

Appendix A: Objectives and Courseware Locations

ICT Web Design Essentials

The *ICT Web Design Essentials* course and this appendix are designed to help students prepare for the ICT Web Design Essentials digital certificate exam. Students can use this appendix as a study guide to locate content within the *ICT Web Design Essentials* courseware that corresponds to the specific skills objectives of the ICT Web Design Essentials digital certificate exam.

Learning objectives for all courses in the ICT Essentials series are based on the Florida Department of Education's Curriculum Framework for Secondary–Middle School Information and Communications Technology skills, and align to National Assessment of Educational Progress (NAEP) frameworks for Technology and Engineering Literacy.

For more information about the ICT Essentials Suite of courses and certificates, visit the ICT pages at www.ICTcertified.com.

ICT Domain 3: Web Design Essentials Learning Objective	<i>ICT Web Design Essentials</i> Course Courseware Lesson, Topics and Activities
Subdomain 3.1 Demonstrate an understanding of webpage design principles.	
3.1.1 Identify website domains, and relate a site's domain to its purpose.	Lesson 1: Principles of Web Design - Website Categories and Domains - Activity: Matching Website Categories and Domains - Activity: Searching Website Categories and Domains
3.1.2 Relate basic components of a webpage (e.g., color, space, written content, typography, images, links, multimedia) to aesthetic, functional and/or usable design principles. 3.1.3 Define aesthetic design, and explain how aesthetics can affect a visitor's perception of a website's information.	Lesson 1: Principles of Web Design - Aesthetic Web Design - Color - Functional and Usable Design - Multimedia and Interactivity - Activity: Evaluating CARP principles - Activity: Reviewing Web Design Principles – Crossword - Activity: Matching Web Design Principles - Activity: Evaluating Best Practices

ICT Domain 3: Web Design Essentials Learning Objective	ICT Web Design Essentials Course Courseware Lesson, Topics and Activities
3.1.4 Demonstrate knowledge of color wheel concepts and effective use of color on a website.	Lesson 1: Principles of Web Design - Aesthetic Web Design - Color - Activity: Exploring the Meaning of Color - Activity: Using a Color Scheme Generator
3.1.5 Compare functional and usable design principles, and explain how usability can affect a website's success. 3.1.6 Critique the aesthetic design, usability and accessibility of sample websites.	Lesson 1: Principles of Web Design - Functional and Usable Design - Activity: Evaluating CARP Principles - Activity: Having Fun with Typography - Activity: Writing Effective Web Content - Activity: Evaluating Website Accessibility - Activity: Evaluating Website Usability - Activity: Evaluating Best Practices
3.1.7 Define multimedia, and identify its role in webpage interactivity.	- Multimedia and Interactivity - Activity: Analyzing Multimedia and Interactivity
Subdomain 3.2 Plan the design and development of an effective website.	
3.2.1 Explain the primary steps of the website planning process. 3.2.2 Apply the website planning process to plan the design for a basic website. 3.2.3 Build the site navigation scheme for a website.	Lesson 2: Planning a Website - Website Planning Steps - Step 4: Determining the Navigation Structure - Activity: Determining Website Purpose and Goals - Activity: Determining Target Audience - Activity: Creating a Mind Map - Activity: Describing Navigation Structures - Course Case Study: All About Me — Assignment 1
3.2.4 Compare webpage creation using an HTML text editor to using a graphical user interface (GUI) editor. 3.2.5 Compare website creation using an online site builder, an offline site builder and a content management system (CMS). 3.2.6 Modify an existing webpage template to create an effective look and feel for a website. 3.2.7 Create a website using a template.	Lesson 2: Planning a Website - Website Planning Steps - Step 6: Selecting the Appropriate Tools - Using an HTML Text Editor or GUI Editor - Using an Online Site Builder - Using an Offline Site Builder - Using a Content Management System (CMS) - Activity: Evaluating Web Tools - Activity: Reviewing Steps for Web Design Planning - Activity: Putting It All Together to Plan a Website

