CompuScholar, Inc.

Correlations to the Texas Essential Knowledge and Skills (TEKS):
Technology Applications - 7th Grade

Texas Course Details:

Chapter	Chapter 126. Texas Essential Knowledge and Skills for Technology Applications
Subchapter	Subchapter B. Middle School
Course	§126.18. Technology Applications, Grade 7 (Adopted 2022)
Standards Link	Subchapter B (Middle School)
TEKS Coverage	100%

CompuScholar Course Details:

Course Title:	Tech Essentials
Course ISBN:	978-1-946113-03-0
Course Year:	2023

Course Standards

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

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

Knowledge and Skills Statement: (1) Computational thinking--foundations. The student explores the core concepts of computational thinking, a set of problem-solving processes that involve decomposition, pattern recognition, abstraction, and algorithms. The student is expected to:	
Student Expectation	**CITATION(S)**
(A) decompose real-world problems into structured parts using flowcharts;	Chapter 10, Lesson 2
(B) analyze the patterns and sequences found in flowcharts;	Chapter 10, Lesson 2
(C) identify abstraction and analyze how an algorithm the student created can be generalized to solve additional problems;	Chapter 10, Lesson 1
(D) design a plan collaboratively using flowcharts to document a problem, possible solutions, and an expected timeline for the development of a coded solution;	Chapter 10, Lesson 2 Chapter 11, Lessons 1-2
(E) analyze different techniques used in debugging and apply them to an algorithm; and	Chapter 10, Lesson 4
(F) analyze the benefits of using iteration (code and sequence repetition) in algorithms.	Chapter 9, Lesson 3 Chapter 10, Lesson 2

Knowledge and Skills Statement: (2) Computational thinking--applications. The student applies the fundamentals of computer science. The student is expected to:	
Student Expectation	**CITATION(S)**
(A) manipulate and rename variables and describe different data types; and	Chapter 8, Lesson 4-5
(B) use a software design process to create text-based programs with nested loops that address different subproblems within a real-world context.	Chapter 9, Lesson 4 Chapter 11, Lesson 4

Knowledge and Skills Statement: (3) Creativity and innovation--innovative design process. The student takes an active role in learning by using a design process and creative thinking to develop and evaluate solutions, considering a variety of local and global perspectives. The student is expected to:	
Student Expectation	**CITATION(S)**
(A) resolve challenges in design processes independently using goal setting and personal character traits such as demonstrating responsibility and advocating for self appropriately;	Chapter 11, Lesson 4
(B) discuss and implement a design process that includes planning and selecting digital tools to develop and refine a prototype or model through trial and error; and	Chapter 11, Lessons 1-2
(C) identify how the design process is used in various industries.	Chapter 11, Lessons 1-2

Knowledge and Skills Statement: (4) Creativity and innovation--emerging technologies. The student demonstrates a thorough understanding of the role of technology throughout history and its impact on societies. The student is expected to:	
Student Expectation	**CITATION(S)**
(A) explain how changes in technology throughout history have impacted various areas of study;	Chapter 12, Lesson 4
(B) explain how global trends impact the development of technology; and	Chapter 12, Lesson 4
(C) transfer current knowledge to the learning of newly encountered technologies.	Chapter 12, Lesson 4

Knowledge and Skills Statement: (5) Data literacy, management, and representation--collect data. The student uses advanced digital strategies to collect and represent data. The student is expected to:	
Student Expectation	**CITATION(S)**
(A) demonstrate how data can be represented in a binary number systems; and	Chapter 8, Lesson 3
(B) evaluate advanced search strategies, including keywords, Boolean operators, and limiters.	Chapter 5, Lesson 1

Knowledge and Skills Statement: (6) Data literacy, management, and representation--organize, manage, and analyze data. The student uses digital tools to transform data, make inferences, and predictions. The student is expected to:	
Student Expectation	**CITATION(S)**
… use digital tools in order to transform data to analyze trends and make inferences and predictions.	Chapter 2, Lesson 4

Knowledge and Skills Statement: (7) Data literacy, management, and representation--communicate and publish results. The student creates digital products to communicate data to an audience for an intended purpose. The student is expected to:	
Student Expectation	**CITATION(S)**
… use digital tools to communicate and display data from a product or process to inform or persuade an intended audience.	Chapter 6, Lesson 4 Chapter 7, Lessons 3-4

