SUBJECT:	Information Technology	T
GRADE LEVEL:	9, 10, 11, 12	
COURSE TITLE:	Digital Information Technology	
COURSE CODE:	8207310	
SUBMISSION TITLE:	Principles of Information Technology ©2017	
BID ID:		
PUBLISHER:	Goodheart-Willcox Publisher	
PUBLISHER ID:	36213599401	
BENCHMARK CODE	BENCHMARK	LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL
	04.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance. – The student will be able to:	
	04.01 Develop keyboarding skills to enter and manipulate text and data.	pg. 218, 234–237, 268
	04.02 Describe and use current computer technology and software to perform personal and business related tasks in the workplace. (e.g., digital calendars, meetings, appointments, e-mail contacts)	pg. 215–259, 267–296, 305–341, 589–603, 609–617
	04.03 Use reference materials. (e.g., on-line help, tutorials, manuals, vendor bulletin boards)	pg. 164
	04.04 Demonstrate basic computer file management skills and file naming conventions to accurately organize files into hierarchies by labeling file folders for easy accessibility.	pg. 135–154
	04.05 Discuss the process of troubleshooting problems with computer hardware peripherals, including input and output devices in the workplace environment.	pg. 193–205
	04.06 Describe ethical issues and problems associated with computers and information systems, including federal laws against anti-piracy with computers and software security protections.	pg. 110–111, 636–646, 659–661

04.07 Identify operating system file naming conventions.	pg. 135–140
04.08 Demonstrate proficiency with file management and structure. (e.g., folder creation file creation, backup copy, delete, open, save)	pg. 135–171
04.09 Demonstrate a working knowledge of standard file formats.	pg. 139–146
04.10 Explain the history and purpose of various operating systems. (e.g., DOS, Windows, Mac, and Unix/Linux)	pg. 47–48, 94–104
05.0 Develop and awareness of microprocessors and digital computers. – The student will be able to:	
05.01 Explain the general architecture of a microcomputer system.	pg. 37
05.02 Explain the need for and use of peripherals.	pg. 40–46, 50–68
05.03 Demonstrate proficiency using peripherals.	pg. 50–68
05.04 Identify the basic concepts of computer maintenance and upgrades.	pg. 186–189

05.05 Differentiate between diagnosing and troubleshooting.	pg. 191
06.0 Demonstrate an understanding of operating systems. – The student will b able to:	e
06.01 Identify types of networks and how they work.	pg. 567–568
06.02 Identify the role of servers and clients on a network.	pg. 567–570
06.03 Identify benefits and risks of networked computing.	pg. 558–559
06.04 Identify the relationship between computer networks and other communications networks. (e.g., wifi, teleconference, telepresence)	pg. 558–564, 589–603, 609–617
06.05 Identify intranets, extranets and how they relate to the Internet.	pg. 567
06.06 Demonstrate basic understanding network administration.	pg. 573–574
07.0 Use technology to enhance the effectiveness of communication skills utilizing word processing applications. – The student will be able to:	

07.01 Compare and contrast word processing software and accompanying features for the most efficient job enhancing written business communications.	og. 267–296, 305–341
07.02 Share and maintain documents by applying different views and protection to a document and manage document versions. Share and save a document and apply a template. (e.g., pdf, html, blog, hyperlinks)	og. 164–167, 283–284
07.03 Format content to a document by applying font, paragraph attributes, indent and tab settings to text and paragraphs. Apply spacing settings to text and paragraphs. Navigate and search through a document, create and manipulate tables.	og. 269–270, 312–316, 325–332
07.04 Apply page layout and reusable content by editing and manipulating page setup settings and applying themes. Create and manipulate page backgrounds, pheaders and footers.	og. 271–275, 312–316, 325–332
07.05 Use image design theory and software to create illustrations, shapes, and graphics and include a selection in a document. Inset and format pictures, shapes, and clipart. Apply and manipulate text boxes.	og. 238–241
07.06 Proofread documents by validating content through the use of spell and grammar check. Configure autocorrect settings, insert and modify comments in a document.	og. 290–296
07.07 Apply references and hyperlinks, create end and footnotes, and create a table of contents in a document.	og. 305–316
07.08 Perform various mail merge options, macros and tracking revisions. p	og. 292–293
08.0 Use technology to enhance communication skills utilizing presentation application. – The student will be able to:	

