Goodheart-Willcox Publisher Correlation of Principles of Information Technology ©2017 to South Carolina Department of Education / CTE Information Technology Standards Course: Principles of Digital Technology (5270)	
STANDARDS AND INDICATORS	**CORRELATING PAGES**
A. SAFETY	
1. Review school safety policies and procedures. 2. Review classroom safety rules and procedures. 3. Review safety procedures for using equipment in the classroom. 4. Identify major causes of work-related accidents in office environments. 5. Demonstrate safety skills in an office/work environment.	**Instruction:** Pg. 41 Ethics Box: Computer Ethics Pg. 531 Ethical Use of the Internet Pg. 668 Safe Hardware and Software Practices
B. STUDENT ORGANIZATIONS	
1. Identify the purpose and goals of a Career and Technology Student Organization (CTSO). Explain how CTSOs are integral parts of specific clusters, majors, and/or courses. 2. Explain the benefits and responsibilities of being a member of a CTSO. 3. List leadership opportunities that are available to students through participation in CTSO conferences, competitions, community service, philanthropy, and other activities. 4. Explain how participation in CTSOs can promote lifelong benefits in other professional and civic organizations.	**Instruction:** Pg. 717 Career and Technical Student Organizations **Application:** All End of Chapter CTSO Event Prep sections
C. TECHNOLOGY KNOWLEDGE	
1. Demonstrate proficiency and skills associated with the use of technologies that are common to a specific occupation. 2. Identify proper netiquette when using e-mail, social media, and other technologies for communication purposes. 3. Identify potential abuse and unethical uses of laptops, tablets, computers, and/or networks. 4. Explain the consequences of social, illegal, and unethical uses of technology (e.g., piracy; illegal downloading; licensing infringement; inappropriate uses of software, hardware, and mobile devices in the work environment). 5. Discuss legal issues and the terms of use related to copyright laws, fair use laws, and ethics pertaining to downloading of images, photographs, documents, video, sounds, music, trademarks, and other elements for personal use.	**Instruction:** Pg. 335-336 Intellectual Property Pg. 336 Figure 8-11 Pg. 336-337 Software Piracy Pg. 338 Proper Usage of Information Pg. 595 Message Pg. 619 Online Presence Pg. 625 Cyberbullying Pg. 626 Cell Phone Use Pg. 669-672 Combating Viruses and Other Malware--Determining Reliable Websites Pg. 674 Pirated Media Pg. 674-677 Preventing Threats from Public Intrusion Pg. 685-700 Chapter 17.1 Careers in IT **Application:** Pg. 341 Check Your Understanding #1-5 Pg. 343 Review and Assessment #5,9,10,15 Pg.344 Application and Extension of Knowledge #4

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6. Describe ethical and legal practices of safeguarding the confidentiality of business-related information.	Pg. 622 Hands-On Example 15.3.1
7. Describe possible threats to a laptop, tablet, computer, and/or network and methods of avoiding attacks.	Pg. 626 Hands-On Example 15.3.2
