SBRHS BUSINESS & ENGINEERING TECHNOLOGY DEPARTMENT - GAMES & APPS CURRICULUM MAP ©08/15 Darmody GRADE LEVEL: 9-12 (3 CREDIT COURSE) APPROXIMATELY 68 DAYS OF 57 MINUTE PERIODS/17 CLASSES/QTR

MONTH	BIG IDEA	CHAPTER	STANDARDS	LESSONS	ASSESSMENTS	SUPPLEMENTS	SBRHS Academic	Rubrics
		S					Expectations	
Sept.	 Students will: be introduced to the concept of computational creation, in the context of Scratch. Become familiar with resources that support their computational creation. Prepare for creating Scratch projects by establishing a Scratch account & studio 	Creative Computi ng curricul um Unit 0 – Getting Started http://scratch ed.gse.harvar d.edu/guide/	ISTE NETS Student Standards 1-2 http://www.iste.org/standard s/ISTE-standards/standards- for-students CSTA K-12 Computer Science Standards 2011 CI.L3A-01 CL.L1:3-1,2 CT.L1:3-1,2,3,4 CPP.L1:3-5 CPP.L2-6 CT.L1:6-5 CT.L1:6-5 CT.L2-12,13,14,15 http://www.csta.acm.org/Cu rriculum/sub/CurrFiles/CST A_K-12_CSS.pdf	 Introducing Scratch Setting up a Scratch account Setting up a Scratch studio Introduce basic elements in Scratch programming interface Creating a simple sprite animation 	 Student Scratch account setup Student Scratch studio setup Student sprite animation Student Reflection Questions 	 <u>http://gaildarmody.weebly.com/gamesapps.html</u> Google Classroom <u>Learn to</u> <u>Program with</u> <u>Scratch</u> textbook <u>Super Scratch</u> <u>Programming</u> <u>Adventure</u> textbook <u>Scratch</u> <u>Programming for</u> <u>Teens</u> textbook 	Read analytically to support conclusions drawn from text Produce clear and coherent writing that is appropriate to task, purpose and audience Adapt speech to a variety of contexts and tasks Solve problems and complete tasks by reasoning critically and creatively Process information critically to become capable researchers Demonstrate technological literacy to facilitate learning	#2 – Produce clear and coherent writing that is appropriate to the task, purpose and audience #4 – Solve problems and complete tasks by reasoning critically & creatively #6 – Demonstrate technological literacy to facilitate learning
Oct.	 Students will: Create an interactive Scratch project. Be introduced to a wider range of Scratch blocks Become familiar with concept of sequence and iterating while creating projects. 	Creative Computi ng Unit 1 - Explorin g	ISTE NETS Student Standards 1-6 http://www.iste.org/standard s/ISTE-standards/standards- for-students CSTA K-12 Computer Science Standards 2011 CL.L1:6-1,2,3 CPP.L1:3-1,2,3,4 CPP.L1:6-1,2,3,4 CPP.L1:6-1,2 CT.L2-1,2,3,8 http://www.esta.acm.org/Cu rriculum/sub/CurrFiles/CST <u>A K-12 CSS.pdf</u>	 Progamming to Dance Step-by-Step Tutorial 10 Blocks Activity Debug It! About Me 	 Sprite Dance Activity Step-by- Step Tutorial 10 Blocks Project Debug It Group Activity About Me Project 	 http://gaildarmody.weebl y.com/gamesapps.html Google Classroom Learn to Program with Scratch textbook Super Scratch Programming Adventure textbook Scratch Programming for Teens textbook 	Read analytically to support conclusions drawn from text Produce clear and coherent writing that is appropriate to task, purpose and audience Adapt speech to a variety of contexts and tasks Solve problems and complete tasks by reasoning critically and creatively Process information critically to become capable researchers Demonstrate technological literacy to facilitate learning	 #2 – Produce clear and coherent writing that is appropriate to the task, purpose and audience #4 – Solve problems and complete tasks by reasoning critically & creatively #6 – Demonstrate technological literacy to facilitate learning

