



K-1st Grade:

Students get to apply directional programming using Bee Bot once a quarter. There are two MacBooks in each classroom used as a center to reinforce academic skills.

2nd Grade:

Students use Google Chromebooks for A/R tests, reinforcement of academic skills, and minimum research on projects. There are two MacBooks in each classroom used as a center to reinforce academic skills.

3rd Grade:

Students learn basic keyboarding skills. Students learn to type using the home row keys and proper posture and technique. Students are introduced to digital literacy, including basic care of computers, parts of a computer, and simple programming concepts (Hour of Code).

4th & 5th Grade:

Students practice keyboarding skills. Students are introduced to various software applications such as Pages (Word), Numbers(Excel), Keynote (PowerPoint), and Google Apps for Education. Students will continue to explore digital literacy and simple programming (Hour of Code).

Formal Computer Science Courses are Introduced in Middle School

Multimedia (6th grade):

This course explores the advanced features of presentations and audio and video technology tools. In addition, the students complete and collaborate on technology projects started in younger grades by providing advanced features (examples: green screen, schoolwide Christmas greeting).

Computer Science Fundamentals (6th grade):

This course is an overview of computer science concepts and applying those to block programming (coding). Students learn to code using Blockly, a coding program created by Code.org, and Scratch, a coding program created by MIT.

Introduction to Computer Science (7th & 8th grade):

This course is an overview of computer history, hardware, and software. Students learn to code using Scratch, a coding program created by MIT.

Introduction to Python (High School):

Python is one of the top programming languages in the world. In this class, students will learn Python basics such as control structures, functional programming, and regular expressions.

Computer Build and A+ Certification Class (High School):

This class will challenge students to spec and build a high-end computer for the lab. They will learn engineering design practices and hold scrums to complete the project. In conjunction with the computer build, an A+ certification will be completed.

Introduction to Java (High School):

Java is one of the top programming languages in the world. In this class, students will learn Java basics such as conditionals and loops, arrays, and exceptions. This course prepares students to take AP Computer Science A.

AP® Computer Science A (High School):

This is an advanced, college level course on the Java programming language. Students will study Java throughout the year to prepare for the AP® exam in May. Topics include conditionals and loops, user-defined classes, and algorithms.

AP® Computer Science Principles (High School):

This is an advanced, college level course that is an overview of computers and computational thinking. Students will analyze data sets, visualize data, and create products, as well as studying algorithms, programming, and the global impact of computers. This course prepares students to take the AP® exam in May.