

Digital Citizenship and Ethics



Certification Exam: ICT Digital Citizenship and Ethics Certificate Test

Exam Objectives

The ICT Digital Citizenship and Ethics courseware is written to the following Exam Objectives:

Domain 1: Internet Awareness

- 1.1: Define "Internet," and explain how it uses protocols and data packets to enable computers to communicate.
- 1.2: Describe how to manage Internet usage to balance life responsibilities at home, school and work.
- 1.3: Explain the differences in network types, including Intranet, Internet, LAN, WAN, MAN, and VPN.
- 1.4: Describe Internet addressing, including domain names (.com, .org, .edu, .gov, .net, .mil), IP addresses and DNS.
- 1.5: Use various search techniques including Boolean concepts.
 - 1.5.1 Use various techniques with common search engines to locate information on the Web, including basic vs. advanced searching, keywords, and Boolean operators.
 - 1.5.2 Describe basic Boolean concepts, including logical operators, order of precedence, expressions.
- 1.6: Incorporate results from Internet searches into a research project (e.g., report, summary).
- 1.7: Explain data size (bits, bytes, etc.) and how data size can affect Internet usage.
- 1.8: Describe how bandwidth affects Internet issues relating to Websites, including bandwidth, compression, streaming, Web hosting.
- 1.9: Describe common threats and safe online communication techniques.
 - 1.9.1 Describe common threats used to spread malware and viruses, including phishing, pharming, viruses, worms, trojans, bots, spyware, malicious sites, "free" downloads.
 - 1.9.2 Practice safe online communication techniques with Internet searches, email, chat rooms, and other social network Websites.
- 1.10: Identify common Internet challenges and how adaptability and perseverance help to solve these problems.
- 1.11: Describe and apply creativity, innovation and imagination to become a Producer of the Internet.
 - 1.11.1 Describe how the Internet allows for Creativity, Innovation and Imagination to create Producers of the Internet.
 - 1.11.2 Apply your creativity and imagination to a research project on becoming an internet producer.

Domain 2: Websites

- 2.1: Explain various navigation techniques to access information on Websites, including click, delayed, double click, mouse over, drag and drop.
- 2.2: Explain why validation is important and determine how to validate Webpage code using W3C validation tools.
- 2.3: Explain and identify Website evaluation techniques.
 - 2.3.1 Describe how to evaluate Websites for valid and invalid content.
 - 2.3.2 Explain why Website evaluation is important
- 2.4: Identify and explain various validating resources and when they would be used.
- 2.5: Explain the benefits and purposes of being literate with information and digital concepts.

Domain 3: Browsers

- 3.1: Explain HTML (Hypertext Markup Language) and Cascading Style Sheet (CSS) technology.
- 3.2: Describe various Web browsers and Web servers
 - 3.2.1 Describe advantages and disadvantages of various Web browsers
 - 3.2.2 Explain how Web browsers and Web servers interact to provide information to users.
- 3.3: Show how to navigate Websites and use bookmarks.
 - 3.3.1 Show how to navigate Websites using URL, scroll, opening new tabs, window and toggling.
 - 3.3.2 Show how to use bookmarks and favorites to improve your browser usage.
- 3.4: Describe benefits of using add-ons, plug-ins and in browser apps.
- 3.5: Explain the purpose of clearing cache and how to clear in various browsers.
- 3.6: Explain cookies and how they are used by companies and Websites.

Domain 4: Fair Use and Creative Commons

- 4.1: Describe creative commons Websites and how to identify these resources.
- 4.2: Identify and apply copyright and fair use guidelines, and explain plagiarism as an ethical and legal violation.
- 4.3: Explain copyright protection and legal consequences.
 - 4.3.1 Explain why copyrights should be respected.

- 4.3.2 List online activities that carry serious legal consequences, including libel, pornography, copyright infringement, hacking.

