Subject	§126.Technology Applications				
Course Title	§126.38. Game Programmin	a and Design (One-Half to One	Credit). Beginning with	School Year 2012-2013	
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement	
Skills)					
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§126.Technology Applications					
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Subject	§126.Technology Applications			
Course Title	§126.38. Game Programming	and Design (One-Half to One	Credit), Beginning with S	School Year 2012-2013
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement
Skills)				
(1) Creativity and innovation.	(A) understand the basic game	(vii) understand the basic		
The student develops products	design elements, including	game design elements,		
and generates new	conceptual ideas, storyline,	including game play		
understanding by extending	visualization, storyboard, game			
existing knowledge. The	effects, sound elements, game			
student is expected to:	play, game controls, and			
	player tutorial			
(1) Creativity and innovation.	(A) understand the basic game	(viii) understand the basic		
The student develops products	design elements, including	game design elements,		
and generates new	conceptual ideas, storyline,	including game controls		
understanding by extending	visualization, storyboard, game			
existing knowledge. The	effects, sound elements, game			
student is expected to:	play, game controls, and			
	player tutorial			
(1) Creativity and innovation.	(A) understand the basic game	(ix) understand the basic game		
The student develops products	design elements, including	design elements, including		
and generates new	conceptual ideas, storyline,	player tutorial		
understanding by extending	visualization, storyboard, game			
existing knowledge. The	effects, sound elements, game			
student is expected to:	play, game controls, and			
	player tutorial			
(1) Creativity and innovation.	(B) create a design concept			
The student develops products	document			
and generates new				
understanding by extending				
existing knowledge. The				
student is expected to:				
(1) Creativity and innovation.	(C) create a storyboard			
The student develops products				
and generates new				
understanding by extending				
existing knowledge. The				
siduent is expected to.				

Subject	§126 Technology Applications					
Course Title	§126.38. Game Programming and Design (One-Half to One Credit), Beginning with School Year 2012-2013					
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Subject	§126.Technology Applications				
Course Title	§126.38. Game Programming	and Design (One-Half to One	Credit). Beginning with	School Year 2012-2013	
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement	
Skills)					
(1) Creativity and innovation.	(E) use bitmap graphics	(ii) use bitmap graphics			
The student develops products	images, including designing,	images, including creating			
and generates new	creating, reading, and	images			
understanding by extending	manipulating images				
existing knowledge. The					
student is expected to:					
(1) Creativity and innovation.	(E) use bitmap graphics	(iii) use bitmap graphics			
The student develops products	images, including designing,	images, including reading			
and generates new	creating, reading, and	images			
understanding by extending	manipulating images				
existing knowledge. The					
student is expected to:					
(1) Creativity and innovation.	(E) use bitmap graphics				
The student develops products	images, including designing,				
and generates new	creating, reading, and				
understanding by extending	manipulating images				
existing knowledge. The					
student is expected to:					
	(1) Creativity and innovation.				
	The student develops products				
	and generates new				
	understanding by extend1-AMC	D 11 e			

Subject	§126.Technology Applications			
Course Title	§126.38. Game Programming and Design (One-Half to One Credit). Beginning with School Year 2012-2013			
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement
Skills)				
(1) Creativity and innovation.	(G) write programs creating			
The student develops products	images using geometric			
and generates new	shapes			
understanding by extending				
existing knowledge. The				
student is expected to:				
(1) Creativity and innovation.	(H) create games using sprites	(i) create games using sprites		
The student develops products	by evaluating the role of	by evaluating the role of		
and generates new	sprites, creating sprites, and	sprites		
understanding by extending	managing sprites			
existing knowledge. The				
student is expected to:				
(1) Creativity and innovation.	(H) create games using sprites	(ii) create games using sprites		
The student develops products	by evaluating the role of	by creating sprites		
and generates new	sprites, creating sprites, and			
understanding by extending	managing sprites			
existing knowledge. The				
student is expected to:				
(1) Creativity and innovation.	(H) create games using sprites	(iii) create games using sprites		
The student develops products	by evaluating the role of	by managing sprites		
and generates new	sprites, creating sprites, and			
understanding by extending	managing sprites			
existing knowledge. The				
student is expected to:				
(1) Creativity and innovation.	(I) create programs using			
The student develops products	sprite sheets			
and generates new				
understanding by extending				
existing knowledge. The				
student is expected to:				
(1) Creativity and innovation.	(J) demonstrate an	(i) demonstrate an		
The student develops products	understanding of image	understanding of image		
and generates new	rendering, including	renaering, including		
understanding by extending	transparency, refresh rate,	transparency		
existing knowledge. The	naroware acceleration, and			
student is expected to:	animation			

