### **FRESHMEN OPTIONS**

### **BUSINESS** (No pre-requisite)

#### **DIGITAL ANIMATION**

037490

Grade: 9-12 DIGITAL ANIM 1/2 CTE Credit Prerequisite: None

In this course, students will use Adobe Flash to develop rich media content utilizing vector graphics and animation. Students will learn to develop storyboards, create and manipulate graphics and text, develop animation using the timeline, and create interactive elements using Actionscript 3.0. This course gives students a competitive edge in today's technologically driven society as they acquire skills using the leading industry software. Upon completion of this course, students are eligible to become Adobe Certified in Flash.

#### FUNDAMENTALS OF IT/COMPUTER MAINTENANCE

037400

Grades: 9-12 IT COMPUT MAIN 1/2 CTE Credit Prerequisite: None

In this introductory course, you will learn the basics of computer hardware, software, networking, troubleshooting, and emerging technologies. You will learn about configuring operating systems, file and folder management, networks and network configuration, and the role of the OSI model in networking and troubleshooting. Through presentations, demonstrations, and knowledge-based exercises, you will gain a fundamental understanding of local and wide area network technologies and protocols, web browsers, identifying security risks and troubleshooting errors, and system maintenance. You will also learn about cuttingedge technologies such as cloud computing and green IT. This course will also prepare you for the CompTIA Strata IT Fundamentals certificate exam and also serves as launch pad for taking other IT courses, such as A+ Computer Maintenance, Network+, & Computer Science.

#### INTRO TO COMPUTER TECHNOLOGIES 037010

Grades: 9-12 INT COMP TECH 1/2 CTE Credit Prerequisite: None

The purpose of this course is to provide students with an opportunity to develop a strong foundation in computer and information literacy. This course is a broad introduction to the use of computers as tools for creativity, communications and organizing information. Students will learn about online tools, word processing and spreadsheet software, as well as publishing and presentation software. Students will learn how to use computers flexibly, creatively and purposefully.

### INTRODUCTION TO BUSINESS

037350

Grades: 9-10 INTRO TO BUS 1/2 CTE Credit Prerequisite: None

This course will provide a solid foundation in business principles which are immediately applicable to students' lives. Through the use of interactive technology, presentations, and project management students are made aware of the integral role that they play in today's ever-changing global economy. The units presented are economics, entrepreneurship, marketing, international business. The experiences students gain in this course will help them to succeed in future personal and business endeavors.

## **FRESHMEN OPTIONS**

INTRODUCTION TO COMPUTER SCIENCE

Grades: 9-12 INT COMP SCI 1/2 CTE Credit Prerequisite: None

This course is designed to provide students with a solid introduction to programming language. The course will provide students with a base of fundamentals in software development. Emphasis is placed on the development of problem solving algorithms and logic. Students learn to develop real life applications that involve the prerequisite to the AP Computer Science course.

#### WEB DESIGN 1

037570

037310

Grades: 9-12 WEB DESIGN 1 1/2 CTE Credit Prerequisite: None

Web Design 1 provides the student with a solid knowledge base to design, build, manage and publish dynamic content for the web. This course focuses on the overall production process with particular emphasis on design elements involving layout, navigation and interactivity. The students will create web pages that effectively communicate a message to a variety of audiences. Prior computer experience is recommended.

VIRTUAL FOUNDATIONS OF VIDEO GAME DESIGN

037900

037320

Virtual Offering Only Grade: 9-12 1/2 CTE Credit Prerequisite: None

This virtual course will provide students with a complete understanding of the creative and technological sides of video game design. The course will introduce students to the different areas of game design. From design, integration, and marketing, students will be introduced to the complete cycle of video game design. Along with exploring the profession of video game design, students will be introduced to another avenue of computer science. This course is an introductory course for students with an interest in computer programming, computer science, web design and multimedia. All classwork will be completed online. Students who are interested should contact their counselor regarding the process for enrolling in an online course.

### **BUSINESS** (Pre-requisite required)

### **COMPUTER SCIENCE: APPLICATION DESIGN AND DEVELOPMENT**

**Grade:** 9-12 1/2 CTE Credit Prerequisite: Intro to Computer Science

Learn the basics of app design, and take the first step on your journey to becoming an app developer! This course is designed for students who are new to programming, and want to learn how to build applications. A basic background in Java programming is recommended. Your experience and knowledge gained in the Intro to Computer Science course will provide a strong foundation for developing an application. If you love being creative, learning to code, and using technology, then you're our perfect target student!By the end of the course, youâ€<sup>™</sup>Il build a fully functioning, yet powerful, application that can be shared with others. In summary, this course lays the foundation for people who want to better understand the overall role of an application developer and become a skilled creator, not just a consumer, of technology.

# **FRESHMEN OPTIONS**

#### 037590

**MULTIMEDIA** Grades: 9-12 **MULTIMEDIA** 1/2 CTE Credit Prerequisite: It is recommended that students complete Integrated Computer Literacy (ICL)

This course provides the skills needed to create high quality video content for today's world. Students will learn the phases of video production, effective use of a camcorder, video editing techniques, and application of video effects using industry software. This course is project oriented allowing students to develop creative thinking skills while producing unique video. This course will prepare students for the workplace or further education by developing their skills in the latest software and making multimedia products that could be included in a personal portfolio.

#### **MULTIMEDIA 2: DIGITAL PRODUCTION 037290**

Grades: 9-12 MULTIMEDIA2 1/2 CTE Credit Prerequisite: Multimedia

This course is going to build upon the skills learned in Multimedia but will go much deeper into the focus on production. Students will learn about pre-production considerations and production techniques that were not learned before. Areas of focus will include: video space, time, composition, language, sound and communication, program planning and development, camera systems and operations, lighting tools, design and applications and audio. Also included will be a focus on directing and on new tricks in video editing.

WEB DESIGN 2 Grades: 9-12 1/2 CTE Credit Prerequisite: Web Design 1 037580

A continuation of Web Design 1, Web Design 2 focuses on the advanced techniques for communicating a message via the web. These techniques include vector animation, templates and forms, applying spry menus and other behaviors. College credit is available through an articulation agreement with St. Louis Community College.