

Chemistry I

“From knowledge of His work, we shall know Him.” – Robert Boyle (1627-1691) “The Father of Chemistry”

“If you're not part of the solution, you're part of the precipitate.” – Mr. Ueland, “The Father of Two” (with apologies to Steven Wright)

COURSE DESCRIPTION:

In this year-long introduction to general chemistry we will investigate the structure of atoms and molecules, and how they interact according to physical laws. We will learn to use the tools of chemical science (measurement, calculation, induction) to explore the theory of chemistry (atomic structure, chemical bonding, reaction dynamics, phase transitions). Students should expect a fast paced, laboratory intensive course. Upon successful completion of this course, students should be able to describe at the conceptual level several ways God has revealed himself in the physical universe.

PRE-REQUISITE:

A good command of algebra is required to do well in this course. Successful completion of Algebra I and at least concurrent registration in Algebra II is a prerequisite.

MATERIALS

- a scientific calculator (capable of exponential notation)
- a bound lab notebook (“Composition” book)
- pencils and a quality eraser
- textbook: *Chemistry*, by Wilbraham et al, 2000, Addison-Wesley