

# Appendix A: Objectives and Courseware Locations

## ICT Communications Essentials

The ICT Communications Essentials course and this appendix are designed to help students prepare for the ICT Communications Essentials digital certificate exam. Students can use this appendix as a study guide to locate content within the ICT Communications Essentials courseware that corresponds to the specific skills objectives of the ICT Communications 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 [www.CIWcertified.com](http://www.CIWcertified.com).

<b>ICT Domain 2: Communications Essentials Learning Objective</b>	<b>ICT Communications Essentials Course Courseware Lesson, Topics and Activities</b>
<b>Subdomain 2.1 Explain how the Internet and its components function to enable communications.</b>	
2.1.1 Define “Internet,” and explain how it uses protocols and data packets to enable computers to communicate.	<b>ICT Communications Essentials Lesson 1: Using the Internet and the World Wide Web</b> - What Is the Internet?
2.1.2 Identify requirements for connecting to the Internet. 2.1.3 Compare various Internet connection types (e.g., dial-up, cable, DSL, broadband, wireless, fiber-optic).	<b>Lesson 1: Using the Internet and the World Wide Web</b> - Connecting to the Internet - Activity: Internet Connection Terms - Activity: Internet Connection — Find the Fib Game - Activity: What Is Required to Connect to the Internet?
2.1.4 Describe Internet addressing, including domain names, IP addresses, DNS. 2.1.5 Compare various top-level domains (.com, .org, .edu, .gov, .net, .mil).	<b>Lesson 1: Using the Internet and the World Wide Web</b> - Internet Addresses - Activity: Domain Names Scavenger Hunt

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<p>2.1.6 Distinguish the Internet from the World Wide Web.</p> <p>2.1.7 Explain how Web browsers and Web servers interact to provide information to users.</p> <p>2.1.8 Define “Uniform Resource Locator (URL)” and identify associated protocols, including http//:, ftp//:, mailto//:.</p> <p>2.1.9 Use various techniques and tools to navigate and access information on the Web, including hyperlinks, Web page and browser components, file downloads.</p>	<p><b>Lesson 1: Using the Internet and the World Wide Web</b></p> <ul style="list-style-type: none"> <li>- Web Addresses</li> <li>- World Wide Web</li> <li>- Web Browsers</li> <li>- Navigating the Web</li> <li>- Activity: Domain Names Scavenger Hunt</li> <li>- Activity: How Browsers Work</li> <li>- Activity: Label a Web Page</li> </ul>
<p><b>Subdomain 2.2</b> <b>Conduct basic research using resources located on the Internet.</b></p>	
<p>2.2.1 Use various techniques with common search engines to locate information on the Web, including basic vs. advanced searching, keywords, Boolean operators.</p>	<p><b>ICT Communications Essentials</b> <b>Lesson 2: Searching the Web</b></p> <ul style="list-style-type: none"> <li>- Understanding Search Engines</li> <li>- Activity: Internet Searching Techniques</li> <li>- Activity: Favorite Sport Report</li> <li>- Activity: Internet Scavenger Hunt</li> <li>- Case Study: Web Research — The Good, the Bad, the Biased (Group)</li> </ul>
<p>2.2.2 Evaluate search results and online information for relevance, credibility and quality using basic guidelines (e.g. authority, affiliation, purpose, bias).</p>	<p><b>Lesson 2: Searching the Web</b></p> <ul style="list-style-type: none"> <li>- Evaluating a Web Site</li> <li>- Activity: Evaluating a Website</li> <li>- Activity: Evaluating a Website - Advanced</li> <li>- Case Study: Web Research — The Good, the Bad, the Biased (Group)</li> </ul>
<p>2.2.3 Identify and apply copyright and fair use guidelines, and explain plagiarism as an ethical and legal violation.</p>	<p><b>Lesson 2: Searching the Web</b></p> <ul style="list-style-type: none"> <li>- Copyright and Fair Use</li> <li>- Activity: Protected by Copyright</li> <li>- Activity: Creative Project — Copyright and Fair Use</li> </ul>

