

CompuScholar, Inc.

Alignment to Tennessee **Computer Applications** Standards

Tennessee Course Details:

Course Name:	Computer Applications
Primary Career Cluster:	Business Management & Administration
Course Code:	5891
Credit:	1
Grade Level:	8 - 12
Standards Link:	http://tn.gov/assets/entities/education/attachments/cte_std_computer_applications.pdf

CompuScholar Course Details:

Course Title: CompuScholar: Digital Savvy
Course ISBN: 978-0-9887070-8-5
Course Year: 2016

Note 1: Citation(s) listed may represent a subset of the instances where objectives are met throughout the course.

Course Description

Computer Applications is a foundational course intended to teach students the computing fundamentals and concepts involved in the use of common software applications. Upon completion of this course, students will gain basic proficiency in word processing, spreadsheets, databases, and presentations. In addition, students will have engaged in key critical thinking skills and will have practiced ethical and appropriate behavior required for the responsible use of technology. Standards in this course are aligned with Tennessee State Standards for Literacy in Technical Subjects and Tennessee State Standards in Mathematics.

Course Standards

Communication Networks, the Internet, and Technology Operations	CITATION(S)
1) Research recent developments in information technology affecting the supply/demand characteristics of the job market, including career pathways and occupational outlooks for occupations in business and finance that require information technology expertise. Synthesize findings into a presentation highlighting the typical roles and responsibilities of professionals in high-growth occupations.	Chapter 24, Lesson 1 Chapter 24 Activity

2) Identify, connect, and demonstrate the correct usage of elements of a typical home computer, including a monitor, keyboard, mouse, network cable, and USB devices (such as camera, memory, or scanner). Perform basic troubleshooting as needed for situations involving these components (e.g., if the computer does not recognize a device).	Chapter 1, Lesson 2 Chapter 1, Lesson 3 Chapter 1 Activity Chapter 5, Lesson 3 Chapter 5 Activity
3) Correctly and safely execute basic file management operations on a typical personal computer and shared storage media, including the opening, creating, copying, moving, deleting, and renaming of files and folders, as well as searching for a specified file or folder on local or networked storage media.	Chapter 4, Lesson 1 Chapter 4, Lesson 2 Chapter 4 Activity
4) Describe and demonstrate the correct connections and setup for a new wireless router in a home computing environment. Discuss the impact of network speeds, wireless communication, firewalls, and gateways on individual and societal productivity.	Chapter 6, Lesson 1 Chapter 6, Lesson 2 Chapter 6, Lesson 3 Chapter 6, Lesson 4
5) Describe the steps necessary to retrieve, download, and safely install new applications, updates, and plug-ins from the Internet.	Chapter 3, Lesson 3 Chapter 5, Lesson 2
6) Compare and contrast the accessibility of the Internet through a home router versus through a public wi-fi access point. Discuss the risks and advantages of using secure home networks versus publicly accessible networks.	Chapter 6, Lesson 1 Chapter 6, Lesson 2
7) While preparing materials and assignments in this course, use a browser to access and download Internet resources by uniform resource locator (URL), hyperlink, or favorite/bookmark.	Chapter 2, Lesson 3 Chapter 7, Lesson 1 Chapter 9, Lesson 2 Chapter 22, Lesson 2

Word Processing and Publishing	CITATION(S)
8) Use a word processing program to create and format documents with academic and business styles (e.g., memos, letters, agendas, reports, tabular lists) to communicate the results of research, meetings, lab reports, and relevant assignments in this course.	Chapter 9 (all lessons) Chapter 9 (all activities) Chapte 14 (Mid-Term Project)
9) Craft documents using word processing program features and methods such as: <ul style="list-style-type: none"> a. Paragraph formatting (line spacing, justification, indentations) b. Bulleted and numbered lists c. Tables of multiple columns, with and without borders d. Margins, headers, footers, page numbers, and footnotes e. Typeface fonts and weights, including hyperlinks f. Capitalization, punctuation, number expression, grammar g. Printing orientation, one- or two-sided, to a selected printer h. Bibliographies and tables of contents i. Saving to a file that can be shared and/or transported, including saving to cloud-based or external sources 	Chapter 9 (all lessons) Chapter 9 (all activities) Chapte 14 (Mid-Term Project)

10) Enhance documents by including graphic arts components such as borders and shaded elements, graphs and charts from other programs, watermarks, and imagery imported from technology devices and drives as well as sources retrieved from the Internet, including adding citations and/or captions for each element when appropriate.	Chapter 9, Lesson 5
11) Create, format, and edit documents suitable for print or electronic distribution, both four-color and two-color (black and white).	Chapter 9 (all lessons) Chapter 9 (all activities) Chapter 14 (Mid-Term Project)
12) Critique and edit existing documents with standard proofreading and editing marks to conform to a standard business style guide (e.g., fonts, colors, line spacing). Practice the use of electronic revision marks and comments, where supported.	n/a
13) Complete a comprehensive word-processing project with instructor approval that applies the skills acquired in this section. For example, prepare a contract, MLA-style report, business proposal, or budget report from a student organization.	Chapter 14 (Mid-Term Project)

