EL CAMINO COLLEGE
COURSE OUTLINE OF RECORD – Approved

I. Course Information
Subject: ART
Course Number: **145**
Descriptive Title: **Web Animation and Games**
Department: **Art**
Course Disciplines: **Multimedia**

Catalog Description:
This course teaches the student to create two-dimensional animations and design interactive games for the Web and hand-held devices. Exercises and projects lead students through the principles of animation, gaming design, typography, screen and interface design, digital sound, and digital video.

Conditions of Enrollment:
Prerequisite: Art 141, or Art 142, or Art 143 with a minimum grade of C

Recommended Preparation: Art 146

Course Length: Full Term

Hours Lecture (per week):   2
Hours Laboratory (per week): 4
Outside Study Hours: 4
Total Hours: 108

Course Units: 3

Grading Method: Letter Grade only
Credit Status: Credit, degree applicable

Transfer CSU: Yes   Effective Date: 01/16/1996
Transfer UC: Yes   Effective Date: 01/1997

General Education:
ECC
Term: **Other:**

CSU GE:
Term: **Other:**

IGETC:
Term: **Other:**

II. Outcomes and Objectives

A. Student Learning Outcomes (SLOs) (The course student learning outcomes are listed below.)

SLO #1 Multimedia software
Students will be able to demonstrate correct use of industry-standard multimedia software to create motion and interactive content for the internet and handheld devices.

SLO #2 Sound and User Interactivity
Students will demonstrate the ability to use a timeline to incorporate sound and user interactivity into two-dimensional animations.

SLO #3 Motion and Interactive Media
Students will demonstrate the ability to output motion and interactive media in appropriate formats for use with current technology.

SLO #4 Problem-Solving
Students will apply visual communication problem-solving skills and two-dimensional design concepts to creation of interactive media.

B. Course Objectives (The major learning objective for in this course are listed below)

1. Optimize sound and video for use in web animation and gaming.
2. Demonstrate use of graphic and interactive user experience (ux) software to create original 2D web animation.
3. Demonstrate use of interactive animation and interactive user experience software to create an interactive presentation.
4. Apply traditional two-dimensional design concepts of line, value, texture, pattern, scale, and various compositional strategies to computer animation.
5. Combine and sequence text and images to effectively communicate ideas in an interactive format.
6. Demonstrate use of color to enhance aesthetic and expressive content.
7. Create visuals from storyboards to computer production, to final presentation.
8. Analyze and assess various two-dimensional animations, interactive online media, as well as interactive games, magazines, books, and products.
9. Plan and produce web animation and gaming projects.

III. Outline of Subject Matter
(Topics should be detailed enough to enable an instructor to determine the major areas that should be covered to ensure consistency from instructor to instructor and semester to semester.)

Major Topics

I. Hardware and System Software Concepts: File formats (2 hours, lecture)
   A. Importing and exporting files
   B. Optimizing files for web
   C. Using keyboard shortcuts
   D. Online navigation

II. Hardware and System Software Concepts: File formats (4 hours, lab)
   A. Importing and exporting files
   B. Optimizing files for web
   C. Using keyboard shortcuts
   D. Online navigation

III. Technical issues for successful online design: File size and format (4 hours, lecture)
   A. Color bit depth
   B. Choice of fonts
   C. Use of vector vs. raster graphics
   D. Image complexity vs. loading time

IV. Technical issues for successful online design: File size and format (8 hours, lab)
   A. Color bit depth
   B. Choice of fonts
   C. Use of vector vs. raster graphics
   D. Image complexity vs. loading time

V. Creating original animations for the web: Animated movies online (14 hours, lecture)
   A. Image sequencing
   B. Storytelling
   C. Storyboards for effective project planning
   D. Color for the web
   E. Original computer graphics
   F. Digitizing images, sound, and video for optimum online usage
   G. Frame by frame animation vs. tweening

VI. Creating original animations for the web: Animated movies online (28 hours, lab)
   A. Image sequencing
   B. Storytelling
   C. Storyboards for effective project planning
   D. Color for the web
   E. Original computer graphics
   F. Digitizing images, sound, and video for optimum online usage
   G. Frame by frame animation vs. tweening

VII. Interactivity and Games: Simple frame actions (11 hours, lecture)
   A. Interactivity with objects
   B. Complex interactivity using expressions and variables
   C. Action scripting and conditional actions

VIII. Interactivity and Games: Simple frame actions (21 hours, lab)
   A. Interactivity with objects
   B. Complex interactivity using expressions and variables
   C. Action scripting and conditional actions

IX. Aesthetic and Expressive Content (1 hour, lecture)
   A. Concept analysis and criticism
   B. Technique analysis and criticism
   C. Color, sound, and graphic enhancement

X. Aesthetic and Expressive Content (3 hours, lab)
   A. Concept analysis and criticism
   B. Technique analysis and criticism
   C. Color, sound, and graphic enhancement

XI. Testing, Troubleshooting, and Critique (4 hours, lecture)
    A. Locating and fixing problems
    B. Peer to peer input and review
    C. Analysis and critique

XII. Testing, Troubleshooting, and Critique (8 hours, lab)
    A. Locating and fixing problems
    B. Peer to peer input and review
    C. Analysis and critique

Total Lecture Hours:	36
Total Laboratory Hours:	72
Total Hours:	108

IV. Primary Method of Evaluation and Sample Assignments

A. Primary Method of Evaluation (choose one):
    3) Skills demonstration

B. Typical Assignment Using Primary Method of Evaluation
    Create a kinetic typography animation of a song lyric of your choice, export in appropriate media format and embed into a web page.