Nov. –	Students will:	Creative	ISTE NETS	1. Performing	• Build a	<u>http://gaildarmody.weebl</u>	Read analytically to	#2 – Produce
Dec.	• Be introduced to	Computi	Student Standards	Scripts	Band	• Google	drawn from text	clear and
	the computational	ng Unit	1-6 http://www.iste.org/standard	2. Build-a-Band	Project	Classroom	Produce clear and	coherent
	thinking concepts	2 -	s/ISTE-standards/standards-	with sounds	Music	• Learn to	appropriate to task,	writing that is
	of loops, events,	Animati	$\frac{\text{for-students}}{\text{CSTA } K}$ 12	& sprites	Video	Program with	purpose and audience	appropriate to
	& parallelism.	ons	Computer Science	3. Orange	project	Scratch textbook	Adapt speech to a variety of contexts and	the task,
	• Become more		Standards 2011	Square,	• Animate	Super Scratch	tasks	purpose and
	familiar with the		CI.L1:3-1	Purple Circle	Your	Programming	Solve problems and	audience
	concepts of		CI.L1:6-1	using vector	Name	Adventure	complete tasks by reasoning critically and	#4 – Solve
	sequence.		CL.L2-1 CL.L2-1,2,3,4	& bit-map	project	textbook	creatively	problems and
	 Experiment with 		CPP.L2-1,2,3,4,5	tools in	 Synchroni 	Scratch	Process information	complete tasks
	new blocks in the		CT.L3A-1	drawing	zed	Programming for	capable researchers	by reasoning
	Events, Control,		http://www.csta.acm.org/Cu rriculum/sub/CurrFiles/CST	4. It's Alive!	Animation	Teens textbook	Demonstrate	critically &
	Sound, & Looks		<u>A_K-12_CSS.pdf</u>	Experimentin	Project	• Headphones with	technological literacy to	creatively
	categories.			g with		microphones for	facilitate learning	#0 -
	 Explore various 			sequence,		students		Demonstrate
	arts-themed			loops, control		statemes		technological
	Scratch programs.			DIOCKS &				fitteracy to
	• Create an			changing				facilitate
	animated music			costumes				learning
	video project.			5. Avolding				
				Plaglarism				
				0. Debug It!				
				/. IVIUSIC VIDEO				

MONTH	BIG IDEAS	CHAPTERS	STANDARDS		LESSONS	ASSESSMENTS	SUPPLEMENTS	SBRHS Academic	RUBRICS
								Expectations	
Jan. –	Students will:	Creative	ISTE NETS	1.	Creating	Pass It On	<u>http://gaildarmody</u>	Read analytically to support conclusions	#2 – Produce clear
Feb.	• Gain familiarity in	Computing	Student Standards		Characters	Group	sapps.html	drawn from text	that is appropriate to
	and build	Unit 3 -	1-6	2.	Synchronizi	Activity	• Google	Produce clear and	the task, purpose
	understandings of	Stories	http://www.iste.org/standar ds/ISTE-		ng	Animated	Classroom	coherent writing that is	and audience $#4 - Solve problems$
	the benefits of	~ ~ ~ ~ ~ ~	standards/standards-for-		Conversatio	Greeting	• Loorn to	purpose and audience	and complete tasks
	reusing and remixing		students		ng	Cord	• <u>Learn to</u>	Adapt speech to a variety	by reasoning
	while designing		CSTA K-12	3	Scenes		<u>Program</u>	of contexts and tasks	creatively
	while designing.		Computer	<i>J</i> .	Doby o It	• Individual	with Scratch	Solve problems and	#6 – Demonstrate
	• Develop greater		Science Standards	4.	Debug It	Animated	textbook	complete tasks by	technological literacy to facilitate
	fluency with		2011	5.	Pass It On	Story/Joke	• <u>Super</u>	creatively	learning
	computational		CI.L3A-1			Project	<u>Scratch</u>	Process information	
	concepts (events &		CL.L3A-1,2,3,4				<u>Programmin</u>	critically to become	
	parallelism) and		CL.L3B-3				g Adventure	capable researchers	
	practices		CPP.L3A-3,4,6 CT L2-7				textbook	Demonstrate	
	(experimenting &		CT.L3A-3				• Scratch	facilitate learning	
	iterating, testing &		http://www.csta.acm.org/C				Programmin		
	debugging, reusing		STA_K-12_CSS.pdf				g for Teens		
	& remixing)						textbook		
	• Explore						tenteoon		
	computational								
	creation within the								
	genre of stories by								
	designing								
	acliaborativa								
	narratives.			1	C		• http://goildownody	Read analytically to	//2 D 1
Mar	Students will:	Creative	ISTE NETS	1.	Starter	• Maze	• <u>mtp://gandarmody</u> .weebly.com/game	support conclusions	#2 - Produce
May	• Be introduced to the	Computing	Student Standards		Games	Game	<u>sapps.html</u>	drawn from text	clear and
	computational	Unit 4 -	1-0 http://www.iste.org/standar	2.	Score	Project	• Google	Produce clear and	coherent
	concepts of	Games	ds/ISTE-	3.	Extensions	• Pong Game	Classroom	appropriate to task,	writing that is
	conditionals,		standards/standards-for- students	4.	Debug It!	Project	• Learn to	purpose and audience	appropriate to
	operators, and data		CSTA K-12			• Scrolling	Program	Adapt speech to a variety	the task,
	(variable & lists)		Computer			Game	with Scratch	of contexts and tasks	purpose and
	• Become more		Science Standards			Project	textbook	Solve problems and complete tasks by	audience
	familiar with the		2011			• Score	• Super	reasoning critically and	#4 – Solve
	computational		CI.L3A-1			Keening	Scratch	creatively	problems and
	practices of		CI.L3B-1			Game	Programmin	Process information	complete
	experimenting &		CL.L3A-1,2,3,4 CL L3B-3			Drojost	a Advantura	capable researchers	tasks by
	experimenting a		CL.LJD 5			Project	g Auventure		

