

CIS 75.31B Fall 2008

Flash ActionScripting Course Syllabus

This class will focus on intermediate and advanced topics in Flash including: ActionScripting 3.0 for both Flash and Flex including the core language fundamentals, properties, methods, and events, timeline control, basic game creation, and creating a web site incorporating the elements learned throughout the class.

General Information

Instructor: Jeffrey Diamond
Phone: (707) 527-4990
Office Hours (Maggini 2941): Monday 9:00 am -11:00 am
Thursday 2:00 pm – 4:00 pm
Web Site: <http://www.santarosa.edu/~jdiamond/>
E-mail: jdiamond@santarosa.edu

Computer Access

You may use the CIS labs in Santa Rosa and Petaluma during regularly scheduled lab hours, or work at your own computer. Attendance during the lab period is optional. You may work at home if you have Flash CS3. Internet access is required for assignments.

Required Materials

Learning ActionScript 3.0 by Rich Shupe, ISBN: 0-596-52787-x
Companion Website: <http://www.learningactionscript3.com/>
Make sure to check the errata page which lists any significant errors or important omission discovered book's publication <http://www.learningactionscript3.com/errata/>

Student Software

You need Flash CS3. This software is available at both the Santa Rosa and Petaluma labs.

Grading and Procedures

Your final grade will be based on the following:

Item	Points
5 Hands-on Assignments	40
Weekly Quizzes	15
Midterm and Final Exams (18 pts. Each)	36
Flex Project	9
Total points	100

Your grade for the class will be based on the following scale:

91-100%=A	81-90%=B	71-80%=C	65-70%=D
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Attendance

Regular attendance is essential. You may be dropped from the class if you are absent twice or more. You are encouraged to ask questions in class, but please do so in a manner that is considerate to your classmates.

Tests and Quizzes:

There will be an online midterm and final quiz. The material comes from the class textbook. If any exam is missed, a zero will be recorded as the score. It is your responsibility to take the quiz by the due date. In addition, there are weekly quizzes from the textbook's companion website. **You are required to repeat each chapter's quiz until you receive a perfect score and email me a screen shot of each week's quiz.** They are available at <http://www.learningactionscript3.com/quizzes/>

Homework

Post all homework to the [Flash Gallery](http://jeffdiamond.com/flash_gallery/) web page at http://jeffdiamond.com/flash_gallery/ unless otherwise indicated. Criteria for grading include:

- Meeting homework specifications.
- Quality of work.
- Meeting size requirements (refers to SWF files)

Late assignments

Will be accepted one week late and will lose one point. **Any assignments turned in more than one week late will receive no credit.**

Credit-No Credit

You may take this class credit/no-credit. You must decide before the fifth class and file the appropriate form with Admissions and Records. You must complete the midterm and final quizzes and projects to receive class credit.

Dropping the Class

If you decide to discontinue this course, it is your responsibility to officially drop it to avoid getting no refund (after 10% of course length), a W symbol (after 20%), or a grade (after 60%). Also, for several consecutive, unexplained absences, the instructor may drop a student.

Flex Project

Your Flex project needs to be posted to your website. Specifics for this project will be available on the website in October.

Cell Phones and Beepers

Use not permitted in classroom or lab. See instructor if you have an emergency situation.

Standards of Conduct

Students shall conduct themselves in a manner that reflects their awareness of common standards of decency and the rights of others. Interference with SRJC's educational objectives is a cause for disciplinary action. All members of the college community are expected to refrain from such interference, including the following types of conduct:

- Disruption of teaching
- Dishonesty, cheating, plagiarism
- Physical or verbal abuse
- Disorderly, lewd, indecent, or obscene conduct

Email etiquette

Here is a list of some basic guidelines:

- Email can easily be misinterpreted; be brief, polite, never send email when angry.
- Always include a pertinent subject title for the message.
- Capitalize words only to highlight an important point or to distinguish a title or heading. Capitalizing whole words is termed as SHOUTING!
- It is rude to forward personal email without the author's permission

Special Needs

Students with disabilities who believe they need accommodations in this class are encouraged to contact Disability Resources (527-4278), Analy Village - C, as soon as possible to better ensure such accommodations are implemented in a timely fashion.

August 21: Course Overview and Introduction

Concepts Studied

Review from CIS 75.31A
Administrative issues

Preliminary homework (due August 28)

1. Purchase textbook and read chapters 1 and 2 (pp.3-28).
2. Complete check-in process at http://www.santarosa.edu/~jdiamond/flash_b
3. Complete quiz for chapters 1 and 2 from <http://www.learningactionscript3.com/quizzes/>, make a screen capture of your quiz score and email it to me; subject title Flash B Quiz score chapter 1-2.

August 28: ActionScript and Programming Overview

ActionScript Overview and Core Language Fundamentals

Homework 2 (due September 4)

1. Read chapter 3 (pp.31-48)

2. Complete quiz for chapter 3- <http://www.learningactionscript3.com/quizzes/>, make a screen capture of your quiz score and email it to me; subject title Flash B Quiz score chapter 3.

September 4: Properties, Methods, and Events

Concepts Studied

Inherited Attributes
Properties
Events
Methods

Event Propagation
Frame and Timer Events
Removing Event Listeners

Homework 3 (due September 11)

1. Read chapter 4 (pp.49-70)
2. Complete quiz for chapter 4- <http://www.learningactionscript3.com/quizzes/>, make a screen capture of your quiz score and email it to me; subject title Flash B Quiz score chapter 4.