	Pg. 631 Check Your Understanding #3
	Pg. 634 Review and Assessment #5
	Pg. 671 Hands-On Example 16.3.2
	Pg. 700 Check Your Understanding #4,5
	Pg. 728 Chapter 17 Test #1,2,6-8,11-15
	Pg. 730 Application and Extension of Knowledge #5
D. PERSONAL QUALITIES AND EMPLOYABILITY SKILLS	
1. Demonstrate punctuality.	**Instruction:**
2. Demonstrate self-representation.	Pg.702-708 Personal-Success Skills
3. Demonstrate work ethic.	Pg.708-715 Researching a Career
4. Demonstrate respect.	Pg.715-722 Education, Certification, Training, and Experience
5. Demonstrate time management.	**Application:**
6. Demonstrate integrity.	All Teamwork activities at End of Chapters
7. Demonstrate leadership.	Pg. 727 Check Your Understanding #1
8. Demonstrate teamwork and collaboration.	
9. Demonstrate conflict resolution.	
10. Demonstrate perseverance.	
11. Demonstrate commitment.	
12. Demonstrate a healthy view of competition.	
13. Demonstrate a global perspective.	
14. Demonstrate health and fitness.	
15. Demonstrate self-direction.	
16. Demonstrate lifelong learning.	
E. PROFESSIONAL KNOWLEDGE	
1. Demonstrate effective speaking and listening skills.	**Instruction:**
2. Demonstrate effective reading and writing skills.	Pg. 659 Ethical Behavior in Cyberspace
3. Demonstrate mathematical reasoning.	Pg.702-708 Personal-Success Skills
4. Demonstrate job-specific mathematics skills.	Pg.708-715 Researching a Career
5. Demonstrate critical-thinking and problem-solving skills.	Pg.715-722 Education, Certification, Training, and Experience
6. Demonstrate creativity and resourcefulness.	Pg. 722-726 Resume and Portfolio
7. Demonstrate an understanding of business ethics.	**Application:**
8. Demonstrate confidentiality.	All Communication Skills activities at End of Chapters
9. Demonstrate an understanding of workplace structures, organizations, systems, and climates.	Pg. 727 Check Your Understanding #1
10. Demonstrate diversity awareness.	
11. Demonstrate job acquisition and advancement skills.	
12. Demonstrate task management skills.	
13. Demonstrate customer-service skills.	
F. COMPUTING FUNDAMENTALS	
1. Computer Hardware	**Instruction:**
a. Identify types of computers, how they process information and how individual computers interact with other computing systems and devices.	Pg. 8-9 Networked Computers
	Pg. 37-40 Categories of Computers
	Pg.43-45 Processing
b. Identify the purpose and function of computer hardware components.	Pg. 50-60 Input Devices and Their Functions
	Pg. 60-68 Output Devices and Their Functions

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c. Identify system requirements that go into the decision for purchasing computer equipment. d. Identify how to maintain computer equipment and solve common problems relating to computer hardware.	Pg. 179-183 Computer Models, Needs Assessment, Recommended Standard Configurations Pg. 186-Maintaining the Hardware Pg. 193-198 Troubleshooting Hardware Problems Pg. 558-563 Network Connection Technologies **Application:** Pg. 48 Check Your Understanding #1 Pg. 66 Hands-On Example 2.2.1 Pg. 69 Check Your Understanding #2-5 Pg. 76 Review and Assessment #1,2,6 Pg. 183 Hands-On Example 5.1.1 Pg.184 Check Your Understanding #1-5 Pg. 189 Check Your Understanding #1,2 Pg. 205 Check Your Understanding #3 Pg. 206-207 Review and Assessment #1-4, 6-9, 11, 14 Pg. 207-208 Application and Extension of Knowledge #1
2. Computer Software a. Identify how software and hardware work together to perform computing tasks and how software is developed and upgraded. b. Identify different types of software, general concepts relating to software categories, and the tasks to which each type of software is most suited or not suited.	**Instruction:** Pg. 15-18 New and Emerging Classes of Software Pg. 110- 111 Software Licenses and Versions Pg. 113-123 Application Software Pg. 668-669 Safe Hardware and Software Practices **Application:** Pg. 16-18 Hands-On Example 1.1.1 Pg. 19 Check Your Understanding #5 Pg. 112 Hands-On Example 3.3.1 Pg. 117-118 Hands-On Example 3.3.2 Pg. 120-121 Hands-On Example 3.3.3