Subject	§126.Technology Applications			
Course Title	§126.38. Game Programming	and Design (One-Half to One	Credit), Beginning with	School Year 2012-2013
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement
Skills)				
(1) Creativity and innovation.	(J) demonstrate an	(ii) demonstrate an		
The student develops products	understanding of image	understanding of image		
and generates new	rendering, including	rendering, including refresh		
understanding by extending	transparency, refresh rate,	rate		
existing knowledge. The	hardware acceleration, and			
student is expected to:	animation			
(1) Creativity and innovation.	(J) demonstrate an	(iii) demonstrate an		
The student develops products	understanding of image	understanding of image		
and generates new	rendering, including	rendering, including hardware		
understanding by extending	transparency, refresh rate,	acceleration		
existing knowledge. The	hardware acceleration, and			
student is expected to:	animation			
(1) Creativity and innovation.	(J) demonstrate an			
The student develops products	understanding of image			
and generates new	rendering, including			
understanding by extending	transparency, refresh rate,			
existing knowledge. The	hardware acceleration, and			
student is expected to:	animation			
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Subject	§126.Technology Applications			
Course Title	§126.38. Game Programming and Design (One-Half to One Credit). Beginning with School Year 2012-2013			
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement
Skills)				
(2) Communication and	(A) design and implement	(i) design procedures to set		
collaboration. The student	procedures to set timelines for,	timelines for a game product		
communicates and	track progress of, and evaluate			
collaborates with peers to	a game product			
contribute to his or her own				
learning and the learning of				
others. The student is				
expected to:				
(2) Communication and	(A) design and implement	(ii) implement procedures to		
collaboration. The student	procedures to set timelines for,	set timelines for a game		
communicates and	track progress of, and evaluate	product		
collaborates with peers to	a game product			
contribute to his or her own				
learning and the learning of				
others. The student is				
expected to:				
(2) Communication and	(A) design and implement	(iii) design procedures to track		
collaboration. The student	procedures to set timelines for,	progress of a game product		
communicates and	track progress of, and evaluate			
collaborates with peers to	a game product			
contribute to his or her own				
learning and the learning of				
others. The student is				
expected to:				
(2) Communication and	(A) design and implement	(iv) implement procedures to		
collaboration. The student	procedures to set timelines for,	track progress of a game		
communicates and	track progress of, and evaluate	product		
collaborates with peers to	a game product			
contribute to his or her own				
learning and the learning of				
others. The student is				
expected to:				

Subject	8126 Technology Applications				
Course Title	Course Title §126.38. Game Programming and Design (One-Half to One Credit). Beginning with School Year 2012-2013				
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement	
Skills)					
(2) Communication and	(B) seek and respond to input	(iii) respond to input from			
collaboration. The student	from peers and professionals	peers in evaluating a game			
communicates and	in evaluating a game project	project			
collaborates with peers to					
contribute to his or her own					
learning and the learning of					
others. The student is					
expected to:					
(2) Communication and	(B) seek and respond to input	(iv) respond to input from			
collaboration. The student	from peers and professionals	professionals in evaluating a			
communicates and	in evaluating a game project	game project			
collaborates with peers to					
contribute to his or her own					
learning and the learning of					
others. The student is					
expected to:					
(2) Communication and	(C) demonstrate knowledge	(i) demonstrate knowledge of			
collaboration. The student	and appropriate use of	operating systems			
communicates and	operating systems, program				
collaborates with peers to	development tools, and				
contribute to his or her own	networking resources				
learning and the learning of					
others. The student is					
expected to:					
(2) Communication and	(C) demonstrate knowledge	(ii) demonstrate knowledge of			
collaboration. The student	and appropriate use of	program development tools			
communicates and	operating systems, program				
collaborates with peers to	development tools, and				
contribute to his or her own	networking resources				
learning and the learning of					
others. The student is					
expected to:					

Subject §126 Technology Applications				
Course Title §126.38. Game Programming and Design (One-Half to One Credit). Beginning with School Year 2012-2013				
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement
Skills)				
(2) Communication and	(C) demonstrate knowledge	(iii) demonstrate knowledge of		
collaboration. The student	and appropriate use of	networking resources		
communicates and	operating systems, program			
collaborates with peers to	development tools, and			
contribute to his or her own	networking resources			
learning and the learning of				
others. The student is				
expected to:				
(2) Communication and	(C) demonstrate knowledge	(iv) demonstrate appropriate		
collaboration. The student	and appropriate use of	use of operating systems		
communicates and	operating systems, program			
collaborates with peers to	development tools, and			
contribute to his of her own	networking resources			
others. The student is				
expected to:				
(2) Communication and	(C) demonstrate knowledge	(v) demonstrate appropriate		
collaboration The student	and appropriate use of	use of program development		
communicates and	operating systems, program	tools		
collaborates with peers to	development tools, and			
contribute to his or her own	networking resources			
learning and the learning of	Ũ			
others. The student is				
expected to:				

