

Web Design (11.42500) (2021)

Adopted 2021

Demonstrate employability skills required by business and industry. IT-WD-1

1. Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities. IT-WD-1.1
2. Demonstrate creativity by asking challenging questions and applying innovative procedures and methods. IT-WD-1.2
3. Exhibit critical thinking and problem-solving skills to locate, analyze and apply information in career planning and employment situations. IT-WD-1.3
4. Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity. IT-WD-1.4
5. Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply team-work skills. IT-WD-1.5
6. Present a professional image through appearance, behavior, and language. IT-WD-1.6

Plan, develop, implement, and resolve ethical issues involved in creating and publishing a web site. IT-WD-2

1. Define key terms in site development: cloud computing, versions of HTML, CSS, design consistency, deprecated tags, wire framing/layout design, hyperlinks. IT-WD-2.1
2. Develop a logical argument for using cloud computing and the various web hosting platforms for business and personal use. IT-WD-2.2
3. Demonstrate proper use of basic HTML tags. IT-WD-2.3
4. Demonstrate proper use of basic CSS Selectors. IT-WD-2.4
5. Demonstrate understanding of inline style, header section styling, and separated CSS style pages. IT-WD-2.5
6. Describe the phases of web development (life cycle) and provide specific tasks for each phase. IT-WD-2.6
7. Use flowcharts/storyboards/pseudocode language to design a web site. IT-WD-2.7

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8. Identify essential web site navigation issues that help ensure site usability (consistency, intuitive text/icons, and breadcrumbs). IT-WD-2.8
 9. Describe ethical, government, and accessibility standards & W3C standards (readability, usability, browser compatibility, and copyright issues related to use of digital media). IT-WD-2.9
 10. Identify technologies available to enhance the user's experience, including programming languages and multimedia technologies. IT-WD-2.10
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Create documents using a variety of tags and coding practices commonly used to create web pages. IT-WD-3

1. Identify basic HTML document (web page) layout & tags used to create web pages according to industry standards (e.g., header, footer, side bar, main content, navigation/menu bar, tabs/drop downs). IT-WD-3.1
 2. Demonstrate familiarity with W3C standards for web development and tag usage. IT-WD-3.2
 3. Demonstrate an understanding of common programming structures, such as loops, conditionals, and arrays, using a front-end Object-Oriented programming language, such as JavaScript. IT-WD-3.3
 4. Create a web site using HTML and Separate CSS Styling pages to W3C standards. Upload to online career portfolio. IT-WD-3.4
 5. Demonstrate understanding of the importance of validating web sites and tools available for the process. IT-WD-3.5
 6. Explain the difference between client-side and server-side programming languages and validation. IT-WD-3.6
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Create and use graphics to enhance web pages using a variety of tools. IT-WD-4

1. Identify and use design and color principles appropriate for graphics and web pages. Explain RGB, HSL, CMYK color formatting. IT-WD-4.1
 2. Describe the image formats used within a web page (gif, jpg, png, image maps) and describe appropriate use of which format. Demonstrate knowledge of lossy and lossless image formats. IT-WD-4.2
 3. Create a web site using multiple image formats. Upload to online career portfolio. IT-WD-4.3
 4. Explore online tools and downloadable software available to create and edit still and animated graphics. IT-WD-4.4
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Define and apply essential aspects of the Cascading Style Sheets to format elements within a web site. IT-WD-5

1. Demonstrate use of inline, header-located and external style sheets. IT-WD-5.1
2. Create a web site using multiple style selectors and sub-selectors using external Cascading Style Sheets. IT-WD-5.2

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3. Design web pages utilizing CSS to manage text flow using regions, columns, and graphical interfaces. Demonstrate understanding of exact and relative text size formatting. Upload to online career portfolio. [IT-WD-5.3](#)
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Use (Graphic User-Interface) GUI-based HTML editing software to create web sites. [IT-WD-6](#)