3. Using an Operating System a. Distinguish between common operating systems, e.g. Microsoft Windows, Linux, Mac OS X, Android, and iOS. b. Identify what an operating system is and how it works, and solve common problems related to operating systems. c. Manipulate and control the Windows desktop, files, and disks; identify how to change system settings, install and remove software.	**Instruction:** Pg. 47 Operating System Pg. 94-104 Operating Systems Pg. 123-127 Installing Software Pg. 135-140 Windows File and Folder Names Pg. 140-146 Windows File Explorer Pg. 203 Windows 7 Startup Programs **Application:** Pg. 104 Hands-On Example 3.2.3 Pg. 142-143 Hands-On Example 4.1.1 Pg. 145 Hands-On Example 4.1.2 Pg. 146-147 Hands-On Example 4.1.3 Pg. 148 Check Your Understanding #1-5
4. Digital Communications a. Identify various digital communication devices. b. Identify advantages and limitations of digital communication subscriptions. c. Evaluate functions of digital devices relative to data usage and/or Wi-Fi connectivity. d. Identify advantages and implications of owning a device, carrier and connection plans, and contracts.	**Instruction:** Pg. 11-13 Communication Technologies Pg. 38-40 Personal Computers and Mobile Devices Pg. 113-114 Apps Pg. 512 Internet Service Provider Pg. 558 Network Connection Technologies Pg. 606-607 Telephone Communication Pg. 609-610 SMS

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e. Differentiate between SMS and MMS. f. Evaluate the mechanics and basic features of instant messaging and chat when using Skype, FaceTime, or Google Hangouts, and others. g. Evaluate apps based on abilities and limitations of digital devices.	Pg. 610 IM Pg. 611 Multimedia Messaging Service (MMS), VoIP Pg. 611-612 Conference Communication Pg. 612 streaming Media Pg. 626-628 Cell Phone Use **Application:** Pg. 610-611 Hands-On Example 15.2.1 Pg. 612 Hands-On Example 15.2.2 Pg. 617 Check Your Understanding #1-5 Pg. 633 Review and Assessment #13, 15
5. Cloud Computing a. Define cloud computing. b. Differentiate between cloud storage versus cloud access. c. Demonstrate collaboration and participation via the cloud. d. Demonstrate the ability to grant and limit access to shared files in the cloud. e. Evaluate various online storage apps, e.g. Dropbox, OneDrive, OneNote, Photobucket, and others. f. Evaluate various online office apps, e.g. Google Apps, Office 365, and others. g. Compare apps within multiple platforms, e.g. browser, tablet, smartphone, desktop, and others.	**Instruction:** Pg. 9 Cloud Computing Pg. 113-114 Application Software Pg. 114 Productivity Software Pg. 591 Microsoft Outlook Pg. 628 Collaboration Pg. 629 Figure 15-18 Pg. 691 Cloud Computing **Application:** Pg. 117-118 Hands-On Example 3.3.2 Pg. 592-593 Hands-On Example 15.1.1
G. KEY APPLICATIONS	
1. Common Functions of Microsoft Application Software a. Be able to start and exit a program, create, save, manage files, and utilize sources of online help. b. Identify and perform common editing and formatting functions. c. Identify and perform common printing functions.	**Instruction:** Pg. 215 Launching Applications Pg. 217-220 Common Features and Functions Pg. 220-222 Displaying Multiple Windows **Application:** Pg. 219 Hands-On Example 6.1.1 Pg. 220 Hands-On Example 6.1.2 Pg. 222-223 Hands-On Example 6.1.3
2. Basic Word Processing Functions a. Demonstrate the ability to modify documents, including the ability to use automatic formatting tools. b. Demonstrate the ability to insert, edit and format tables in a document. c. Demonstrate the ability to use word processing tools to automate processes such as document review, security, and collaboration.	**Instruction:** Pg. 215 Launching Microsoft Word Pg. 226-228 Saving Files Pg. 228-230 Printing Files Pg. 231 Closing Files and Applications Pg. 231 Opening Files Pg. 234-237 Editing Text Pg. 238-239 Inserting Media Files Pg. 241-242 Reversing Errors Pg. 246-248 Formatting Text Pg. 255-257 Office Options Pg. 280-282 Tables **Application:** Pg. 227-228 Hands-On Example 6.2.1 Pg. 230 Hands-On Example 6.2.2 Pg. 232 Hands-On Example 6.2.3

