Introduction to Digital Technology

IT-IDT-1. Demonstrate employability skills required by business and industry.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

1.2 Demonstrate creativity with multiple approaches to ask challenging questions resulting in innovative procedures, methods, and products. 1.3 Exhibit critical thinking and problem-solving skills to locate, analyze, and apply information in career planning and employment situations.

1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

1.5 Apply the appropriate skill sets to be productive in a changing, technological, and diverse workplace to be able to work independently, interpret data, and apply team work skills.

1.6 Present a professional image through appearance, behavior, and language.

IT-IDT-3: Demonstrate effective professional communication skills (oral, written, and digital) and practices that enable positive customer relationships.

3.1 Recognize the importance of all customers to a business.

a. Identify organization's products and services.

b. State the IT influence and impact on business.

c. Communicate how technology can be used to create a solution to business challenge and present to customer in professional business format.

3.2 Demonstrate ability to assist customers in a professional manner.

a. Actively listen to customers.

b. Determine customers' individual needs.

c. Project a professional business image (e.g., appearance, voice, grammar, word usage, enunciation, nonverbal communication).

d. Interact with customers and colleagues in a professional manner (e.g., prompt, friendly, courteous, respectful, helpful, knowledgeable, and understandable).

e. Ensure that your assistance promotes the best interests of the company.

3.3 Determine the best method to maintain a customer list and communication platform.

3.4 Demonstrate understanding of word processing, spreadsheet, presentation, and database software as a communication tool for business.

IT-IDT-6: Explore and explain the basic components of computer networks.

6.1 Develop a working networking vocabulary including networking media, topologies, network operating systems, models and protocols, codes and standards, addressing, diagnostics, routing, WAN services, network security networking software, tools, and equipment.

6.2 Illustrate and describe the functions of various types of networks including wireless.

6.3 Explain key issues in data transmission.

6.4 Characterize the purposes, features and functions of the following network components: Switches, Bridges, Routers, Gateways, CSU / DSU, NICs, ISDN adapters, WAPs, Modems, Transceivers, Firewalls.

6.5 Identify factors which affect the range and speed of wireless service.

6.6 Explore networking trends and issues affecting business and personal use.

IT-IDT-8: Create and organize webpages through the use of a variety of web programming design tools.

8.1 Understand and apply design principles to create professional appearing and functioning web pages

8.2 Understand elements of web design

a. HTML, CSS, responsive design, site usability, relation of site to business, story the site reveals about the business

8.3 Design simple webpages incorporating media elements (e.g., sound, video, graphics, text, motion graphics, navigation, and linking)
8.4 Explain the impact of mobile sites on the development of business
8.5 Explore the trends and emerging issues for websites

Lesson Title: Web Design

Essential Question(s):
1. What are the advantages and disadvantages of the different network topologies?
2. What are the features and functions of network components/hardware?
3. What are the key issues in data transmission?

Learning Target(s)
 Students will:
➢ State advantages and disadvantage of network topologies
➢ List and explain two network topologies
➢ Name and explain a key issue in data transmission

21st Century Skills – Communication, Citizenship (Digital), Collaboration, Critical Thinking

May 14 - 18, 2018	**Assignment(s)**
	✦ Final Project – Web Design → **Due: 5/18/18**
	o Intro and 1st Standard → **Due: 5/4/18**
	o 2, 3 & 4 Standards → **Due: 5/8/18**
	o 5, 6, & 7 Standards →**Due: 5/11/18**
	o 9, 10, & 11 Standards → **Due: 5/15/18**
	Networking Basics
	✦ *Introduction to Networking - PowerPoint - What is Computer Networking?*
	How the Internet Works - Khan Academy (will need earbuds to listen to videos which are part of the lesson)