	 iterating, testing & debugging, reusing & remixing, & abstracting & modularizing by building & extending self- directed maze, pong, and scrolling game projects. Identify & understand common game mechanics 		CPP.L3A-3,4,6 CT.L2-7 CT.L3A-3 http://www.csta.acm.org/C urriculum/sub/CurrFiles/C STA_K-12_CSS.pdf			textbook • <u>Scratch</u> <u>Programmin</u> <u>g for Teens</u> textbook	Demonstrate technological literacy to facilitate learning	reasoning critically & creatively #6 – Demonstrate technological literacy to facilitate learning
June	 Students will: Reflect on past experiences to self- assess current learning goals & needs as part of their Scratch portfolios. Create a self-remix by extending a previous project to explore Scratch extensions Gain additional fluency in computational concepts & practices by exploring the newest Scratch features, such as video sensing & cloning) 	Creative Computing Unit 5 – Advanced Concepts & Extensions in Scratch	ISTE NETS Student Standards 1-6 http://www.iste.org/standar ds/ISTE- standards/standards-for- students CSTA K-12 Computer Science Standards 2011 CIL3A-1 CL13B-1 CL13B-1 CL13B-1 CL13B-3 CPP.L3A-3,4,6 CT.L2-7 CT.L3A-3 http://www.csta.acm.org/C urriculum/sub/CurrFiles/C STA K-12 CSS.pdf	 Know Want Learn/Portfo lio reflections Advanced Concepts & Extensions Activity Design 	 Use of advanced concepts & extensions in Scratch to improve previous projects End-of- Course Portfolio Assessment 	 http://gaildarmody .weebly.com/game sapps.html Google Classroom Learn to Program with Scratch textbook Super Scratch Programmin g Adventure textbook Scratch Programmin g for Teens textbook 	Read analytically to support conclusions drawn from text Produce clear and coherent writing that is appropriate to task, purpose and audience Adapt speech to a variety of contexts and tasks Solve problems and complete tasks by reasoning critically and creatively Process information critically to become capable researchers Demonstrate technological literacy to facilitate learning	 #2 – Produce clear and coherent writing that is appropriate to the task, purpose and audience #4 – Solve problems and complete tasks by reasoning critically & creatively #6 – Demonstrate technological literacy to facilitate learning

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							purpose and addience	
							Adapt speech to a variety	
							of contexts and tasks	
							Solve problems and	
							complete tasks by	
							reasoning critically and	
							creatively	
							Decases information	
							critically to become	
							capable researchers	
							Demonstrate	
							facilitate learning	
							Read analytically to	
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							A dont anonab to a variativ	
							of contexts and tasks	
							Solve problems and	
							complete tasks by	
							creatively	
							Process information	
							critically to become	
							capable researchers	
							Demonstrate	
							technological literacy to	
	1	1	1	1	1		Tacilitate learning	

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			Solve problems and complete tasks by reasoning critically and creatively
			Process information critically to become capable researchers
			Demonstrate technological literacy to facilitate learning