CHINO VALLEY UNIFIED SCHOOL DISTRICT
INSTRUCTIONAL GUIDELINE
3D ANIMATION

Course Number   5755
Department   Technology
Prerequisite   Art Fundamentals or Advanced Computer
                                 Applications, and/or teacher approval
Length of Course   One (1) year/Two (2) semesters
Grade Level   11-12
Credit   5 units per semester/10 total credits – elective
Repeatable   Not repeatable for credit
UC/CSU   Does not meet the a-g requirements
Board Approval   June 2, 2005 / November 1, 2012

Description of Course – This course helps students develop the skills, necessary for working with three-dimensional animation. Emphasis is placed on developing the students' observation skills to enhance their creative abilities. The design elements of line, space, shape, form, texture, value, and color are used in combination with the computer, design and animation software, and digital draw tablets. Composition principles utilized in the course are: still life, figure, movement, and landscape design. This course is aligned with the California Content Standards for Visual and Performing Arts and the California Career Technical Education Standards.

Rationale for Course – The fields of movie making, marketing, architecture, and design have changed immensely with the emergence of digital design software and its ability to create images. Digital imagery and design professionals are in high demand. The course will emphasize the aspects of designing an idea, animating it, and marketing the idea to the proper medium.

Standard 1 – Students learn how to perceive the world in an artistic way by refining their sensory perceptions of works of art, objects in nature, events, and the environment. They will identify visual elements and principles of design using the language of the visual arts.

1.1   Objective: Artistic perception: Processing, analyzing, and responding to sensory information through the language and skills unique to arts.

       1.1.1 Performance Indicator: Students will identify, record, and use art elements as he/she explores, analyze, and talks about what he/she sees in the physical world and in what he/she creates (line, color, shape/form, texture, space).

1.1.2 Performance Indicator: Students will identify, record, and use design principles in exploring, analyzing, and talking about what they see in the physical world and in what they create (balance, contrast, emphasis, moment, rhythm, unity).

Standard 2 – Students develop knowledge of artistic skills in a variety of visual arts media and technical processes. They will apply this knowledge and skill in creating original artworks based on personal experiences and by demonstrating the process.

2.1 Objective: Creative expression: Creating, performing, and participating in the arts.

2.1.1 Performance Indicator: Students will create original works with 3D animation of increasing complexity and skill.

2.1.2 Performance Indicator: Students will explore a variety of visual art media, techniques, and processes, making choices as to what to apply in their work.

2.1.3 Performance Indicator: Students will engage in expressive 3D animation experiences, gaining personal insight and appreciation of their own accomplishments and the accomplishments of others.

2.1.4 Performance Indicator: Students will demonstrate an understanding of how to effectively solve artistic problems in unique and expressive ways.

Standard 3 – Students apply what is learned in visual arts to learning across disciplines. They will develop competencies in problem solving, communication skills, and management of the time and resources, in which will contribute to lifelong learning and career skills.

3.1 Objective: Connections, relations, applications: Connecting and applying what is learned in each art form to learning in other art forms, subject areas, and careers.

3.1.1 Performance Indicator: Students will integrate what they learn in 3D animation to learning in other subject areas.

3.1.2 Performance Indicator: Students will learn skills in 3D animation that translate to careers.

3.1.3 Performance Indicator: Students will explore careers in the visual arts.

3.1.4 Performance Indicator: Students will learn diverse ways in which visual arts can communicate the same idea.

Standard 4 – Students understand the effective use of tools for media production, development, and project management.

4.1 Objective: Introduce and/or apply the mechanics of animation.

4.1.1 Performance Indicator: Students will know the basic functions of media design software, such as two-dimensional design and three-dimensional design.

4.1.2 Performance Indicator: Students will use appropriate software to design and produce professional-quality images, documents, and presentations.

4.1.3 Performance Indicator: Students will analyze the purpose of the media to determine the appropriate file format and level of compression.

4.1.4 Performance Indicator: Students will analyze media and develop strategies that target the specific needs and desires of the audience.

4.1.5 Performance Indicator: Students will know the basic design elements necessary to produce effective print and web-based media.

4.1.6 Performance Indicator: Students will use technical skills (e.g., pagination, printing, folding, cutting, binding) to produce publishable materials.

Standard 5 – Students will understand the effective use of communication software to access and transmit information.

5.1 Objective: Introduce various animation effects.

5.1.1 Performance Indicator: Students will know multiple ways in which to transfer information and resources (e.g., text, data, sound, video, still images) between software programs and systems.

5.1.2 Performance Indicator: Students will understand the differences between various Internet protocols (e.g., http, ftp).

5.1.3 Performance Indicator: Students will use multiple online search techniques and resources to acquire information.

Standard 6 – Students understand the use of different types of peripherals and hardware appropriate to media and technology.

6.1   Objective: Introduce and apply the principles of animation.

      6.1.1   Performance Indicator: Students will understand the appropriate peripherals and hardware needed to achieve maximum productivity for various projects.

      6.1.2   Performance Indicator: Students will know how to identify and integrate various types of peripherals and hardware to meet project requirements.

      6.1.3   Performance Indicator: Students will use various types of audio and video equipment (e.g., digital cameras, recorders, scanners, web cams, CD and DVD recorders), as appropriate, for different projects.

      6.1.4   Performance Indicator: Students will understand the types of media storage and the use of appropriate file formats and know how to convert data between media and file formats.

Standard 7 – Students apply technical and interpersonal skills and knowledge to support the user.

7.1   Objective: Apply technical and interpersonal skills and knowledge.

      7.1.1   Performance Indicator: Students will use a logical and structured approach to isolate and identify the source of problems and to resolve problems.

      7.1.2   Performance Indicator: Students will know the available resources for identifying and resolving problems.

      7.1.3   Performance Indicator: Students will use technical writing and communication skills to work effectively with diverse groups of people.

      7.1.4   Performance Indicator: Students will understand the principles of a customer-oriented service approach to users.