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**Technology Courses**

**Computer Programming**

**Computer Science Principles**

**Year: 10, 11, 12   
Credit: (1.0) CTE, Science, or Elective   
Prerequisite: Computer Technology**

Computer Science Principles is a new course that follows a project to develop a computer science course that seeks to broaden participation in computing and computer science. The course places emphasis on the principles of computer science rather than just programming.

**Computer Programming I**

**Year: 10, 11, 12   
Credit: (1.0) CTE, 3rd Year Math, or Elective   
Prerequisite: Computer Technology**

An introductory course in computer programming/software engineering and applications. The course introduces students to the fundamentals of computer programming. Students will learn to design, code, and test their own programs while applying mathematical concepts. Introduction to programming language such as C++, C#, Java, Python, and Processing.

**Computer Programming II**

**Year: 11, 12   
Credit: (1.0) CTE or Elective   
Prerequisite: Computer Programming I**

This is a second year programming/CS course catered to students pursuing IB/AP computer science. Students will continue the study of prominent object oriented languages including C++, Java and C# in preparation for the applicable state and/or AP/IB exams. Current hardware, operating systems, applied electronics and up to date IDE’s are all used in approaching highly technical and real world solutions resulting in skilled jobs and excellent education opportunities.

**Yearbook**

**Yearbook (Desktop Publishing)**

**Year: 10, 11, 12   
Credit: (1.0) CTE or Elective   
Prerequisite: None**

The students in this course plan and produce the school yearbook, The Aquilian. Students receive training in layout, design, photography, cropping and editing photos, and writing stories and captions.

**Digital Media**

**Digital Media I**

**Year: 10, 11, 12   
Credit: (1.0) CTE or Elective   
Prerequisite: None**

Designed specifically for students who want to develop their creativity using exciting, new multimedia/computer technologies. Students will use a variety of computer software to learn photo manipulation, graphic design, web design, animation, digital music composing, and video production. As part of the class, students may optionally participate in an annual film-festival. Students will leave the class with an interactive portfolio showcasing the year’s work.

**Digital Media II**

**Year: 11, 12   
Credit: (1.0) CTE or Elective   
Prerequisite: Digital Media I**

This second year of Digital Media is designed to train students in marketable skills for the production of multimedia. Students will expand the knowledge they learned in Digital Media I as they take a deeper exploration in 3-D graphics, animation, scripting, storyboarding, video production, audio mixing, and project development. This is the place to create a portfolio for college and/or future employment.

**Computer Literacy**

**Computer Technology**

**Year: 10, 11, 12   
Credit: (.5) Computer Literacy or Elective   
Prerequisite: None**

This course is an introduction to various types of productivity software including word processing, spreadsheets, presentation software, desktop publishing, and internet applications. The course also explores computer operating systems, hardware and general information principles.

**Exploring Computer Science**

**Year: 10, 11, 12   
Credit: (.5) Computer Literacy or Elective   
Prerequisite: None**

Exploring Computer Science is designed to introduce students to the breadth of the field of computer science through an exploration of engaging and accessible topics. The course is designed to focus the conceptual ideas of computing and help students understand why certain tools or languages might be utilized to solve particular problems. The goal of Exploring Computer Science is to develop in students the computational thinking practices of algorithm development, problem solving and programming within the context of problems that are relevant to the lives of today’s students. Students will also be introduced to topics such as interface design, limits of computers and societal and ethical issues.

**Exploring Computer Science II**

**Year: 10, 11, 12**

**Credit: (.5) CTE or Elective**

**Prerequisite: None**

Exploring Computer Science is designed as an interactive class which introduces students with a wide variety of robotics and technology associated competitions and organizations available to them. The course works in cooperation with Skyline High School Technology Student Association and VEX Robotics to develop the students’ fascination with robotics, computer science, and technology.