

Fundamentals of Technology (2021)

Mobile Devices **A**

- 1 Classify cellular phone connections and carriers (1:3) **A.1****
- 2 Compare cellular vs. Wi-Fi-enabled devices and connection limitations (1:3) **A.2****
- 3 Understand smart phone functions and limitations (3:3) **A.3****
- 4 Understand the use of phones in a professional setting (3:3) **A.4****
- 5 Differentiate between SMS and MMS text messaging and multiple platforms (1:1) **A.5****
- 6 Configure location services and notifications (3:3) **A.6****

Intro to App Culture **B**

- 1 Understand how apps are obtained (must have an account,) app stores, purchasing apps with a credit card, in-app purchases, how to use an app store (2:2) **B.1****
- 2 Identify different app types (3:3) **B.2****
- 3 Compare strengths and limits of web applications vs. local applications (1:1) **B.3****

Hardware Devices **C**

- 1 Identify types of devices (i.e. server, laptop, desktop, tablets, etc.) (1:2) **C.1****
- 2 Identify impact of memory and storage for device usage (1:2) **C.2****
- 3 Connect and use different peripherals: camera, audio, microphone, USB devices, printer, external display and necessary device ports (3:3) **C.3****
- 4 Identify Ethernet usage (1:2) **C.4****
- 5 Connect a wireless device to a network (Wi-Fi) (1:1) **C.5****
- 6 Understand power management and power settings (1:1) **C.6****
- 7 Understand driver concepts as well as their device compatibility and updates (1:2) **C.7****

	8 Compare platform implications and considerations (i.e. Mac, PC, Linux, iOS, Android, Firmware) (1:2) C.8
	9 Compare platform compatibility for cellular, Wi-Fi, and wired (1:3) C.9
	10 Understand concepts for connecting devices to the internet (1:2) C.10
	11 Understand common hardware configurations (1:1) C.11
	12 Compare the pros and cons of touch screens vs non-touch screen devices (1:1) C.12
Computer Software D	1 Understand operating system versioning and update awareness (1:2) D.1
	2 Compare concepts surrounding applications vs. operating system vs. global settings (1:1) D.2
	3 Understand operating systems and software settings (1:2) D.3
	4 Understand software preferences/settings (1:1) D.4
	5 Understand users and profiles (2:3) D.5
	6 Understand file structures and file/folder management, including image files (3:3) D.6
	7 Navigate menu options (3:3) D.7
	8 Troubleshoot software issues (2:3) D.8
	9 Identify use of global positioning system (GPS) and geographic information system (GIS) in society (1:1) D.9
Backup and Restore E	1 Understand local data backup and restore functions (1:2) E.1
	2 Differentiate use of backup (find a lost file) and restore (fix settings) (1:2) E.2
	3 Understand steps to complete a full system restore on a personal device (1:2) E.3
File Sharing F	1 Understand ways to transfer files, attachments, links, shared folders, and compressed files (3:3) F.1
	2 Understand PDF usage for file sharing (1:3) F.2
Cloud Computing G	1 Understand cloud concepts (3:3) G.1
	2 Identify benefits of using cloud storage (3:3) G.2

