Animation 12

District Name: Mission
District Number: 75

Developed by: Shelly Bryant
Nov. 22, 2004
School Name: Heritage Park Secondary School
Principal's Name: Kevin Kaardal

Board/Authority Approval Date: December 14, 2004

Board/Authority Signature: _____

Course Name: Animation 12
Grade Level of Course: 12
Number of Course Credits: 4 Credits
Number of Hours of Instruction: 120 hours

Prerequisite: None; suggested Animation 11 or successful completion of Art 11, Drafting 11 or Animation 10

Equipment required:

Computers (500 MHZ or higher), video cameras with picture capabilities or digital cameras, video tapes, T.V. monitors, editing software, animation software, linear editing equipment, digital editing program. Teacher or recourse person will need experience with video camera, digital photography, editing software, linear editing equipment.

Course Synopsis:

This course has been developed to allow students to continue to explore both computer animation and classical animation. Students will continue to explore various methods of animation including cell animation, stop motion animation and computer animation at an advanced level. Students will be expected to think creatively, designing his or her own characters, stories and animations. They will also be expected to create an advanced level animation.

Rationale:

This course has been developed as a continuation of Animation 11. These students will continue to explore the various techniques used in the industry. Drawing skills will be stressed as well as student creativity. Students will be encouraged to explore all the different types of animation during the course of the year. They will be expected to create storyboards, characters both in 2 D and in 3D, film or shoot pictures of animations (stop-motion-claymation) and create a 5-10 min. animation.

Organizational Structure:

Unit	Detail	Hours
Unit 1	Introduction to advanced Softimage (computer animation software)	20 hours
Unit 2	Advanced Character design	10 hours
Unit 3	Advanced 3D character modeling	20 hours
Unit 4	Introduction to advanced computer editing program (Adobe Premiere)	10 hours
Unit 5	Creation of a 5-10 min. animation	60 hour
	Total	120 hours

Unit description:

Unit One: Introduction to Softimage

The students will be introduced to some of the advanced areas of softimage animation software. They will be instructed in the basics of advanced modeling, advanced colour/ material mapping, advanced lighting and advanced animation. The students will create a variety of projects that show their understanding of the higher-level areas of the program. Modeling: Creation of models from actual photos and creation of their own complex models, and Colour/material mapping: advanced colour mapping of their models to include scanned textures and advanced colour techniques. Lighting: Advanced scene lighting verse individual object lighting will be developed. Animation: Advanced animations will be studied: Cycling, weighting and lip-syncing.

a) Students will create a variety of advanced 3D models within the computer animation program
b) Students will be able to place advanced colours and materials on a variety of computer generated models
c) Students will be able to place lighting within complex scenes
d) Students will animate a variety of complex models using cycling, parent/child relationships, bones, lip syncing in a computer animation program

Unit Two: Character Design

The students will begin to develop their own characters in 2D. The students will study a variety of different animated characters. The students will take advance characteristics and apply them to their own work. Students will draw their characters from six different views in complete detail and draw their characters in complex action poses. They will also create props that are part of the character including clothing, accessories, tools and other such objects.

a) Students will create a complex animated character – complex characters involve multiple moving parts working in unison
b) Students will be able to draw the characters in various poses and in various complex actions
c) Students will understand the principles that are required for creating animated figures

Unit Three: 3D Character Modeling

The students will create their characters in plasticine. Students will start by creating an armature for their character. They will then create the basic shape of the body. Clothing or skin will be added to the outer layers to show the colours or details of the character. These models will then be used to create an advanced stop-motion animation. At this point storyboards will be introduced. In a group students must create a story for their models that interrogates both characters in an interesting format. The students will then film their animations.

a) Students will use their drawing to create a complex 3 D model of their work involving 2 or more 3D objects with light and shadows represented from various sources
b) Students will create an underlying structure to assist in the movement of the character
c) Students will create a story that centers on their characters and that of their partners
d) Students will take photos or video of the actions of their characters to create an animation with complex actions

Unit Four: Intro to Computer Editing

The students will learn how to compile their animation sequences on the computer using a video editing program. Students will take their video taped animations and place them onto the computer. Then, using Adobe Premiere, edit the various scenes. They will learn how to fade in, fade out, and add some special effects and how to sequence their individual frames. Sound will be added to enhance the animation.

a) Students will transfer their video/photos to the computer
b) Students will compile their various frames in a video-editing program
c) Students will add advanced special effects to the animation
d) Students will add sound and talking to their animation project

Unit Five: Creation of Short animation

Students in this unit will have time to work either on the computer or with plasticine to create their own 5-10 min. animation. This will include characters developed by the students, drawings of their characters, storyboards for their animations and editing of the animations.

a) Students will be responsible for creating a 5-10 minute animation
b) Students will draw a variety of advanced characters for their animation
c) Students will create an advanced storyboard that outlines their animations
d) Students will model either on computer or with plasticine a collection of complex characters for their animation
e) Students will animate their characters
f) Students will edit their animations to create a complex finished product involving 3 or more chracters, 2 or more backgrounds matching the rising action of the story board.

Instructional Components:

Directed Instruction
Indirect Instruction
Interactive instruction
Independent Instruction
Modeling Tutorials
Analysis of commercial films and video (animation and special effects)
Analysis of commercial computer games

Assessment Components

Due to the nature of this course, evaluation is on going. Each unit builds on principles studied before. Successful completion of each of the units is necessary for success in the course. The process used to get to the final product is as important as the final product; therefore, all assignments will be graded equally. 20%/unit with the final unit being an indicator of understanding of the course throughout the year.

Product Evaluation: The following will be given a mark on a scale of 1-5

Storyboards
Character development
Backgrounds
Characters
Filming Techniques/editing
Finished product

Evaluation: Storyboards:

a) Have a complex background, mid ground and foreground
b) Should contain the key frames needed in the animation
c) Contain a variety of views (zooming in and out)
d) Show the complex character in a variety of complex poses
e) Have advanced shading or colouring
f) Neatly drawn
g) Have a beginning, middle and end to the story
h) Have a complex and interesting story outline

Character Development:

a) Show the evolution of a character from basic idea (quick sketch) to finished drawing
b) Show an understanding of advanced character design
c) Show an understanding of the character and its interaction within the story

Backgrounds:

a) Be made of the same material as the character (plasticine for claymation)
b) Be complete in detail
c) Contain complex colours and textures
d) Fit with the story
e) Include props and other 3D elements

Characters:

a) Complete drawings using provided character sheets
b) Have an advanced level of detail
c) Be coloured or shaded well
d) Show 6 different views
e) Show a variety of complex action poses

Filming techniques:

a) Have a smooth transition from one frame to another
b) Have only the characters and the background (no hands or fingers)
c) Have no jumps in the filming

Finished Product:

a) Show an understanding of the advanced principles of animation
b) Include lip-syncing and sound
c) Show an advanced understanding of video editing
d) Follow the storyboard completely
e) Have a complex and interesting theme

Learning Resources: On-line tutorials for various animation software
Video and editing equipment manuals
Books:

Additional Course Information:

This is an advanced course in animation. Students need to be aware of the higher expectations that a senior course requires. It is a must to have an adequate number of computers available for the students to do their work on. Computer editing programs make stop motion animation smoother but it can be created with linear equipment as well. The end product can be used in a portfolio for future studies.