CompuScholar, Inc.

Alignment to Alabama **Digital Literacy and Computer Science** Standards

7th Grade

Alabama Course Details:

Course Title:	Digital Literacy and Computer Science
Grade Level:	7th Grade
Standards Link:	2025 Alabama Digital Literacy and Computer Science (PDF)

CompuScholar Course Details:

Course Title:	CompuScholar: Digital Savvy
Course ISBN:	978-0-9887070-8-5
Course Year:	2026

Course Description

7th-grade content for Alabama Digital Literacy and Computer Science (DLCS) is organized into five areas of focused study. CompuScholar's "Digital Savvy" course covers these topics as described below.

Course Standards - 7th Grade

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

Note 2: Citation(s) refer to the "Lesson Text" elements within the course, unless otherwise noted. The course "Instructional Video" components are supplements designed to introduce or re-enforce the main lesson concepts, and the Lesson Text contains full details.

Computational Thinking	**CITATION(S)**
Algorithms, Abstraction, and Decomposition	
1. Design and test algorithms using pseudocode with sequencing, selection, and iteration applying relational and logical operators to control program flow and produce appropriate outcomes.	Chapter 22, Lesson 3 (sequencing) Chapter 23, Lessons 2, 3 (selection, iteration) Chapter 23 Activity Supplemental Chapter 2, Lesson 2 / Activity 2 (pseudocode) Supplemental Chapter 2, Lesson 7 (logical operators)
2. Create a flowchart and corresponding pseudocode to plan and explain a process.	Chapter 22, Lesson 3 Supplemental Chapter 2, Lesson 2 / Activity 2
3. Debug algorithms containing selection and iteration and explain improvements.	Supplemental Chapter 2, Lesson 2 / Activity 2 Supplemental Chapter 2, Lesson 8

4. Analyze a multi-step problem by dividing it into its key components that can be completed collaboratively.	Chapter 14, Activity 1 Chapter 25, Activity 1 Supplemental Chapter 2, Lesson 2 / Activity 2 Supplemental Chapter 2, Lessons 6, 9
5. Create functions to reduce complexity in programming.	Supplemental Chapter 2, Lesson 9
Programming	
6. Design and implement a program that solves a problem, using sequencing, selection, and iteration, and user input to control the program's behavior.	Chapter 22, Lesson 3 Chapter 23, Lessons 2, 3 Chapter 23 Activity Supplemental Chapter 2, Lesson 7

Data Science	**CITATION(S)**
Data Collection and Representation	
7. Write a program that utilizes multiple data types and structures. Examples: numbers vs text, true/false Booleans	Chapter 23, Lessons 1, 2, Activity Supplemental Chapter 2, Lesson 4
8. Convert simple text and numbers into binary, manually or using digital tools.	Supplemental Chapter 2, Lesson 1 Supplemental Chapter 2, Lesson 3 / Activity 3
Data Analysis	
9. Apply basic data analysis techniques to draw conclusions from structured datasets. Examples: charts, graphs, statistical measures (mean, median, and mode)	Chapter 10, Lessons 6, 7 Chapter 10, Activity 3 Supplemental Chapter 3, Lesson 8
10. Use evidence from multiple data sources to support claims or decisions related to real-world problems.	Chapter 11, Lesson 5 Chapter 11, Activity 2 Chapter 14, Lesson 1 Supplemental Chapter 3, Lesson 8
Modeling and Simulation	
11. Modify a model or simulation to improve its accuracy and describe how changes in input affect the results.	Supplemental Chapter 2, Lesson 5 / Activity 5

Computing Systems	**CITATION(S)**
Networks and Internet	
12. Compare and contrast different types of networks, including LAN, WAN, and wireless.	Chapter 6, Lessons 1, 2
13. Describe how data travels between devices using basic protocols. Examples: IP, HTTP	Chapter 6, Lesson 6
14. Identify Internet of Things (IoT) devices and explain how they communicate with other devices over a network.	Supplemental Chapter 1, Lesson 6

