Public Schools science programing provides students with knowledge of the science and engineering practices, crosscutting concepts, and the core ideas of science and engineering to engage in public discussions on science related issues, to be critical consumers of scientific information related to their everyday lives, and continue to learn science throughout their lives. To ensure this level of scientific literacy, Bristol Public Schools anchor science units in phenomena, this practice promotes student ownership of learning and supports student application of the science content as it pertains to the real world. In each science unit, students work to explain phenomena through the applications of the three dimensions of the Next Generation Science Standards: (1) science and engineering practices, (2) disciplinary core ideas, and (3) cross cutting concepts. Bristol's use of phenom-based units and the three dimensions ensure that students connect with and build a deep conceptual understanding of science concepts. Throughout the kindergarten through grade 12 experience, this philosophy provides all Bristol students with the skills and concepts to be scientifically literate adults.
Course	<u>AP Chemistry</u>
Course Description for Program of Studies	The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations, as they explore content such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. This course requires that 25 percent of instructional time engages students in lab investigations. This includes a minimum of 16 hands-on labs (at least six of which are inquiry-based). It is recommended that students keep a lab notebook throughout.
Grade Level	10, 11, 12
Pre-requisites	Must be enrolled in or have taken Accel. Alg. 2 and have an "83" average in Accel. Bio. or a "93" in Acad. Bio. Grade 10 students may take concurrently with Biology ACC with teacher recommendation and "83" average in Physical Science ACC.
Credit (if applicable)	2.0