08.01 Manage and configure the presentation software environment, including: adjusting views, manipulating window, configuring toolbar and file options.
08.02 Create slide presentations utilizing various project development elements, including: adding and removing slides, slide layouts, format slide design, insert or format placeholders.
08.03 Locate, create and incorporate graphical and multimedia elements, including: shapes, graphics, images, bullets, hyperlinks, video, and audio into a slide presentation appropriate for the project.
08.04 Explore and apply design and color theory to create dynamics and appealing visuals. pg. 357–361
08.05 Create and manipulate graphical and multimedia elements to improve or develop new contacts appropriate for the project, including: creation of images, pg. 357–358 color selections, tone, hue, and contrast.
08.06 Demonstrate various business-related elements that can be created, embedded and manipulated in a slide presentation, including: charts, graphs, tables, spreadsheets, flowcharts, and organizational charts.
08.07 Apply slide transitions and create custom animations to slide presentations appropriate for the target audience. pg. 373–376
08.08 Demonstrate different delivery methods for slide presentations, including: packaging for CD delivery, video projection – on mouse click, rehearsed timings, printing options – outlines, handouts, slides, and notes.
09.0 Use technology to enhance the effectiveness of communication utilizing spreadsheet and database applications. – The student will be able to:

09.01 Manage the worksheet environment by navigating through and printing a worksheet. Personalize the environment by manipulating the ribbon tabs, group settings, importing data/database, manipulating properties, files and folders.	pg. 401–429
09.02 Create cell data, apply auto fill and hyperlinks.	pg. 401–408
09.03 Format cells and worksheets by applying cell formats, merging and splitting cells, create row and column titles, hide and unhide column titles, rows and columns. Manipulate page set up options. Create and apply cell styles.	pg. 410–417
09.04 Manage worksheets and workbooks by creating and formatting worksheets and manipulating views/themes.	pg. 401–408
09.05 Apply formulas and functions by creating formulas, enforcing precedence and cell formula references. Apply conditional formula logic, name and cell ranges.	pg. 401–408, 437–446
09.06 Demonstrate data visually by creating and modifying charts and images (e.g., pivot tables)	pg. 448–457
09.07 Share worksheet data through email, changing file type and different versions. Manage comments (e.g., mail merge)	pg. 589–603
09.08 Analyze and organize data through filters, sorting and applying conditional formatting. (e.g., macros)	pg. 422–426
09.09 Create forms for inputting data into a database application.	pg. 465–466

09.10 Interpret queries for specialized reports using a database application.	pg. 493–498
09.11 Interpret data on line graphs, pie charts, diagrams, and tables commonly used in spreadsheet software application that incorporate industry data.	pg. 450–457
10.0 Use technology to enhance communication skills utilizing electronic mail. – The student will be able to:	
10.01 Describe and perform e-mail capabilities and functions. Create and send messages, manage signature and automated messages. Save, send, schedule, and manage junk mail, e-mail and spam. Configure message sensitivity, security and delivery options.	pg. 589–603
10.02 Use the Internet to perform e-mail activities, including: attaching externa files, saving e-mail attachments, viewing mailbox details, establishing appointments, creating contact groups, and sending a meeting to a contact group to communicate in the workplace.	pg. 589–603
11.0 Investigate individual assessment and job/career exploration and individual career planning that reflect the transition from school to work, lifelong learning, and personal and professional goals.	
11.01 Investigate/research personal skills and aptitudes in comparison with various business related job and career options and present.	pg. 685–726
11.02 Use career resources to develop an information base that reflects local and global business related occupations and opportunities for continuing education and workplace experience.	pg. 708–726
11.03 Demonstrate job-seeking skills required for entry-level employment, including resume, cover letter, thank you letter, online/hard copy application, mock interview, and follow-up call.	pg. 722–726

11.04 Design, initiate, refine and implement a plan to facilitate growth and skill development related to anticipated job requirements and career expectations	pg. 712–715
11.05 Demonstrate an awareness of specific job requirements and career paths (e.g., requirements, characteristics needed) in business environments.	pg. 702–722
11.06 Investigate/research the potential impact of local and global trends on career plans and life goals and present.	pg. 685–699, 708–722
11.07 Describe the importance of building community and mentor relationships in a variety of professional and workplace situations.	pg. 718–720
11.08 Simulate work-based projects in an information technology environment	pg. 729–730 Application and Extension of Knowledge
12.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objective and enhance workplace performance. – The student will be able to:	
12.01 Demonstrate awareness of the following workplace essentials: quality customer service; business ethics; confidentiality of information; copyright violations; accepted workplace rules, regulations, policies, procedures, processes, and workplace safety, and appropriate attire and grooming.	pg. 335–341, 651–652, 511–532, 659–661, 702–708 Global note: Ethics feature in each chapter
12.02 Demonstrate ways of accepting constructive criticism on team projects within the workplace.	pg. 703
12.03 Apply appropriate strategies to manage and resolve conflicts in work situations.	pg. 703

