DMAD A280: 2D ANIMATION

Item	Value
Curriculum Committee Approval Date	09/23/2020
Top Code	061440 - Animation
Units	3 Total Units
Hours	90 Total Hours (Lecture Hours 36; Lab Hours 54)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	Yes
Basic Skills	Not Basic Skills (N)
Repeatable	No
Grading Policy	Standard Letter (S)

Course Description

An investigation into the theory and practice of computer generated 2-D animation. Lectures, demonstrations, and graphic examples introduce students to the technical and creative aspects of 2-D animation as seen in communication media. Through classroom assignments students will investigate both commercial and fine art applications. ADVISORY: ART A120, DMAD A181, and DMAD A190. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Demonstrate proficiency in digital animation skills including the use of: drawing tools, animation basics, symbols and instances, frame-by-frame animation, motion tweening, shape tweening, and movie clips.
2. Apply a variety of sound synchronization modes to an animation project dependent on whether the sound will be streamed or event driven.
3. Create and display a storyboard presentation for a project.

Course Objectives

- 1. Define graphic communication principles as applied to computer technology.
- 2. Demonstrate a broad knowledge of animation techniques.
- 3. Use a variety of software and hardware to generate 2D animations.
- 4. Apply basic concepts and techniques of 2D animation.
- 5. Develop skills in storyboarding, scripting, characterization, movement, layout, editing, and production.
- 6. Integrate multiple media with 2D animation.
- 7. Apply basic concepts of interactive media.
- 8. Develop presentation skills.
- 9. Showcase the final product.

Lecture Content

Overview of animation process Drawn animation Computer animation: 2D vs. 3D Model animation Conceptualization and structure Establishing character and situation Developing conflict Climax and resolution Developing action through storyboard Creating the framework and background for each scene Developing a point of view Building a story Storyboard variations Presentation Critique Revision Scripting Developing a treatment Incorporating dialogue and sound effects Preliminaries to drawn animation on the computer Registration Image field Tools and equipment Characterization Developing character through movement Design considerations Movement: preliminaries Facial and gestural expressions Body weight Moving an object Speeding up and slowing down an object Movement basics: stretch and squash Illustrating the principle through a bouncing ball Dramatizing shape, movement, differences Movement on ground surface Walk cycle Walking on the spot Walking in perspective Movement analysis Spacing The movement key Analyzing timing Layout Detailing the background Roughing the characters for size and position Defining the camera field Defining the matchlines Background Styles and approaches Integrate background and character Perspective illusion the multiplane set-up Laying out the animation Timeline Keyfra mes Layers Motion interpolation Continuity Editing the animation Frame-by-frame animation Frame insertion and deletion Multi-frame editing Creation of reusable assets Finalizing the animation Colorizing the animation Synchronizing sound Preparing credits Showcasing the work Palette considerations for 2D animations File size and download times for 2D animations Vector-based animations Pixel-based animations Compression schemes: JPEG, GIF, and specialty players Creating GIF animation frames Testing the GIF animation in an HTML file Adding interactivity to the 2D animation Internet resources on animation Sound resources Web-base animations Design considerations Navigational considerations Linking the 2D animation to a URL

Method(s) of Instruction

- Lecture (02)
- DE Live Online Lecture (02S)
- DE Online Lecture (02X)
- Lab (04)
- DE Live Online Lab (04S)
- DE Online Lab (04X)

Instructional Techniques

Slide and video demonstrations on current work in field; field trips to labs; student critiques

Reading Assignments

Students will spend 1-2 hours per week on: Readings from required text. Reading from assigned online resources.

Writing Assignments

Students will spend 1-2 hours per week on: Self-Reflections Analysis of Elements and Principles of Design Written Reports of Attended Events and/or Materials Read

Out-of-class Assignments

Students will spend 1-2 hours per week on: Design projects using appropriate software. Attend on campus student art shows. Sketching and conceptualizing drawing.

Demonstration of Critical Thinking

Project development, skills demonstration, problem solving exercises, and final presentation

Required Writing, Problem Solving, Skills Demonstration

Written critiques of work seen outside class; group critiques of work

Eligible Disciplines

Graphic arts (desktop publishing): Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience. Graphic arts (desktop publishing): Any bachelors

degree and two years of professional experience, or any associate degree and six years of professional experience. Multimedia: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience.

Textbooks Resources

1. Required Schwartz, R., Labrecque, J.. Learn Adobe Animate CC for Interactive Media, ed. Adobe Press, 2016

Other Resources

1. Selected handout materials to be provided and distributed by the instructor.