

TECHNOLOGY

Course name: **Technology Literacy**
Credit: **1/2**
Grade: **10-12**

In this course, you will learn the basics of the Internet, word processing with MS Word, presentation development with PowerPoint, and spreadsheet development using Excel. In addition, the course will have you constructing video, audio, animation similar to those of business as well as for other classes (cross-curricular presentations). Students will use multimedia to create computer presentations and learn business-style presentation techniques.

Course name: **Web Design I**
Credit: **1/2**
Grade: **10-12**

Have you ever wondered how web pages on the Internet are made? Do you want to have the skills to create interesting websites? This course teaches the basics of building and maintaining a site on the World Wide Web. We discuss Internet terminology and how the Internet and its associated technologies work. The Extensible Hypertext Markup Language (XHTML), a basic Internet formatting language, will be taught step by step as well as other software tools such as Macromedia Flash and Adobe Photoshop. Creative design concepts are thoroughly investigated and as knowledge and skills develop, students will have the opportunity to create functional websites around specific educational themes with major emphasis on aesthetics. FTP skills are developed in order to transfer files to the WWW. This course will require a variety of outside work, including: website critiques, reading assignments, research, or other assigned projects. Students will maintain a portfolio for assessment and presentation for each quarter.

Course name: **Web Design II**
Credit: **1/2**
Grade: **10-12**
Prerequisite: **Web Design I or by permission of the instructor**

Students will expand their existing web design authoring skills and knowledge by building and maintaining advanced websites with Macromedia's Dreamweaver web authoring software as well as develop animation using Macromedia Flash and still graphics using Adobe Photoshop software. Students will work independently to create original websites that are designed for aesthetics and function. An on-going segment of this course will be web maintenance of existing websites. FTP skills are developed in order to transfer files to the WWW. This course will require a variety of outside work, including: Website critiques, reading assignments, research or other assigned projects. Students will maintain a portfolio for assessment and presentation for each quarter.

Course name: Web Design III
Credit: 1/2
Grade: 11-12
Prerequisite: Web Design I & II and permission of instructor

Have you ever wanted to know how websites authenticate someone so that he/she can sign into their email account? OR... how personal service sites like Myspace work? That is accomplished through some intense languages know as AMP, short for Apache, MySQL and PHP.

Using the Apache Web server, which powers more than 60 percent of Internet domains (according to Netcraft's Web Server Survey), students will learn how to program and develop dynamic web pages. Apache is a powerful, flexible, HTTP/1.1-compliant Web server known for its stability. It's highly configurable, and can be extended with third-party modules.

PHP is an HTML-embedded scripting language. Much of its syntax is borrowed from C, Java and Perl with a couple of unique PHP-specific features thrown in. The goal of the language is to allow web developers to write dynamically generated pages quickly.

MySQL is a multithreaded, multi-user, SQL (Structured Query Language) Database Management System (DBMS) with an estimated six million installations. Not only is MySQL the world's most popular open source database, it's also become the database of choice for a new generation of applications built on the LAMP stack (Linus, Apache, MySQL, PHP/Perl/Python.)

Course name: Computer Graphics
Credit: 1/2
Prerequisite: None

This half-year course will give students a foundation in the use of several graphic applications. Emphasis will be placed on the use of Adobe Photoshop as well as other software applications as a means of exploring the elements and principles of design.

Course name: Digital Art and Media
Credit: 1/2
Grade: 10-12
Prerequisite: Web Design I, Computer Graphics, or permission of instructor

In this course, the students study appropriate digital art and media. The topics include audio, video, graphics, text and animation tools. Concepts such as storyboards, scripts media, color and presentation are also addressed.

Course name: 2D & 3D Animation
Credit: 1/2
Grade: 10-12
Prerequisite: Students who select this course should have a strong comfort level using the PC or Macintosh computer and should be able to demonstrate computer graphics capabilities using applications similar to Adobe PhotoShop. In addition, completion of any art course or web design course is recommended before taking Computer Animation.

This course will allow students to enter the creative world of digital animation through Macromedia Flash, Daz3D Poser, Carrara, and Adobe After Effects software. Students will discover how the principles and concepts of animation are applied to the creation of their own multimedia animation that may integrate sound, music, photography, drawings, video clips, text and other imagery. As students begin to develop production techniques they will focus on creativity, individuality, originality in the formation of their storyline and concept. Animation involves electronic drawing and manipulation of graphics, creating and adjusting frame types, sequencing and regulation timing, adding transitions for scenes, tweening objects for movement, adding special effects, editing and revising frames, and creating front and ending matter. For major animation projects, students will present ideas in a well-planned and written format for discussion with the teacher for prior approval. This course will require a variety of outside work, including: reading and writing assignments, research, or other assigned projects. Students will maintain an animation portfolio for assessment and presentation for each quarter.

Course name: Podcasting
Credit: 1/2
Grade: 10-12

Podcasting is a method of broadcasting information about absolutely anything to an audience. People can either download the (podcast) audio file to their computer, MP3 player or actually tune into it from the PVHS radio station. Students/teachers/parents can use a program called an aggregator to subscribe to programs, which are downloaded to the consumers' computer for listening or viewing. Once downloaded to consumers' computers, the media can often be transferred to a portable media player, such as an iPod or other MP3 or video player.

Course name: Video Production
Credit: 1/2
Grade: 10-12

Introduces the basics of video production utilizing a personal camcorder and video editing equipment. Students study video technologies, basic equipment operation, video composition, basic lighting and audio production planning and visual storytelling. Students work in groups to create video projects utilizing post-production editing.