

# VALOR CHRISTIAN HIGH SCHOOL

INFLUENCE THROUGH EXCELLENCE

## TECHNOLOGY

The primary goal of the Technology Department is to provide students with exposure to educational and vocational training using state of the art technology and equipment. The students will be immersed in hands-on training while learning to understand, appreciate and create. Students will be able to explore their God-given talents in new and exciting areas.

### TEC 115

#### Networking

This course introduces the basics of networking including network terminology, local area networks (LAN) and wide area networks (WAN). Also included are network protocols such as TCP/IP, Open System Interconnection (OSI) models, cabling, routers, and subnetting. Some of the topics covered as well as hands on training will include: planning subnets and configuring IP Addresses, IPv4 address subnetting, install and configure network devices and nodes to create a local network (LAN), and building a wireless network.

**Grade:** 10,11,12; **Prerequisites:** None; **Term:** Semester;  
**Credit:** .5

### TEC 145

#### Computer Programming

This course will provide students with the knowledge and skills they need to develop C# applications for the Microsoft .NET Platform. The course focuses on C# program structure, language syntax, and implementation details. Visual C# is an object-oriented programming language designed specifically for programming Microsoft's new platform, the .NET Framework. Students will quickly and easily learn how to write C# code to create windows applications using Microsoft Visual Studio. Best practices will be especially emphasized and other topics include: variables, boolean logic, control statements, looping, class definitions, defining and implementing methods and using windows forms designer.

**Grade:** 10,11,12; **Prerequisites:** None; **Term:** Semester;  
**Credit:** .5

### TEC 135

#### Web Design

This course provides training in all aspects of website design. Students will help maintain portions of the Valor website. Tasks will include page design, writing, proofing, editing, layout, and JavaScript animation. Students will create other websites as well using HTML editing tools and Content Management Systems to create informational user friendly websites. Advanced students will prepare portfolios and focus on a specialty such as page management, animation, online video, digital photography or design.

**Grade:** 10,11,12; **Prerequisites:** None; **Term:** Semester;  
**Credit:** .5

### TEC 240

#### Web Design II

The Web Design II course is intended to build on the foundation established in Web Design I, as students further refine their technical ability in Dreamweaver, Photoshop and Flash, and expand their ability to create effective web design. In addition to project based applications, the class will assist in maintaining, updating and the creation of graphics for the Valor website.

**Grade:** 10,11,12; **Prerequisites:** Web Design I, or permission of instructor; **Term:** Full Year; **Credit:** 1.0

### GRA/TEC 410

#### Applied Media: Graphic Design and Web Design III/IV

This course takes skills learned in Graphic Design and Web Design I and II and applies them in a variety of real life applications. Half of the course is focused directly serving others through our creative gifts, while the other half is focused on commercial applications of graphic and web design. On the service side, the class will partner with a local public service organization, helping to create an awareness campaign. On the commercial side, students will learn fundamentals of marketing as they develop design related products sold through the *Valor Media* website. The site will be a delivery portal for Christ centered media, such as a teen focused video series, fine art prints, calendars, posters, greeting cards and worship media tools. The class meets concurrently with *Applied Media Photography* and *Applied Media Video*, so that the groups can work collectively to provide complete solutions in both service and commercial applications. The class emphasizes group decision-making and creative brainstorming, and takes a round table collaborative approach to applying student skills in a significant manner.

**Grade:** 11,12; **Prerequisites:** 93% or higher average in Graphic Design and Web Design II, or permission of the instructor **Term:** Full Year; **Credit:** 1.0; **Fee required:** See Valor website for details.