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2.2.4 Incorporate results from Internet searches into a research project (e.g., report, summary).	<b>Lesson 2: Searching the Web</b> - Evaluating a Web Site - Activity: Evaluating a Website - Activity: Evaluating a Website - Advanced - Activity: Creative Project — Copyright and Fair Use - Case Study: Web Research — The Good, the Bad, the Biased (Group)
2.2.5 Download images as needed to support a research project, complying with copyright notices. 2.2.6 Properly cite Internet sources used to obtain information for a research project.	<b>Lesson 2: Searching the Web</b> - Copyright and Fair Use - Activity: Protected by Copyright - Citing Sources - Activity: Creative Project — Copyright and Fair Use - Case Study: Web Research — The Good, the Bad, the Biased (Group)
<b>Subdomain 2.3 Demonstrate knowledge of safety and privacy practices for online communications.</b>	
2.3.1 Define “privacy” and relate it to the term “digital footprint.” 2.3.2 Describe risks of communicating on social networking sites (e.g., Facebook, MySpace, Twitter), and identify ways to communicate safely.	<b>ICT Communications Essentials Lesson 3: Internet Life and Privacy</b> - Social Networking and My Privacy - Activity: Build a Secure Online Identity - Activity: My Digital Log - Activity: Group Digital Log - Activity: Digital Footprint Map - Activity: Online Digital Footprint Map
2.3.3 Describe online communication practices that contribute to cyberbullying.	<b>Lesson 3: Internet Life and Privacy</b> - What Is Cyberbullying? - Activity: Cyberbullying 10-Tip Plan - Activity: Cyberbullying 10-Tip Plan - Advanced - Case Study: Attacked from All Sides
2.3.4 Practice safe online communication techniques with Internet searches, e-mail, chat rooms, and other social network Web sites.	<b>Lesson 3: Internet Life and Privacy</b> - Virus Protection - Activity: How Malware Works
2.3.5 Follow an Acceptable Use Policy (AUP) when accessing the Internet.	<b>Lesson 3: Internet Life and Privacy</b> - Acceptable Use Policy - Activity: Acceptable Use Responsibilities Project

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<b>Subdomain 2.4 Demonstrate effective strategies and techniques for locating, preparing and/or creating Web content.</b>	
<p>2.4.1 Describe effective text and image content for Web pages based on how visitors use the Web.</p> <p>2.4.2 List guidelines and conventions for effective text on a Web page.</p> <p>2.4.3 Explain the inverted pyramid model of newspaper journalism and how it applies to Web content.</p> <p>2.4.4 Use word-processing software to create effective written content for a Web page.</p>	<p><b>ICT Communications Essentials</b></p> <p><b>Lesson 4: Creating Content for the Web</b></p> <ul style="list-style-type: none"> <li>- Writing for the Web</li> <li>- Creating a Basic Web Page</li> <li>- Activity: Writing Effective Web Content – Venn Diagram</li> <li>- Activity: Writing Effective Web Content – HTML</li> <li>- Activity: Writing Effective Web Content – Online</li> </ul>
<p>2.4.5 Create and/or edit message-driven image content for a Web page using graphics software.</p> <p>2.4.6 Access graphics through various resources (e.g., scanner, digital camera, CD-ROM, clipart, copyright-free online graphics).</p>	<p><b>Lesson 4: Creating Content for the Web</b></p> <ul style="list-style-type: none"> <li>- Accessing Graphics for the Web</li> <li>- Activity: Writing Effective Web Content – HTML</li> <li>- Activity: Writing Effective Web Content – Online</li> </ul>
<p>2.4.7 Plan the content and design of a basic Web page using strategies for effective Web communication, including brainstorming, determining audience, choosing content and media types, using white space.</p>	<p><b>Lesson 4: Creating Content for the Web</b></p> <ul style="list-style-type: none"> <li>- Creating a Basic Web Page</li> <li>- Activity: Writing Effective Web Content – Venn Diagram</li> <li>- Activity: Writing Effective Web Content – HTML</li> <li>- Activity: Writing Effective Web Content – Online</li> </ul>
<b>Subdomain 2.5 Demonstrate effective and appropriate use of e-mail for online communication.</b>	
<p>2.5.1 Define “e-mail,” and describe its functions and advantages as a form of communication.</p>	<p><b>ICT Communications Essentials</b></p> <p><b>Lesson 5: Communicating Using E-Mail</b></p> <ul style="list-style-type: none"> <li>- Introduction to E-Mail</li> <li>- Activity: Traditional vs. Electronic Mail</li> </ul>
<p>2.5.2 Explain the format of an e-mail address (i.e., user name, @ symbol, domain).</p>	<p><b>Lesson 5: Communicating Using E-Mail</b></p> <ul style="list-style-type: none"> <li>- Understanding E-Mail Addresses</li> </ul>

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<p>2.5.3 Identify components of an e-mail message, including addresses (sender and recipients), subject, body, attachments, etc.</p> <p>2.5.4 Perform e-mail activities (send, reply, forward) using an e-mail client and/or Web-based e-mail.</p> <p>2.5.5 Attach a file to an e-mail message.</p> <p>2.5.6 Use an address book, a calendar and other features of an e-mail service.</p>	<p><b>Lesson 5: Communicating Using E-Mail</b></p> <ul style="list-style-type: none"> <li>- Sending and Receiving E-Mail</li> <li>- Activity: Compose an E-Mail Message</li> <li>- Activity: Parts of an E-Mail Message</li> <li>- Activity: E-Mail Address Book</li> </ul>
<p>2.5.7 Compose appropriate e-mail communications based on audience and purpose.</p> <p>2.5.8 Demonstrate etiquette and safe practices when using e-mail.</p>	<p><b>Lesson 5: Communicating Using E-Mail</b></p> <ul style="list-style-type: none"> <li>- E-Mail Etiquette</li> <li>- Activity: E-Mail Etiquette and Safety – Learning Log</li> <li>- Activity: Classroom Guide to E-Mail Etiquette and Safety</li> </ul>