CERTIPORT IC3 DIGITAL LITERACY CORRELATION GS4

GOODHEART-WILLCOX

PRINCIPLES OF INFORMATION TECHNOLOGY © 2017

BY KATHLEEN M. AUSTIN, LORRAINE N. BERGKVIST

Certiport IC3 Digital Literacy Correlation GS4		
IC³ GS4 Objective		**Correlating Pages**
Computing Fundamentals		
Domain 1.0 Operating system		
1.1 What is an OS and what does it do?		
1.1.1	Difference between applications and OS	pg. 94–104
1.1.2	Common OS features	
(i)	Power On/Power Off	pg. 94–104, 98–100
(ii)	Log on/log off/switch user	pg. 94–104, 98–100
(iii)	Lock/Unlock	pg. 94–104, 98–100
(iv)	Differences between common OSs	pg. 94–104, 98–100
1.1.3	Software/hardware relationship	pg. 94–104, 106–107, 123–127
1.1.4	Updates, software	pg. 111, 125–126
1.2 Manage computer files and folders		
1.2.1	Directory and folder hierarchy and structure	
(i)	Menu, Toolbar, and Window Navigation	pg. 135, 140–147
(ii)	Expand and Collapse	pg. 135, 140–147
(iii)	Folder views	pg. 135, 140–147
1.2.2	File/Folder management	
(i)	Keyboard shortcuts	pg. 98, 135–171
(ii)	Copy	pg. 98, 135–171
(iii)	Paste	pg. 98, 135–171
(iv)	Delete	pg. 98, 135–171
(v)	Move	pg. 98, 135–171
(vi)	Rename	pg. 98, 135–171
(vii)	Create shortcuts	pg. 98, 135–171
(ix)	Search	pg. 98, 135–171
1.2.3	Common file extensions and default behavior	
(i)	*File extensions and their associations such as .docx, .xlsx, .exe, .swf, .pdf, .text, .zip, .jpg, .tif, .mp3, .m4a, .avi, etc.	pg. 138–139
1.3 Manage computer configuration, Control Panel, OS drivers		
1.3.1	Basic Desktop Customization	
(i)	Visual options	pg. 101
(ii)	Languages	pg. 101
(iii)	Date and Time	pg. 101
(iv)	Accessibility options	pg. 101
1.3.2	Power States	pg. 102
1.3.3	Power options	pg. 101–103
1.3.4	Power down	pg. 102
1.3.5	Hibernating	pg. 103
1.3.6	User accounts and rights	
(i)	Group policy (specifically mobile)	pg. 100
(ii)	Read/Write	pg. 100, 166
(iii)	Administrative vs. standard user rights (Install/uninstall applications)	pg. 100
(iv)	File and Directory Permissions	pg. 100, 166

