

ICT Communications Essentials Objectives Matrix

The ICT Communications Essentials course focuses on fundamentals of effective communications in a technological society. Students will learn about basic network functions and Internet connections. They will use strategies and techniques for efficient Web searching. They will also explore issues related to online safety and privacy. Students will learn strategies for creating effective Web site content. Finally, they will study the tools, practices and etiquette needed for communicating effectively with e-mail.

ICT Communications Essentials Objective	ICT Communications Essentials Courseware Lesson(s) and Section(s)
Domain 2.1: Explain how the Internet and its components function to enable communications, including data packets, connection types, Internet addressing, domains, browsers and servers, URLs, and navigation tools and techniques.	
2.1.1: Define "Internet," and explain how it uses protocols and data packets to enable computers to communicate.	Lesson 1: Using the Internet and the World Wide Web - What Is the Internet?
2.1.2: Identify requirements for connecting to the Internet.	Lesson 1: Using the Internet and the World Wide Web - Connecting to the Internet
2.1.3: Compare various Internet connection types (e.g., dial-up, cable, DSL, broadband, wireless, fiber-optic).	Lesson 1: Using the Internet and the World Wide Web - Connecting to the Internet
2.1.4: Describe Internet addressing, including domain names, IP addresses, DNS.	Lesson 1: Fundamentals of Data Analysis - Internet Addressing
2.1.5: Compare various top-level domains (.com, .org, .edu, .gov, .net, .mil).	Lesson 1: Fundamentals of Data Analysis - Internet Addressing
2.1.6: Distinguish the Internet from the World Wide Web.	Lesson 1: Using the Internet and the World Wide Web - What Is the Internet? - What Is the World Wide Web?
2.1.7: Explain how Web browsers and Web servers interact to provide information to users.	Lesson 1: Using the Internet and the World Wide Web - What Is the World Wide Web?
2.1.8: Define "Uniform Resource Locator (URL)" and identify associated protocols, including http://, ftp://, mailto://.	Lesson 1: Using the Internet and the World Wide Web - What Is the World Wide Web?
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.	Lesson 1: Using the Internet and the World Wide Web - Navigating the Web

ICT Communications Essentials Objective	ICT Communications Essentials Courseware Lesson(s) and Section(s)
Domain 2.2: Conduct basic research using resources located on the Internet, including search engine techniques, evaluation of results, copyright guidelines and downloading images.	
2.2.1: Use various techniques with common search engines to locate information on the Web, including basic vs. advanced searching, keywords, Boolean operators.	Lesson 2: Searching the Web - Understanding Search Engines
2.2.2: Evaluate search results and online information for relevance, credibility and quality using basic guidelines (e.g., authority, affiliation, purpose, bias).	Lesson 2: Searching the Web - Evaluating a Web site
2.2.3: Identify and apply copyright and fair use guidelines and explain plagiarism as an ethical and legal violation.	Lesson 2: Searching the Web - Copyright and Fair Use
2.2.4: Incorporate results from Internet searches into a research project (e.g., report, summary).	Lesson 2: Searching the Web - Copyright and Fair Use
2.2.5: Download images as needed to support a research project, complying with copyright notices.	Lesson 2: Searching the Web - Copyright and Fair Use
2.2.6: Properly cite Internet sources used to obtain information for a research project.	Lesson 2: Searching the Web - Copyright and Fair Use - Citing Sources
Domain 2.3: Demonstrate knowledge of safety and privacy practices for online communications, including digital footprint, social network risks, cyberbullying, safe online communication techniques and acceptable use policies.	
2.3.1: Define "privacy" and relate it to the term "digital footprint."	Lesson 3: Internet Life and Privacy - Social Networking and My Privacy
2.3.2: Describe risks of communicating on social networking sites (e.g., Facebook, MySpace, Twitter) and identify ways to communicate safely.	Lesson 3: Internet Life and Privacy - Social Networking and My Privacy
2.3.3: Describe online communication practices that contribute to cyberbullying.	Lesson 3: Internet Life and Privacy - What Is Cyberbullying?
2.3.4: Practice safe online communication techniques with Internet searches, e-mail, chat rooms, and other social network Web sites.	Lesson 3: Internet Life and Privacy - What Is Cyberbullying?
Domain 2.4: Demonstrate effective strategies and techniques for locating, preparing and/or creating Web content, including writing text for Web sites, inverted pyramid model of journalism, word-processing software, message-driven image content, accessing graphics, and Web communication strategies.	
2.4.1: Describe effective text and image content for Web pages based on how visitors use the Web.	Lesson 4: Creating Content for the Web - Writing for the Web
2.4.2: List guidelines and conventions for effective text on a Web page.	Lesson 4: Creating Content for the Web - Writing for the Web
2.4.3: Explain the inverted pyramid model of newspaper journalism and how it applies to Web content.	Lesson 4: Creating Content for the Web - Writing for the Web

ICT Communications Essentials Objective	ICT Communications Essentials Courseware Lesson(s) and Section(s)
2.4.4: Use word-processing software to create effective written content for a Web page.	Lesson 4: Creating Content for the Web - Writing for the Web
2.4.5: Create and/or edit message-driven image content for a Web page using graphics software.	Lesson 4: Creating Content for the Web - Accessing Graphics for the Web
2.4.6: Access graphics through various resources (e.g., scanner, digital camera, CD-ROM, clipart, copyright-free online graphics).	Lesson 4: Creating Content for the Web - Accessing Graphics for the Web
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.	Lesson 4: Creating Content for the Web - Creating a Basic Web Page
Domain 2.5: Demonstrate effective and appropriate use of e-mail for online communication, including e-mail address format, components of e-mail messages, e-mail client interfaces and tools, file attachments, e-mail service features, appropriate e-mail communication, and e-mail etiquette and safety practices.	
2.5.1: Define "e-mail" and describe its functions and advantages as a form of communication.	Lesson 5: Communicating Using E-Mail - Introduction to E-Mail
2.5.2: Explain the format of an e-mail address (i.e., user name, @ symbol, domain).	Lesson 5: Communicating Using E-Mail - Understanding E-Mail Addresses
2.5.3: Identify components of an e-mail message, including addresses (sender and recipients), subject, body, attachments, etc.	Lesson 5: Communicating Using E-Mail - Sending and Receiving E-Mail Messages
2.5.4: Perform e-mail activities (send, reply, forward) using an e-mail client and/or Web-based e-mail.	Lesson 5: Communicating Using E-Mail - Sending and Receiving E-Mail Messages
2.5.5: Attach a file to an e-mail message.	Lesson 5: Communicating Using E-Mail - Sending and Receiving E-Mail Messages
2.5.6: Use an address book, a calendar and other features of an e-mail service.	Lesson 5: Communicating Using E-Mail - Sending and Receiving E-Mail Messages
2.5.7: Compose appropriate e-mail communications based on audience and purpose.	Lesson 5: Communicating Using E-Mail - Sending and Receiving E-Mail Messages
2.5.8: Demonstrate etiquette and safe practices when using e-mail.	Lesson 5: Communicating Using E-Mail - E-Mail Etiquette