Game Design – HS/One Part

COURSE DESCRIPTION: This course is for anyone who loves gaming and wants to design and build original games from scratch. Students learn how to use popular game-development software to create engaging, interactive games in a variety of styles. After learning about game genres, students learn about all aspects of the game-design process. From there, it's on to a series of increasingly challenging hands-on projects that teach all the elements of successful game development.

PREREQUISITES: None

COURSE LENGTH: One Semester

REQUIRED TEXT: None

MATERIALS LIST: Software: Multimedia Fusion 2.5 (Standard). System Requirements: Microsoft Windows XP or Windows Vista operating system; 1 GHz or faster processor; 256 MB of memory (RAM); at least 2 GB of available hard drive space.

COURSE OUTLINE:

Unit 1: Course Overview
- Start the Course
- Set Up Your Computer
- Set Up a Browser
- Download Resources and Zip Assignments

Unit 2: Project 1: Ping
- Set Up the Background
- Make Game Objects
- Add Paddles
- Bounce the Ball
- Move the Paddles
- Test and Select Positions

- Keep Score
- Add Text and Sound
- Add a Title Screen

Unit 3: Project 2: Ice Breakers
- Add a Library
- Add Backgrounds
- Add Snowboards and a Snowball
- Add the Paddle
- Add Ice Cubes and Sound
- Add Lives
- Keep Score

Unit 4: Project 3: Cat Burglar
- Set Up the Game
- Add the Cat and Maze
- Add Keys and Treasure
- Add Blades
- Move the Blades
- Spin the Blades
- Change the Cat
- Make Start, Win, and Lose Screens
- Connect the Frames

Unit 5: Project 4: Alien Attack
- Set Up the Game
- Add Spaceships
- Add Aliens
- Create the Shield
- Shoot the Aliens
- Add a Particle System
- Add a Health Meter
- Add Challenge

- Make Start and End Frames

Unit 6: Project 5: Pest Busters

- Set Up the Game
- Add Objects on Layers
- Scroll the Layers
- Control the Ships
- Add Pest Enemies
- Track Points and Lives
- Add Bonuses
- Create a One-Player Version

Unit 7: Project 6 – Amazon Adventure

- Set Up the Game
- Add the Backdrop and Scientist
- Move the Scientist
- Add ladders and Platforms
- Add Collection Objects
- Add Obstacles
- Drop Pineapples