Subject	§126.Technology Applications			
Course Title	§126.38. Game Programming	and Design (One-Half to One	Credit). Beginning with	School Year 2012-2013
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement
Skills)				
(2) Communication and	(E) collaborate to research the	(i) collaborate to research the		
collaboration. The student	business of games, including	business of games, including		
communicates and	the roles of developer,	the roles of developer		
collaborates with peers to	marketing, publisher, and retail			
contribute to his or her own	sales			
learning and the learning of				
others. The student is				
expected to:	(<u>-</u>)			
(2) Communication and	(E) collaborate to research the	(II) collaborate to research the		
collaboration. The student	business of games, including	business of games, including		
communicates and	the roles of developer,	the roles of marketing		
collaborates with peers to	marketing, publisher, and retail			
Learning and the learning of	Sales			
others. The student is				
expected to:				
(2) Communication and	(E) collaborate to research the	(iii) collaborate to research the		
collaboration. The student	business of games, including	business of games, including		
communicates and	the roles of developer,	the roles of publisher		
collaborates with peers to	marketing, publisher, and retail	•		
contribute to his or her own	sales			
learning and the learning of				
others. The student is				
expected to:				
(2) Communication and	(E) collaborate to research the	(iv) collaborate to research the		
collaboration. The student	business of games, including	business of games, including		
communicates and	the roles of developer,	the roles of retail sales		
collaborates with peers to	marketing, publisher, and retail			
contribute to his or her own	sales			
learning and the learning of				
others. The student is				
expected to:				

Subject	§126.Technology Applications			
Course Title	§126.38. Game Programming	and Design (One-Half to One	Credit), Beginning with	School Year 2012-2013
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement
Skills)				
(2) Communication and	(F) demonstrate an	(i) demonstrate an		
collaboration. The student	understanding of and evaluate	understanding of online		
communicates and	online technology, including	technology, including online		
collaborates with peers to	online interaction and massive	Interaction		
contribute to his or her own	multiplayer games			
learning and the learning of				
others. The student is				
(2) Communication and	(E) domonstrato on	(ii) domonstrato an		
collaboration. The student	understanding of and evaluate	understanding of online		
communicates and	online technology including	technology including massive		
collaborates with peers to	online interaction and massive	multiplayer games		
contribute to his or her own	multiplaver games	inaliplayer gamee		
learning and the learning of				
others. The student is				
expected to:				
(2) Communication and	(F) demonstrate an	(iii) evaluate online technology,		
collaboration. The student	understanding of and evaluate	including online interaction		
communicates and	online technology, including			
collaborates with peers to	online interaction and massive			
contribute to his or her own	multiplayer games			
learning and the learning of				
others. The student is				
expected to:				
(2) Communication and	(F) demonstrate an	(IV) evaluate online technology,		
communication. The student				
collaborates with poors to	online interaction and massive	games		
contribute to his or her own	multiplayer games			
learning and the learning of	nanplayer games			
others. The student is				
expected to:				

Subject	§126.Technology Applications			
Course Title	\$126.38. Game Programming and Design (One-Half to One Credit). Beginning with School Year 2012-2013			
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement
Skills)				
(3) Research and information	(B) evaluate, analyze, and	(vi) document game playability		
fluency. The student locates,	document game styles and			
analyzes, processes, and	playability			
organizes data. The student is				
expected to				
(3) Research and information	(C) research the dramatic	(i) research the dramatic		
fluency. The student locates,	elements in games, including	elements in games, including		
analyzes, processes, and	kinds of fun, player types, and	kinds of fun		
organizes data. The student is	nonlinear storytelling			
expected to				
(3) Research and information	(C) research the dramatic	(ii) research the dramatic		
fluency. The student locates,	elements in games, including	elements in games, including		
analyzes, processes, and	kinds of fun, player types, and	player types		
organizes data. The student is	nonlinear storytelling			
expected to				
(3) Research and information	(C) research the dramatic	(iii) research the dramatic		
fluency. The student locates,	elements in games, including	elements in games, including		
analyzes, processes, and	kinds of fun, player types, and	nonlinear storytelling		
organizes data. The student is	nonlinear storytelling			
expected to				
(4) Critical thinking, problem	(A) demonstrate an	(i) demonstrate an		
solving, and decision making.	understanding of the game	understanding of the game		
The student uses appropriate	design process, including	design process, including		
strategies to analyze problems	generating ideas,	generating ideas		
and design algorithms. The	brainstorming, and paper			
student is expected to	prototyping			
(4) Critical thinking, problem	(A) demonstrate an	(ii) demonstrate an		
solving, and decision making.	understanding of the game	understanding of the game		
The student uses appropriate	design process, including	design process, including		
strategies to analyze problems	generating ideas,	brainstorming		
and design algorithms. The	brainstorming, and paper			
student is expected to	prototyping			