Domain 2.0 Computer hardware and concepts			
2.1 Common computer terminology			
2.1.1	Hardware and Peripherals		
	(i)	Processing (Gigahertz, Hertz, CPU)	pg. 43–45, 50–68
	(ii)	Input/Output (monitor and projector, mice, keyboards, stylus, microphone, speakers, touchpad, printers)	pg. 43–45, 50–68
2.1.2	Storage		
	(i)	Volatile (RAM)	pg. 42–43
	(ii)	Involatile (SSD drive, magnetic hard drive, ROM, flash drives)	pg. 42–43, 71–72
	(iii)	Units of measurement (mega, giga, tera, peta; bit vs. byte)	pg. 43
2.2 Types of devices			
2.2.1	Server		pg. 38
2.2.2	Desktop		pg. 38–40
2.2.3	Laptop		pg. 38–40
2.2.4	Tablet		pg. 9, 39–40
2.2.5	Smartphone		pg. 9, 39–40
2.2.6	Other mobile devices		pg. 9, 38–40
2.3 Computer performance			
2.3.1	Pros and cons of particular devices		pg. 52, 53, 54, 55, 57, 58, 60, 61–62, 63, 64, 66, 68
2.3.2	Processing vs. memory vs. storage		pg. 42–44
Domain 3.0 Computer software and concepts			
3.1 Software management			
3.1.1	Install		pg. 124
3.1.2	Uninstall		pg. 126
3.1.3	Reinstall		pg. 126–127
3.2 Licensing			
3.2.1	Freeware, shareware, open-source, premium applications		pg. 110–111
3.2.2	End User License Agreements (EULAs)		pg. 110–111
3.2.3	Site licensing		pg. 110–111
3.2.4	Single seat vs. volume		pg. 110–111
3.3 Software Usage			
3.3.1	Hardware implications		pg. 47, 50–68, 71–73
3.3.2	Database vs. spreadsheet		pg. 401–429, 465–501
3.3.3	Desktop publishing		pg. 115, 285–287
3.3.4	Presentation		pg. 117
3.3.5	Content creation		pg. 114–116
3.3.6	Entertainment		pg. 122
3.3.7	Media editing/manipulation		pg. 118–121
3.4 Software Tools			
3.4.1	File compression		pg. 169–171
3.4.2	Updates		pg. 125–126, 187
3.4.3	Disk management		pg. 104–105, 169–171, 187–188
3.4.4	Virus and malware scanners		pg. 189, 669–671
Domain 4.0 Troubleshooting			
4.1 Software			
4.1.1	Updates		pg. 125–126, 187
4.1.2	OS versioning		pg. 111, 198–199
4.1.3	Virus and malware removal		pg. 189, 639–644, 669–671
4.1.4	Understanding safe mode		pg. 193
4.1.5	Knowledge Base, Help		pg. 191–193
4.1.6	Task and Process Management		pg. 199–202
4.2 Hardware			
4.2.1	Firmware updates		pg. 47, 196
4.2.2	Cables and connections		pg. 196

4.3 Devices and Peripherals			
4.3.1	Firmware updates		pg. 47, 196
4.3.2	OS versioning		pg. 111–112, 198
4.3.3	Drivers		pg. 106–107, 197
4.4 Backup/Restore			
4.4.1	Offsite		pg. 168–169
4.4.2	External		pg. 168–169
4.4.3	Cloud		pg. 9, 15 168–169
4.4.4	Versioning of backups		pg. 168–169

Key Applications

Domain 1.0 Common Application Features			
1.1 Common Features and Commands			
1.1.1	Keyboard shortcuts		pg. 219 (Hands-on Example 6.1.1), 244–246
1.1.2	Cut, copy, paste		pg. 244–246
1.1.3	Show/hide		pg. 219–220
1.1.4	Print		
	(i)	Basic print options (sizing, pages per sheet, collation, layout)	pg. 228–230
	(ii)	Print preview	pg. 228–230
1.1.5	Spellcheck, find/replace, redo/undo		pg. 243–244, 290–292, 293–295
1.1.6	Drag and drop		pg. 245, 245–246 (Hands-on Example 6.3.4)
1.1.7	Preferences, resets, customization		pg. 255–257, 257–258 (Hands-on Example 6.4.1)
1.1.8	Help		pg. 258–259
1.1.9	Selecting		
	(i)	Select All	pg. 234, 245–246 (Hands-on Example 6.3.4)
	(ii)	Select nonadjacent	pg. 235
	(iii)	Sorting	pg. 236–237
1.2 Formatting			
1.2.1	Using styles		pg. 275–278, 722–726
1.2.2	Basic text formatting		
	(i)	Bold	pg. 219–220, 246–247, 270–271, 722–726
	(ii)	Italic	pg. 219–220, 246–247, 270–271, 722–726
	(iii)	Underline	pg. 219–220, 246–247, 270–271, 722–726
	(iv)	Font size	pg. 246–247, 270–271, 722–726
1.3 Navigating			
1.3.1	Open, close		pg. 231–232
1.3.2	Save vs. save as		pg. 226–228
1.3.3	New file		
	(i)	Blank new file	pg. 215
	(ii)	From file from existing templates	pg. 215–216
1.3.4	Maximize/minimize/resize		pg. 98, 220–222
1.3.5	Search		pg. 150–152, 243–244
1.3.6	Views		
	(i)	Zoom	pg. 253
	(ii)	Switching	pg. 252–253
	(iii)	Read only, protected mode	pg. 254
1.4 Working with multimedia files			
1.4.1	(i)	Resize	pg. 238–239
	(ii)	Crop	pg. 239
	(iii)	Rotate	pg. 239
1.4.2	(i)	Insert	pg. 238
	(ii)	Attach	pg. 238
	(iii)	Working in the application	pg. 240–241
Domain 2.0 Word Processing Activities			

