Anoka-Hennepin Secondary Curriculum Unit Plan

Department:	BME	Course:	Video Game Design and Marketing	Unit 2 Title:	Game Engines, Programs, Basic Commands	Grade Level(s):	9-12
Assessed Trimester:	A	Pacing:	4-6 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

- **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)
- Use basic programming techniques and commands to create a simple two dimensional program as a precursor to creating a video game

Meaning

Unit Understanding(s):	Essential Question(s):
Students will understand that:	Students will keep considering:
- Game engines are made up of different components that make the development of a video game easier - Dark Basic Pro has basic functions and commands - Program structure is essential to the design of a good program - Do Loops are an important part of programming and allow the program to do many different things - Debugging or eliminating errors is an important step in designing an effective program	- How do I create a program? - What commands should I use?

Acquisition

Knowledge - Students will:	Skills - Students will:
- Describe or define the purpose of the intended command (i.e. TEXT,etc...) - Understand proper syntax for the programming language being used **Reasoning - Students will:** - Organize code based on proper program structure - Analyze code to determine outcomes	- Create a program to produce the desired output.

Common Misunderstandings	Essential new vocabulary

- It is not important where I put commands in a computer program
- Grammar or Syntax is not important when writing computer programs
	- Syntax
	- Game Engines
	   ○ Renderer
	   ○ Culler
	   ○ 3D World Generator

	- Programming Commands
	    ○ Remark
	    ○ Print
	    ○ Text
	    ○ Center Text
	    ○ Set Text
	        ■ Font
	        ■ Size
	        ■ Bold/Italic/BoldItalic
	        ■ Opaque
	        ■ Transparent
	        ■ Normal
	    ○ CLS RGB
	    ○ Ink RGB
	    ○ Wait Key
	    ○ Do/Loop