Thomaston Public Schools - Curriculum Overview and Pacing Guide

Course Title: Introduction to Information Technology		
School: Thomaston High School	**Grade: 9-12**	**Curriculum Pacing: 18 weeks**
Unit One: Hardware	**Unit Two: Software**	**Unit Three: Digital Citizenship**
Unit Pacing: 3 Weeks	**Unit Pacing: 3 Weeks**	**Unit Pacing: 3 Weeks**
Unit Overview: Students develop a foundational understanding of various pieces of hardware by analyzing the development of modern computers. They will learn about the history of technology and understand how pieces of hardware have evolved over the past 5000 years. Students will also learn about the variety of hardware devices that exist today and how each of them can be utilized.	**Unit Overview:** Students will define software and use software in an effort to improve academic performance. Students will learn how to use various software including a variety of operating systems, numerous application software, and system utilities. Students will create projects using block coding to demonstrate an understanding of the computer science utilized in system development. .	**Unit Overview**: Students will suggest ways that an individual can use information technology in the most appropriate manner. Students will learn how to be good digital citizens by demonstrating an understanding of social and civic responsibility, as well as an improved performance using technology. Students will analyze the best uses for technology, including limitations that prevent an overreliance on technology.
Compelling Questions 1. How has the history of computers influenced technology that we have access to today? 2. What piece of hardware is most appropriate for various individuals? 3. How do various pieces of hardware have an impact on our daily lives?	**Compelling Questions** 1. What software is most appropriate for various users? 2. In what ways can computer software be used to improve performance in our daily lives? 3. How are computer software programs developed?	**Compelling Questions** 1. What does being a good digital citizen mean to me, as a student? 2. What legal and ethical considerations exist pertaining to the use of information technology? 3. ?How does society use technology appropriately to solve problems?
Priority Learning Targets 1. I can analyze and compare society's influence on information technology and information technology's influence on society. (NBEA IT I - 7) 2. I can evaluate and recommend hardware to solve specific problems.	**Priority Learning Targets** 1. I can compare and contrast productivity software features from different providers (NBEA IT V - 1) 2. I can compare and contrast the functions, features , and limitations of different operating systems and utilities	**Priority Learning Targets** 1. I can use technology to achieve academic success. (NBEA IT I - 1) 2. I can analyze legal and ethical dilemmas within the framework of current laws and legislation (e.g., virus development, hacking, threats,

(NBEA IT II - 1) 3. I can apply information technology skills to lifelong learning. (NBEA IT II - 9)	(e.g., open source, mobile, and proprietary operating systems). (NBEA IT III - 2). 3. I can use advanced features of productivity software (NBEA IT V - 5).	phishing) (NBEA IT XV - 3) 3. I can evaluate the cause and effect of technological solutions on society (NBEA IT I - 8).
Unit Four: Networks	**Unit Five: Website Development**	**Unit Six: Multimedia**
Unit Pacing: 3 Weeks	**Unit Pacing: 3 Weeks**	**Unit Pacing: 3 Weeks**
Unit Overview: Students will develop skills to design, deploy, and administer networks and telecommunications systems. Students will differentiate commonly used networks, including telecommunications, computer networks such as LANs and WANs, and the Internet.	**Unit Overview**: Students will design, develop, test, implement, update, and evaluate web solutions. Students will use Google Sites to create an original website. They will use various web design tools including graphics, interactive elements, and HTML.	**Unit Overview**: Students will learn about multimedia tools and emerging forms of technology. Students will analyze their impact on the education system and their impact on various work environments. They will demonstrate their ability to use some of these forms of technology while understanding their impact on society.
Compelling Questions 1. How are networks created? 2. What networks are most optimal for various individuals? 3. How do networks use various forms of technology to improve performance?	**Compelling Questions** 1. What are the needs of a target audience? 2. How can the quality of a website be improved? 3. How are websites created?	**Compelling Questions** 1. What emerging technologies exist and how can they be used to improve society? 2. How do multimedia tools have an impact on schools, businesses, and other organizations? 3. What is the relationship between emerging technology/information technology and society as a whole?
Priority Learning Targets 1. I can identify network devices, including network connectivity hardware, and describe their functions (NBEA XII - 1). 2. I can distinguish between local area network and wide area network topologies and protocols (NBEA IT XII -	**Priority Learning Targets** 1. I can identify client and target audience needs (NBEA IT VII - 1) 2. I can create content that is readable, accessible, searchable, and sticky. (NBEA IT VII - 2) 3. I can create a comprehensive website	**Priority Learning Targets** 1. I can identify examples of emerging hardware technologies (NBEA IT II - 6) 2. I can analyze multimedia delivery tools and their impact on business functions (NBEA IT VI - 1) 3. I can analyze and compare society's

2). 3. I can recognize the impact of the convergence of telephony, data, and video communications on networks (NBEA IT XII I - 3) 4. (NBEA IT VII - 1)	using good design (NBEA IT VII - 11)	influence on information technology and information technology's influence on society. (NBEA IT I - 7)