CompuScholar, Inc.

Alignment to the California CTE "ICT" Anchor Standards

California Standards Information:

CTE Page	California CTE Standards Page
Standards Link:	CTE ICT Curriculum Standards

CompuScholar Course:

Course Title:	Digital Savvy, ISBN 978-0-9887070-8-5
	Course Description and Syllabus

Course Description

California's CTE "Information and Communication Technologies (ICT)" requirements include common "Anchor" standards that apply to all ICT pathways. CompuScholar's **Digital Savvy** course can be used to effectively meet these 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.

CTE / ICT Knowledge and Performance Anchor Standards

1.0 Academics	CITATION(S)
Analyze and apply appropriate academic standards required for successful	Multi-disciplinary examples from
industry sector pathway completion leading to postsecondary education and	subjects such as math, science
employment.	and economics are found
	throughout the course.

2.0 Communications	CITATION(S)
Acquire and accurately use Information and Communication Technologies sector terminology and protocols at the career and college readiness level	Students have opportunities to read, write, and communicate
for communicating effectively in oral, written, and multimedia formats.	verbally with peers and instructors throughout the course.

3.0 Career Planning and Management	CITATION(S)
3.1 Identify personal interests, aptitudes, information, and skills necessary	Chapters 13, 24
for informed career decision making.	

3.2 Evaluate personal character traits such as trust, respect, and	Chapters 13, 24
responsibility and understand the impact they can have on career success.	
3.3 Explore how information and communication technologies are used in	Chapters 13, 24
career planning and decision making.	
3.4 Research the scope of career opportunities available and the	Chapter 24
requirements for education, training, certification, and licensure.	Suppl. Chapter 3, Lesson 2
3.5 Integrate changing employment trends, societal needs, and economic	Chapter 24
conditions into career planning.	Suppl. Chapter 3, Lesson 2
3.6 Recognize the role and function of professional organizations, industry	Chapter 24
associations, and organized labor in a productive society.	Suppl. Chapter 3, Lesson 2
3.7 Recognize the importance of small business in the California and global	N/A
economies.	
3.8 Understand how digital media are used by potential employers and	Chapter 8, Lesson 1
postsecondary agencies to evaluate candidates.	Chapter 18, Lesson 4
3.9 Develop a career plan that reflects career interests, pathways, and	Chapter 24
postsecondary options.	

4.0 Technology	CITATION(S)
4.1 Use electronic reference materials to gather information and produce products and services.	Chapters 7, 9, 10, 11, 12
4.2 Employ technology based communications responsibly and effectively to	Chapters 14, 16, 25
explore complex systems and issues.	Suppl. Chapter 3, Lesson 4
4.3 Use information and communication technologies to synthesize,	Chapters 7, 14, 25
summarize, compare, and contrast information from multiple sources.	
4.4 Discern the quality and value of information collected using digital	Chapter 7, Lesson 3
technologies, and recognize bias and intent of the associated sources.	
4.5 Research past, present, and projected technological advances as they	Chapter 1
impact a particular pathway.	Suppl. Chapter 1, Lesson 4
4.6 Assess the value of various information and communication technologies	Chapters 7, 14, 25
to interact with constituent populations as part of a search of the current	
literature or in relation to the information task.	

5.0 Problem Solving and Critical Thinking	CITATION(S)
5.1 Identify and ask significant questions that clarify various points of view	Chapter 13, Lesson 3
to solve problems.	Chapters 14, 25
5.2 Solve predictable and unpredictable work-related problems using	Chapter 5, Lesson 3
various types of reasoning (inductive, deductive) as appropriate.	Chapter 13, Lesson 3
5.3 Use systems thinking to analyze how various components interact with	Chapters 13, 14, 25
each other to produce outcomes in a complex work environment.	
5.4 Interpret information and draw conclusions, based on the best analysis,	Chapters 7, 14, 25
to make informed decisions.	Suppl. Chapter 1
5.5 Use a logical and structured approach to isolate and identify the source	Chapter 5, Lesson 3
of problems and to resolve problems.	Chapter 13, Lesson 3