Domain 5: Online Safety/Cyber Security

- 5.1: Identify scams, theft and risks and who is at risk.
- 5.1.1 Identify scams and identify theft risks including phishing, pharming, spyware, malicious sites, "free" downloads.
 - 5.1.2 Describe identity theft, including who is at risk (e.g., adults, senior citizens, children), personal information that is vulnerable (name, address, birthdate, SSN), and vulnerable documents/accounts (birth certificate, SSN card, driver's license, credit card, bank account).
- 5.2: Explain data breaches and incorporate a recent data breach in a class project.
- 5.3: Identify strong password practices and explain the purpose to others.
- 5.4: Practice cyber-safety techniques to protect your personal information when using Internet searches, email, chat rooms and social network Websites.
- 5.5: Explain safe practice for online safety and identify security issues.
- 5.5.1 Explain safe practice for online safety, including posting pictures, sharing personal information, and never meeting in person with someone online.
 - 5.5.2 Identify security issues related to mobile phones, including personal information compromised if a phone is lost or stolen.
- 5.6: Discuss issues related to downloading music, videos or software from the Internet, including unethical vs. illegal actions.

Domain 6: Digital Citizenship Responsibilities

- 6.1: Describe personal and social responsibility in a digital world.
- 6.1.1 Describe personal and social responsibility in a digital world.
 - 6.1.2 Explain positives and negatives of anonymity in a digital world.
- 6.2: Describe safe posting practices and why they are important to know and follow.
- 6.3: Explain appropriate online behavior and online etiquette.
- 6.4: Describe the nine elements of digital citizenship and why they are important.
- 6.4.1 Explain why the nine elements of digital citizenship are important.
 - 6.4.2 Describe Digital Access.
 - 6.4.3 Describe Digital Commerce
 - 6.4.4 Describe Digital Communication and Collaboration
 - 6.4.5 Describe Digital Etiquette
 - 6.4.6 Describe Digital Fluency/Literacy
 - 6.4.7 Describe Digital Health and Welfare
 - 6.4.8 Describe Digital Law
 - 6.4.9 Describe Digital Rights and Responsibility
 - 6.4.10 Describe Digital Security and Privacy
- 6.5: Define digital footprint and how to manage.
- 6.6: Describe cyberbullying.
- 6.6.1 Define Cyberbullying.
 - 6.6.2 Describe online communication practices that contribute to cyber-bullying.
- 6.7: Describe how interpersonal skills are vital to your digital citizenship.

Domain 7: Global Awareness

- 7.1: Describe the global digital citizens awareness
- 7.1.1 Describe a global digital citizen and how they engage with other citizens.
 - 7.1.2 Explain how a global digital citizen views others internationally.
- 7.2: Compare and contrast various laws around the world, including privacy, security, and social laws.
- 7.3: Identify cultural differences that could affect online activity and responsibility.
- 7.4: Identify individual responsibility for words and actions, and accepting consequences.
- 7.5: Define digital literacy and the benefits and drawbacks.
- 7.6: Define global awareness and your responsibility in an online global community.

Domain 8: Licensing Rules, Laws, Rights

- 8.1: Describe intellectual property (IP) and IP Rights and who protects these rights.
- 8.2: Compare and contrast rules for copyright and fair use.
- 8.2.1 Compare and contrast rules for copyright and fair use, especially in relation to using online resources for school and educational purposes.
 - 8.2.2 Show how to verify copyright restrictions on various Websites
- 8.3: Explain censorship and filtering.

- 8.3.1 Explain Censorship and when it is appropriate to apply.
- 8.3.2 Explain Filtering and how it is applied in various settings.
- 8.4: Describe blocking and how to develop rules for implementation at home, school and work.
- 8.5: Explain plagiarism laws and detection.
 - 8.5.1 Explain Plagiarism laws and how they are enforced.
 - 8.5.2 Identify various Plagiarism detection practices and tools.

Domain 9: Email

- 9.1: Define "email," and describe its functions and etiquette.
 - 9.1.1 Define "email," and describe its functions and advantages as a form of communication.
 - 9.1.2 Describe email etiquette in various situations. (i.e., family, school, work, etc.)
 - 9.1.3 Demonstrate etiquette and safe practices when using email.
- 9.2: Explain email addresses, messages and groups.
 - 9.2.1 Explain the format of an email address (i.e., user name, @ symbol, domain).
 - 9.2.2 Identify components of an email message, including addresses (sender and recipients), subject, body, attachments, etc.
 - 9.2.3 Describe how to create email groups and managing email addresses.
- 9.3: Explain the purpose and proper use of email components.
 - 9.3.1 Explain the purpose and proper use of Reply, Reply All, Header/Subject, TO, CC, BCC, and signature.
 - 9.3.2 Perform email activities (send, reply, forward) using an email client and/or Web-based email.
- 9.4: Attach a file to an email message, including documents, images and hyperlinks.
- 9.5: Describe folders, spam, junk mail, archive, trash etc., and how to manage these email items.
- 9.6: Create an address book

