

**CS 74.31A Course Outline as of Spring 2011****CATALOG INFORMATION**

Dept and Nbr: CS 74.31A Title: FLASH WEB ANIMATION

Full Title: Intro to Web-Based Animation with Flash

Last Reviewed: 4/13/2015

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	4	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00

Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable

Grading: Grade or P/NP

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly: CIS 75.31A

**Catalog Description:**

An introduction to the use and implementation of Web-based animation tools. Students will use Macromedia Flash to create basic vector-based animations, examine the concepts that make a quality interactive animation, complete a thorough exploration of the tools, introduce and utilize basic ActionScripting, and produce animations.

**Prerequisites/Corequisites:****Recommended Preparation:**

Course Completion of CS 50.11A ( or CIS 58.51A) and Course Completion of CS 70.11A

**Limits on Enrollment:****Schedule of Classes Information:**

Description: An introduction to the use and implementation of Web-based animation tools. Students will use Macromedia Flash to create basic vector-based animations, examine the concepts that make a quality interactive animation, complete a thorough exploration of the tools, introduce and utilize basic ActionScripting, and produce animations. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Course Completion of CS 50.11A ( or CIS 58.51A) and Course Completion of CS 70.11A

Limits on Enrollment:

Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>			<b>Effective:</b>	<b>Inactive:</b>
<b>CSU GE:</b>	<b>Transfer Area</b>			<b>Effective:</b>	<b>Inactive:</b>
<b>IGETC:</b>	<b>Transfer Area</b>			<b>Effective:</b>	<b>Inactive:</b>
<b>CSU Transfer:</b>	Transferable	<b>Effective:</b>	Fall 2000	<b>Inactive:</b>	Fall 2017
<b>UC Transfer:</b>		<b>Effective:</b>		<b>Inactive:</b>	

**CID:**

**Certificate/Major Applicable:**

Certificate Applicable Course

## **COURSE CONTENT**

### **Outcomes and Objectives:**

The students will be able to:

1. Examine and report on uses of Flash on the web and in interfaces
2. Identify and apply animation/interface design principles
3. Effectively use animation interface including animation tools
4. Create different types of Flash symbols and utilize them through the Library
5. Compare, contrast and practice different tweening and frame-based animation techniques
6. Examine and resolve issues related to importing files and managing content on the stage
7. Identify basic Flash actions and apply them by creating interactivity with animations
8. Apply audio basics and their use within the Flash paradigm and apply this knowledge by importing, editing, and controlling audio files in Flash
9. Inventory, compare and implement various Flash movie testing methods
10. Examine issues and implement effective optimization techniques for publishing Flash sites

### **Topics and Scope:**

1. Examples of Flash animation
  - a. Web-based
  - b. Application interfaces
2. Introduction to web-based animation software
  - a. Flash
  - b. LiveMotion2
3. Software Interface
  - a. Drawing tools
  - b. Painting tools
  - c. Stage
  - d. Timeline

- e. Layers
- f. Palettes
- g. Rules, guides, and grids
- 4. Symbols, Libraries, Instances
  - a. Graphic symbols
  - b. Button symbols
  - c. Movie Clip symbols
  - d. Library methods and control
- 5. Keyframe animation
  - a. Different types of frames
  - b. Frame-based animations
  - c. Motion tweening
  - d. Shape tweening
- 6. Importing files into Flash
  - a. Bitmaps
  - b. Audio
  - c. Exporting from other programs
- 7. Basic Actions
  - a. Labels
  - b. Actions list
  - c. Actions panel
  - d. Applying actions to symbols
    - i. Movie clips
    - ii. Buttons
- 8. Audio within Flash
  - a. File Types
  - b. More importing techniques and concerns
  - c. Compressing files
  - d. Editing the sound envelope
  - e. Playing files on the timeline
  - f. Looping audio
- 9. Testing Flash movies
  - a. Testing in the browser
  - b. Using Test movie command
  - c. Using Bandwidth profiler
  - d. Showing streaming
- 10. Optimization of Flash movies
  - a. Examine and edit publish settings
    - i. Flash
    - ii. HyperText Markup Language (HTML)
  - b. Compression of images and sounds
  - c. Generating file size reports
  - d. Producing your own animations
    - i. Stage size
    - ii. Target audience

**Assignment:**

- 1. View a variety of Flash sites and application interfaces
- 2. Analyze and evaluate theme based on established criteria
- 3. Read chapters appropriate to the topics being discussed (approx. 25 pages per week)
- 4. Utilize the Flash>Help>Lessons to review and practice the use of Flash tools and program

interface

5. Draw a static multi-layer scene using several of the program tools consisting of a variety of symbol types
6. Apply knowledge of keyframe animation to create animations within the static scene, with a focus on publish settings, FTPing (File Transfer Protocol) files
7. Create a 468X60 web banner by using several files imported and/or created in another program - part of an electronic portfolio
8. Import and control sound within a Flash file
9. Examine labels, actions, and behaviors and apply labels, actions and behaviors to a short animation sequence
10. Examine the use of multiple scenes within an animation and create a short animation utilizing multiple scenes, audio and keyframe techniques
11. Create a six-page web site project, using a go to structure that will:
  - a. demonstrate facility with the Flash interface
  - b. demonstrate facility with the Drawing tools
  - c. demonstrate facility with keyframe animation
  - d. frame-by-frame walk cycle
  - e. motion tweening
  - f. effects, opacity, tint, alpha
  - g. guide layers
  - h. mask tweening
  - i. shape tweening-compare and contrast with motion tweening
12. 3-5 exams

### Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Analysis and evaluation of theme

Writing  
5 - 10%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Web site project

Problem solving  
10 - 20%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Flash animation assignments

Skill Demonstrations  
30 - 50%

**Exams:** All forms of formal testing, other than skill performance exams.

Exams: Multiple choice, True/false, completion

Exams  
30 - 50%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

None
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Other Category 0 - 0%
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**Representative Textbooks and Materials:**

Flash Professional CS5 Digital Classroom (1st), Gerantabee, Fred. Wiley & Sons 2010