eDynamicLearning
CAREER & ELECTIVE COURSES

eDynamic Learning Course Title: Middle School Coding 1a / 1b

State: TX
State Course Title: Technology Applications
State Course Code: 126.15
State Standards: Essential Knowledge and Skills for Technology Applications
Date of Standards: 2012-2013

TEKS	Course Title. (a or b), if applicable, e.g. Game Design 1a	Unit Name(s)	Lesson(s) Numbers
(1) Creativity and innovation. The student uses creative thinking and innovative processes to construct knowledge, generate new ideas, and create products.			
(A) identify, create, and use files in various formats such as text, raster and vector graphics, video, and audio files;	Middle School Coding 1a	1a: Unit 3: Let's Play!	L: 2
(B) create and present original works as a means of personal or group expression;	Middle School Coding 1a	1a: Unit 5: Snake Charmer	L: Activity
(C) explore complex systems or issues using models, simulations, and new technologies to make predictions, modify input, and review results; and	Middle School Coding 1a	1a: Unit 5: Snake Charmer	L: Lab
(D) discuss trends and make predictions.	Middle School Coding 1a	1a: Unit 2: There's Nothing 'Soft' About Software	L: 1
(2) Communication and collaboration. The student collaborates and communicates both locally and globally to reinforce and promote learning.			
(A) create personal learning networks to collaborate and publish with peers, experts, or others using digital tools such as blogs, wikis, audio/video communication, or other emerging technologies;	Middle School Coding 1a	1a: Unit 5: Snake Charmer	L: Activity
(B) communicate effectively with multiple audiences using a variety of media and formats; and	Middle School Coding 1b	1b: Unit 3: Build a Webpage	L: Activity
(C) create products using technical writing strategies.	Middle School Coding 1a	1a: Unit 5: Snake Charmer	L: 1-3
(3) Research and information fluency. The student acquires, analyzes, and manages content from digital resources.			
(A) create a research plan to guide inquiry;	Middle School Coding 1a	1a: Unit 3: Let's Play	L: 5

(B) select and evaluate various types of digital resources for accuracy and validity; and	Middle School Coding 1a	1a: Unit 2: There's Nothing 'Soft' About Software	L: Lab
(C) process data and communicate results.	Middle School Coding 1a	1a: Unit 2: There's Nothing 'Soft' About Software	L: Activity
(4) Critical thinking, problem solving, and decision making. The student makes informed decisions by applying critical-thinking and problem-solving skills.			
(A) identify and define relevant problems and significant questions for investigation;	Middle School Coding 1a	1a: Unit 2: There's Nothing 'Soft' About Software	L: 1
(B) plan and manage activities to develop a solution, design a computer program, or complete a project;	Middle School Coding 1b	1b: Unit 5: Buttons and Gadgets	L: 2
(C) collect and analyze data to identify solutions and make informed decisions;	Middle School Coding 1a	1a: Unit 2: There's Nothing 'Soft' About Software	L: 3, Lab
(D) use multiple processes and diverse perspectives to explore alternative solutions;	Middle School Coding 1a	1a: Unit 1: Crack the Code!	L: Lab
(E) make informed decisions and support reasoning; and	Middle School Coding 1a	1a: Unit 2: There's Nothing 'Soft' About Software	L: Lab
(F) transfer current knowledge to the learning of newly encountered technologies.	Middle School Coding 1a	1a: Unit 2: There's Nothing 'Soft' About Software	L: 2
(5) Digital citizenship. The student practices safe, responsible, legal, and ethical behavior while using technology tools and resources.			
(A) practice ethical acquisition of information and standard methods for citing sources;	Middle School Coding 1b	1b: Unit 3: Build a Webpage	L: 2
(B) practice and explain safe and appropriate online behavior, personal security guidelines, digital identity, digital etiquette, and acceptable use of technology; and	Middle School Coding 1b	1b: Unit 5: Buttons and Gadgets	L: 3
(C) understand the negative impact of inappropriate technology use, including online bullying and harassment, hacking, intentional virus setting, invasion of privacy, and piracy such as software, music, video, and other media.	Middle School Coding 1a	1a: Unit 2: There's Nothing 'Soft' About Software	L: Lab
(6) Technology operations and concepts. The student demonstrates a thorough understanding of technology concepts, systems, and operations.			
(A) define and use current technology terminology appropriately;	Middle School Coding 1a	1a: Unit 4: It's All Greek to Me	L: 2, 3, Lab
(B) select and apply technology tools based on licensing, application, and support;	Middle School Coding 1a	1a: Unit 4: It's All Greek to Me	L: Lab
(C) identify, understand, and use operating systems;	Middle School Coding 1a	1a: Unit 2: There's Nothing 'Soft' About Software	L: 1
(D) understand and use software applications, including selecting and using software for a defined task;	Middle School Coding 1a	1a: Unit 2: There's Nothing 'Soft' About Software	L: 1-3

(E) identify, understand, and use hardware systems;	Middle School Coding 1a	1a: Unit 2: There's Nothing 'Soft' About Software	L: 1
(F) understand troubleshooting techniques such as restarting systems, checking power issues, resolving software compatibility, verifying network connectivity, connecting to remote resources, and modifying display properties;	Middle School Coding 1b	1b: Unit 6: Become a Master Exterminator!	L: 5
(G) implement effective file management strategies such as file naming conventions, location, backup, hierarchy, folder structure, file conversion, tags, labels, and emerging digital organizational strategies;	Middle School Coding 1a	1a: Unit 2: There's Nothing 'Soft' About Software	L: 1-3
(H) explain the relevance of technology as it applies to college and career readiness, life-long learning, and daily living;	Middle School Coding 1a	1a: Unit 2: There's Nothing 'Soft' About Software	L: 1
(I) use a variety of local and remote input sources;	Middle School Coding 1a	1a: Unit 1: Crack the Code!	L: 3
(J) use keyboarding techniques and ergonomic strategies while building speed and accuracy;	Middle School Coding 1a	1a: Unit 2: There's Nothing 'Soft' About Software	L: 2
(K) create and edit files with productivity tools, including:	see sub items below		
(i) a word processing document using digital typography standards such as page layout, font formatting, paragraph formatting, and list attributes;	Middle School Coding 1a	1a: Unit 4: It's All Greek to Me	L: 1-2
(ii) a spreadsheet workbook using advanced computational and graphic components such as complex formulas, basic functions, data types, and chart generation;	Middle School Coding 1a	1a: Unit 2: There's Nothing 'Soft' About Software	L: Activity
(iii) a database by manipulating components such as defining fields, entering data, and designing layouts appropriate for reporting; and	Middle School Coding 1a	1a: Unit 2: There's Nothing 'Soft' About Software	L: 3, Lab
(iv) a digital publication using relevant publication standards;	Middle School Coding 1a	1a: Unit 6: Flexing Our Python Muscles	L: Activity
(L) plan and create non-linear media projects using graphic design principles; and	Middle School Coding 1b	1b: Unit 5: Buttons and Gadgets	L: Lab
(M) integrate two or more technology tools to create a new digital product.	Middle School Coding 1b	1b: Unit 2: Plan the Code; Code the Plan	L: 2