Subject	§126.Technology Applications			
Course Title	§126.38. Game Programming	and Design (One-Half to One	Credit), Beginning with S	School Year 2012-2013
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement
Skills)				
(4) Critical thinking, problem	(A) demonstrate an	(iii) demonstrate an		
solving, and decision making.	understanding of the game	understanding of the game		
The student uses appropriate	design process, including	design process, including		
strategies to analyze problems	generating ideas,	paper prototyping		
and design algorithms. The	brainstorming, and paper			
student is expected to	prototyping			
(4) Critical thinking, problem	(B) write programs using			
solving, and decision making.	variables of different data			
The student uses appropriate	types			
strategies to analyze problems				
and design algorithms. The				
student is expected to				
(4) Critical thinking problem	(C) evaluate game rules and	(i) evaluate game rules		
solving and decision making	instructions	(i) evaluate game rules		
The student uses appropriate				
strategies to analyze problems				
and design algorithms. The				
student is expected to				
(4) Critical thinking, problem	(C) evaluate game rules and	(ii) evaluate game instructions		
solving, and decision making.	instructions			
The student uses appropriate				
strategies to analyze problems				
and design algorithms. The				
student is expected to				
(4) Critical thinking problem	(D) demonstrate an	(i) demonstrate an		
(4) Childar tilliking, problem	(D) demonstrate an	(i) demonstrate an		
The student uses appropriate	experience by comparing rules	experience by comparing rules		
strategies to analyze problems	and dame-play patterns	experience by comparing rules		
and design algorithms. The	and game play patterns			
student is expected to				

Subject	§126.Technology Applications			
Course Title	§126.38. Game Programming	and Design (One-Half to One	Credit), Beginning with	School Year 2012-2013
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement
Skills)	(D) demonstrate en			
(4) Critical thinking, problem	(D) demonstrate an	(II) demonstrate an		
solving, and decision making.	understanding of the user	understanding of the user		
The student uses appropriate	experience by comparing rules	experience by comparing		
strategies to analyze problems	and game-play patterns	game-play patterns		
and design algorithms. The				
student is expected to				
(4) Critical thinking, problem	(E) write game rules, and	(i) write game rules		
solving, and decision making.	instructions			
The student uses appropriate				
strategies to analyze problems				
and design algorithms. The				
student is expected to				
(4) Critical thinking, problem	(E) write game rules, and	(ii) write game instructions		
solving, and decision making.	instructions	() 3.		
The student uses appropriate				
strategies to analyze problems				
and design algorithms. The				
student is expected to				
(4) Critical thinking, problem	(F) develop game software			
Solving, and decision making.				
strategies to apply a problems				
and design algorithms. The				
student is expected to				
(4) Critical thinking, problem	(G) write computer game	(i) write computer game code		
solving, and decision making.	code, resolve game defects,			
The student uses appropriate	and revise existing game code			
strategies to analyze problems				
and design algorithms. The				
student is expected to				
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Subject	§126.Technology Applications			
Course Title	§126.38. Game Programming	and Design (One-Half to One	Credit), Beginning with S	School Year 2012-2013
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement
Skills)				
(4) Critical thinking, problem	(G) write computer game	(II) resolve game defects		
solving, and decision making.	code, resolve game defects,			
The student uses appropriate	and revise existing game code			
strategies to analyze problems				
and design algorithms. The				
student is expected to				
(4) Critical thinking, problem	(G) write computer game	(iii) revise existing game code		
solving, and decision making.	code, resolve game defects,			
The student uses appropriate	and revise existing game code			
strategies to analyze problems				
and design algorithms. The				
student is expected to				
(4) Critical thinking, problem	(H) test a finished game			
solving, and decision making.	product by implementing			
The student uses appropriate	sound testing techniques			
strategies to analyze problems				
and design algorithms. The				
student is expected to				
(5) Digital citizenship. The	(A) explore intellectual	(i) explore intellectual property		
student explores and	property, privacy, sharing of			
understands safety, legal,	information, copyright laws,			
cultural, and societal issues	and software licensing			
relating to the use of	agreements			
technology and information.				
I he student is expected to				
(5) Digital citizenship. The	(A) explore intellectual			
understands safety local	information convright lows			
cultural and societal issues	and software licensing			
relating to the use of	arreements			
technology and information	agreements			
The student is expected to				