2.1 Organizing data			
2.1.1	Tables		
	(i)	Add columns	pg. 282
	(ii)	Add rows	pg. 282
	(iii)	Split cells	pg. 282
	(iv)	Merge cells	pg. 282
2.1.2	Lists		
	(i)	Ordered	pg. 235–236
	(ii)	Unordered	pg. 235–236
2.2 Layout			
2.2.1	Page Layout		
	(i)	Page Numbering	pg. 328–329
	(ii)	Columns	pg. 275
	(iii)	Margin	pg. 272–273
	(iv)	Alignment, text in paragraphs and tables	pg. 274
	(v)	Tabs and Rulers	pg. 271, 273
	(vi)	Orientation	pg. 271–272
2.2.2	Spacing		
	(i)	Line	pg. 274–275
	(ii)	Paragraph	pg. 274–275
2.2.3	Indent Text		pg. 273, 273
Domain 3.0 Spreadsheet Activities			
3.1 Spreadsheet Layout			
3.1.1	Insert/delete		
	(i)	Rows	pg. 415–416
	(ii)	Columns	pg. 415–416
3.1.2	Cell sizes		pg. 414–415
3.1.3	Alignment		pg. 410
3.1.4	Navigation		
	(i)	Cell references	pg. 401–403, 419–422
	(ii)	Worksheet vs. workbook	pg. 401–403, 419–422
3.1.5	Merging cells		pg. 416–417
3.2 Data Management			
3.2.1	Filter and sort		pg. 422–426
3.2.2	Formulas and functions		
	(i)	PLUS, MINUS, MULTIPLY and DIVIDE (+, –, *, /)	pg. 404–406
	(ii)	SUM	pg. 404–406, 437–438
	(iii)	AVERAGE	pg. 404–406, 437–438
3.2.3	Number format		pg. 411–414
3.2.4	Cell format		pg. 410–417, 448–450
3.2.5	Charts, graphs		
	(i)	Comparison, such as pie, line, and column	pg. 450–451
	(ii)	Insert	pg. 452–453
	(iii)	Move	pg. 452–453
Domain 4.0 Presentation Activities			
4.1 Inserting content			
4.1.1	Text		pg. 355–357
4.1.2	Table		pg. 383–385
4.1.3	Media		pg. 376–377
4.1.4	Chart		pg. 385–389
4.1.5	Graphic		pg. 357–360, 378–379
4.2 Slide Management			
4.2.1	Add slides		pg. 355–357
4.2.2	Delete Slides		pg. 367
4.2.3	Revise slide order		pg. 367

