Science and Engineering Course Descriptions

Course	Description	Recommended Prerequisites
Biology	Biology is the study of life. Learn about organisms, their structures, how they function, and their relationships to each other and their environment. Labs are conducted as part of this course.	None
Biology Accelerated	This course covers the same topics as Biology, but done at an accelerated pace with activities that go deeper into each topic. Labs are conducted as part of this course.	Grade of B or A in 8th grade science
Bilingual Biology	Biología es el estudio de la vida. Aprenda sobre los organismos, sus estructuras, cómo funcionan y sus relaciones entre sí y con su entorno. Experimentos se llevan a cabo como parte de este curso. El curso se imparte tanto en español como en inglés.	Solicitud del padre para que el estudiante se matricule en un curso bilingüe
Biomedical Science	Learn the topics of Biology through a medical lens, including anatomy and the study of life in the medical field. Labs are conducted as part of this course.	None
Biology Fundamentals	This course provides students a more concentrated perspective of Biology by focusing on key topics. Labs are conducted as part of this course.	Only available to those students whose educational plan calls for enrollment in course
Chemistry	Chemistry is the study of atoms, the building blocks of matter. Learn the structure and behavior of atoms when in different environments and when interacting with each other. Labs are conducted as part of this course.	Grade of C or better in Biology course, completion of Integrated Math 1.
Honors Chemistry	Covering the same topics as Chemistry, but done at an accelerated pace with activities that go deeper into each topic.	Grade of B or A in Biology course, grade of B or A in Integrated Math 1.

	Labs are conducted as part of this course.	
Physics	Physics is the study of matter and energy. Learn how matter and energy move and transform in our world. Labs are conducted as part of this course.	Grade of C or better in Biology course, completion of Integrated Math 1.
Honors Physics	Covering the same topics in physics at an accelerated pace, in additon to two dimensional motion, honors physics takes a more mathematical approach to studying the behavior of matter and energy in our universe. Labs are conducted as a part of this course.	Grade of B or A in Biology course, grade of B or A in Integrated Math 1.
Earth Science	Earth Science is the study of the natural processes that created the Earth and continue to shape it.	None
Earth Science Fundamentals	This course provides students a more concentrated perspective of Earth Science by focusing on key topics in the subject.	Only available to those students whose educational plan calls for enrollment in course.
AP Biology	Studying the topics of Biology at a college level depth and pace, this bracing course goes far deeper into the structure, function, and interaction of living things.	Grade of A or B in Biology and Chemistry course, strong reading and writing skills, grade of B or A in Integrated Math 1. Concurrent enrollment in AP Statistics encouraged.
AP Chemisty	Studying the topics of Chemistry at a college level depth and pace, this stimulating course goes far deeper into the structure, behavior, and interaction of atoms and chemicals.	Grade of A or B in Chemistry course, strong reading and writing skills, grade of B or A in Integrated Math 2.
AP Physics 1	Studying mechanics at a college level depth and pace, this stimulating course goes far deeper, with a mathematical lens, into kinematics, forces, rotional motion, waves, momentum, circuits, and energy.	Grade of A or B in honors physics (or completion of AP Physics 2), strong reading and writing skills, grade of B or A in Integrated Math 2.
AP Physics 2	Studying thermodynamics, circuits, optics, electromagnetism, and modern physics at a college level depth	Grade of A or B in honors physics (or completion of AP Physics 1), strong reading and

	and pace, this course goes far deeper, with a mathematical lens, into the behavior of matter and waves.	writing skills, grade of B or A in Integrated Math 2.
AP Environmental Science	Studying the interactions of earth systems and how humans impact those systems, this interdisciplinary course is taught at a college level depth and pace.	Grade of A or B in Biology and Chemistry course, strong reading and writing skills.
Introduction to Engineering	Studies the design process needed to create and manufacture products. Provides an introduction to Computer Aided Design (CAD).	Grade of A or B in science course, grade of A or B in Integrated Math 1. Must be in 10^{th} grade or above.
Principles of Engineering	Studies structures, mechanical advantage, programming and robotics.	Completion of Introduction to Engineering course, grade of A or B in Integrated Math 2.
Aerospace Engineering	Study of fluid mechanics as related to flight (lift and drag), wing design, and aviation.	Completion of Introduction to Engineering and Principles of Engineering (or concurrent enrollment), grade of A or B in Integrated Math 2.