

Game Design Course Outline		Points Possible	Course Hours
<b>Course Orientation and Course Overview</b>			<b>7</b>
<b>Lab 1: Start the Course</b>			
	<i>Identify computer requirements.</i>		
	<i>Learn how to move through the course.</i>		
	<i>Switch between windows.</i>		
<b>Lab 2: Set Up Your Computer</b>			
	<i>Find files and folders on a computer.</i>		
	<i>Set up a computer to show the List folder view and file name extensions.</i>		
	<i>Make a course folder.</i>		
<b>Lab 3: Set Up a Browser and Install 7-Zip</b>			
	<i>Set up a Web browser.</i>		
	<i>Download and install a zip utility.</i>		
<b>Lab 4: Download Resources and Zip Assignments</b>			
	<i>Get the course resources.</i>		
	<i>Learn about finding, completing, and turning in assignments.</i>		
	<i>Zip and unzip files and folders.</i>		
<b>Project 1: Ping</b>			<b>13</b>
<b>Lab 1: Set Up the Background</b>			
	<i>Identify types of games.</i>		
	<i>Create an MMF2 application.</i>		
	<i>Set up the MMF2 workspace.</i>		
	<i>Rename a frame and an application.</i>		
	<i>Save a project.</i>		
<b>Lab 2: Make Game Objects</b>			
	<i>Identify the Frame Editor and the play area.</i>		
	<i>Change the background color.</i>		
	<i>Add Active objects to the frame.</i>		
	<i>Use the drawing tools in the Animation Editor to change an Active object.</i>		
<b>Lab 3: Add Paddles</b>			
	<i>Add an Active object and change its color and size.</i>		
	<i>Clone an object.</i>		
	<i>Rename and align objects.</i>		
<b>Lab 4: Bounce the Ball</b>			
	<i>Define static object and Bouncing Ball movement.</i>		
	<i>Add movement to the ball and set its initial direction.</i>		
	<i>Define event, condition, and action.</i>		
	<i>Make a collision event in the Event Editor.</i>		
<b>Lab 5: Move the Paddles</b>			
	<i>Add Eight Directions movement to an object.</i>		
	<i>Set objects to players.</i>		
	<i>Change keyboard controls.</i>		
<b>Lab 6: Test and Select Positions</b>			
	<i>Make test position events that contain and reset the ball.</i>		
	<i>Define X and Y coordinates.</i>		
<b>Lab 7: Keep Score</b>			
	<i>Define Score object.</i>		
	<i>Add Score objects and set them to players.</i>		
	<i>Format text.</i>		
	<i>Create events that track the score and end the game.</i>		
<b>Lab 8: Add Text and Sound</b>			
	<i>Define String object.</i>		
	<i>Add a String object with two paragraphs.</i>		
	<i>Create events that display text.</i>		
	<i>Define WAV and MP3.</i>		
	<i>Add sounds to a game.</i>		

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<b>Lab 9: Add a Title Screen</b>			
	<i>Define title screen, Storyboard Editor, and thumbnail image.</i>		
	<i>Add a Start frame.</i>		
	<i>Add text and a button.</i>		
	<i>Create an event that moves the game to another frame.</i>		
	<i>Build the game as an .exe file to share with others.</i>		
<b>Quiz Study Guide</b>			
	<i>Review the quiz study guide before taking the quiz.</i>		
<b>Quiz 1</b>			
	<i>Project 1 Quiz.</i>	25	
<b>Assignment 1</b>			
	<i>See assignment description document for detailed instructions.</i>	50	
<b>Project 2: Ice Breakers</b>			11
<b>Lab 1: Add a Library</b>			
	<i>Add frames to a new application.</i>		
	<i>Define library and identify the Library Toolbar.</i>		
	<i>Add a library folder.</i>		
<b>Lab 2: Add Backgrounds</b>			
	<i>Preview library objects.</i>		
	<i>Define Backdrop object.</i>		
	<i>Lock and unlock an object.</i>		
	<i>Add a start button.</i>		
<b>Lab 3: Add Snowboards and a Snowball</b>			
	<i>Add game objects.</i>		
	<i>Add Bouncing Ball movement to the ball.</i>		
	<i>Create events that bounce the ball.</i>		
<b>Lab 4: Add the Paddle</b>			
	<i>Define mouse controlled movement.</i>		
	<i>Add mouse controlled movement and set a movement zone.</i>		
	<i>Create a keyboard controlled event.</i>		
<b>Lab 5: Add Ice Cubes and Sound</b>			
	<i>Duplicate objects in rows and columns.</i>		
	<i>Create events that destroy objects.</i>		
	<i>Create events that play sounds.</i>		
<b>Lab 6: Add Lives</b>			
	<i>Define lives and Lives object.</i>		
	<i>Add a Lives object and create an event that subtracts lives.</i>		
	<i>Reset the ball.</i>		
	<i>End the game.</i>		
<b>Lab 7: Keep Score</b>			
	<i>Add a Score object.</i>		
	<i>Add a Hi-Score object.</i>		
	<i>Format text.</i>		
	<i>Build the game as an .exe file to share with others.</i>		
<b>Quiz Study Guide</b>			
	<i>Review the quiz study guide before taking the quiz.</i>		
<b>Quiz 2</b>			
	<i>Project 2 Quiz.</i>	25	
<b>Assignment 2</b>			
	<i>See assignment description document for detailed instructions.</i>	50	
<b>Project 3: Cat Burglar</b>			14
<b>Lab 1: Set Up the Game</b>			
	<i>Define maze game and plot.</i>		
	<i>Open a new application and rename frames.</i>		
	<i>Change the background color.</i>		
	<i>Add a library folder and preview its objects.</i>		

