EL CENTRO COLLEGE
GAME 1409
INTRODUCTION TO ANIMATION PROGRAMMING
SYLLABUS

COURSE DESCRIPTION

Prerequisites: ARTV 2401 or ARTV 1303, Flash/Animate experience or instructor approval

Course Description: Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

This course will cover 2D casual video game development utilizing Adobe Animate Professional. Game design will focus on ActionScripting to control graphics, sound files, and interactivity between the player and the system assets utilizing the SWF format to efficiently deliver the final product through web interfaces.

This is a 3 credit hour course. (2 lec., 4 lab.)

WECM END-OF-COURSE OUTCOMES: Incorporate sound and 2D graphics in games; modify the rules of games in order to change the experience of gameplay; Design a simple computer game from initial concept to final design document.

STUDENT LEARNING OUTCOMES:

Upon successful completion of GAME 1394, students will be able to:

- Evaluate 2D game animation principles used with Adobe Animate CC and 2D Internet games.
- Demonstrate an understanding of the Adobe ActionScript as it relates to game construction
- Create a 2D game, save as SWF and export the items to the web by utilizing Adobe Animate.

COURSE MATERIALS


Storage: A minimum of 2 GB USB Flash Drive and an online storage account with Dropbox.com

A student of this institution (El Centro College) is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.
MAJOR COURSE REQUIREMENT:
Students will practice concepts and techniques for each unit by completing **programming exercises**.

Students will produce **Unit exercises** for the following:
- ActionScript 3.0
- Button Events
- Update the Score
- Use Motion Presets
- Create Motion Presens
- Create a Monster
- Collisions: Shoot the Monster
- Add a Timer to the Shoot the Monster Game
- Add Sounds to the Shoot the Monster Game
- Brain Game
- Hangman Game

A **Final Project** will evaluate the student’s understanding of game design principles and Adobe Animate software knowledge presented in each exercise.

SUBJECT MATTER:
Topics covered in the lecture portion of the course include:
- **Programming Concepts**
  - Variables
  - Loops
  - Arrays
  - Movie Clips
  - Functions
  - Design Patterns
  - Classes
  - Debugging
- **ActionScript**
  - Event Listeners
  - Trace
  - Tween
  - Timer Events
  - Math Functions
- **Game Design Principles**
  - Artificial Intelligence
  - Game Loop
  - Scrolling
  - Tile-Based Games
  - Wireframe
  - Collision management
- **Adobe Animate Tools and Features**
  - Using the Stage
  - Events
  - Timeline
  - Using authoring panels
  - Working with documents
  - Text
  - Sound
  - Creating and Editing Artwork
  - Symbols, instances, and library assets
  - Timelines and Animation
DISCLAIMER
The provisions contained in this syllabus do not constitute a contract between the student and El Centro College. These provisions may be changed at the discretion of the Coordinator/Instructor. When necessary, appropriate notice of such changes will be given to the student.

The instructor-of-record may provide additional information to enhance the course to meet the needs of the enrolled students, provided that the enhancements do not conflict with the official course syllabus.

POLICIES
Students should click on the links below and read all of these policies.

General institutional policies
Course-related institutional policies