Subject	§126.Technology Applications			
Course Title	§126.38. Game Programming	and Design (One-Half to One	Credit), Beginning with	School Year 2012-2013
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement
Skills)				
(5) Digital citizenship. The	(A) explore intellectual	(iii) explore sharing of		
student explores and	property, privacy, sharing of	information		
understands safety, legal,	information, copyright laws,			
cultural, and societal issues	and software licensing			
relating to the use of	agreements			
technology and information.				
The student is expected to				
(5) Digital citizenship. The	(A) explore intellectual	(iii) explore copyright laws		
student explores and	property, privacy, sharing of			
understands safety, legal,	information, copyright laws,			
cultural, and societal issues	and software licensing			
relating to the use of	agreements			
technology and information.				
The student is expected to				
(5) Digital citizenship. The	(A) explore intellectual	(iv) explore software licensing		
student explores and	property, privacy, sharing of	agreements		
understands safety, legal,	information, copyright laws,			
cultural, and societal issues	and software licensing			
relating to the use of	agreements			
technology and information.				
The student is expected to				
(5) Digital citizenship. The	(B) model ethical acquisition	(i) model ethical acquisition of		
student explores and	and use of digital information	digital information		
understands safety, legal,				
cultural, and societal issues				
relating to the use of				
technology and information.				
The student is expected to				
(5) Digital citizenship. The	(B) model ethical acquisition	(ii) model ethical use of digital		
student explores and	and use of digital information	information		
understands safety, legal,				
cultural, and societal issues				
relating to the use of				
technology and information.				
The student is expected to				

Course Title \$126.38. Game Programming and Design (One-Half to One Credit), Beginning with School Year 2012-2013 TEKS (Knowledge and Image: Course Title Image: Course Title Image: Course Title	Subject	§126.Technology Applications				
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Subject	§126.Technology Applications			
Course Title	§126.38. Game Programming	and Design (One-Half to One	Credit). Beginning with S	School Year 2012-2013
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement
Skills)				
(5) Digital citizenship. The	(D) model respect of	(iii) model respect of		
student explores and	intellectual property, including	intellectual property, including		
understands safety, legal,	manipulating graphics,	editing graphics		
cultural, and societal issues	morphing graphics, editing			
relating to the use of	graphics, and editing sound			
technology and information.				
The student is expected to				
(5) Digital citizenship. The	(D) model respect of	(iv) model respect of		
student explores and	intellectual property, including	intellectual property, including		
understands safety, legal,	manipulating graphics,	editing sound		
cultural, and societal issues	morphing graphics, editing			
relating to the use of	graphics, and editing sound			
technology and information.				
The student is expected to				
(5) Digital citizenship. The	(E) discuss and evaluate the	(i) discuss the social issues		
student explores and	social issues surrounding	surrounding gaming		
understands safety, legal,	gaming			
cultural, and societal issues				
relating to the use of				
technology and information.				
The student is expected to				
(5) Digital citizenship. The	(E) discuss and evaluate the	(ii) evaluate the social issues		
student explores and	social issues surrounding	surrounding gaming		
understands safety, legal,	gaming			
cultural, and societal issues				
relating to the use of				
technology and information.				
The student is expected to				
(5) Digital citizenship. The	(F) evaluate the cultural	(i) evaluate the cultural		
student explores and	aspects of game design	aspects of game design		
understands safety, legal,	fundamentals, including	fundamentals, including		
cultural, and societal issues	rationale for games and types	rationale for games		
relating to the use of	of games			
technology and information.				
The student is expected to				