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<b>Lab 2: Add the Cat and Maze</b>			
	<i>Add game objects.</i>		
	<i>Create a collision event with a stop action to contain the cat in the maze.</i>		
<b>Lab 3: Add Keys and Treasure</b>			
	<i>Define collection items.</i>		
	<i>Add and destroy objects.</i>		
	<i>Create a pick or count condition.</i>		
<b>Lab 4: Add Blades</b>			
	<i>Add and position obstacles to create challenge.</i>		
	<i>Add a Lives object and create an event that subtracts lives.</i>		
<b>Lab 5: Move the Blades</b>			
	<i>Bounce and contain the blades in the maze.</i>		
	<i>Change the bounce properties of an object.</i>		
<b>Lab 6: Spin the Blades</b>			
	<i>Define animation, frame, animated object, and looping animation.</i>		
	<i>Move an object's hot spot.</i>		
	<i>Rotate an object.</i>		
<b>Lab 7: Change the Cat</b>			
	<i>Create a new animation inside an object.</i>		
	<i>Create an animation sequence action to play an animation.</i>		
<b>Lab 8: Make Start, Win, and Lose Screens</b>			
	<i>Add, name, and move frames.</i>		
	<i>Change background colors.</i>		
	<i>Add text.</i>		
<b>Lab 9: Connect the Frames</b>			
	<i>Add a start button.</i>		
	<i>Add events that connect the frames.</i>		
	<i>Build the game as an .exe file to share with others.</i>		
<b>Quiz Study Guide</b>			
	<i>Review the quiz study guide before taking the quiz.</i>		
<b>Quiz 3</b>			
	<i>Project 3 Quiz.</i>	25	
<b>Assignment 3</b>			
	<i>See assignment description document for detailed instructions.</i>	50	
<b>Project 4: Alien Attack</b>			14
<b>Lab 1: Set Up the Game</b>			
	<i>Define shooter game.</i>		
	<i>Open a new application and rename frames.</i>		
	<i>Add a library folder and preview its objects.</i>		
	<i>Change the background color and add an object.</i>		
<b>Lab 2: Add Spaceships</b>			
	<i>Add spaceships and give them Path movement.</i>		
	<i>Draw a path for the spaceships.</i>		
	<i>Reverse and loop movement.</i>		
<b>Lab 3: Add Aliens</b>			
	<i>Add aliens.</i>		
	<i>Combine a timer condition and pick or count condition to make aliens appear.</i>		
<b>Lab 4: Create the Shield</b>			
	<i>Add Bouncing Ball movement to the aliens and set their direction and speed.</i>		
	<i>Add the shield and destroy aliens when they hit the shield.</i>		
	<i>View the Appearing and Disappearing animations for the alien.</i>		
<b>Lab 5: Shoot the Aliens</b>			
	<i>Define cursor and crosshair.</i>		
	<i>Create a start of frame condition and a set cursor shape action.</i>		
	<i>Add and format a Score object.</i>		
<b>Lab 6: Add a Particle System</b>			