Domain 10: Calendaring

- 10.1: Compare and contrast various calendars and features.
 - 10.1.1 Compare and contrast various calendar options, including Google and Outlook
 - 10.1.2 Describe various calendar features, including recurring events, invitations and appointments.
- 10.2: Create calendar events and appointments.
- 10.3: Create a recurring event
- 10.4: Create an invitation to an event, including purpose, audience, etc.
- 10.5: Explain the purpose of calendars and functionality.
 - 10.5.1 Explain the purpose of multiple calendars, sharing and subscribing to calendars.
 - 10.5.2 Create a calendar and share with others based on purpose and audience.
 - 10.5.3 Subscribe to a calendar and verify it updates automatically.

Domain 11: Communications

- 11.1: Describe how effective communication methods change depending on the situation and apply these methods. Methods include email, text, Webinars VOIP, phone, chat and conferences.
 - 11.1.1 Describe how effective communication methods change depending on the situation. Methods include email, text, webinars VOIP, phone, chat and conferences.
 - 11.1.2 Given a scenario identify the most effective communication method. (i.e., email, text, webinars VOIP, phone, chat and conferences)
- 11.2: Identify various collaboration tools and effective implementation based on situation.
- 11.3: Identify various shared storage sites (SharePoint, Google, Dropbox, etc.), and the advantages and disadvantages.
- 11.4: Compare and contrast various Web and video conference applications and their purposes (i.e., VOIP, Skype, FaceTime, Google Hangouts, etc.)
 - 11.4.1 Compare and contrast various web and video conference applications. (i.e., VOIP, Skype, FaceTime, Google Hangouts, etc.)
 - 11.4.2 Identify various purposes of web and video conference applications and audiences.
- 11.4.2 Identify various purposes of web and video conference applications and audiences.
- 11.5: Describe streaming services for audio, video, downloading and how to implement.
 - 11.5.1 Describe streaming services for audio, video, downloading.
 - 11.5.2 Explain how to implement streaming services (i.e., audio and video) to enhance a Website or business.

Domain 12: Social Media

- 12.1: Describe what an online persona is, how it is created and branded.
 - 12.1.1 Describe what an online persona is, and how it is created.
 - 12.1.2 Explain how what you post and who you follow "brands" your online persona.
- 12.2: Explain your personal responsibility to others on social media.
- 12.3: Identify differences between and explain the purposes of internal sites (i.e., school or business) and open media sites (i.e., Facebook, Instagram, Pinterest, etc.)

- 12.3.1 Identify differences between Internal sites (i.e., school or business) and open media sites (i.e., Facebook, Instagram, Pinterest, etc.)
- 12.3.2 Explain the purposes of Internal sites (i.e., school or business) and open media sites (i.e., Facebook, Instagram, Pinterest, etc.)
- 12.4: Describe and explain the purposes of, and create forums, blogs and wikis.
 - 12.4.1 Describe and explain the purposes of forums, blogs and wikis.
 - 12.4.2 Create and use a social media page (e.g., Facebook, Wimba) and/or a blog to share content and collaborate on projects.
 - 12.4.3 Create and use a wiki or similar tool for collaborating among project team members.
- 12.5: Explain the effects, consequences and risks of cyber-bullying.
 - 12.5.1 Explain the effects and consequences of cyber-bullying, its impact on perpetrators and victims, and ways to respond.
 - 12.5.2 Describe risks of communicating on social networking sites (e.g., Facebook, MySpace, Twitter), and identify ways to communicate safely.
 - 12.5.3 Describe risks associated with social networking sites (e.g., Facebook, MySpace, Twitter) and ways to mitigate these risks.
 - 12.5.4 Describe risks associated with online gaming, and identify ways to reduce these risks.
- 12.6: Explain how a person uses social media can affect their future.