Spreadsheet Applications	CITATION(S)
14) Use a spreadsheet program to create and format academic and business documents for the purposes of tabulating and calculating numerical and/or textual data (e.g., statistics, historical data, measurements), such as budget calculations, sales reports, lab data, and related analyses.	Chapter 10 (all lessons) Chapter 10 (all activities)
15) Craft documents using a spreadsheet program using features and methods such as: a. Cells, columns, and rows b. Formulas and functions c. Copy, move, delete, and fill d. Cell-value formats (numerical and text) and alignment e. Column and row width/height, insert/delete, move f. Printing to a selected printer g. Saving with a file format that can be shared and/or transported	Chapter 10, Lesson 2 Chapter 10, Lesson 3 Chapter 10, Lesson 4 Chapter 10, Lesson 6 Chapter 10 (all activities)
16) Create new formulas to analyze data by calculating with, extracting from, presenting, and/or summarizing, including: a. Basic arithmetic calculations b. Basic mathematic (e.g., SUM, AVG, MIN, MAX) and text (e.g., LEN, LEFT, RIGHT, MID) functions c. Copying formulas that include both relative and absolute cell references d. Sorting in ascending/descending order e. Filtering data to retrieve specific values f. Basic conditional formatting (e.g., red for negative values)	Chapter 10, Lesson 5 Chapter 10, Lesson 6 Chapter 10, Activity 2

17) Create and format for optimal clarity a variety of types of graphs and charts, including bar charts, line charts, pie charts, and X-Y graphs, based on tabulated data.	Chapter 10, Lesson 7 Chapter 10, Activity 3
18) Retrieve a spreadsheet template (from those installed with the program or from the Internet) and customize it for a particular assignment approved by the instructor. For example, prepare a “timecard” of one’s daily hours spent on a month-long job assignment.	Chapter 10 (all activities) Chapter 14 (Mid-Term Project)

Database Applications	CITATION(S)
19) Use a database program to interpret the structure of an existing database (found in teaching resources or teacher-created), identifying tables, fields, key fields, queries, forms, and reports.	Chapter 12 (all lessons) Chapter 12 (all activities)
20) Using an existing database (found in teaching resources or teacher-created), create and run a database report based on basic queries. For example, retrieve the relevant information to answer a customer product inquiry during a mock customer service phone call.	Chapter 12, Lesson 3 Chapter 12, Lesson 4 Chapter 12, Lesson 5 Chapter 14 (Mid-Term Project)
21) Using an existing database (found in teaching resources or teacher-created), create, modify, and perform basic queries through a form to create a new table/view in a database.	Chapter 12, Lesson 3 Chapter 12, Lesson 4

Presentation Software	CITATION(S)
22) Design, create, and deliver an oral presentation for a selected audience on a topic approved by the instructor. Using a specified slide number and duration, include the following elements: a. A selected theme (colors, background, fonts, etc.) b. Bulleted text based on a chosen style c. Photographs and other imagery d. Charts and graphs e. Video and animated graphics f. Animated transitions of slides and components within a slide Save the file in a format that can be transported and shared with the audience.	Chapter 11 (all lessons) Chapter 11 (all activities) Chapter 14 (Mid-Term Project)
23) Design, create, and deliver a self-running electronic slideshow for a selected audience on a topic approved by the instructor. Using a specified slide number and duration, include the following elements: a. A selected theme (colors, background, fonts, etc.) b. Photographs and other imagery c. Video and animated graphics d. Animated transitions of slides Save the file in a format that can be transported and shared with the audience.	Chapter 11, Lesson 6 Chapter 14 (Mid-Term Project)

Digital Citizenship	CITATION(S)
24) Research, summarize, and deliver (via presentation, document, spreadsheet data/chart, or other format) a summary of the various perspectives and ramifications surrounding an ethical issue related to modern-day electronic communications, as approved by the instructor. Develop and strengthen claim(s) and counterclaim(s) about the issue, citing supportive evidence. Potential issues include spam, flaming, cyberbullying, libel, slandering, and mining of personal data for profit.	Chapter 8 covers numerous topics in online safety, ethical computing, security, and intellectual property. Teacher may specify additional student assignments in this area or incorporate themes into the mid-term or final projects.
25) Research, summarize, and deliver (via presentation, document, spreadsheet data/chart, or other format) a summary of the various perspectives and ramifications surrounding an ethical issue related to intellectual property rights, as approved by the instructor. Develop and strengthen claim(s) and counterclaim(s) about the issue, citing supportive evidence. Potential issues include copyright infringement, piracy, plagiarism, art licensing, creative commons, and the state/federal laws that govern them.	Chapter 8 covers numerous topics in online safety, ethical computing, security, and intellectual property. Teacher may specify additional student assignments in this area or incorporate themes into the mid-term or final projects.
26) Explain, furnish examples, and demonstrate technical literacy with the following terms: a. The Internet, World Wide Web, and various browsers b. Network speeds, wireless communication, firewalls, and gateways c. Domains, hyperlinks, homepages, favorites/bookmarks, plugins, tabs, and downloads/uploads	Chapter 2, Lesson 3 Chapter 6 (all lessons) Chapter 19, Lesson 1
Electronic Communication and Collaboration	CITATION(S)
27) Employ skills covered in this course (document processing, spreadsheet applications, electronic presentations, databases, Internet fluency) to complete a cross curricular project approved by the instructor.	Chapter 14 (Mid-Term Project) Chapter 25 (Final Project)