Knowledge and Skills Statement: (8) Digital citizenship--social interactions. The student understands different styles of digital communication and that a student's actions online can have a long-term impact. The student is expected to:	
Student Expectation	**CITATION(S)**
(A) classify actions as having a positive or negative effect on a digital footprint;	Chapter 12, Lesson 1
(B) create and revise formal and informal communications using a feedback process and appropriate digital etiquette; and	Chapter 7, Lessons 2-3
(C) collaborate on digital platforms such as recording a video conference presentation using appropriate formal and informal digital etiquette.	Chapter 7, Lessons 2-3

Knowledge and Skills Statement: (9) Digital citizenship--ethics and laws. The student recognizes and practices responsible, legal, and ethical behavior while using digital tools and resources. The student is expected to:	
Student Expectation	**CITATION(S)**
(A) adhere to local acceptable use policy (AUP) and practice and model safe, ethical, and positive online behaviors;	Chapter 12, Lesson 2 Chapter 13, Lessons 1-2
(B) explain the importance of intellectual property laws, including the benefits of protection for content owners, and the consequences of violating these laws;	Chapter 12, Lesson 3
(C) create citations and cite sources for a variety of digital forms of intellectual property; and	Chapter 5, Lesson 3 Chapter 12, Lesson 3
(D) evaluate how various types of media, including social media, and technology can be used to exaggerate and misrepresent information.	Chapter 5, Lesson 3

Knowledge and Skills Statement: (10) Digital citizenship--privacy, safety, and security. The student practices safe, legal, and ethical digital behaviors to become a socially responsible digital citizen. The student is expected to:	
Student Expectation	**CITATION(S)**
(A) describe and model ways to protect oneself from real-world cybersecurity attacks; and	Chapter 13, Lessons 1-2
(B) analyze the negative impacts of cyberbullying on the victim and the bully.	Chapter 13, Lesson 3

Knowledge and Skills Statement: (11) Practical technology concepts--processes. The student evaluates and selects appropriate methods or techniques for an independent project and identifies and solves common hardware and software problems using troubleshooting strategies. The student is expected to:	
Student Expectation	**CITATION(S)**
… choose a variety of digital tools to create, share, and communicate digital artifacts.	Chapter 2, Lesson 1 Chapter 3, Lesson 1 Chapter 4, Lesson 1

Knowledge and Skills Statement: (12) Practical technology concepts--skills and tools. The student leverages technology systems, concepts, and operations to produce digital artifacts. The student is expected to:	
Student Expectation	**CITATION(S)**
(A) demonstrate proficiency in the appropriate use of technology terminology in projects through team collaboration and communication;	Chapter 2, Lesson 3 Chapter 7, Lesson 2
(B) demonstrate effective file management strategies such as file naming conventions, local and remote locations, backup, hierarchy, folder structure, file conversion, tags, and emerging digital organizational strategies with assistance;	Chapter 1, Lessons 2-4
(C) select and use appropriate platform and tools, including selecting and using software or hardware for a defined task;	Chapter 2, Lessons 2,3 Chapter 3, Lessons 1,5 Chapter 4, Lessons 1,2
(D) demonstrate improvement in speed and accuracy as measured by words per minute when applying correct keyboarding techniques;	Chapter 3, Lesson 6
(E) select and use appropriate shortcuts within applications;	Chapter 2, Lesson 2 Chapter 3, Lesson 3
(F) research and test potential solutions to solve hardware and software problems;	Chpater 5, Lesson 2 Chapter 10, Lesson 4
(G) use a variety of types of local and remote data storage to store or share data such as cloud architecture or local server; and	Chapter 1, Lessons 2, 4 Chapter 2, Lesson 5 Chapter 7, Lesson 3
(H) select and use productivity tools found in spread sheet, word processing, and publication applications to create digital artifacts such as reports, graphs, and charts with increasing complexity.	Chapter 2, Lesson 3, 5 Chapter 3, Lesson 4-5 Chapter 6, Lesson 4-6