C. College-level Critical Thinking Assignments
Critical Thinking Assignment 1:
    Creation of interactive game mockup. Project goal is to create a unique game/user experience. Mockup would be used to sell concept to a game company. Project includes development of concepts, creation of storyboards and tight execution of an interactive mockup, and presentation of game to class.

Critical Thinking Assignment 2:
    Select a fairy tale and develop two possible endings. Create a flow-chart outlining the interactive paths one would follow to reach each ending.

D. Other Typical Assessment and Evaluation Methods
    Completion, Multiple Choice, Other (specify), Quizzes, True/False

V. Instructional Methods
    Demonstration, Discussion, Lab, Lecture, Multimedia presentations

    If other:

Note: In compliance with Board Policies 1600 and 3410, Title 5 California Code of Regulations, the Rehabilitation Act of 1973, and Sections 504 and 508 of the Americans with Disabilities Act, instruction delivery shall provide access, full inclusion, and effective communication for students with disabilities.

VI. Work Outside of Class
    Problem solving activity, Required reading, Skill practice, Study

    If Other:

VII. Texts and Materials

A. **Up-to-date Representative Textbooks: (Please use the following format: Author, Title, Edition, Publisher, Year. If you wish to list a text that is more than 5 years old, please annotate it as a "discipline standard".)**

B. **Alternative Textbooks: (Please use the following format: Author, Title, Edition, Publisher, Year. If you wish to list a text that is more than 5 years old, please annotate it as a "discipline standard".)**

C. **Required Supplementary Readings**
Online course materials to match the software taught such as Lynda.com training or Adobe Learn website.

D. **Other Required Materials**
Online course materials to match the software taught such as Lynda.com training or Adobe Learn website.

VIII. Conditions of Enrollment

A. Requisites (Course Prerequisites and Corequisites) Skills needed without which a student would be highly unlikely to succeed.

Requisite: Prerequisite
Category: sequential

Requisite course(s): List both prerequisites and corequisites in this box.
Art 141, or Art 142, or Art 143

Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s).

Computer skills including mouse and menu operations, launching and quitting applications computer file management, and experience working with illustration software, scanning and printing.
ART 141 Demonstrate appropriate computer skills needed for the creation of digital art.
ART 142 Demonstrate digital photography software workflow.
ART143 Demonstrate the use and operation of a computer system and graphics software.

Skills to plan and compose an image.
ART 141 Apply the elements and principles of design in finished digital images and time-based works.
ART 142 Apply elements and principles of design as they relate to digital photographic images.
ART 143- Apply elements and principles of 2D design to digital publications.

Experience in analyzing and assessing visual works of art.
ART 141 Assess, discuss, and critique digital art designs.
ART 142 Analyze and assess the relationship of digital photographs to the history of photography and other art forms.
ART 143 Analyze, discuss, and critique digital publications.

Experience in taking a project from initial idea, through production, to final presentation.
ART 141 Assess the purpose, scope, and specifications of art projects and formulate solutions by applying the appropriate creative and technical strategies.
ART 142 Assess the purpose, scope, and specifications of art and formulate solutions by applying the appropriate creative and technical strategies.
ART 143 Assess the scope and purpose of design projects and apply appropriate strategies of teamwork, time management, design, and production to meet deadlines.

B. Requisite Skills: (Non-Course Prerequisite and Corequisites) Skills needed without which a student would be highly unlikely to succeed.

Requisite:

Requisite and Matching Skill(s): Bold the requisite skill(s). If applicable

Basic knowledge of web design.
ART 146 - Operate the computer and related hardware and software, HTML, image and web authoring software.

C. Recommended Preparations (Course) (Skills with which a student's ability to succeed will be strongly enhanced.)

Requisite course: ART 146

Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s).

D. Recommended Preparation (Non-Course) (Skills with which a student's ability to succeed will be strongly enhanced.)

Requisite:

Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s). If applicable

E. Enrollment Limitations
Enrollment Limitations and Category:
Enrollment Limitations Impact:

Course Created by: Joyce Dallal on 10/30/1995

Original Board Approval Date: 01/16/1996

Last Reviewed and/or Revised by: Joyce Dallal   Date: 04/01/2021

Last Board Approval Date: 06/21/2021