FUNDAMENTALS OF WEB DESIGN
Course Syllabus

Course Number: WDEL-0003
OCAS Code: 8153
Course Length: 120 Hours
Career Cluster: Information Technology
Career Pathway: Interactive Media
Career Major(s): Web Design, Multimedia Design

Pre-requisite(s): Business and Computer Tech OR Fundamentals of Technology

Course Description: Students will acquire fundamental web authoring skills and design strategies through the application of XHTML incorporating Cascading Style Sheets and future trends in web programming. Once XHTML foundation skills are achieved, students will utilize a WYSIWYG editor and graphics package for application of design principles. (This course can be substituted with Web Authoring Languages. This course can also substitute for Design Tools and Electronic Marketing in the Animator, 3D Animator, 3D Modeler, and Motion Graphics Artist Career Majors).

Textbooks: Fundamentals of Web Design

Course Objectives: A. Demonstrate Knowledge of Fundamentals of Web Design
1. Explain and implement web design concepts, including page layout, font and color selection, graphic images, copyright and ethics, audience usability, file hierarchy, and navigation.
2. Select and implement basic web technologies, such as XHTML tables and frames, metadata, and Cascading Style Sheets.
3. Use web production applications and tools to create and manage pages and sites, create animated GIFs, and edit graphic image files, to enhance the user's experience.
4. Identify the Internet governing organizations and legal issues.
5. Research Internet standards, register a domain name, and identify the basic principles of the domain name system (DNS).
6. Identify the relationship between IP addresses and domain names, including: assignment of IP addresses within a subnet.
7. Define Internet communications protocols.
8. Demonstrate ways to communicate effectively and efficiently transfer text and binary files using the Internet.
9. Identify security-related issues related to Internet clients in the workplace and configure user customization features in web browsers including: preferences, caching, and cookies.
10. Construct a web page using a text editor and XHTML coding incorporating forms, frames.
11. Distinguish between and be able to use absolute and relative pathnames.
12. Identify differences in platforms, browsers, display settings, etc., and related accessibility issues.
13. Design and apply essential aspects of the Cascading Style Sheets standard for
page layouts.
15. Identify pre-production requirements including storyboarding, researching, budgeting, prioritizing, drafting proposals, contracts and requirements documents, etc.
16. Identify and incorporate standards for usability, ease of navigation, accessibility, and internationalization.
17. Identify and construct appropriate “voice” for web delivery.
18. Follow steps involved for testing, optimizing, hosting, and implementation of website.
19. Identify and use design and color principles for web pages.
20. Optimize and export graphics.
21. Identify steps in the website planning development and/or maintenance process.
22. Define electronic commerce (e-commerce) and related technologies and concepts necessary to develop a secure, useful interface (i.e., storefront).
23. Represent technical issues to a non-technical audience.

ODCTE Objectives

Teaching Methods: The class will primarily be taught by the lecture and demonstration method and supported by various media materials to address various learning styles. There will be question and answer sessions over material covered in lecture and media presentations. Supervised lab time is provided for students to complete required projects.

Grading Procedures: 1. Students are graded on theory and shop practice and performance.
2. Each course must be passed with seventy (70)% percent or better.
3. Grading scale: A=90-100%, B=80-89%, C=70-79%, D=60-69%, F=50-59%.

Description of Classroom, Laboratories, and Equipment: Tulsa Technology Center campuses are owned and operated by Tulsa Technology Center School District No. 18. All programs provide students the opportunity to work with professionally certified instructors in modern, well-equipped facilities.

Available Certifications/College Credit: The student may be eligible to take state, national or industry exam after completion of the program. College credit may be issued from Oklahoma State University-Okmulgee or Tulsa Community College. See program counselor for additional information.

College Credit Eligibility: The student must maintain a grade point average of 2.0 or better.