1. Explain the differences between the types of editing software and when to editing software: text, object, and WYSIWYG (What You See Is What You Get). [IT-WD-6.1](#)
 2. Design web sites using a GUI-based editor following the design principles to enable navigation, usability, and accessibility. [IT-WD-6.2](#)
 3. Explore advanced layouts & scripting tools available through GUI-based editors such as widgets, image sliders, etc. [IT-WD-6.3](#)
 4. Create a website which implements tables. [IT-WD-6.4](#)
 5. Create and use interactive forms on a web site. [IT-WD-6.5](#)
 6. Design and implement layers, image maps, and navigation bars. [IT-WD-6.6](#)
 7. Enhance a website with media objects and images. Upload to online career portfolio. [IT-WD-6.7](#)
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Develop an understanding of e-commerce practices and related technologies necessary to create a secure, useful interface to conduct business online. [IT-WD-7](#)

1. Develop a working e-commerce vocabulary including e-business, mobile commerce, branding, market space, business model (B2B, B2C), security, payment options. [IT-WD-7.1](#)
 2. Explain the importance of branding and establishing a color palette for an e-business to create an online presence. [IT-WD-7.2](#)
 3. Explain the importance of using web design principles to meet customer expectations. [IT-WD-7.3](#)
 4. Explain the benefits of configuring a site to mobile standards currently used further the accessibility of an e-business. [IT-WD-7.4](#)
 5. Demonstrate an understanding of security issues associated with the internet including but not limited to backing up files & cloud storage, e-commerce and collecting customer information, vendor tracking devices, hacking, and data security on a web site. [IT-WD-7.5](#)
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Test, analyze, and identify performance issues related to publishing and maintaining web sites. [IT-WD-8](#)

1. Identify essential issues in developing and maintaining a web site, including project management, testing, legal issues. [IT-WD-8.1](#)
2. Identify strategies commonly used for managing a user's experience and improving site creativity and aesthetic qualities. [IT-WD-8.2](#)
3. Explore options for publishing a web site and web hosting. [IT-WD-8.3](#)

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4. Identify the benefits and drawbacks of running your own web server versus using a service provider. IT-WD-8.4
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5. Plan and deliver oral presentations of a web site explaining the developmental process before, during, and after site completion to a potential customer. IT-WD-8.5
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Organize personal online career portfolio for specific career interests. IT-WD-9

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1. Review and update résumé to reflect new knowledge and skills master and additional work experience. IT-WD-9.1
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2. Organize folders within the portfolio to reflect specific careers of interest, including résumé, targeted cover letter, and artifacts relevant to the specific career. IT-WD-9.2
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3. Update all current items in the portfolio. IT-WD-9.3
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4. Identify and upload additional industry-appropriate artifacts reflective of mastered skills throughout this course. Write and include a reflective entry for each artifact discussing steps taken, problems encountered and how they were overcome, and other pertinent information about the learning. IT-WD-9.4
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5. Polish all entries in the online career portfolio to ensure accuracy and professionalism as expected from employers. IT-WD-9.5
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6. Conduct a job search and share the appropriate folder with the potential employer. IT-WD-9.6
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Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events. IT-WD-10

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1. Explain the goals, mission, and objectives of Future Business Leaders of America (FBLA) and/or Technology Student Association (TSA) and/or SkillsUSA. IT-WD-10.1
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2. Explore the impact and opportunities a student organization (FBLA, TSA, SkillsUSA) can develop to bring business and education together in a positive working relationship through innovative leadership and career development programs. IT-WD-10.2
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3. Explore the local, state, and national opportunities available to students through participation in related student organizations (FBLA, TSA, SkillsUSA) including but not limited to conferences, competitions, community service, philanthropy, and other student organization activities. IT-WD-10.3
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4. Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development. IT-WD-10.4
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5. Explore the competitive events related to the content of this course and the required competencies, skills, and knowledge for each related event for individual, team, and chapter competitions. IT-WD-10.5
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