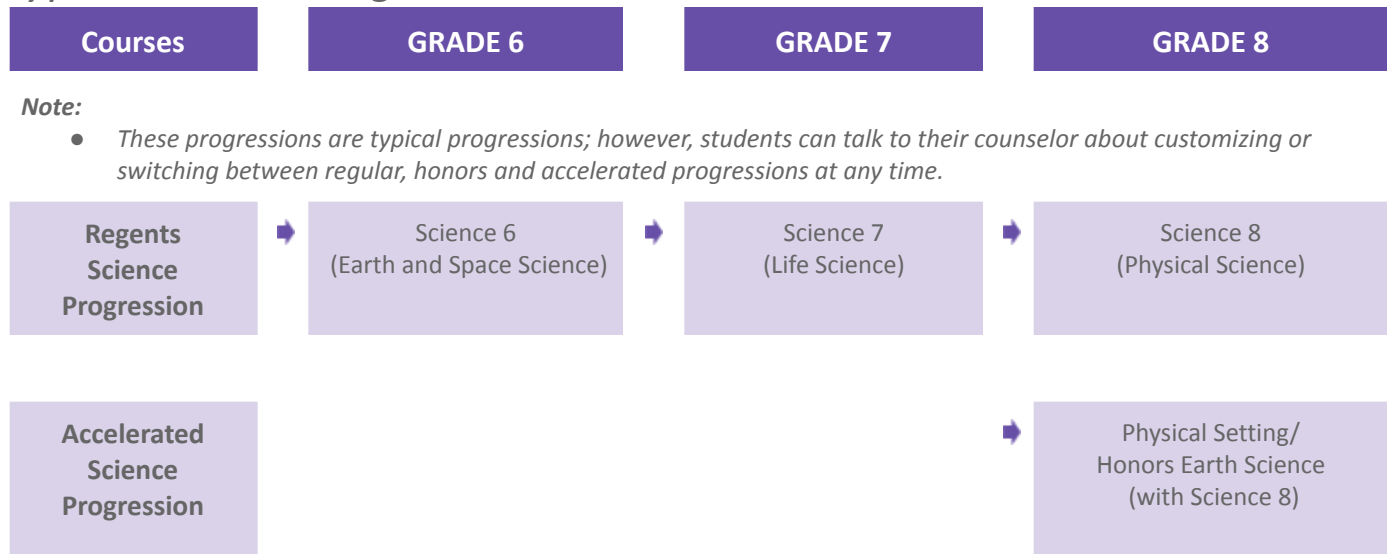




Science

Typical Science Progressions



Note:

- These progressions are typical progressions; however, students can talk to their counselor about customizing or switching between regular, honors and accelerated progressions at any time.

Science Courses

Science 6

Full year course

Course Description

The curricular foundation for this course is the New York State Science Learning Standards (NYSSLS) for Grades 5-8 in Science. The focus of instruction in Grade 6 science is to encourage understanding of relationships, processes, mechanisms, and application of concepts in Earth & Space Science. Students will explore such areas as natural disasters, the structure of the universe, geology including weathering, erosion, deposition and plate tectonics, meteorology and the nature of scientific inquiry. Students will explore the “hands on” nature of laboratory exercises in individual and cooperative settings. Activities include laboratory experiments, classroom demonstrations, research projects, textbook readings, note taking, metric measuring, data analysis, and interpretation of observations. This course will extend skills and prepare students to explain, both accurately and with appropriate depth, the most important ideas within the introductory topics of Earth & Space Science.



Science (continued)

Science 7

Full year course

Course Description

The curricular foundation for this course is the New York State Science Learning Standards (NYSSLS) for Grades 5-8 in Science. This course will further develop an understanding of the concepts of Life Science. This is the branch of science that deals with the study of living things, their relationship to one another and to their environment. Major units of study in life science include: the scientific method, tools of a life scientist, characteristics of the kingdoms of life, genetics, microscopes and cells, simple organisms, plants, animals, similarity and diversity of life, human biology, animal behavior and adaptation, evolution, and ecology. Important in the seventh grade program are the skills of classifying, using laboratory techniques, researching and organizing information, making inferences, and using the metric system of measurement. Many laboratory exercises are used to assist students in developing these skills.

Science 8

Full Year Course

Course Description

The curricular foundation for this course is the New York State Science Learning Standards (NYSSLS) for Grades 5-8 in science. This course will further develop an understanding of the concepts of Physical Science. It emphasizes the development of individual student skills in science reading, laboratory work, record keeping, measurement, and conceptual learning. Through a series of carefully structured investigations in physical science, the students study properties of matter, basic chemistry, forces, work, simple machines, motion, nuclear energy, electricity, heat energy, mixtures and solutions, electromagnetism, mechanics and alternate energy resources.

Grade 8 Accelerated Regents Earth Science

Full Year Course

Course Description

The curricular foundation for this course is the New York State Science Learning Standards (NYSSLS) and the Physical Science curriculum included in the Science 8 course. Topics studied are physics, chemistry, astronomy, meteorology, oceanography and geology. The course develops skills, ideas, principles and concepts important to the understanding of basic physical science and the Earth and Space Sciences. These are emphasized through laboratory experiences, classroom discussions, media demonstrations, mathematical analysis, and text assignments.

Course Requirements/Recommendations

Students must be accelerated at least one year in math in order to enroll in this course. They must take the NYS Regents Exam for Earth and Space Science at the end of the course in the spring semester.