Subject	§126.Technology Applications			
Course Title	§126.38. Game Programming	Land Design (One-Half to One	Credit), Beginning with	School Year 2012-2013
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement
Skills)		(ii) engly chiest criented come		
(6) Technology operations and	(E) demonstrate an	(II) apply object-oriented game		
concepts: The student	understanding of and apply	programming		
understands technology	object-oriented game			
concepts, systems, and	programming			
operations as they apply to				
game programming. The				
student is expected to				
(6) Technology operations and	(F) demonstrate an	(i) demonstrate an		
concepts: The student	understanding of game	understanding of game		
understands technology	programming essentials,	programming essentials,		
concepts, systems, and	including event-driven	including event-driven		
operations as they apply to	programming, communicating	programming		
game programming. The	with messages, and device			
student is expected to	management			
(6) Technology operations and	(F) demonstrate an	(ii) demonstrate an		
concepts: The student	understanding of game	understanding of game		
understands technology	programming essentials,	programming essentials,		
concepts, systems, and	including event-driven	including communicating with		
operations as they apply to	programming, communicating	messages		
game programming. The	with messages, and device	C C		
student is expected to	management			
(6) Technology operations and	(F) demonstrate an	(iii) demonstrate an		
concepts: The student	understanding of game	understanding of game		
understands technology	programming essentials,	programming essentials,		
concepts, systems, and	including event-driven	including device management		
operations as they apply to	programming, communicating	5 5		
game programming. The	with messages, and device			
student is expected to	management			
(6) Technology operations and				
concepts: The student				
understands technology				
concepts systems and				
operations as they apply to				
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Subject	§126 Technology Applications				
Course Title	§126.38. Game Programming	and Design (One-Half to One	Credit), Beginning with S	School Year 2012-2013	
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement	
Skills)					
(6) Technology operations and	(G) demonstrate an	(ii) demonstrate an			
concepts: The student	understanding of the role of	understanding of the role of			
understands technology	game events, the animation	the animation loop			
concepts, systems, and	loop, and game timing				
operations as they apply to					
game programming. The					
student is expected to					
(6) Technology operations and	(G) demonstrate an	(iii) demonstrate an			
concepts: The student	understanding of the role of	understanding of the role of			
understands technology	game events, the animation	game timing			
concepts, systems, and	loop, and game timing				
operations as they apply to					
game programming. The					
student is expected to					
(6) Technology operations and	(H) demonstrate an				
concepts: The student	understanding of the role of				
understands technology	game engines				
concepts, systems, and					
operations as they apply to					
game programming. The					
student is expected to					
(6) Technology operations and	(I) demonstrate an	(i) demonstrate an			
concepts: The student	understanding of video display	understanding of video display			
understands technology	flicker and double buffering;	flicker			
concepts, systems, and					
operations as they apply to					
game programming. The					
student is expected to					
(6) Technology operations and	(I) demonstrate an	(ii) demonstrate an			
concepts: The student	understanding of video display	understanding of double			
understands technology	flicker and double buffering;	buffering			
concepts, systems, and					
operations as they apply to					
game programming. The					
student is expected to					

Subject	8126.Technology Applications				
Course Title	§126.38. Game Programming	and Design (One-Half to One	Credit). Beginning with S	School Year 2012-2013	
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement	
Skills)					
(6) Technology operations and	(J) apply basic game screen	(i) apply basic game screen			
concepts: The student	design and layout, including	design, including visual			
understands technology	visual controls, user interfaces,	controls			
concepts, systems, and	menus and options				
operations as they apply to					
game programming. The					
student is expected to					
(6) Technology operations and	(J) apply basic game screen	(ii) apply basic game screen			
concepts: The student	design and layout, including	design, including user			
understands technology	visual controls, user interfaces,	interfaces			
concepts, systems, and	menus and options				
operations as they apply to					
game programming. The					
student is expected to					
(6) Technology operations and	(J) apply basic game screen	(iii) apply basic game screen			
concepts: The student	design and layout, including	design, including menus			
understands technology	visual controls, user interfaces,				
concepts, systems, and	menus and options				
operations as they apply to					
game programming. The					
student is expected to					
(6) Technology operations and	(J) apply basic game screen	(iv) apply basic game screen			
concepts: The student	design and layout, including	design, including options			
understands technology	visual controls, user interfaces,				
concepts, systems, and	menus and options				
operations as they apply to					
game programming. The					
student is expected to					
(6) Technology operations and	(J) apply basic game screen	(v) apply basic game screen			
concepts: The student	design and layout, including	layout, including visual controls			
understands technology	visual controls, user interfaces,				
concepts, systems, and	menus and options				
operations as they apply to					
game programming. The					
student is expected to					

