CS 74.31B Course Outline as of Summer 2010

CATALOG INFORMATION

Dept and Nbr: CS 74.31B Title: INTERMEDIATE FLASH
Full Title: Intermediate Concepts and Action Scripting with Flash
Last Reviewed: 2/1/2010

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 75.31B

Catalog Description:
This class will focus on intermediate and advanced topics in Flash including an ActionScript, a thorough programming overview, properties, methods, events, display list, document and custom classes, bitmap and vector drawing, working with sound, video, and XML [Extensible Markup Language]. Students will create a project that incorporates many of these elements.

Prerequisites/Corequisites:
Course Completion of CS 74.31A (or CIS 75.31A or CIS 84.56A)

Recommended Preparation:
Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Schedule of Classes Information:
Description: This class will focus on intermediate and advanced topics in Flash including an ActionScript, a thorough programming overview, properties, methods, events, display list, document and custom classes, bitmap and vector drawing, working with sound, video, and XML [Extensible Markup Language]. Students will create a project that incorporates many of these elements. (Grade or P/NP)

Prerequisites/Corequisites: Course Completion of CS 74.31A (or CIS 75.31A or CIS 84.56A)
Recommended: Eligibility for ENGL 100 or ESL 100
Limits on Enrollment:
Transfer Credit: CSU;
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:	Transferable	Effective:	Fall 2001	Inactive:	Fall 2015
UC Transfer:		Effective:		Inactive:	

CID:

Certificate/Major Applicable:
Both Certificate and Major Applicable

COURSE CONTENT

Outcomes and Objectives:
Upon completion of this course, students will be able to:
1. Review and assess Flash terminology and concepts.
2. Summarize and apply basic and intermediate level ActionScript programming concepts.
3. Construct ActionScripts with various levels of complexity.
4. Implement ActionScripts enabling them to control sound, video, and other objects (MP3 player).
5. Examine and use various text types and methods to control text.
6. Design and create a series of preload sequences.
7. Inspect, analyze, and implement a variety of special effects.
8. Inspect, compare, and employ a variety of interactive techniques.
9. Design and create a project incorporating the elements learned throughout class.

Topics and Scope:

1. Inventory basic Flash terminology and concepts
   a. Animation overview
   b. Understanding symbols and instances
   c. Editing symbols and instances
   d. Creating a shared external library
   e. Creating buttons
   f. Using the Movie Explorer
   g. Using the stop and goto actions
   h. Using the Loader class
2. Examine ActionScript concepts
   a. OOP (object oriented programming) Language
   b. ActionScripting categories

c. The Display List
d. Document class
e. Dot syntax and other punctuation
f. Movie clips
    1. Instantiating
    2. Methods
g. Objects and Classes
h. Properties
i. Methods
j. Variables and data types
    1. Objects
    2. Numbers
    3. Strings
    4. Boolean data
k. Conditional Statements
l. Arrays
m. Constructors
n. Concatenating strings

3. Construct complex ActionScripts
a. Working with the Loader class
b. Load video and sound
c. Using the addChild method
d. Testing information with conditional statements
    1. if...then
    2. else
e. Working with form fields and variables
f. Using ActionScript to set variables and input different data types
g. Using string operators to format a variable display
h. Evaluating and dynamically setting object properties
i. OnScreen text fields
j. Using loop statements

4. Controlling sound
a. Creating sound objects
b. Modifying sounds
c. Transforming sounds

5. Controlling text
a. Input text
b. Dynamic text
c. Concatenating text
d. Manipulating and analyzing strings of text

6. Creating pre-load sequences
a. Examine Flash's streaming capabilities
b. Create a Flash pre-loader

7. Creating animated effects
a. Creating text effects
b. Stimulating transitions using masks
c. Spotlight and magnification effects

8. Interactive techniques
a. Interface design issues
b. Custom buttons
c. Text field elements
d. Drag and drop behaviors

e. Menus
f. Sliding button controls

9. Creating Flash-based websites
   a. Optimization
   b. Publishing
   c. Extensions to detect plug-ins
   d. Size considerations
   e. Accessibility issues

Assignment:

1. Complete worksheet demonstrating understanding of basic flash elements reviewed
2. Create a basic pre-loader and test it using the bandwidth profiler
3. Apply targeting through dot syntax
4. Apply a variety of loader class techniques to load objects in Flash movie
5. Create a sound object and control the object properies
6. Control text by utilizing dynamic and input text options
7. Create an advanced pre-loader and test it using the bandwidth profiler
8. Use and modify variables to control information flow
9. Create a dynamic navigation bar
10. Create an MP3 player
11. Create a dynamic video player
12. Read 20 to 30 pages per week
13. 2 to 4 quizzes
14. Final Exam or Project

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.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.	Writing 0 - 0%

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

Homework problems	Problem solving 20 - 40%

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

Class performances, final project, production of animation	Skill Demonstrations 40 - 60%

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

Multiple choice, true/false and final exam or project	Exams 20 - 40%

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

Attendance and participation	Other Category 0 - 10%

Representative Textbooks and Materials:
Learning ActionScript 3.0, Rich Shupe, O'Reilly Publishing, 2008.