Science Course Updates for 2020-2021

Science Course Pathways:
- Graduation Requirements: 3 credits, IES, Biology, and either Chemistry or Physics
- Course prerequisites and recommendations are listed in italics.
- Prerequisites for AP courses align with College Board recommendations and are designed to best prepare for the exam.

- Integrated Environmental Science (IES)
  - Biology: Prerequisite: IES
  - Chemistry: Prerequisites: IES, Algebra I
  - Physics: Prerequisites: IES, Algebra I
  - AP Physics: Prerequisites: IES, Geometry and Algebra II (may be taken concurrently)
  - AP Biology: Prerequisite: IES, Biology
  - Additional Recommended Coursework: Chemistry
  - AP Chemistry: Prerequisites: IES, Chemistry, Algebra II

Courses outlined above meet science graduation credits. Science electives are listed in the course guide.

Changes made to Life Science and Physical Science courses

- Life Science is now Biology. The course title will be changed for all students currently enrolled in Life Science.
- The Physical Science course (Introduction to Physics and Chemistry) will no longer be offered. Students completing this course will meet the Chemistry or Physics graduation requirement. This course also will meet the course prerequisites for AP Biology and AP Chemistry. Students may enroll in AP Physics after having taken Physical Science.

New Non-AP Chemistry and Physics courses

- Physics: grades 10-12, Course prerequisites: Algebra I, IES 1 credit
  In this Physics course, students will engage with the ideas of Objects in Motion (“Kinematics”), Newtonian Mechanics, Momentum & Energy, Uniform Circular Motion & Gravitation, and employ their Algebra I skills on a regular basis. Students will be expected to participate in a wide variety of science practices including, but not limited to: analysis, modeling, and investigating. This course features significant lab work.

- Chemistry: grades 10-12, course prerequisites: Algebra I, IES 1 credit
  In this Chemistry course, students will engage with the ideas of the Periodic Table and Atomic Theory, Chemical Bonds, Chemical Reactions, Stoichiometry (mathematical applications of Chemistry), and begin their thinking about Acids & Bases, Thermochemistry, and employ their Algebra I skills on a regular basis. Students will be expected to participate in a wide variety of science practices including, but not limited to: computational thinking, modeling, and investigating. This course features significant lab work and is a prerequisite for the AP Chemistry course.

AP course prerequisites have been updated to align with College Board recommendations.

- AP Physics prerequisites: IES, Geometry, Algebra II (may be taken concurrently)
- AP Chemistry prerequisites: IES, Chemistry, Algebra II (Physical Science course meets Chemistry requirement)
- AP Biology prerequisites: IES, Biology, Recommendation: Chemistry (Physical Science course meets this recommendation)