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	CHAPTERS	STANDARDS	LESSONS	ASSESSMENTS	SUPPLEMENTS	SBRHS Academic Expectations	Rubrics
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 Computing curriculum Unit 0 – Getting Started http://scratched.gse.harvard.edu/guide/	ISTE NETS Student Standards 1-2 http://www.iste.org/standards/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.L1.6-6 CT.L2-12,13,14,15 http://www.csta.acm.org/Curriculum/sub/CurrFiles/CSTA_K-12_CSS.pdf	1. Introducing Scratch 2. Setting up a Scratch account 3. Setting up a Scratch studio 4. Introduce basic elements in Scratch programming interface 5. Creating a simple sprite animation	• Student Scratch account setup • Student Scratch studio setup • Student sprite animation • Student Reflection Questions	• http://gaildarmody.weebly.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
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 Computing Unit 1 - Exploring	ISTE NETS Student Standards 1-6 http://www.iste.org/standards/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.L1:6-1,2,3,4,5,6 CT.L1:6-1,2 CT.L2-1,2,3,8 http://www.csta.acm.org/Curriculum/sub/CurrFiles/CSTA_K-12_CSS.pdf	1. Progamming to Dance 2. Step-by-Step Tutorial 3. 10 Blocks Activity 4. Debug It! 5. About Me	• Sprite Dance Activity • Step-by-Step Tutorial • 10 Blocks Project • Debug It Group Activity • About Me Project	• http://gaildarmody.weebly.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. – Dec.	Students will: • Be introduced to the computational thinking concepts of loops, events, & parallelism. • Become more familiar with the concepts of sequence. • Experiment with new blocks in the Events, Control, Sound, & Looks categories. • Explore various arts-themed Scratch programs. • Create an animated music video project.	Creative Computing Unit 2 - Animations	ISTE NETS Student Standards 1-6 http://www.iste.org/standards/ISTE-standards/standards-for-students CSTA K-12 Computer Science Standards 2011 CI.L1:3-1 CI.L1:6-1 CI.L2-1 CL.L2-1,2,3,4 CPP.L2-1,2,3,4,5 CT.L2-5,6 CT.L3A-1 http://www.csta.acm.org/Curriculum/sub/CurrFiles/CSTA_K-12_CSS.pdf	1. Performing Scripts 2. Build-a-Band with sounds & sprites 3. Orange Square, Purple Circle using vector & bit-map tools in drawing 4. It's Alive! Experimenting with sequence, loops, control blocks & changing costumes 5. Avoiding Plagiarism 6. Debug It! 7. Music Video	• Build a Band Project • Music Video project • Animate Your Name project • Synchronized Animation Project	• http://gaildarmody.weebly.com/gamesapps.html • Google Classroom • Learn to Program with Scratch textbook • Super Scratch Programming Adventure textbook • Scratch Programming for Teens textbook • Headphones with microphones for students	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

MONTH	BIG IDEAS	CHAPTERS	STANDARDS	LESSONS	ASSESSMENTS	SUPPLEMENTS	SBRHS Academic Expectations	RUBRICS
Jan. – Feb.	Students will: • Gain familiarity in and build understandings of the benefits of reusing and remixing while designing. • Develop greater fluency with computational concepts (events & parallelism) and practices (experimenting & iterating, testing & debugging, reusing & remixing) • Explore computational creation within the genre of stories by designing collaborative narratives.	Creative Computing Unit 3 - Stories	ISTE NETS Student Standards 1-6 http://www.iste.org/standards/ISTE-standards/standards-for-students CSTA K-12 Computer Science Standards 2011 CI.L3A-1 CI.L3B-1 CL.L3A-1,2,3,4 CL.L3B-3 CPP.L3A-3,4,6 CT.L2-7 CT.L3A-3 http://www.csta.acm.org/Curriculum/sub/CurrFiles/CSTA_K-12_CSS.pdf	1. Creating Characters 2. Synchronizing Conversations 3. Scenes 4. Debug It 5. Pass It On	• Pass It On Group Activity • Animated Greeting Card • Individual Animated Story/Joke Project	• http://gaildarmody.weebly.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
Mar. - May	Students will: • Be introduced to the computational concepts of conditionals, operators, and data (variable & lists) • Become more familiar with the computational practices of experimenting &	Creative Computing Unit 4 - Games	ISTE NETS Student Standards 1-6 http://www.iste.org/standards/ISTE-standards/standards-for-students CSTA K-12 Computer Science Standards 2011 CI.L3A-1 CI.L3B-1 CL.L3A-1,2,3,4 CL.L3B-3	1. Starter Games 2. Score 3. Extensions 4. Debug It!	• Maze Game Project • Pong Game Project • Scrolling Game Project • Score Keeping Game Project	• http://gaildarmody.weebly.com/gamesapps.html • Google Classroom • Learn to Program with Scratch textbook • Super Scratch Programming Adventure	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	#2 – Produce clear and coherent writing that is appropriate to the task, purpose and audience #4 – Solve problems and complete tasks by

Month	Objectives	Unit	Standards			Resources	ELA Standards	Technology Standards
	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/Curriculum/sub/CurrFiles/CSTA_K-12_CSS.pdf			textbook • Scratch Programming for Teens 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/standards/ISTE-standards/standards-for-students CSTA K-12 Computer Science Standards 2011 CI.L3A-1 CI.L3B-1 CL.L3A-1,2,3,4 CL.L3B-3 CPP.L3A-3,4,6 CT.L2-7 CT.L3A-3 http://www.csta.acm.org/Curriculum/sub/CurrFiles/CSTA_K-12_CSS.pdf	1. Know Want Learn/Portfolio reflections 2. Advanced Concepts & Extensions 3. Activity Design	• Use of advanced concepts & extensions in Scratch to improve previous projects • End-of-Course Portfolio Assessment	• http://gaildarmody.weebly.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

MONTH	BIG IDEA	CHAPTERS	STANDARDS	LESSONS	ASSESSMENTS	SUPPLEMENTS	SBRHS Academic Expectations	Rubrics
							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	
							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	

							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	