ICT Domain 3: Web Design Essentials Learning Objective	ICT Web Design Essentials Course Courseware Lesson, Topics and Activities
Subdomain 3.3 Create webpages using basic HTML code and authoring tools.	
<p>3.3.1 Define “HTML (Hypertext Markup Language)” and related terms, including tag vs. element, container vs. empty tag, block-level vs. inline element, attribute, value, semantic tag.</p> <p>3.3.2 Identify HTML elements required to create webpage structure.</p>	<p>Lesson 3: Creating a Website</p> <ul style="list-style-type: none"> - Introduction to HTML - Elements of a Webpage - Activity: Putting HTML Code in the Correct Order - Activity: Filling in the Missing Code - Activity: Filling in the Missing Code — Advanced
<p>3.3.3 Create webpages using basic HTML tags (e.g., headings, lists, character styles, text alignment, tables, comments).</p> <p>3.3.4 Use HTML to create hyperlinks to external sites.</p> <p>3.3.5 Use HTML to insert common image file formats into webpages, and use an image as a hyperlink.</p>	<p>Lesson 3: Creating a Website</p> <ul style="list-style-type: none"> - Elements of a Webpage - Activity: Writing HTML Code with W3Schools Try It Now — Part 1 - Activity: Writing HTML Code with W3Schools Try It Now — Part 3 - Activity: Creating a Webpage – Part 1 - Activity: Creating a Webpage – Part 2 - Course Case Study: All About Me — Assignment 2
<p>3.3.6 Explain Cascading Style Sheet (CSS) technology.</p> <p>3.3.7 Apply CSS styles to an HTML page.</p>	<p>Lesson 3: Creating a Website</p> <ul style="list-style-type: none"> - Activity: Using Codecademy to Learn HTML and CSS - Activity: Writing HTML Code with W3Schools Try It Now — Part 2
<p>3.3.8 Create and/or edit animation files, and integrate them into a webpage.</p> <p>3.3.9 Create and/or edit video files, and integrate them into a webpage.</p> <p>3.3.10 Use Dynamic HTML (DHTML) to enhance webpage interactivity.</p>	<p>Lesson 3: Creating a Website</p> <ul style="list-style-type: none"> - Multimedia and Interactivity - Activity: Using Thimble to Create a KEEP CALM poster - Activity: Using Thimble to Create a Meme - Activity: Using Thimble to Create a Movie Poster - Activity: Creating an Animated Scrolling Text Box - Activity: Writing the Code Required to Insert a Video in a Webpage - Activity: Creating a Video Tutorial - Activity: Creating a 3D Photo Slide Show

ICT Domain 3: Web Design Essentials Learning Objective	ICT Web Design Essentials Course Courseware Lesson, Topics and Activities
Subdomain 3.4 Use collaborative web technologies in a web development or research project.	
<p>3.4.1 Create and use a wiki or similar tool for collaborating among project team members.</p> <p>3.4.2 Create and use a social media page (e.g., Facebook, Wimba) and/or a blog to share content and collaborate on projects.</p>	<p>Lesson 4: Publishing a Website</p> <ul style="list-style-type: none"> - Collaboration - Blogs - Wikis - Activity: Reviewing and Posting to a Blog - Activity: Creating a Blog - Activity: Comparing Wikis and Blogs - Course Case Study: All About Me — Assignment 3
Subdomain 3.5 Prepare webpages for publication, and publish a website to the Internet using appropriate tools.	
<p>3.5.1 Review webpage content, verify copyright restrictions, and create meta-data before publishing a site to the Internet.</p> <p>3.5.2 Test webpages for display, functionality, and accessibility before publishing a site to the Internet.</p> <p>3.5.3 Validate webpage code using W3C validation tools before publishing a site to the Internet.</p>	<p>Lesson 4: Publishing a Website</p> <ul style="list-style-type: none"> - Preparing to Publish - Activity: Being Legal and Fair - Activity: Using Meta Tags with W3Schools Try It Now - Activity: Validating a Website's Code - Activity: Choosing a Domain Name - Course Case Study: All About Me — Assignment 3
<p>3.5.4 Describe network issues relating to websites, including bandwidth, compression, streaming, web hosting.</p> <p>3.5.5 Explain the purpose of File Transfer Protocol (FTP) in accessing information on the Internet.</p> <p>3.5.6 Publish a website using FTP.</p>	<p>Lesson 4: Publishing a Website</p> <ul style="list-style-type: none"> - Uploading Your Website
<p>3.5.7 Describe website security methods, including secure server vs. unsecured server, SSL, SSH, encryption.</p>	<p>Lesson 4: Publishing a Website</p> <ul style="list-style-type: none"> - Uploading Your Website - Activity: Encrypting and Decrypting Vocabulary Terms
Course Project	
<p><i>Students use all the skills they learn throughout this course to complete a case study project in which they construct a website called "All About Me."</i></p>	<p>Case Study Project – All About Me</p> <ul style="list-style-type: none"> - Assignment 1 — end of Lesson 2 - Assignment 2 — end of Lesson 3 - Assignment 3 — end of Lesson 4