Course Title: **CompuScholar: Digital Savvy**
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Note 1: Arkansas standards were derived from this document:

http://ace.arkansas.gov/cte/informationForms/curriculumFrameworks/Documents/Frameworks/Business/computertechnology-intro2007.pdf

Note 2: Citation(s) listed may represent a subset of the actual instances where objectives are met throughout the course.

Arkansas ACE: Business and Marketing Technology Standards	
Course Title:	**Computer Technology: Introduction**
Course/Unit Credit:	0.5 (1 semester)
Course Number:	399040
Grades:	7 - 8

Computer Technology: Introduction is a one-semester course designed to prepare seventh- and eighth-grade students with an introduction to computers and business applications that are necessary to live and work in a technological society. Emphasis is given to data entry, computer concepts and operations, programming and design, computer software, implications of technology in society, and ethics. The course is designed to provide students with an understanding of the business, industrial, and scientific area in which the computer is used.

Unit 1: Computing Fundamentals		CITATION(S)
1.1 Define terminology	1.1.1 Prepare a list of terms with definitions	Terms defined as needed throughout the relevant chapters.
1.2 Discuss types of computers, how they process information and how individual computers interact with other computer systems and devices	1.2.1 Compare categories of computers based on their size, power and purpose	Chapter 1, Lesson 1
	1.2.2 Identify the role of the CPU including speed and how it is measured	Chapter 1, Lesson 1 Chapter 1, Lesson 2

	1.2.3 Explain the difference between memory and storage including RAM, ROM and other storage devices	Chapter 1, Lesson 2
	1.2.4 Illustrate the binary number system	Supplemental Lesson 1
	1.2.5 Identify how computers share data, files, hardware and software (networking)	Chapter 1 Chapter 4 Chapter 6
1.3 Describe the function of computer hardware components	1.3.1 Identify input, output and storage devices	Chapter 1, Lesson 2 Chapter 1, Lesson 3
	1.3.2 Locate the motherboard with the CPU, memory, power supply, expansion clots, ports, and drives	Chapter 1, Lesson 2
	1.3.3 Compare types of storage devices and their uses	Chapter 1, Lesson 2
	1.3.4 Identify how hardware devices are installed on a computer system	Chapter 1, Lesson 2 Chapter 1, Lesson 3
1.4 Discuss the factors that go into an individual or organizational decision on how to purchase computer equipment	1.4.1 Describe and illustrate the decision-making process involved in purchasing a computer	Chapter 1, Lesson 2
	1.4.2 Identify the criteria for selecting a personal computer	Chapter 1, Lesson 2
	1.4.3 Identify factors that affect computer performance	Chapter 1, Lesson 2
	1.4.4 Identify hardware and software considerations when purchasing a computer including warranties and support agreements	Chapter 1, Lesson 2
1.5 Describe how to maintain computer equipment and solve common problems related to computer hardware	1.5.1 Identify how to protect computer hardware from theft or damage	Chapter 5 Chapter 8
	1.5.2 Demonstrate routine maintenance along with troubleshooting techniques	Chapter 5
1.6 Discuss how hardware and software work together to perform computing tasks and how software is developed and upgraded	1.6.1 Identify how hardware and software interact	Chapter 1

	1.6.2 Identify issues relating to software upgrades, such as pros and cons and methods to upgrade	Chapter 5
1.7 Discuss different types of software, general concepts related to software categories, and the tasks to which each type of software is most suited or not suited	1.7.1 Identify fundamental concepts and common uses relating to word processing, spreadsheets, databases, graphics and multimedia, and presentation software	Chapter 9, 10, 11, 12, 15
	1.7.2 Identify the types and purposes of different utility programs	Chapter 3, Lesson 2 Chapter 3, Lesson 3
	1.7.3 Identify other types of software	Chapter 2
	1.7.4 Identify how to select the appropriate application(s) for a particular purpose, and problems that can arise if the wrong software product is used for a particular purpose	Chapter 2
1.8 Explain what an operating system is and how it works, and solve common problems related to operating systems	1.8.1 State the purpose of an operating system	Chapter 3
	1.8.2 Describe the difference between an operating system and application software	Chapter 3
	1.8.3 Cite examples of different operating systems including DOS, Windows, and Macintosh	Chapter 3
1.9 Discuss the operating system desktop, files, and disks	1.9.1 Identify elements of the operating system desktop	Chapter 3
	1.9.2 Manipulate operating system such as minimizing the desktop window	Chapter 3
	1.9.3 Shut down, logoff and restart the computer	Chapter 3
	1.9.4 Use the operating system start menu and taskbar	Chapter 3
	1.9.5 Manipulate desktop folders and icons	Chapter 3
	1.9.6 Manage files using the operating systems file manager	Chapter 4
	1.9.7 Identify precautions one should take when manipulating files including using standardized naming conventions	Chapter 4

