

**CS 74.31A Course Outline as of Fall 2017****CATALOG INFORMATION**

Dept and Nbr: CS 74.31A Title: MULTIMEDIA CREATION

Full Title: Multimedia Content Creation

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	6	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 concepts, use, creation and implementation of multimedia content and animations on websites and mobile devices. Students will use various industry standard applications to create animated, interactive content for the web and mobile devices.

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

Course Completion of CS 70.11A

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

Description: An introduction to the concepts, use, creation and implementation of multimedia content and animations on websites and mobile devices. Students will use various industry standard applications to create animated, interactive content for the web and mobile devices.  
(Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Course Completion of CS 70.11A

Limits on Enrollment:

Transfer Credit:

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

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

**AS Degree:**      **Area**      Effective:      Inactive:

**CSU GE:**      **Transfer Area**      Effective:      Inactive:

**IGETC:**      **Transfer Area**      Effective:      Inactive:

**CSU Transfer:**      Effective:      Inactive:

**UC Transfer:**      Effective:      Inactive:

**CID:**

**Certificate/Major Applicable:**

Certificate Applicable Course

## **COURSE CONTENT**

**Outcomes and Objectives:**

Upon completion of this course, students will be able to:

1. Examine and report on uses of current industry standard multimedia applications for the web and mobile devices.
2. Identify and apply animation/interface design principles.
3. Use software interface including animation tools.
4. Create and export different types of multimedia assets.
5. Import and utilize assets within animation and multimedia assignments and projects.
6. Compare, contrast and practice different animation techniques.
7. Identify basic programming techniques and utilize them in animations and interactive content.
8. Identify and apply audio basic techniques to multimedia projects.
9. Identify and apply video basic techniques to multimedia projects.
10. Inventory, compare and implement various multimedia testing methods.
11. Examine issues and implement effective optimization techniques for publishing multimedia content.

**Topics and Scope:**

1. Explore examples of multimedia content and animations on the web and other devices
  - a. Web-based
  - b. Mobile devices
  - c. Legacy examples
2. Introduction to current industry standard multimedia and animation software
  - a. Drawing tools
  - b. Painting tools
  - c. Timelines
  - d. Keyframes
  - e. Layers
  - f. Palettes

- g. Rules, guides, and grids
- 3. Symbols, Libraries, Instances
  - a. Graphic symbols
  - b. Button symbols
  - c. Movie Clip symbols
  - d. Library methods and control
- 4. Create and export files across applications
  - a. Bitmaps
  - b. Audio
  - c. Video
  - d. Vector files
- 5. Importing files into multimedia applications
  - a. Bitmaps
  - b. Audio
  - c. Video
  - d. Vector files
  - e. File size considerations
- 6. Multimedia and Animation Best Practices and Techniques
  - a. Explore keyframe techniques in frame-based animations
  - b. Motion tweening and Shape tweening
- 7. Programming Fundamentals
  - a. Variables
  - b. Classes
  - c. Functions
- 8. Audio within Flash
  - a. File Types
  - b. Compressing files
  - c. Editing sound envelopes
  - d. Playing files on the timeline
  - e. Looping audio
- 9. Video within Flash
  - a. File Types
  - b. Compressing files
  - c. Streaming techniques
  - d. Captioning
- 10. Testing and Deploying
  - a. Testing in the browser
  - b. Using Test movie command
  - c. Using Bandwidth profiler
  - d. Showing streaming
- 11. Optimization of multimedia files and delivery methods
  - a. Examine and edit publish settings
  - b. Compression of images and sounds
  - c. Generating file size reports

**Assignment:**

- 1. Analysis and evaluation of multimedia presentations
- 2. Read chapters and/or watch videos appropriate to the topics being discussed (approx. 2 hours of reading/viewing per week)
- 3. Utilize the Help Section of applications to review and practice the use of tools and program interface

4. Create a static multi-layer scene using multiple tools
5. Apply knowledge of keyframe animation to create animations within a static scene, with a focus on optimizing publish settings
6. Export and import multimedia to create banner ads and other marketing material
7. Import, modify, and control audio within multimedia projects
8. Import, modify, and control video within multimedia projects
9. Explore, compare, contrast, and apply multimedia and animation Best Practices and Techniques to an ePortfolio
10. Apply programming basics to create interactive content
11. Optimize, test and upload projects and ePortfolios to web-sites
12. Optimize, test and deploy projects and ePortfolios to mobile devices
13. Complete 2-3 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 presentations	Writing 5 - 10%
--	--------------------

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

Multimedia projects, mobile device content	Problem solving 10 - 20%
--	-----------------------------

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

Animation assignments (use animation, create static multi-layer scene), ePortfolios	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	Other Category 0 - 0%
------	--------------------------

### Representative Textbooks and Materials:

Introduction to Digital Multimedia (2nd), Savage, T.M.; Vogel, K.E. Jones & Bartlett Learning, LLC: 2013