5.6 Know the available resources for identifying and resolving problems.	Chapter 5, Lesson 3
5.7 Work out problems iteratively and recursively.	Chapters 14, 23, 25
5.8 Create and use algorithms and solve problems.	Chapters 22, 23
5.9 Deconstruct large problems into components to solve.	Chapter 13, Lesson 2
5.10 Use multiple layers of abstraction.	Chapters 1, 2, 3
5.11 Understand the concept of base systems, including binary and hexadecimal.	Suppl. Chapter 2, Lesson 1
5.12 Apply the concepts of Boolean logic to decision making and searching.	Chapter 23

6.0 Health and Safety	CITATION(S)
6.1 Locate, and adhere to, Material Safety Data Sheet (MSDS) instructions.	Chapter 24, Lesson 3
6.2 Interpret policies, procedures, and regulations for the workplace environment, including employer and employee responsibilities.	Chapter 24, Lesson 3
6.3 Use health and safety practices for storing, cleaning, and maintaining tools, equipment, and supplies.	Chapter 24, Lesson 3
6.4 Practice personal safety when lifting, bending, or moving equipment and supplies.	Chapter 24, Lesson 3
6.5 Demonstrate how to prevent and respond to work-related accidents or injuries; this includes demonstrating an understanding of ergonomics.	Chapter 24, Lesson 3
6.6 Maintain a safe and healthful working environment.	Chapter 24, Lesson 3
6.7 Be informed of laws/acts pertaining to the Occupational Safety and Health Administration (OSHA).	Chapter 24, Lesson 3
6.8 Maintain a safe and healthful working environment.	Chapter 24, Lesson 3
6.9 Dispose of e-waste properly, understanding the health, environmental, and legal risks of improper disposal.	Chapter 24, Lesson 3
6.10 Act conscientiously regarding the use of natural resources (e.g., paper, ink, etc.)	Chapter 24, Lesson 3
6.11 Conserve energy while computing (e.g., turn off equipment at night, power-saving settings, etc.)	Chapter 24, Lesson 3

7.0 Responsibility and Flexibility	CITATION(S)
7.1 Recognize how financial management impacts the economy, workforce,	N/A
and community.	

7.2 Explain the importance of accountability and responsibility in fulfilling personal, community, and workplace roles.	Chapter 24, Lesson 2
7.3 Understand the need to adapt to changing and varied roles and responsibilities.	Chapter 13, Lessons 1-2 Chapter 24, Lessons 1-2
7.4 Practice time management and efficiency to fulfill responsibilities.	Chapter 13, Lesson 2 Chapters 14, 25
7.5 Apply high-quality techniques to product or presentation design and development.	Chapters 9 - 11, 19 - 23 Chapters 14, 25
7.6 Demonstrate knowledge and practice of responsible financial management.	N/A
7.7 Demonstrate the qualities and behaviors that constitute a positive and professional work demeanor, including appropriate attire for the profession.	Chapter 24, Lesson 2
7.8 Explore issues of global significance and document the impact on the Information and Communication Technologies sector.	Suppl. Chapter 1

8.0 Ethics and Legal Responsibilities	CITATION(S)
8.1 Access, analyze, and implement quality assurance standards of practice.	Chapters 8, 14, 25
8.2 Identify local, district, state, and federal regulatory agencies, entities, laws, and regulations related to the Information and Communication Technologies industry sector.	Chapter 8
8.3 Demonstrate ethical and legal practices consistent with Information and Communication Technologies sector workplace standards.	Chapter 8
8.4 Explain the importance of personal integrity, confidentiality, and ethical behavior in the workplace.	Chapter 8
8.5 Analyze organizational culture and practices within the workplace environment.	Chapters 13, 24
8.6 Adhere to copyright and intellectual property laws and regulations, and use and appropriately cite proprietary information.	Chapter 8
8.7 Conform to rules and regulations regarding sharing of confidential information, as determined by Information and Communication Technologies sector laws and practices.	Chapter 8
8.8 Identify legal and ethical issues that have proliferated with increased technology adoption, including hacking, scamming, and breach of privacy.	Chapter 8