September 11: The Display List

Concepts Studied

The Sum of Its Parts
Adding and Removing Children
Managing Object Names, Positions, and Data Types

Changing the Display List Hierarchy
A Dynamic Navigation Bar

Homework 4 (due September 18)

1. Read chapter 5 (pp.71-86)
2. Complete quiz for chapter 5- <http://www.learningactionscript3.com/quizzes/>, make a screen capture of your quiz score and email it to me; subject title Flash B Quiz score chapter 5.
3. Complete hands-on assignment one (specifics TBD) and post to the gallery

September 18: Timeline Control

Concepts Studied

Playhead Movement
Frame Labels

Frame Rate
A Simple Site or Application Structure

Homework 5 (due September 25)

1. Read chapter 6 (pp.87-114)
2. Complete quiz for chapter 6- <http://www.learningactionscript3.com/quizzes/>, make a screen capture of your quiz score and email it to me; subject title Flash B Quiz score chapter 6.

September 25—no meeting (this class will be recorded): OOP

Concepts Studied

Classes	Encapsulation
Inheritance	Polymorphism
Composition	Navigation Bar Revisited

Homework 6 (due October 2)

1. Read chapter 7 (pp.115-140)
2. Complete quiz for chapter 7- <http://www.learningactionscript3.com/quizzes/>, make a screen capture of your quiz score and email it to me; subject title Flash B Quiz score chapter 7.
3. Complete hands-on assignment two (specifics TBD) and post to the gallery

October 2: Motion

Concepts Studied

Basic Movement	Programmatic Tweening
Geometry and Trigonometry	Timeline Animation Recreations
Physics	Particle Systems

Homework 7 (due October 9)

1. Read chapter 8 (pp.141-166)
2. Complete chapter 8 quiz- <http://www.learningactionscript3.com/quizzes/>, make a screen capture of your quiz score and email it to me; subject title Flash B Quiz score chapter 8.

October 9: Drawing with Vectors

Concepts Studied

The Graphics Class	9-Slice Scaling
The Geometry Package	Applied Examples
The Motion Package	

Homework 8 (due October 16)

1. Read chapter 9 (pp.167-194)
2. Complete quiz for chapter 9- <http://www.learningactionscript3.com/quizzes/>, make a screen capture of your quiz score and email it to me; subject title Flash B Quiz score chapter 9.

October 16: Drawing with Pixels

Concepts Studied

Bitmap Caching
The BitmapData Class
Blend Modes

Bitmap Filters
Color Effects
Image Encoding and Saving

Homework 9 (due October 23)

[Complete Online Midterm](#)

1. Read chapter 10 (pp.197-218)
2. Complete quiz for chapter 10- <http://www.learningactionscript3.com/quizzes/>, make a screen capture of your quiz score and email it to me; subject title Flash B Quiz score chapter 10.
3. Complete hands-on assignment three (specifics TBD) and post to the gallery

October 23: Text

Concepts Studied

Creating Text Fields
Setting Text Field Characteristics
Selecting Text
Formatting Text

Formatting with HTML and CSS
Triggering ActionScript from HTML Links
Parsing Text Fields
Loading HTML and CSS

Homework 10 (due October 30)

1. Read chapter 11 (pp.221-250)
2. Complete quiz for chapter 11- <http://www.learningactionscript3.com/quizzes/>, make a screen capture of your quiz score and email it to me; subject title Flash B Quiz score chapter 11.

October 30: Sound

Concepts Studied

ActionScript Sound Architecture
Internal and External Sounds
Playing, Stopping, and Pausing Sounds
Buffering Streaming Sounds
Changing Sound Volume and Pan

Reading ID3 Metadata from MP3 Sounds
Visualizing Sound Data
Working with Microphone Sound
Waveform Visualization

Homework 11 (due November 6)

1. Read chapter 12 (pp.251-278)
2. Complete chapter 12 quiz- <http://www.learningactionscript3.com/quizzes/>, make a screen capture of your quiz score and email it to me; subject title Flash B Quiz score chapter 12.
3. Complete hands-on assignment four (specifics TBD) and post to the gallery

November 6: Video

Concepts Studied

Encoding
Components
Full-screen Video

Captions
Coding Your Own Video Playback

Homework 12 (due November 13)

1. Read chapter 13 (pp.279-296)
2. Complete chapter 13 quiz - <http://www.learningactionscript3.com/quizzes/>, make a screen capture of your quiz score and email it to me; subject title Flash B Quiz score chapter 13.

November 13: Loading Assets

Concepts Studied

Loading Sound and Video
Loading Text
Loading Display Objects

Communicating Across ActionScript
Virtual Machines
Taking a Brief Look at Security

Homework 13 (due November 20)

1. Read chapter 14 (pp.297-330)
2. Complete chapter 14 quiz - <http://www.learningactionscript3.com/quizzes/>, make a screen capture of your quiz score and email it to me; subject title Flash B Quiz score chapter 14.
3. Complete hands-on assignment five (specifics TBD) and post to the gallery

November 20: XML and E4X

Concepts Studied

Understanding XML Structure
Creating an XML Object
Reading XML
Writing XML

Deleting XML Elements
Loading External XML Documents
Communicating with XML Servers
An XML-Based Navigation System

Homework 14 (due December 4)

1. Read chapter 15 (pp.333-350)
2. Complete quiz for chapter 15- <http://www.learningactionscript3.com/quizzes/>, make a screen capture of your quiz score and email it to me; subject title Flash B Quiz score chapter 15.

November 27-30 Thanksgiving Holiday- No School

December 4: Programming Design and Resources

Concepts Studied

Programming Design Methodologies
Object-oriented Design Patterns

Resources

December 11: Intro to Flex

Review material on Final Exam

Homework (due December 18)

1. Complete Flex Project
2. Complete [MTM Evaluation](#)

December 18: Final Project Presentation

Presentations