2.3 Network troubleshooting			
2.3.1	Solve simple scenarios		pg. 579–580
2.3.2	Identify common problems		pg. 579–580
2.3.3	Define IP addressing		pg. 512–514
Domain 3.0 Digital Communication			
3.1 E-mail communication			
3.1.1	E-mail account settings		
	(i)	User name	pg. 590–593, 724
	(ii)	Password	pg. 590–593
	(iii)	Credentials	pg. 590–593
3.1.2	Appropriate use of e-mail		
	(i)	Subject Line	pg. 593–599
	(ii)	Body	pg. 593–599
	(iii)	Reply, reply all, forward	pg. 593–599
	(iv)	Attachments	pg. 593–599
	(v)	Address book (contact lists, group lists)	pg. 593–599
	(vi)	CC and BCC	pg. 593–599
3.1.3	Managing e-mail communication		
	(i)	Automated features (auto-respond, out of office, auto-forwarding, signatures)	pg. 599–603
	(ii)	Personal folders (archive)	pg. 599–603
	(iii)	Junk mail	pg. 599–603
	(iv)	Spam	pg. 599–603
3.2 Real-Time-communication			
3.2.1	Text communication		
	(i)	IM (Gmail chat, Skype, ICQ, AIM, Windows Live Messenger, etc.)	pg. 609–610
	(ii)	SMS	pg. 610–611
3.2.2	Audio-visual communication		
	(i)	MMS	pg. 611
	(ii)	Real-time video	pg. 611–613
	(iii)	Chatting	pg. 610
	(iv)	Skype	pg. 611–613
	(v)	VoIP	pg. 611
	(vi)	Video conferencing	pg. 611–613
3.2.3	Telepresence (social media)		
	(i)	Change online status	pg. 620
	(ii)	Visible vs. invisible	pg. 620
	(iii)	Blogging	pg. 613
Domain 4.0 Digital Citizenship			
4.1 Communication Standards			
4.1.1	Spelling		pg. 624
4.1.2	All capitals vs. standard capitalization		pg. 624–625
4.1.3	Verbal vs. Written, Professional vs. Personal communication *Differences and benefits *Suitable behavior in online interactions, Facebook		pg. 594–596 pg. 624–625
4.1.4	Spamming, flaming, bullying		pg. 602 pg. 613 pg. 625–626
4.1.5	Libel, slander		pg. 622
4.2 Legal and responsible use of computers			
4.2.1	Censorship		pg. 644
4.2.2	Filtering		pg. 528, 657
4.2.3	Intellectual property		pg. 335–336
4.2.4	Piracy		pg. 336–337
4.2.5	Copyright use		pg. 335–336

4.2.6	Licensing		pg. 110–111
4.2.7	Creative commons		pg. 335
Domain 5.0 Safe Computing			
5.1 Secure online communication or activity			
5.1.1	Identity protection		
	(i)	E-commerce safety (Identify safe ecommerce sites and secure web pages, personal data usage [tracked and used—sold])	pg. 651–658, 653–654
	(ii)	Oversharing of information (safety concerns)	pg. 657, 660–661
	(iii)	Password control, saved passwords	pg. 664–667
	(iv)	Phishing	pg. 657
	(v)	Identify parts of a URL	pg. 672–673
5.1.2	Data protection		
	(i)	Residual files left on hard drives, flash drives, portable drives	pg. 647–648, 647–648
	(ii)	Keeping your computer secure and updated	pg. 663–664
	(iii)	Personal firewall	pg. 663–664
	(iv)	Cookies	pg. 641
	(v)	Protection programs / utilities / practices (downloads, virus protection, spyware protection)	pg. 639, 669–677
5.2 Ergonomics			
5.2.1	Computer positioning (monitor height, angles)		pg. 526–527
5.2.2	Input device use (mice, keyboard)		pg. 526–527
5.2.3	Chairs		pg. 526–527
5.2.4	Lighting		pg. 526–527
5.2.5	Body posture		pg. 526–527
Domain 6.0 Research Fluency			
6.1 Using Search Engines			
6.1.1	Acquire knowledge		pg. 527–531
6.1.2	Solve problems		pg. 528–530
6.2 Evaluate search results			pg. 528–530
6.2.1	Forums		pg. 530
6.2.2	Ads		pg. 530
6.2.3	Sponsored links		pg. 530
6.2.4	Knowledge bases		pg. 530
6.2.5	Validity of sources		pg. 529–530
6.2.6	Articles		pg. 531
6.3 Using advanced features of search engines			pg. 527–528
6.3.1	Search types		
	(i)	File	pg. 528
	(ii)	Media	pg. 528
	(iii)	Category	pg. 528
	(iv)	Size	pg. 528