3 Access and use the cloud to upload, download, and sync (3:3) **G.3**

4 Differentiate web applications vs. local applications, including subscription services (3:3) **G.4**

Security **H**

1 Understand basic account management (3:3) **H.1**

2 Understand basic threats to security of computers, data, and identity (3:3) **H.2**

3 Understand implications of monitoring software (i.e. surveillance) (3:3) **H.3**

4 Differentiate connecting to secured vs. unsecured network (i.e. wired and wireless) (3:3) **H.4**

5 Understand importance of anti-virus software usage (3:3) **H.5**

6 Understand firewalls and basic settings (3:3) **H.6**

7 Identify e-commerce interactions and best purchasing practices (1:1) **H.7**

8 Define virtual private networks (VPNs) (1:1) **H.8**

Common Application Features **I**

1 Demonstrate copy, cut, and paste keyboard equivalents (3:3) **I.1**

2 Compare differences between plain text and HTML (i.e. text with markup) (3:3) **I.2**

3 Use spell check (3:3) **I.3**

4 Use review features (3:3) **I.4**

5 Demonstrate find/replace (3:3) **I.5**

6 Select text or cells (3:3) **I.6**

7 Demonstrate redo and undo (3:3) **I.7**

8 Demonstrate drag and drop (3:3) **I.8**

9 Understand read-only view (3:3) **I.9**

10 Understand protected mode (3:3) **I.10**

11 Demonstrate magnification (3:3) **I.11**

Hands On – Word Processing Activities **J**

1 Perform basic formatting skills (3:3) **J.1**

2 Adjust margins, page sizes, page orientation, and other page layout concepts (3:3) **J.2**

3 Change text sizes and font styles (3:3) J.3

4 Create and save files (3:3) J.4

5 Print a document (3:3) J.5

6 Understand print views (3:3) J.6

7 Use review options (3:3) J.7

8 Create tables (3:3) J.8

9 Understand file types that are compatible or editable with word processors (3:3) J.9

Hands On – Spreadsheet Activities K

1 Understand common spreadsheet terms (2:3) K.1

2 Insert/delete rows and columns (2:3) K.2

3 Modify cell sizes (2:3) K.3

4 Filter and sort data (2:3) K.4

5 Understand functions, formulas, and operators (2:3) K.5

6 Enter data (2:3) K.6

7 Use and create charts (2:3) K.7

8 Create tables (2:3) K.8

9 Manipulate data (2:3) K.9

10 Format data (2:3) K.10

11 Understand print preview, print, and other page formatting (2:3) K.11

12 Understand compatible spreadsheet file types (i.e. csv, xlsx, tab delimited) (2:3) K.12

13 Use spreadsheet templates to increase productivity (2:3) K.13

14 Understand use of spreadsheet as a simple database (2:3) K.14

Hands On – Database Activities L

1 Define data (1:1) L.1

2 Understand how websites utilize databases (1:1) L.2

3 Identify basic concepts of a relational database (1:1) L.3

4 Define metadata (1:1) L.4

Hands On – Presentation Activities M

1 Understand file types compatible with presentation software (2:3) M.1

2 Understand how to connect external/extended monitors to display presentation (2:3) M.2

3 Use presentation views and modes (2:3) M.3

4 Add animations, effects, and slide transitions (2:3) M.4

5 Create and organize slides (2:3) M.5

6 Design slides (2:3) M.6

7 Identify presentation software options (2:3) M.7

Introduction to Digital Media N

1 Import and insert images into documents (3:2) N.1

2 Crop images (2:2) N.2

3 Identify different types of multimedia (i.e. print, film, video) (1:2) N.3

Online Functionality O

1 Understand email basics (3:3) O.1

2 Create calendar events and appointments (3:3) O.2

3 Understand digital identity and cyber bullying in social media (3:3) O.3

4 Understand best communication tools (3:3) O.4

5 Understand virtual meeting options (2:2) O.5

6 Demonstrate effective online searches (3:3) O.6

7 Understand implications of copyright violations (3:3) O.7

8 Identify virtual reality (VR) uses and applications (1:1) O.8

9 Demonstrate appropriate internet etiquette (3:3) O.9

10 Validate internet resources (2:2) O.10

11 Research and validate new technologies (1:1) O.11

Introduction to Webpage Development P

1 Understand basic concepts of webpage development (1:3) P.1

2 Understand HTML/CSS in webpage development (1:3) P.2

Smart Technology Q	1 Understand use of artificial intelligence (AI) in technology (1:3) Q.1
	2 Define Internet of Things (IoT) as used to connect and operate devices (2:3) Q.2
	3 Identify the ethical issues related to the use of smart technology (1:3) Q.3
	4 Identify use of drones in society (1:2) Q.4
Introduction to Programming R	1 Define algorithms (1:1) R.1
	2 Create a simple program (2:3) R.2
Introduction to Leadership S	1 Identify leader characteristics (i.e. ethics, intelligence, objectivity, initiative, accountability, dependability, cooperation, integrity, courage, confidence, stability, empathy, creativity, teamwork, responsibility, flexibility) (2:2) S.1
	2 Identify leadership styles (2:2) S.2
	3 Identify professional and community organizations (i.e. student organizations, civic organizations, professional organizations, social organizations) (2:2) S.3
	4 Participate in student organization activities and various projects on the local, state, and national levels (2:2) S.4
Introduction to Employment Process T	1 Set occupational objectives (i.e. entrepreneurship, self-employment, full-time, part-time) (1:3) T.1
	2 Compose a letter of application (1:3) T.2
	3 Create a résumé and portfolio in hard copy and digital format (1:3) T.3
	4 Demonstrate knowledge of employment services (i.e. online searches, private, state, federal) (1:3) T.4
	5 Review potential interview questions and techniques (1:3) T.5
	6 Participate in pre-interview activities (i.e. mock interview, preparing questions for prospective employers) (1:3) T.6
	7 Participate in job interview (i.e. interview etiquette, application, appropriate dress, résumé, research company history) (1:3) T.7
	8 Complete post-interview activities (i.e. follow-up letter and inquiry call) (1:3) T.8
	9 Complete job acceptance (i.e. negotiate salary and benefits, complete benefits forms) (1:3) T.9
	10 Discuss legal issues (i.e. drug screen, discrimination, harassment) (1:3) T.10

11 Identify career and training opportunities (i.e. networking, professional organizations, education requirements, salaries, labor market, career ladder, self-initiative, transfer skills and flexibility, functions/job levels of a company) (1:3) T.11

12 Demonstrate knowledge of resignation, termination, and exit interview practices (1:3) T.12

Employability Skills U

1 Demonstrate effective communication skills (2:3) U.1

2 Demonstrate ability to present in front of a group (1:3) U.2

3 Demonstrate time management skills (3:3) U.3

4 Understand remote workforce implications (2:3) U.4

5 Understand impact of multigenerational and diverse workforce (2:3) U.5
