## CompuScholar, Inc.

# Alignment to North Carolina BI12

# "CompTIA IT Fundamentals" Course Standards

## **BID IDENTIFICATION # CPS3000**

#### **North Carolina Course Details:**

Course Name: CompTIA IT Fundamentals
Primary Cluster: Information Technology

Course Code(s): BI12
Grade Level: 9th-12th

State Standards Link: 2020-2021 Course Standards, B12

### **CompuScholar Course Details:**

Course Title: CompuScholar: Digital Savvy

Course ISBN: 978-0-9887070-8-5

Course Year: 2021

**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.

## **North Carolina Course Description**

This course is designed for students to develop knowledge and skills required to identify and explain the basics of computing, IT infrastructure, application and software, software development, database fundamentals, and security. The course is also designed for students to develop the ability to demonstrate knowledge and skills to install software, establish basic network connectivity, identify or prevent basic security risks, explain troubleshooting theory, and provide preventative maintenance for devices.

### **Course Standards**

1 - Understand computing basics and computer hardware. (22%)	CITATION(S)
1.01 - Understand computing basics.	Chapters 1, 2, 3, 4
1.02 - Identify the types of computing devices.	Chapter 1, Lesson 1
1.03 - Identify internal computer system components.	Chapter 1, Lesson 2
1.04 - Identify common computer connector types	Chapter 1, Lesson 3
1.05 - Identify common peripheral devices	Chapter 1, Lesson 3

1.06 - Understand safety issues and environmental concepts in computing.	Chapter 24, Lesson 3
1.07 - Understand the value of data and information.	Chapter 5, Lesson 2
	Chapter 8, Lessosn 1-2
	Chapter 18, Lesson 4
	Suppl. Chapter 1, Lesson 2
1.08 - Understand information technology career pathways. (SUPPLEMENTAL)	Chapter 24
	Suppl. Chapter 3, Lesson 2

2 - Understand computer software and software development concepts. (22%)	CITATION(S)
2.01 - Understand types of software and their uses.	Chapter 2
2.02 - Understand working with files, folders, and applications.	Chapter 3, Lesson 3
	Chapter 4
2.03 - Identify programming language categories.	Chapter 19, Lesson1
	Chapter 22, Lesson 1
2.04 - Understand programming organizational techniques and interpret logic.	Chapter 19, Lessons 2-3
	Chapter 22, lesson 3
	Chapter 23
2.05 - Understand the purpose and use of programming concepts.	Chapters 19, 20, 21, 22, 23

3 - Understand computer workstation setup and issue troubleshooting. (14%)	CITATION(S)
3.01 - Identify the steps to set up a basic computer workstation.	Chapter 1, Lesson 2
	Chapter 3, Lesson 2
	Chapter 24, Lesson 3
3.02 - Understand how to back up and restore data.	Chapter 5, Lesson 2
3.03 - Understand troubleshooting hardware and software.	Chapter 5, Lesson 3
3.04 - Identify the factors that influence the computer purchasing decision making process. (SUPPLEMENTAL)	Chapter 1, Lesson 2

4 - Understand networking. (9%)	CITATION(S)
4.01 - Understand network characteristics, data sharing, and storage methods.	Chapter 6
4.02 - Understand how to install and configure a SOHO router.	Suppl. Chapter 3, Lesson 5

5 - Understand wireless technology and mobile devices. (9%)	CITATION(S)
5.01 - Understand how to configure wireless devices.	Chapter 3 (see "Mobile" tabs within lessons)
5.02 - Understand the basics of using wireless devices.	Chapter 3 (see "Mobile" tabs within lessons)

6 - Understand computer security. (15%)	CITATION(S)
6.01 - Identify the types of computer security threats.	Chapter 8, Lessons 1-3
6.02 - Understand computer user account settings to secure computing devices.	Chapter 3, Lesson 2 Chapter 8, Lessons 1, 3 Chapter 18, Lesson 4
6.03 - Identify secure web browsing practices.	Chapter 2, Lesson 3 Chapter 8, Lesson 1 Chapter 17, Lesson 1 Chapter 18, Lessons 1, 4

7 - Understand database fundamentals (9%)	CITATION(S)
7.01 - Understand database concepts and the purpose of a database.	Chapter 12, Lessons 1-2
7.02 - Identify various database structures.	Chapter 12, Lessons 2 - 4
7.03 - Understand methods used to interface with databases.	Chapter 12, Lessons 4 - 5