Subject	8126.Technology Applications				
Course Title	§126.38. Game Programming	and Design (One-Half to One	Credit), Beginning with S	School Year 2012-2013	
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement	
Skills)					
(6) Technology operations and	(J) apply basic game screen	(vi) apply basic game screen			
concepts: The student	design and layout, including	layout, including user			
understands technology	visual controls, user interfaces,	interfaces			
concepts, systems, and	menus and options				
operations as they apply to					
game programming. The					
student is expected to					
(6) Technology operations and	(J) apply basic game screen	(vii) apply basic game screen			
concepts: The student	design and layout, including	layout, including menus			
understands technology	visual controls, user interfaces,				
concepts, systems, and	menus and options				
operations as they apply to					
game programming. The					
student is expected to					
(6) Technology operations and	(J) apply basic game screen	(viii) apply basic game screen			
concepts: The student	design and layout, including	layout, including options			
understands technology	visual controls, user interfaces,				
concepts, systems, and	menus and options				
operations as they apply to					
game programming. The					
student is expected to					
(6) Technology operations and	(K) use game control design to	(i) use game control design to			
concepts: The student	understand, access, and	understand input devices,			
understands technology	control input devices, including	including keyboard			
concepts, systems, and	keyboard, mouse, and joystick				
operations as they apply to					
game programming. The					
student is expected to					
(6) Technology operations and	(K) use game control design to	(ii) use game control design to			
concepts: The student	understand, access, and	understand input devices,			
understands technology	control input devices, including	including mouse			
concepts, systems, and	keyboard, mouse, and joystick				
operations as they apply to					
game programming. The					
student is expected to					

Subject	8126.Technology Applications			
Course Title	§126.38. Game Programming	and Design (One-Half to One	Credit). Beginning with S	School Year 2012-2013
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement
Skills)				
(6) Technology operations and	(K) use game control design to	(iii) use game control design to		
concepts: The student	understand, access, and	understand input devices,		
understands technology	control input devices, including	including joystick		
concepts, systems, and	keyboard, mouse, and joystick			
operations as they apply to				
game programming. The				
student is expected to				
(6) Technology operations and	(K) use game control design to	(iv) use game control design to		
concepts: The student	understand, access, and	access input devices, including		
understands technology	control input devices, including	keyboard		
concepts, systems, and	keyboard, mouse, and joystick			
operations as they apply to				
game programming. The				
student is expected to				
(6) Technology operations and	(K) use game control design to	(v) use game control design to		
concepts: The student	understand, access, and	access input devices, including		
understands technology	control input devices, including	mouse		
concepts, systems, and	keyboard, mouse, and joystick			
operations as they apply to				
game programming. The				
student is expected to				
(6) Technology operations and	(K) use game control design to	(vi) use game control design to		
concepts: The student	understand, access, and	access input device, joystick		
understands technology	control input devices, including			
concepts, systems, and	keyboard, mouse, and joystick			
operations as they apply to				
game programming. The				
student is expected to				
(6) Technology operations and	(K) use game control design to	(vii) use game control design		
concepts: The student	understand, access, and	to control input devices,		
understands technology	control input devices, including	including keyboard		
concepts, systems, and	keyboard, mouse, and joystick			
operations as they apply to				
game programming. The				
student is expected to				

Subject	§126 Technology Applications					
Course Title						

Subject	§126 Technology Applications				
Course Title	§126.38. Game Programm	ing and Design (One-Ha	alf to One Credit). Beginning	with School Year 2012-2013	
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement	
Skills)					

Subject	\$126.Technology Applications				
Course Title	§126.38. Game Programming	and Design (One-Half to One	Credit), Beginning with	School Year 2012-2013	
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement	
Skills)					
(6) Technology operations and	(N) demonstrate an	(iii) demonstrate an			
concepts: The student	understanding of game events,	understanding of game events,			
understands technology	including listeners, triggers,	including timed events			
concepts, systems, and	and timed events				
operations as they apply to					
game programming. The					
student is expected to					
(6) Technology operations and	(O) demonstrate an	(i) demonstrate an			
concepts: The student	understanding of and	understanding of collision			
understands technology	implement collision detection,	detection, including bounding			
concepts, systems, and	including bounding boxes and	boxes			
operations as they apply to	sprite collisions				
game programming. The					
student is expected to					
(6) Technology operations and	(O) demonstrate an	(ii) demonstrate an			
concepts: The student	understanding of and	understanding of collision			
understands technology	implement collision detection,	detection, including sprite			
concepts, systems, and	including bounding boxes and	collisions			
operations as they apply to	sprite collisions				
game programming. The					
student is expected to					
(6) Technology operations and	(O) demonstrate an	(iii) implement collision			
concepts: The student	understanding of and	detection, including bounding			
understands technology	implement collision detection,	boxes			
concepts, systems, and	including bounding boxes and				
operations as they apply to	sprite collisions				
game programming. The					
student is expected to					
(6) Technology operations and	(O) demonstrate an	(iv) implement collision			
concepts: The student	understanding of and	detection, including sprite			
understands technology	implement collision detection,	collisions			
concepts, systems, and	including bounding boxes and				
operations as they apply to	sprite collisions				
game programming. The					
student is expected to					

