

# Principles of Information Technology

## At-A-Glance - Lamar CISD

Ongoing Skills Imbedded All Year	Professional Standards/Employability Skills/Technical Skills		
	1(A) The student will identify and demonstrate work behaviors and qualities that enhance employability and job advancement such as regular attendance, attention to proper attire, maintenance of a clean and safe work environment, pride in work, flexibility, and initiative. 1(B) The student will employ effective verbal and nonverbal communication skills. 1(C) The student will employ effective reading and writing skills. 1(D) The student will solve problems and think critically. 1(E) The student will demonstrate leadership skills and function effectively as a team member. 1(F) The student will identify and implement proper safety procedures. 1(G) The student will demonstrate planning and time-management skills such as storyboarding and project management, including initiating, planning, executing, monitoring and controlling, and closing a project.		
Grading Period	Unit Name	Estimated Time Frame	TEKS
Grading Period 1 <b>29 Days</b>	<b>Team Building</b>	<b>8 Days</b>	1(A), 1(B), 1(C), 1(D), 1(E), 1(F), 1(G)
	1(A) The student will identify and demonstrate work behaviors and qualities that enhance employability and job advancement such as regular attendance, attention to proper attire, maintenance of a clean and safe work environment, pride in work, flexibility, and initiative. 1(B) The student will employ effective verbal and nonverbal communication skills. 1(C) The student will employ effective reading and writing skills. 1(D) The student will solve problems and think critically. 1(E) The student will demonstrate leadership skills and function effectively as a team member. 1(F) The student will identify and implement proper safety procedures. 1(G) The student will demonstrate planning and time-management skills such as storyboarding and project management, including initiating, planning, executing, monitoring and controlling, and closing a project.		
	<b>Hardware</b>	<b>15 Days</b>	4(A), 4(B), 4(C)
	4(A) The student will identify major hardware components and their functions. 4(B) The student will use available reference tools as appropriate. 4(C) The student will connect and use a variety of peripheral devices such as mouse, keyboard, microphone, digital camera, and printer.		
	<b>Language &amp; Systems</b>	<b>6 Days</b>	5(C), 5(D), 5(F), 5(G), 5(H), 5(I)
5(C) The student will explain the purpose of file types across software products. 5(D) The student will demonstrate computer numbering systems and internal data representation such as identifying the hexadecimal value of a color. 5(F) The student will explain use of system management tools. 5(G) The student will apply proper file management techniques such as creating, naming, organizing, copying, moving, and deleting files. 5(H) The student will use appropriate file protection and security. 5(I) The student will explain the process for discovering, quarantining, and removing viruses from a computer system.			
Grading Period 2 <b>26 Days</b>	<b>Software</b>	<b>5 Days</b>	5(A), 5(B), 5(E)
	5(A) The student will differentiate between systems and application software. 5(B) The student will identify and explain major operating system fundamentals and components such as disk operations, graphical user interface components, and hardware drivers. 5(E) The student will compare and contrast open source and proprietary software.		
	<b>Word Processing</b>	<b>15 Days</b>	7(A), 7(B), 7(C)
7(A) The student will identify the terminology associated with word-processing software. 7(B) The student will edit a variety of text documents using functions such as pagination, appropriate white space, tab settings, and font style, size, and color. 7(C) The student will create professional documents such as memorandums, technical manuals, or proposals using advanced word-processing features.			

