Glendale Unified School District

Senior High School

May 21, 2002

Department: Visual and Performing Arts

Course Title: Computer Animation 1-2 (formerly Animation 1-2)

Course Number:

Grade Level: 9, 10, 11, and 12

Semester Hours: 10

Prerequisite: Art 1-2

Recommended: Computer Graphics

Course Description: This course introduces students to the fundamentals of animation and to 2-D and 3-D modeling on any computer platform, using a variety of traditional and technological strategies. Topics include (but are not limited to) history of the industry, basic terminology, traditional and contemporary techniques, introduction to kinematics, storyboarding, character construction, building a scene/background, hardware basics and limitations, painting, animation and CAD software strengths and weaknesses, lighting, scanning, compression techniques and future career opportunities. Additional topics may include ray trace rendering, tweening, morphing, printing to video, musical score arrangement, and digital special effects.

I. Standards

A. Standard 1-Artistic Perception: Perceive the world in artistic ways by refining their sensory perceptions of works of art, events, objects in nature and the environment. They utilize the vocabulary of the visual arts to express their observations.

The students will:

1. Analyze the environment and be able to interpret and explain their ideas and the ideas of others.

2. Use the Art Elements and Principles of Design to solve animated and environmental problems in inventive ways.

3. Incorporate the principles of design concepts by manipulating line, mass, volume, space, rhythm, texture, and pattern in their artwork.

4. Recognize and build upon prior knowledge of color theory, illustration, perspective, lettering, and technological processes.

B. Standard 2-Creative Expression: Students apply artistic knowledge and skills in a variety of visual arts media and technical processes to communicate meaning and intent through the creation of original artworks.

The students will:

1. Develop and use imagery to express personal beliefs, interests and perception of the visual world.

2. Develop reading comprehension by using instructional material to follow computer applications.

3. Demonstrate a continuity of thought from preplanning to the completed artwork.

4. Develop an in-depth knowledge of the interplay of light, color, sound, movement and composition. Participants will create numerous portfolio pieces using these projects that can be saved and later presented to colleges and potential employers.

5. Develop, through hands-on experience, the ability to use a variety of hardware and software on multiple platforms making simple paintings, logos, back- grounds, characters, and ultimately short animated sequences. Participants will be encouraged to explore the interrelationships between the many artistic disciplines that contribute to animation (drawing, painting, 3-D modeling, etc.).

C. Standard 3-Historical and Cultural Context: Students describe and analyze the role and development of visual arts in past and present cultures throughout the world noting human diversity as it relates to visual art and artists.

The students will:

1. Explore and relate the role of animation in culture.

2. Recognize a variety of cultures and the influence they have on animated art.

3. Relate cultural styles and techniques as they apply to specific animated assignments.

4. Develop an awareness of the role of animation themes in historical and contemporary world periods.

5. View, discuss, analyze and write about animation as a unique form of expression.

6. Connect their assignments with various historical periods.

D. Standard 4-Aesthetic Valuing: Students consider why people make art. They analyze and interpret art in order to derive meaning. They develop criteria to make informed judgments about the quality of their work and the work of others.

The students will:

1. Demonstrate the importance of ongoing evaluation from preliminary sketch through presentation.

2. Demonstrate the steps of art criticism through oral and written reports.

E. Standard 5-Connections, Relations and Application: Students apply what is learned in visual arts across subject areas and beyond the classroom. They develop visual literacy, competencies in problem solving, communication and management of time and resources. They learn about careers in and related to the visual arts.

The students will:

1. Make the connection between animation and their other classes by incorporating writing, history, math, etc. into their assignments.

2. Relate visual language to literary devices such as figurative language, allegory and symbolism.

3. Use math and geometry to create layouts and finished products.

4. Research and express literature and history as themes for animation.

5. Become familiar with the nature of animation and technology and relate that knowledge to career possibilities and the needed skills and/or further education.

II. Sample Assessments

A. Projects

B. Sketch books and note-taking

C. Tests

D. Portfolio

E. Classroom participation during discussions, demonstrations and class work

F. Written and oral self-evaluations and critiques of other's work

G. Research and written reports on animated works

H. Research and written reports on career and educational opportunities

III. Topics of Study/Suggested Time Distribution

A. Artistic Perception 15%

1. Identification and use of the principles of design in visual compositions

2. Comparisons and contrasts of similar styles of artwork done in electronic media with those done in traditional visual arts materials

3. Analyze and describe how the composition and use of materials contribute to the meaning of an artwork

B. Creative Expression/Evaluation 30%

1. Animation basics, including use a variety of hardware and software on multiple platforms making simple paintings, logos, backgrounds, characters, and ultimately short animated sequences

2. Creation of animated artworks that address social issues and needs

3. Portfolio development that reflects craftsmanship, technical skills and creativity

C. Historical and Cultural Context 15%

1. Similarities and differences and the purposes of art created in selected cultures

2. The role and influence of new technologies on contemporary artwork

3. Identifying, describing and discussing the trends in the visual arts and how the diverse issues of time, place and cultural influence are reflected

D. Aesthetic Valuing 15%

1. Analyze, assess and derive meaning from works of art, including student's own, according to the elements of art, principles of design and aesthetic qualities

2. Employ the conventions of art criticism in writing and speaking about artwork

3. Formulate and support a position regarding the aesthetic value of a specific work of art and change or defend that position after weighting the views of others

E. Connections: Relations & Applications 25%

1. Various careers available to Animation Artists and the skills needed for those professions

2. Relate arts to environment and other subjects

3. Development of competencies and creative skills in problem solving, communication and management of time and resources

IV. Instructional Strategies or Methods

A. Direct instruction with students drawing along with the teacher

B. Lecture with students taking notes

C. Teamwork in creating products

D. Creation of finished products incorporating learned material

E. Portfolio development

F. Readings

G. Library/internet research

H. Videos, audiotapes, CD ROM

V. Recommended Materials

A. Textbooks on the Animation and its role in history and culture

B. Library with resources on college and career opportunities

C. Lunchbox

D. Computers with high graphic capabilities and memory

E. Software with 2-D and 3-D rendering such as:

1. Photoshop
2. Premiere
3. Flash
4. Bryce
5. Maya

6. Lightwave
7. 3Ds
8. Max

F. Scanner

G. Digital Camera

H. Color Printer