



# Science Curriculum

## **The Science Curriculum and the Mission of Saint Rose Academy**

The study of the universe reflects the truth, beauty, and goodness of the Creator. While science has its own order and laws, these empirical truths are never contrary to the truths of faith. Rather the study of physics, biology, chemistry, astronomy, and geology leads our students to develop a sense of awe, wonder, and discovery of the abiding presence of the Triune God. Therefore, the ultimate goal of the Science Curriculum at Saint Rose Academy is to deepen the students' Catholic faith and stewardship to the common good through the development of their skills in logical reasoning, discovery and exploration, and ingenuity.

## **Sequence of the Curriculum**

Saint Thomas Aquinas taught that man understands abstract concepts and ideas through interactions with concrete reality using one's five senses. Therefore, the goal of the primary and lower elementary grades is to provide a rich experience for our students to experience God's creation through hands-on-experiences. In addition, they are given the scientific vocabulary to understand these experiences and provide a means for communicating it with others. Most especially students are encouraged and nurtured to build upon their innate wonder and awe for the world around them.

In fifth grade through eighth grade, students continue their study of science in the Saint Albert the Great Laboratory. The study of various scientific concepts is balanced through demonstrations and the performance of lab activities. Fifth graders begin their study of the universe through the study of astronomy. Sixth graders focus predominantly upon the interactions of the geosphere, hydrosphere, and atmosphere which sustains the biosphere on Earth. The foundations of the study of the Earth are deepened in seventh grade through the study of matter in chemistry and the forces that guide motion in physics. Lastly, eighth graders study more in depth about the biosphere on Earth through the study of cells, genetics, and human anatomy and physiology in biology. With each progression of grade levels, students are encouraged to not study isolated facts or concepts but to see how God has incorporated into His creation an intricate relationship among organisms, matter, and energy by which He sustains and guides His creation.