	1.9.8 Solve common problems associated with working with files	Chapter 4
1.10 Demonstrate how to change system settings, install and remove software	1.10.1 Display control panels	Chapter 3
	1.10.2 Identify different control panel settings	Chapter 3
	1.10.3 Change simple control panel settings such as date and time settings	Chapter 3
	1.10.4 Display and update a list of installed printers	Chapter 3
	1.10.5 Identify precautions regarding changing system settings	Chapter 3
	1.10.6 Install software including updates from online sources	Chapter 5
	1.10.7 Identify commmon problems associated with installing and running applications	Chapter 2 Chapter 5

Unit 2: Key Applications		CITATION(S)
2.1 Define terminology	2.1.1 Prepare a list of terms with definitions	Terms defined as needed throughout the relevant chapters.
2.2 Describe the state/exit procedures of an operating system application and the utilization of online help sources	2.2.1 Start and exit an operating system application	Chapter 3
	2.2.2 Use various forms of automated help	Chapter 1, Lesson 3
2.3 Discuss common on screen elements of operating system applications, changing application settings and managing files within an application	2.3.1 Identify on-screen elements common to operating system applications (e.g. menus, toolbars, and document windows)	Chapter 3
	2.3.2 Create and save a document	Chapters 9, 10, 11
2.4 Identify common editing and formatting functions	2.4.1 Proofread and edit various documents (insert, cut, copy, move, undo, redo, repeat, Find/Replace, spell check, insert/modify pictures)	Chapter 9

2.5 Identify common printing functions	2.5.1 Format a document for printing	Chapter 9, Lesson 6
	2.5.2 Preview a file before printing	Chapter 9, Lesson 6
	2.5.3 Print files, specifiying common print options	Chapter 9, Lesson 6
	2.5.4 Manage printing and print jobs	Chapter 9, Lesson 6
	2.5.5 Identify and solve common problems associated with printing	Chapter 9, Lesson 6
2.6 Discuss formatting text and documents including the ability to use automatic formatting tools	2.6.1 Identify on-screen formatting information (select text, line/paragraph spacing, indent, create and modify, bulleted/numbered list, symbols, special characters, outline, including breaks, paragraph markers, date/time, document comments, ruler, tabs, page break, section break, page numbers, headers/footers, footnotes/endnotes, borders, shading, styles, format painter, track changes, document statistics)	Chapter 9
	2.6.2 Format text and documents using the automatic formatting tools	Chapter 9
2.7 Explain inserting, editing, and formatting tables in a document	2.7.1 Create a table	Chapter 9, Lesson 5
	2.7.2 Insert, edit, and format tables in a document	Chapter 9, Lesson 5
	2.7.3 Sort data in a table	Chapter 9, Lesson 5
2.8 Discuss modifying worksheet data and formatting data in a spreadsheet	2.8.1 Apply basic spreadsheet features and functions to produce a spreadsheet	Chapter 10
	2.8.2 Create and save a spreadsheet	Chapter 10, Lesson 2
	2.8.3 Retreive, edit, format, and print a spreadsheet	Chapter 10
	2.8.4 Create and modify arithmetic formulas	Chapter 10, Lesson 6
	2.8.5 Use common function formulas (e.g. SUM, AUTOSUM, AVERAGE, and COUNT)	Chapter 10, Lesson 6
	2.8.6 Identify common errors made when using formulas and functions	Chapter 10, Lesson 6
	2.8.7 Create a chart from worksheet data	Chapter 10, Lesson 7
	2.8.8 Apply table autoformat	Chapter 10, Lesson 4