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	<i>Define particle and particle system.</i>		
	<i>Create an on loop condition with a shoot an object action.</i>		
	<i>Create a start loop action.</i>		
	<i>Reorder actions in the Event List Editor.</i>		
<b>Lab 7: Add a Health Meter</b>			
	<i>Add a Counter object and make it look like a horizontal bar.</i>		
	<i>Add a gradient to the Counter object.</i>		
	<i>Define initial value, minimum value, and maximum value for a Counter object.</i>		
	<i>Subtract from the Counter object.</i>		
<b>Lab 8: Add Challenge</b>			
	<i>Define calculation and math symbols in MMF2.</i>		
	<i>Create an event that increases the speed of the aliens every 10 points.</i>		
	<i>Destroy the shield when the health runs out.</i>		
	<i>End the game.</i>		
<b>Lab 9: Make Start and End Frames</b>			
	<i>Add, name, and move frames.</i>		
	<i>Add backgrounds and text.</i>		
	<i>Connect the frames.</i>		
	<i>Add a Hi-Score object.</i>		
	<i>Build the game as an .exe file to share with others.</i>		
<b>Quiz Study Guide</b>			
	<i>Review the quiz study guide before taking the quiz.</i>		
<b>Quiz 4</b>			
	<i>Project 4 Quiz.</i>	25	
<b>Assignment 4</b>			
	<i>See assignment description document for detailed instructions.</i>	60	
<b>Project 5: Pest Busters</b>			13
<b>Lab 1: Set Up the Game</b>			
	<i>Define horizontal and vertical scrolling.</i>		
	<i>Define side-scrolling game.</i>		
	<i>Open a new application and rename frames.</i>		
	<i>Add a library folder and preview its objects.</i>		
<b>Lab 2: Add Objects on Layers</b>			
	<i>Define parallax perspective, layers, and Layers Toolbar.</i>		
	<i>Add and arrange layers.</i>		
	<i>Put objects on layers.</i>		
	<i>Hide and lock layers.</i>		
<b>Lab 3: Scroll the Layers</b>			
	<i>Define pixel, coordinate, visible play area, and virtual width.</i>		
	<i>Change the virtual width.</i>		
	<i>Create a scrolling event.</i>		
	<i>Wrap layers.</i>		
	<i>Use layer coefficients to change scrolling speed.</i>		
<b>Lab 4: Control the Ships</b>			
	<i>Add Eight Directions movement to an object.</i>		
	<i>Contain objects in the visible play area.</i>		
	<i>Change player controls.</i>		
	<i>Add bullets and a shoot an object action.</i>		
<b>Lab 5: Add Pest Enemies</b>			
	<i>Add pests, poison, and pest bases.</i>		
	<i>Make the bases invisible.</i>		
	<i>Shoot pests from the bases toward the players.</i>		
	<i>Shoot poison from the pests.</i>		
<b>Lab 6: Track Points and Lives</b>			
	<i>Add collision events that destroy objects.</i>		
	<i>Add and format a shared Score object.</i>		

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	Add two separate Lives objects.		
	Subtract lives and destroy players.		
<b>Lab 7: Add Bonuses</b>			
	Define bonus.		
	Add a bonus object and shoot it from the bases toward the player.		
	Create an event that restores lives.		
	Create an End frame with a Hi-Score object.		
<b>Lab 8: Create a One-Player Version</b>			
	Clone a frame.		
	Remove objects and events from a frame.		
	Create the Start frame.		
	Set up separate start buttons.		
	Use the Picture Editor to change objects.		
	Build the game as an .exe file to share with others.		
<b>Quiz Study Guide</b>			
	Review the quiz study guide before taking the quiz.		
<b>Quiz 5</b>			
	Project 5 Quiz.	25	
<b>Assignment 5</b>			
	See assignment description document for detailed instructions.	65	
<b>Project 6: Amazon Adventure</b>			18
<b>Lab 1: Set Up the Game</b>			
	Define platform and platform game.		
	Open a new application and rename frames.		
	Add a library folder and preview its objects.		
<b>Lab 2: Add the Backdrop and Scientist</b>			
	Define virtual size and change the virtual size of a frame.		
	Zoom out.		
	Identify the Local Library and add an object from it.		
<b>Lab 3: Move the Scientist</b>			
	View the object's animations.		
	Define Platform movement and add it to an object.		
	Scroll layers relative to an object.		
	Change scrolling speed.		
<b>Lab 4: Add Ladders and Platforms</b>			
	Add a ladder and platform.		
	Change the gravity and strength jump settings of an object.		
	Change Backdrop object settings.		
	Create a collision event with Backdrop objects.		
	Clone the ladder and platform and arrange them.		
<b>Lab 5: Add Collection Objects</b>			
	Add objects to platforms.		
	Add a non-scrolling layer.		
	Define collection area and add collection area objects.		
	Make objects invisible at start and set them to appear later.		
	Create visibility conditions that let the player move to the next level.		
<b>Lab 6: Add Obstacles</b>			
	Add a warp object, an alligator, and a bird.		
	Set the warp to move the player back to the starting position.		
	Draw a motion path for the bird.		
<b>Lab 7: Drop Pineapples</b>			
	Create a timer condition that makes pineapples appear near the bird.		
	Add Pinball movement to the pineapples.		
	Destroy pineapples when they hit objects or the ground.		
<b>Lab 8: Start and End the Game</b>			
	Add a Lives object and create events that subtract lives.		
	Restart the game.		
	Add a Start frame.		

Game Design - Course Outline

<b>Game Design Course Outline</b>		<b>Points Possible</b>	<b>Course Hours</b>
	<i>Add a transition.</i>		
	<i>Create a Level 2 frame.</i>		
	<i>Build the game as an .exe file to share with others.</i>		
<b>Quiz Study Guide</b>			
	<i>Review the quiz study guide before taking the quiz.</i>		
<b>Quiz 6</b>			
	<i>Project 6 Quiz.</i>	<b>25</b>	
<b>Assignment 6</b>			
	<i>See assignment description document for detailed instructions.</i>	<b>75</b>	
	<b>Total</b>	<b>500</b>	<b>90</b>