9.0 Leadership and Teamwork	CITATION(S)
9.1 Define leadership and identify the responsibilities, competencies, and	Chapter 13, Lessons 1, 3
behaviors of successful leaders.	Chapter 24, Lesson 2
9.2 Identify the characteristics of successful teams, including leadership,	Chapter 13, Lessons 1, 2
cooperation, collaboration, and effective decision-making skills as applied in	Chapter 24, Lesson 2
groups, teams, and career technical student organization activities.	
9.3 Understand the characteristics and benefits of teamwork, leadership,	Chapter 13, Lessons 1, 2
and citizenship in the school, community, and workplace setting.	Chapter 24, Lesson 2

9.4 Explain how professional associations and organizations and associated leadership development and competitive career development activities enhance academic preparation, promote career choices, and contribute to employment opportunities.	Suppl. Chapter 3, Lesson 2
9.5 Understand that the modern world is an international community and requires an expanded global view.	Suppl. Chapter 1, Lesson 1
9.6 Respect individual and cultural differences and recognize the importance of diversity in the workplace.	Suppl. Chapter 1, Lesson 1
9.7 Participate in interactive teamwork to solve real Information and Communication Technologies sector issues and problems.	Chapters 14, 25

10.0 Technical Knowledge and Skills	CITATION(S)
10.1 Interpret and explain terminology and practices specific to the	Throughout the course
Information and Communication Technologies sector.	
10.2 Comply with the rules, regulations, and expectations of all aspects of	Throughout the course
the Information and Communication Technologies sector.	
10.3 Construct projects and products specific to the Information and	Chapters 14, 25 and
Communication Technologies sector requirements and expectations.	throughout the course
10.4 Collaborate with industry experts for specific technical knowledge and skills.	N/A
10.5 Understand the major software and hardware components of a computer and a network and how they relate to each other.	Chapters 1, 2, 3, 6
10.6 Understand data sizes of various types of information (text, pictures,	Chapter 23, Lesson 1
sound, video, etc.) and data capacity of various forms of media.	Suppl. Chapter 2, Lessons 1, 3
10.7 Understand the SI (metric) prefixes commonly used in computing	N/A
including, at least, kilo, mega, giga, and tera.	
10.8 Understand security concepts including authorization, rights, and	Chapter 8
encryption.	
10.9 Use common industry-standard software and their applications	Chapters 9, 10, 11, 12
including word processing, spreadsheets, databases, and multimedia software.	
10.10 Manage files in a hierarchical system.	Chapter 4
10.11 Know multiple ways in which to transfer information and resources	Chapters 9, 10, 11, 12
(e.g., text, data, sound, video, still images) between software programs and systems.	
10.12 Know appropriate search procedures for different types of	Chapter 7, Lessons 1, 2
information, sources, and queries.	
10.13 Evaluate the accuracy, relevance, and comprehensiveness of retrieved information.	Chapter 7, Lesson 3
10.14 Analyze the effectiveness of online information resources to support	Chapter 7, Lesson 3
collaborative tasks, research, publications, communications, and increased productivity.	

11.0 Demonstration and Application	CITATION(S)
11.1 Utilize work-based/workplace learning experiences to demonstrate and	Chapter 24, Lessons 1, 2
expand upon knowledge and skills gained during classroom instruction and	Suppl. Chapter 3, Lesson 2
laboratory practices specific to the Information and Communication	
Technologies sector program of study.	
11.2 Demonstrate proficiency in a career technical pathway that leads to	Chapter 24, Lessons 1, 2
certification, licensure, and/or continued learning at the postsecondary level.	Suppl. Chapter 3, Lesson 2
11.3 Demonstrate entrepreneurship skills and knowledge of self-	Chapter 24, Lessons 1, 2
employment options and innovative ventures.	Suppl. Chapter 3, Lesson 2
11.4 Employ entrepreneurial practices and behaviors appropriate to	Chapter 24, Lessons 1, 2
Information and Communication Technologies sector opportunities.	Suppl. Chapter 3, Lesson 2
11.5 Create a portfolio, or similar collection of work, that offers evidence	Chapters 14, 25 and
through assessment and evaluation of skills and knowledge competency as	other projects throughout the
contained in the anchor standards, pathway standards, and performance	course
indicators.	