12.04 Demonstrate human relations, personal and interpersonal skills appropriate for the workplace, including: responsibility, dependability, punctuality, integrity, positive attitude, initiative, respect for self and others, and professional dress.	pg. 702–708
13.0 Demonstrate competence using computer networks, internet and online databases to facilitate collaborative or individual learning and communication The student will be able to:	
13.01 Demonstrate how to connect to the Internet and use appropriate Internet protocol. Identify and describe web terminology, addresses and how browsers work.	pg. 511–532
13.02 Demonstrate proficiency using basic features of GUI browsers, including: bookmarks, basic configurations, e-mail configurations, and address books. Describe appropriate browser security configurations.	pg. 518–523, 589–603, 651–658
13.03 Describe information technology terminology, including Internet, intranet, ethics, copyright laws, and regulatory control.	pg. 511–532, 659–661
13.04 Demonstrate proficiency using search engines and search tools.	pg. 511–532
13.05 Use various web tools, including: downloading files, transfer of files, telnet, PDF, plug-ins, and data compression. Identify Boolean search strategies.	pg. 169–171, 515, 518–523, 527–528
13.06 Understand and apply level one Universal Resource Locator (URL) and associated protocols. (e.g., com, org, edu, gov, net, mil)	pg. 511–532
14.0 Demonstrate competence in page design applicable to the WWW – the student will be able to:	

14.01 Describe and apply color theory as it applies to Web page design.	pg. 526, 534–537
14.02 Access and digitize graphics through various resources. (e.g., scanner, digital cameras, on-line graphics, clipart, CD-ROMs)	pg. 55–56
14.03 Describe appropriate use of social networking sites and applications, blogs and collaborative tools for file sharing and using listservers. (dangers of piracy, copyright, plagiarism)	pg. 335–341, 651–652, 659–661
14.04 Describe web applications, including sharing photos and video clips, messaging, chatting and collaborating.	pg. 511–532
15.0 Develop an awareness of emerging technologies. – the student will be able to :	
15.01 Compare and contrast emerging technologies and describe how they impact business in the global marketplace. (e.g., wireless network, tablets, cell phones, satellite technology, nano technology, smart devices, home networks, peer-to-peer)	pg. 13–18
16.0 Develop awareness of computer languages and software applications. – the student will be able to:	
16.01 Compare and contrast the appropriate use of various software applications. (e.g., word processing, desktop publishing, graphic design, web browser, e-mail, presentation, database, scheduling, financial management, Java applet, music)	pg. 215–259, 267–296, 349–392, 465–501, 534–549, 589–603
16.02 Demonstrate the use of various software applications. (e.g., word processing, desktop publishing, graphic design, web browser, e-mail, presentation, database, scheduling, financial management, Java applet, music)	pg. 267–296, 305–341

16.03 Describe and illustrate language terminology. (e.g., HTML, Python, Java, Flash, Pearl, code.org)	pg. 43–46, 534–549
16.04 Use storyboarding techniques to design a website.	pg. 702, 534–549
16.05 Create personal and business web pages.	pg. 534–549
16.06 Use basic functions of WYSIWYG editors.	pg. 524–526
16.07 Use basic functions of HTML, DHTML, and XML editors and converters.	pg. 534–549
16.08 Enhance web pages through the addition of images and graphics including animation.	pg. 525–526
17.0 Demonstrate comprehension and communication skills. – The student will be able to:	
17.01 Read and comprehend technical and non-technical reading assignments related to course content, including manuals, books, magazines and electronic sources.	pg. 164 Reading Prep activity at beginning of each chapter Reading activities at end of select chapters
17.02 Use listening, speaking, telecommunication and nonverbal skills and strategies to communicate effectively with supervisors, co-workers, and customers.	pg. 702–708

17.03 Apply the writing process to the creation of appropriate documents following designated business formats. (e.g., note taking, research, MLA/APA)
17.04 Demonstrate an awareness of project management concepts and tools.
(e.g., timelines, deadlines, resource allocation, time management, delegation of pg. 702–703
tasks, collaboration)