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	Pg. 232 Check Your Understanding #1-5 Pg. 237 Hands-On Example 6.3.1 Pg. 240-241 Hands-On Example 6.3.2 Pg. 242 Hands-On Example 6.3.3 Pg. 248-249 Hands-On Example 6.3.5 Pg. 249 Hands-On Example 6.3.6 Pg. 250 Check Your Understanding #1-5 Pg. 257-258 Hands-On Example 6.4.1 Pg. 281 Hands-On Example 7.1.7
3. Basic Spreadsheet Functions a. Demonstrate the ability to modify and format worksheet data. b. Demonstrate the ability to sort data, manipulate data using formulas and functions. c. Demonstrate the ability to add or modify charts.	**Instruction:** Pg. 216 Launching Microsoft Excel Pg. 403-404 Entering Data Pg. 404-405 Using Formulas Pg. 406-408 Editing Data Pg. 410-417 Customizing the Appearance Pg. 417-418 Changing Data Location Pg. 419-421 Rearranging Data Pg. 422-424 Locating and Organizing Data **Application:** Pg. 405-406 Hands-On Example 10.1.1 Pg. 408 Hands-On Example 10.1.2 Pg. 408 Check Your Understanding #2-5 Pg. 411 Hands-On Example 10.2.1 Pg. 413-414 Hands-On Example 10.2.2 Pg. 415 Hands-On Example 10.2.3 Pg. 417 Hands-On Example 10.2.4 Pg. 419 Hands-On Example 10.2.5 Pg. 421-422 Hands-On Example 10.2.6 Pg. 425-426 Hands-On Example 10.2.7
4. Basic Presentation Software a. Demonstrate the ability to create simple presentations. b. Demonstrate the ability to format simple presentations	**Instruction:** Pg. 216 Launching Microsoft PowerPoint Pg. 349-354 Purpose and Planning Pg. 354-365 Working with a Presentation Pg. 371 Creating a New Presentation Pg. 373-380 Advanced Features **Application:** Pg. 354 Hands-On Example 9.1.1 Pg. 356-357 Hands-On Example 9.1.2 Pg. 358-360 Hands-On Example 9.1.3 Pg. 361 Hands-On Example 9.1.4 Pg. 362-363 Hands-On Example 9.1.5 Pg. 364-365 Hands-On Example 9.1.6 Pg. 368 Hands-On Example 9.1.7 Pg. 369 Check Your Understanding #1-5 Pg. 372-373 Hands-On Example 9.2.1 Pg. 374 Hands-On Example 9.2.2 Pg. 375-376 Hands-On Example 9.2.3 Pg.377 Hands-On Example 9.2.4 Pg. 378-379 Hands-On Example 9.2.5 Pg. 380-381 Hands-On Example 9.2.6

	Pg. 381 Check Your Understanding #1-5
5. Basic Database Applications a. Demonstrate the ability to create a basic database. b. Use, query, and navigate a basic database.	**Instruction:** Pg. 468-470 Examining a Database Pg. 471-474 Creating a Database Structure Pg. 478 Importing Records into a Database Pg. 480-485 Viewing Data Pg. 486-490 Joining Tables Pg. 493-498 Locating Data Pg. 498-499 Creating Calculated Fields Pg. 499-500 Creating Statistical Fields **Application:** Pg. 469 Hands-On Example 12.1.1 Pg. 469-470 Hands-On Example 12.1.2 Pg. 471 Hands-On Example 12.1.3 Pg. 474-475 Hands-On Example 12.1.4 Pg. 479-480 Hands-On Example 12.2.1 Pg. 482 Hands-On Example 12.2.2 Pg. 483-484 Hands-On Example 12.2.3 Pg. 485-486 Hands-On Example 12.2.4 Pg. 490-491 Hands-On Example 12.2.5 Pg. 494 Hands-On Example 12.3.1 Pg. 496-497 Hands-On Example 12.3.2 Pg. 498 Hands-On Example 12.3.3 Pg. 499 Hands-On Example 12.3.4 Pg. 500-501 Hands-On Example 12.3.5
H. LIVING ONLINE	
1. Using the Internet and the World Wide Web a. Differentiate between the World Wide Web and the internet. b. Describe how computers are connected to communication networks and the Internet. c. Demonstrate the ability to create and locate online content. d. Be able to use a standard web browsing application, i.e. Microsoft Internet Explorer/Edge, Mozilla Firefox, Safari, Chrome, Opera, etc. e. Be able to search the Internet for information using a variety of search engines, e.g. Yahoo, Google, Bing, etc. f. Evaluate various websites for valid information including author, content, and audience.	**Instruction:** Pg. 511 Internet Pg. 515 World Wide Web Pg. 524 HTML and Web 2.0 Pg. 527-531 Using Search Engines Pg. 534-535 Designing for the Web Pg. 537-546 HTML Pg. 546-549 Programming Languages **Application:** Pg. 536-537 Hands-On Example 13.2.1 Pg. 540-541 Hands-On Example 13.2.2 Pg. 545 Hands-On Example 13.2.3 Pg. 548 Hands-On Example 13.2.4 Pg. 549 Check Your Understanding #1-5