	2.8.9 Demonstrate an understanding between absolute and relative formulas	Chapter 10, Lesson 6
2.9 Illustrate creating and formatting simple presentations	2.9.1 Identify effective design principles for simple presentations	Chapter 11
	2.9.2 Create and format a simple presentation	Chapter 11
2.10 Discuss managing slides, including: creating/inserting a new slide with a specified format; deleting a slide; and duplicating a slide	2.10.1 Insert and delete a slide	Chapter 11, Lesson 2
	2.10.2 Change slide view	Chapter 11, Lesson 2
	2.10.3 Change slide layout	Chapter 11, Lesson 2
	2.10.4 Modify a slide background	Chapter 11, Lesson 2
	2.10.5 Apply transitions to slides	Chapter 11, Lesson 4
	2.10.6 Print presentation using various output elements (speaker's notes, handouts, etc.)	Chapter 11, Lesson 6
	2.10.7 Present presentation to peers	Chapter 11, Lesson 6
2.11 Explain databases	2.11.1 Apply basic database features to produce a simple record	Chapter 12
	2.11.2 Create and save a database file	Chapter 12

Unit 3: Living Online		CITATION(S)
3.1 Define terminology	3.1.1 Prepare a list of terms with definitions	Terms defined as needed throughout the relevant chapters.
3.2 Discuss network fundamentals and the benefits and risks of network computing	3.2.1 Describe a network	Chapter 6
	3.2.2 List and describe the types of networks	Chapter 6, Lesson 2
	3.2.3 List the benefits and risks of network computing	Chapter 6, Lesson 4
3.3 Describe the relationship between computer networks, other computer networks (like the telephone network) and the Internet	3.3.1 List and describe communications media	Chapter 6, Lesson 1
	3.3.2 List and describe network transmission hardware	Chapter 6, Lesson 1

3.4 Discuss how electronic mail works	3.4.1 Demonstrate how to send and receive an e-mail	Chapter 16, Lesson 1
	3.4.2 Demonstrate how to manage e-mail (reply, forward, save, delete)	Chapter 16, Lesson 1
	3.4.3 List the procedures for the secure use of electronic mail	Chapter 16, Lesson 1
3.5 Discuss the appropriate use of e-mail and e-mail "netiquette"	3.5.1 Create a professional and effective electronic communication	Chapter 8, Lesson 4 Chapter 16, Lesson 1
3.6 Discuss the different types of information sources on the Internet	3.6.1 List types of Internet resources	Chapter 7
	3.6.2 Evaluate Web sites	Chapter 7, Lesson 3
3.7 Explain how to search for information online	3.7.1 Demonstrate the use of a Web browsing application	Chapter 2, Lesson 3
	3.7.2 Label the parts of the browser window	Chapter 2, Lesson 3
	3.7.3 Use several search engines to find information	Chapter 7
	3.7.4 Search for information using various search techniques	Chapter 7
	3.7.5 Save, copy, and print text, Web pages, and images from the Internet	Chapter 14 and 28 (online data gathering part of team projects)
3.8 Discuss how computers are used in different areas of work, school, and home	3.8.1 List common uses of the Internet	Chapter 6
3.9 Discuss the risks of using computer hardware and software online	3.9.1 Cite ways you can prevent data loss	Chapter 8, Lesson 2
	3.9.2 Identify types of computer crimes	Chapter 8, Lesson 1
	3.9.3 Identify computer viruses	Chapter 8, Lesson 1
3.10 Discuss how to use computers and the Internet safely, legally and responsibly	3.10.1 Describe ways to protect privacy and personal security online	Chapter 8, Lesson 1 Chapter 18, Lesson 4
	3.10.2 Identify legal and ethical issues pertaining to the use of technology	Chapter 8
	3.10.3 Describe responsibilities of technology users	Chapter 8 Chapter 18, Lesson 4