	<b>Programming</b>	<b>6 Days</b>	9(A), 9(B), 9(C), 9(D), 9(E), 9(F)
	<p>9(A) The student will identify the function of compilers and interpreters.  9(B) The student will explain the difference between the operation of compilers and interpreters.  9(C) The student will identify various computer languages and how the languages are used in software development.  9(D) The student will recognize data representation in software development such as string, numeric, character, integer, and date.  9(E) The student will identify and explain the concept of algorithms.  9(F) The student will describe the flow of a structured algorithm, including linear and iterative instructions such as using a flow chart.</p>		
<b>Grading Period 3 25 Days</b>	<b>Spreadsheets</b>	<b>10 Days</b>	8(A), 8(B), 8(C), 8(D), 8(E), 8(F)
	<p>8(A) The student will identify the terminology associated with spreadsheet software  8(B) The student will use numerical content to perform mathematical calculations.  8(C) The student will use student-created and preprogrammed functions to produce documents such as budget, payroll, statistical tables, and personal checkbook register.  8(D) The student will identify, generate, and describe the function of comma separated value files.  8(E) The student will create and analyze spreadsheets incorporating advanced features such as lookup tables, nested IF statements, subtotals, cell protection conditional formatting, charts, and graphs.  8(F) The student will perform sorting, searching, and data filtering in documents.</p>		
	<b>Databases</b>	<b>10 Days</b>	10(A), 10(B), 10(C), 10(D), 10(E)
	<p>10(A) The student will identify the terminology associated with database software and database functions.  10(B) The student will explore the application of databases.  10(C) The student will identify and explain the purpose and elements of a query language.  10(D) The student will identify and explain the purpose of fields and records.  10(E) The student will describe the process of constructing a query, including multiple search parameters.</p>		
	<b>Electronic Technology</b>	<b>5 Days</b>	3(A), 3(B)
<p>3(A) The student will identify and describe functions of various evolving and emerging technologies.  3(B) The student will send and receive text information and file attachments using electronic methods such as email, electronic bulletin boards, and instant message services.</p>			
<b>Grading Period 4 32 Days</b>	<b>Internet</b>	<b>8 Days</b>	3(C), 3(D), 3(E)
	<p>3(C) The student will demonstrate effective Internet search strategies, including keywords and Boolean logic using various available search engines.  3(D) The student will identify the various components of a Uniform Resource Locator.  3(E) The student will demonstrate ability to effectively test acquired information from the Internet for accuracy, relevance, and validity.</p>		
	<b>Web Design &amp; Publishing</b>	<b>10 Days</b>	12(A), 12(B), 12(C), 12(D), 12(E)
	<p>12(A) The student will identify the terminology associated with web page development and interactive media.  12(B) The student will identify and explain design elements such as typeface, color, shape, texture, space, and form.  12(C) The student will identify and explain design principles such as unity, harmony, balance, scale, and contrast.  12(D) The student will identify and explain common elements of Hyper Text Markup Language (HTML) such as tags, stylesheets, and hyperlinks.  12(E) The student will create a web page containing links, graphics, and text using appropriate design principles.</p>		
	<b>Presentations</b>	<b>14 Days</b>	11(A), 11(B)
<p>11(A) The student will identify the terminology and functions of presentation software.  11(B) The student will create, save, edit, and produce presentations incorporating advanced features such as links, hyperlinks, audio, and graphics.</p>			
<b>Grading Period 5 32 Days</b>	<b>Ethics</b>	<b>16 Days</b>	3(F), 3(G), 13(E), 13(F)
	<p>3(F) The student will explain issues concerning computer-based threats such as computer viruses, malware, and hacking.  3(G) The student will explain issues concerning Internet safety such as identity theft, online predators, cyber-bullying, and phishing.  Internet security protocols such as computer viruses, online predators, hacking, and identity theft.  13(E) The student will identify and explain unethical practices such as hacking, online piracy, and data vandalism.  13(F) The student will demonstrate ethical use of online resources, including citation of source.</p>		

	<b>Networks</b>	<b>16 Days</b>	6(A), 6(B), 6(C), 6(D)
<b>Grading Period 6 29 Days</b>	6(A) The student will identify hardware associated with telecommunications and data networking such as servers, routers, switches, and network connectors. 6(B) The student will identify and describe various types of networks such as peer-to-peer, local area networks, wide area networks, wireless, and Ethernet. 6(C) The student will identify functions of network operating systems. 6(D) The student will explain troubleshooting techniques for various network connection issues.		
	<b>Legal &amp; Ethical</b>	<b>14 Days</b>	13(A), 13(B), 13(C), 13(D)
	13(A) The student will explain and demonstrate ethical use of technology and online resources. 13(B) The student will adhere to intellectual property laws. 13(C) The student will explain the concept of intellectual property laws, including copyright, trademarks, and patents and consequences of violating each type of law. 13(D) The student will examine the consequences of plagiarism.		
	<b>Careers</b>	<b>14 Days</b>	2(A), 2(B), 2(C)
	2(A) The student will identify job opportunities and accompanying job duties and tasks. 2(B) The student will research careers of personal interest along with the education, job skills, and experience required to achieve personal career goals. 2(C) The student will describe the functions of resumés and portfolios.		
	<b>Semester Exam</b>	<b>1 Day</b>	