2. The Impact of Computing and the Internet on Society a. Explain the impact of computing and the Internet on society. b. Identify how computers are used in different areas of work, school, and home. c. Identify the risks of using computer hardware and software. d. Identify how to use the Internet safely, legally, and responsibly.	**Instruction:** Pg. 13-18 Emerging Technologies Pg. 21-22 Worker Productivity Pg. 22-23 Current Employment Pg. 23-24 Future Employment Pg. 26-28 Cultural and Societal Issues Pg. 28-29 Closing the Digital Divide Pg. 531 Ethical Use of the Internet Pg. 639-644 Computer Threats Pg.644-647 Internet Security Protocols

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e. Describe threats to a computer network and online accounts, methods of avoiding attacks, and options for dealing with virus attacks.	Pg.647-648 Protecting Stored Data Pg. 651-654 Identity Protection on the Internet Pg. 654-658 Identity Protection in E-mail Pg. 668-669 Safe Hardware and Software Practices Pg. 669-671 Combating Viruses and Other Malware Pg. 672-674 Determining Reliable Websites Pg. 674-677 Preventing Threats from Public Intrusion **Application:** Pg. 24 Check Your Understanding #1-5 Pg. 29 Check Your Understanding #1-5 Pg. 644 Hands-On Example 16.1.1 Pg. 648-649 Hands-On Example 16.1.2 Pg. 649 Check Your Understanding #1-5 Pg. 652 Hands-On Example 16.2.1 Pg. 661 Hands-On Example 16.2.2 Pg. 671 Hands-On Example 16.3.2 Pg. 677 Check Your Understanding #1-5
3. Organizing Your Digital Life (Calendaring, Social Media, Online Conferencing, Streaming Media Literacy) a. Create events and appointments through an online calendar. b. Create notifications, alerts, and rules. c. Maximize the use of multiple calendars through the use of subscriptions and sharing. d. Differentiate between intranet and internet. e. Demonstrate the use of various Web 2.0 tools: 1. Blogs, wikis, and forums 2. VOIP, video, and phone conferencing 3. Screen sharing 4. Video, live, and audio streaming including using various devices; f. Differentiate between streaming and downloading files. g. Describe how electronic communication works and how to communicate using electronic mail, social networks, and other communication methods.	**Instruction:** Pg. 511 Internet Pg. 515 Upload and Download Pg. 521 Downloads Pg. 519-520 Home Page Pg. 567 Network Types Pg. 589-590 E-mail Technologies Pg. 590-593 E-mail Account Settings Pg. 593-598 Appropriate E-mail Use Pg. 599-603 Managing E-mail Communication Pg. 609-615 Communication Tools Pg. 613 Streaming Media Pg. 616-617 Online Calendars Pg. 619-623 Social Media Pg. 623-626 Online Communication Pg. 626-628 Cell Phone Use Pg. 628-630 Collaboration Pg. 630 Learning Management Systems **Application:** Pg. 592-593 Hands-On Example 15.1.1 Pg. 598-599 Hands-On Example 15.1.2 Pg. 604 Check Your Understanding #1-5 Pg. 610-611 Hands-On Example 15.2.1 Pg. 612-613 Hands-On Example 15.2.2 Pg. 615-616 Hands-On Example 15.2.3
4. Obtaining Mobile Apps a. Evaluate processes for obtaining and/or purchasing apps. b. Identify different app genres, e.g. productivity, reference, content, creation, social media, music, and health.	**Instruction:** Pg. 113-123 Application Software **Application:** Pg.117-118 Hands-On Example 3.3.2 Pg. 120-121 Hands-On Example 3.3.3

| c. Analyze strengths and limitations of apps and applications in regards to compatibility, productivity, and appropriate device usage. | |