Subject	§126 Technology Applications				
Course Title	§126.38. Game Programming	and Design (One-Half to One	Credit). Beginning with S	School Year 2012-2013	
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement	
Skills)					
(6) Technology operations and	(P) implement a tile-based	(i) implement a tile-based			
concepts: The student	game, including loading tile	game, including loading tile			
understands technology	maps, drawing tile maps,	maps			
concepts, systems, and	rendering a tile map, and				
operations as they apply to	layering sprites				
game programming. The					
student is expected to					
(6) Technology operations and	(P) implement a tile-based	(ii) implement a tile-based			
concepts: The student	game, including loading tile	game, including drawing tile			
understands technology	maps, drawing tile maps,	maps			
concepts, systems, and	rendering a tile map, and				
operations as they apply to	layering sprites				
game programming. The					
student is expected to					
(6) Technology operations and	(P) implement a tile-based	(iii) implement a tile-based			
concepts: The student	game, including loading tile	game, including rendering a			
understands technology	maps, drawing tile maps,	tile map			
concepts, systems, and	rendering a tile map, and				
operations as they apply to	layering sprites				
game programming. The					
student is expected to					
(6) Technology operations and	(P) implement a tile-based	(iv) implement a tile-based			
concepts: The student	game, including loading tile	game, including layering			
understands technology	maps, drawing tile maps,	sprites			
concepts, systems, and	rendering a tile map, and				
operations as they apply to	layering sprites				
game programming. The					
student is expected to					
(6) Technology operations and	(Q) demonstrate an	(i) demonstrate an			
concepts: The student	understanding of artificial	understanding of artificial			
understands technology	intelligence and develop and	intelligence			
concepts, systems, and	implement artificial intelligence				
operations as they apply to					
game programming. The					
student is expected to					

Subject	\$126.Technology Applications			
Course Title	§126.38. Game Programming	and Design (One-Half to One	Credit). Beginning with	School Year 2012-2013
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement
Skills)				
(6) Technology operations and	(Q) demonstrate an	(ii) develop artificial		
concepts: The student	understanding of artificial	intelligence		
understands technology	intelligence and develop and			
concepts, systems, and	implement artificial intelligence			
operations as they apply to				
game programming. The				
student is expected to				
(6) Technology operations and	(Q) demonstrate an	(iii) implement artificial		
concepts: The student	understanding of artificial	intelligence		
understands technology	intelligence and develop and			
concepts, systems, and	implement artificial intelligence			
operations as they apply to				
game programming. The				
student is expected to				
(6) Technology operations and	(R) demonstrate an	(i) demonstrate an		
concepts: The student	understanding of game	understanding of game		
understands technology	balance and tuning	balance		
concepts, systems, and				
operations as they apply to				
game programming. The				
student is expected to				
(6) Technology operations and	(R) demonstrate an	(ii) demonstrate an		
concepts: The student	understanding of game	understanding of game tuning		
understands technology	balance and tuning			
concepts, systems, and				
operations as they apply to				
game programming. The				
student is expected to				
(6) Technology operations and	(S) demonstrate an	(Q)delestraondstrogteef aphayer		
concepts: The student	understanding of player			
understands technology	student is expected to			
concepts, systems, and				
operations as they apply to				
game programming. The				
student is expected to				

Subject	\$126.Technology Applications				
Course Title	\$126.38. Game Programming and Design (One-Half to One Credit), Beginning with School Year 2012-2013				
TEKS (Knowledge and	Student Expectation	Breakout	Element	Subelement	
Skills)					
(6) Technology operations and	(S) demonstrate an	(ii) demonstrate an			
concepts: The student	understanding of player	understanding of player			
understands technology	progression, including leveling,	progression, including linear			
concepts, systems, and	linear progression, and	progression			
operations as they apply to	maintaining high score data				
game programming. The					
student is expected to					
(6) Technology operations and	(S) demonstrate an	(iii) understand player			
concepts: The student	understanding of player	progression, including			
understands technology	progression, including leveling,	maintaining high score data			
concepts, systems, and	linear progression, and				
operations as they apply to	maintaining high score data				
game programming. The					
student is expected to					