Web Design is a course that provides instruction in the principles of web design using HTML/XHTML and current/emerging software programs. Areas of instruction include audience analysis, hierarchy layout and design techniques, software integration, and publishing. Instructional strategies should include peer teaching, collaborative instruction, project-based learning activates and school community projects.

- **DOE Code:** 4574
- **Recommended Grade Level:** Grade 11-12
- **Recommended Prerequisites:** IT Essentials or Introduction to Communications
- **Credits:** 1 credit per semester, maximum of 2 credits
- **Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- **This course is aligned with postsecondary courses for Dual Credit:**
  - Ivy Tech
    - VISC 110 Web Design I
  - Vincennes University
    - COMP 107 Web Page Design
    - COMP 113 Advanced Web Page Design

**Dual Credit**
This course provides the opportunity for dual credit for students who meet postsecondary requirements for earning dual credit and successfully complete the dual credit requirements of this course.

**Application of Content and Multiple Hour Offerings**
Intensive laboratory applications are a component of this course and may be either school based or work based or a combination of the two. Work-based learning experiences should be in a closely related industry setting. Instructors shall have a standards-based training plan for students participating in work-based learning experiences. **When a course is offered for multiple hours per semester, the amount of laboratory application or work-based learning needs to be increased proportionally.**

**Career and Technical Student Organizations (CTSOs)**
Career and Technical Student Organizations are considered a powerful instructional tool when integrated into Career and Technical Education programs. They enhance the knowledge and skills students learn in a course by allowing a student to participate in a unique program of career and leadership development. Students should be encouraged to participate in Business Professional of America, DECA, or Future Business Leaders of America. the CTSO for this area.

**Content Standards**

**Domain – Introduction to the Internet**
**Core Standard 1** Students assess internet tools used to access information for base knowledge of internet functions.

**Standards**
WD-1.1 Demonstrate a basic knowledge of the internet
WD-1.2 Access information using electronic sources
WD-1.3 Identify key events in history of the WWW, Internet and Intranet
WD-1.4 Analyze the affects of the Internet on society
WD-1.5 Trace the history of Internet communication and commerce

Domain – HTML/XHTML
Core Standard 2 Students integrate knowledge of HTML/XHTML fundamentals to understand the functions of a website.

Standards
WD-2.1 Create and format a table on an HTML/XHTML document
WD-2.2 Integrate scripting into HTML/XHTML documents
WD-2.3 Utilize forms in an HTML/XHTML document
WD-2.4 Identify and use appropriate HTML/XHTML elements and attribute syntax for semantic web page markup
WD-2.5 Identify, describe, and explain the differences in HTML/XHTML DOCTYPEs
WD-2.6 Demonstrate knowledge and implementation of CSS through proper syntax and effective use of external, embedded, and in-line style sheets

Domain – Website Development
Core Standard 3 Students produce websites to demonstrate skills of website development

Standards
WD-3.1 Create a basic template
WD-3.2 Develop website architecture, prototypes, and user interface specifications
WD-3.3 Demonstrate knowledge of usability and interface design
WD-3.4 Link web objects
WD-3.5 Demonstrate knowledge of content management
WD-3.6 Construct and maintain web pages using current editing software
WD-3.7 Construct web pages using standards compliant HTML/XHTML and CSS that successfully pass validation tests
WD-3.8 Design functional websites for consumer, education, and information based markets
WD-3.9 Observe organized structure which demonstrates and understanding of correct pathnames for relative and absolute links
WD-3.10 Implement basic website accessibility markup
WD-3.11 Recognize file types and file extensions
WD-3.12 Publish and maintain websites by using FTP to transfer to a server
WD-3.13 Analyze and optimize graphic files for web delivery

Domain 4 – Design Elements
Core Standard 4 Students integrate elements and principles of design for an aesthetically pleasing and functional website.

Standards
WB-4.1 Identify and apply effective design solutions based on content
WB-4.2 Discuss the importance of proper research, brainstorming, and thumbnails
WB-4.3 Evaluate the aesthetics of web design
WB-4.4 Given the target audience, the student will be able to show the importance of assessment in the advertising media industry
WB-4.5 Explain the elements of visual design unique to the commercial art and graphic design
WB-4.6 List and describe the components of a design
WB-4.7 Apply brainstorming techniques to develop many possible solutions
WB-4.8 Explain the human, social and environmental issues that affect the design solutions
WB-4.9 Analyze ethical issues in choosing design solutions
WB-4.10 Analyze the effective use of symbols, elements, principles, and media using appropriate terminology
WB-4.11 Evaluate the effectiveness of elements and principles in other design solutions and use this evaluation toward personal work
WB-4.12 Create design solutions that use specific elements, principles, and functions to solve problems and communicate ideas