Anoka-Hennepin Secondary Curriculum Unit Plan

Department:	BME	Course:	Video Game Design and Marketing	Unit 5 Title:	Game Worlds, Objects, Cameras	Grade Level(s):	9-12
Assessed Trimester:	A	Pacing:	8-10 Days	Date Created:	4/23/2014	Last Revision Date:	

Course Understandings: *Students will understand that:*
- Writing programing code is essential in designing effective 3D programs.
- The organization of basic elements is important in creating a well-designed program.

DESIRED RESULTS (Stage 1) - WHAT WE WANT STUDENT TO KNOW AND BE ABLE TO DO?

Established Goals

- **Computation I. Mathematical Foundations:** Apply basic mathematical operations to solve problems.
- **Computation II. Number Relationships and Operations:** Solve problems involving whole numbers, decimals, fractions, percents, ratios, averages, and proportions.
- **Computation III. Patterns, Functions, and Algebra:** Use algebraic operation to solve problems.
- **Computation VI. Problem Solving Applications:** Use mathematical procedures to analyze and solve basic business problems.
- **Information Technology IV. Input Technologies:** Use various input technologies to enter and manipulate information appropriately.

Transfer

Students will be able to independently use their learning to: (product, high order reasoning)
- Apply computational skills and advanced programing commands to produce an introductory 3D game

Meaning

Unit Understanding(s):	Essential Question(s):
Students will understand that: ● Video game developers use 2D and 3D ways when creating video games ● Different objects may be created and colored ● Placing objects on the different axes (x, y, z) will define their 3D world ● Camera placement is essential ● Animated objects will make their game more interesting	**Students will keep considering:** ● What is the difference between 2D and 3D? ● What objects can I make? ● How do I color an object? ● How do I get my camera to follow my player? ● How can I put a model into my game?

Acquisition

Knowledge - Students will:	Skills - Students will:
● Know and understand the X, Y, Z axes ● Recognize and understand the code to load and color objects ● Understand how to position a camera **Reasoning - Students will:** ● Analyze code to determine outcomes	● Create a 3D game world ● Generate or create objects within the world ● Use code to properly position the camera in world

Common Misunderstandings	**Essential new vocabulary**
● Which axis should be used when positioning objects in my world ● Objects must have a unique ID number ● Color codes must follow RGB format	● RGB - Red, Green, Blue ● CLS - Clear Screen ● ID Number ● X, Y, Z Axes ● Animated Objects ● Command ● Camera