Cybersecurity	
15. Explain how sensitive data can be compromised by threats and analyze how strong security practices can reduce these risks. Examples: viruses, malware,	Chapter 8, Lessons 1-3 Chapter 18, Lesson 4 Supplemental Chapter 1, Lesson 2
16. Outline cybersecurity practices, including firewalls, antivirus software, and secure passwords, and explain how to identify and reduce system vulnerabilities.	Chapter 1, Lessons 1, 2
17. Demonstrate strategies for protecting personal information and digital identity.	Chapter 8, Lessons 1-3 Chapter 18, Lesson 4 Supplemental Chapter 1, Lesson 2
Hardware and Software	
18. Evaluate the benefits and limitations of hardware components for different users and computing needs.	Chapter 1, Lessons 1, 2
19. Complete a specific task using appropriate application software.	Chapters 9, 10, 11, 15
20. Analyze how different operating systems work for various types of devices.	Chapter 3, Lessons 1-3

Impact of Computing	**CITATION(S)**
Career Paths	
21. Investigate various careers in computer science and related fields, and identify the skills commonly required for those roles.	Chapter 24, Lesson 1 Chapter 24 Activity Supplemental Chapter 4, Lesson 2
Ethics	
22. Explain the importance of intellectual property, copyright, and fair use in digital media.	Chapter 8, Lesson 5 Supplemental Chapter 4, Lesson 3
23. Analyze ethical dilemmas involving the use of technology or data, including AI bias and misuse. [AI]	Chapter 8, Lessons 4, 5 Supplemental Chapter 1, Lesson 1 / Activity 1 Supplemental Chapter 1, Lesson 4 Supplemental Chapter 4, Lessons 1 - 3, Activity
Society	
24. Describe ways computing technologies can transform and impact the environment, culture, economies, and society.	Chapter 2, Lesson 5 Supplemental Chapter 1, Lessons 1, 3, 4, 5 Supplemental Chapter 4, Lessons 1 - 3, Activity
Emerging Technology	
25. Assess and predict the impact of emerging technologies. [AI]	Chapter 2, Lesson 5 Supplemental Chapter 1, Lesson 4 Supplemental Chapter 4, Lessons 1 - 4, Activity
Accessibility	
26. Apply basic accessibility principles when creating digital content. Examples: using clear headings, providing simple alternative text for images	Chapter 9, Lesson 2 Chapter 11, Lesson 3 Chapter 14 Activity 2 Supplemental Chapter 1, Lesson 3 / Activity 3

Digital Proficiency	CITATION(S)
Information Literacy	
27. Apply strategies for verifying digital information, cross-referencing sources and using digital tools to assess credibility and accuracy. [AI]	Chapter 7, Lesson 3 Chapter 7 Activity Chapter 14, Activity 2
Digital Life	
28. Analyze their own technology use and explain the impact of online activities on their lives and well-being.	Chapter 8, Lesson 1 Chapter 18, Lesson 4 Supplemental Chapter 1, Lesson 4
Digital Tools	
29. Select and apply appropriate online tools and file types for a variety of tasks.	Chapter 4, Lessons 2, 3, 4 Chapters 9, 10, 11, 15
30. Collaborate with peers using online platforms to create and revise multimedia content, adjusting tone and format for audience and purpose.	Chapter 13, Lessons 1, 2 Chapter 14, Activities 1, 2, 3 Chapter 25, Activities 1, 2, 3
31. Compare and contrast AI-generated artifacts with human-generated artifacts. [AI]	Chapter 7, Lessons 1, 2 Chapter 9, Lessons 2, 4 Chapter 10, Lesson 7 Chapter 11, Lesson 2 Supplemental Chapter 4, Lesson 4
32. Input text at a rate of 30 words per minute via keyboard or alternative text input method.	Supplemental Chapter 3, Lesson 1 / Activity 1