PELLISSIPPI STATE COMMUNITY COLLEGE
MASTER SYLLABUS

ADVANCED FLASH
WEB 2115

Class Hours: 3.0   **Credit Hours: 3.0**

Laboratory Hours: 0.0   **Revised: Spring 2011**

Catalog Course Description:

This course teaches the basics of how to use Actionscript. Students learn how to use Flash and
Actionscript to enhance web site design. General topics include how to create Actionscript
in external files, use XML documents in conjunction with Flash, write event handling functions, add
interactivity, load external content, handle data, control timelines and animation, and work with text,
images, sound and video.

Entry Level Standards:

Students taking this course should be familiar with the Flash interface and its basic animation
features along with a basic understanding of HTML.

Prerequisites:

WEB 2110

Textbook(s) and Other Course Materials:

Actionscript 3.0 for Adobe Flash CS5 Professional
Classroom in a Book
ISBN-10: 0-13-262961-5
ISBN-13: 978-0-13-262961-4

Supplementary Materials:
Software
The following software is referenced in the course. Purchasing this software is mandatory.
Adobe Flash CS5

I. Week/Unit/Topic Basis: (Tentative Schedule)

Week	Topic
1	Introduction to Actionscript 3.0 a. A brief introduction to Actionscript and its history. b. Actionscript 3.0 for new programmers
2	Navigating the Timeline in Flash a. Placing code on the Timeline
3	Working with Events and Functions

a. Creating event listeners and event handling functions
b. Creating Navigation with a button click

4   Creating Animation with Actionscript
a. Using Actionscript to control MovieClip properties
b. Using Actionscript Tweens to create animation

5   Creating Actionscript in External Files
a. Creating an Actionscript file
b. Creating instances of a class file in Flash

6   Using Actionscript and Components to Load Content
a. Creating an instance of the List component and setting its parameters
b. Adding an instance of the UILoader component
c. Adding a CHANGE event listener to the List component
d. Loading SWF files into a UILoader component

7   Creating Preloaders in Actionscript 3.0
a. Tools in the testing environment
b. Creating a text field and progress bar to track loading
c. Inserting Actionscript to track progress of the UILoader component
d. Controlling the frames of a MovieClip to reflect loading progress

8   Using Arrays and Loops in Actionscript 3.0
a. Adding MovieClip instances to the stage from the library
b. Generating multiple instances with a for loop
c. Adding event listeners to the Block instances
d. Creating animation using ENTER_FRAME
e. Adding the testDone() function

9   Creating a Radio Button Quiz in an Actionscript File
a. Setting up the RadioButtonQuiz class
b. Adding variables to the RadioButtonQuiz class
c. Formatting text with Actionscript
d. Creating checkAnswer()- the final function
e. Integrating the new class into the Flash project

10   Controlling Sound with Actionscript
a. The Sound, SoundChannel, and SoundTransform classes
b. Setting the song titles using a for loop
c. Programming the buttons to select songs

11   Controlling Sound with Actionscript (continued)
d. Controlling the visibility of the volume and controls
e. Adding a listener for the ID3 tags of an MP3 file
f. Adding a text format object
g. Adding the slider controls

12   Working with an XML playlist
a. Understanding the basics of an XML file
b. Replacing the songList array with an XML instance
c. Loading an external playlist using the URLLoader class

13   Working with an XML playlist (continued)
d. Responding to COMPLETE and IO_ERROR events
e. Moving the event listeners into the xmlLoaded() function

f. Updating the chooseSong() function
g. Creating hyperlinks using XML data

14   Using Actionscript and Components to Control Video
a. Adding the FLVPlayback component
b. Setting FLVPlayback properties in Flash
c. Adding Actionscript control of FLVPlayback properties
d. Working with color
e. Adding the FLVCaptioning component
f. Playing multiple video files from an XML playlist
g. Using the full screen publish settings

15   Final Project

II. Course Goals*:

The course will

A.   Learn to use Actionscript and its wide array of useful resources. (I,IV)

B.   Add interactivity to Flash files using ActionScript 3.0. (I.II,III,IV)

C.   Control timelines and animation, write event-handling functions, control loading of and interaction with data, text, video, sound, and images. (I,II,IV)

D.   Create Animations with Actionscript. (I,III)

E.   Learn to place code on the Flash timeline as well as create external Actionscript files.(II, IV)

F.   Create Flash pages containing text, graphics, hyperlinks and dynamic text fields. (I,II,III)

G.   Learn to use Components with Actionscript. (II,IV)

H.   Learn to create quizzes using Flash Actionscripting. (I,II)

I.   Explain why navigation is critical and describe how to use Flash to control navigation. (I,III)

J.   Explain the function of graphics in Flash. (I,II,IV)

K.   Apply Web design principles. (II,III)

L.   Learn to control video. (I,II,IV)

M.   Create multimedia files using Adobe Flash. (II,III)

N.   Explain basic programming language concepts. (III,IV)

*Roman numerals after course objectives reference goals of the Web Technology program. (Career Program Goals and General Education Goals are listed http://www.pstcc.edu/departments/curriculum_and_instruction/syllabi/)

III. Expected Student Learning Outcomes*:

Students will be able to:

1.	See the similarities and differences between JavaScript and Actionscript.(A)

2.	Define Actionscript Object properties and methods and state how browsers use them. (A,J)

3.	Describe how Flash functions on the Internet. (A)

4.	Know how to write functions and implement Event Handlers (A,B)

5.	Identify and describe methods used in Flash to load internal and external content (A)

6.	Create links to other URLs using Actionscript. (A,B)

7.	Create a preloader using Flash and Actionscript. (A)

8.	Find, access, view, and navigate Actionscript resources on the Web using various Web browsers. (B,C)

9.	View Actionscript source code. (B,E)

10.	Save and organize frequently used Web page addresses in the Favorites and Bookmarks folders.(A,B,C)

11.	Send and receive e-mail messages using various e-mail client programs. (A,B)

12.	Define and practice "netiquette." (A,B)

13.	Access and download files using File Transfer Protocol (FTP). (A,B)

14.	Describe the purpose of the Flash Player plug-in. (A,C)

15.	Identify various file formats, such as MPEG, MP3, MOV, AIFF, AU, WAV, AVI, EPS, TIFF, and RTF and how to load them or link to them using Flash. (A,E,H)

16.	Distinguish between creating objects in Actionscript versus using the Flash authoring tool. (F)

17.	Create hyperlinks for text and images and link to local files, remote sites, and internal anchors within the same file. (F,H)

18.	Explain why navigation is critical. (B)

19.	Choose fonts for Flash files. (A)

20.	Identify Flash components that control navigation. (B)

21.	Define Flash object hierarchy and define familiar conventions. (B)

22.	Choose graphics file formats. (A,B)

23.	Apply multimedia design principles. (B)

24.	Define the importance of design goals. (C)

25.	Identify web accessibility issues and solutions. (E,G)

26.	Identify the elements of a Flash movie. (B,G)

27. Create, edit, resize, and transform shapes using Flash. (B,G)

28. Use the Flash timeline. (B,G)

29. Save and publish a Flash movie.(B,G)

30. Create and edit Flash symbols and buttons. (B,G)

31. Create Flash motion tweens, shape tweens, and text tweens.(B,G)

32. Identify programming concepts.(B,G)

* Capital letters after Expected Student Learning Outcomes reference the course goals listed above.

IV. Evaluation:

A. Testing Procedures:

40 percent of grade. Students will be given a series of non-cumulative theory exams over textbook content during the semester. These exams will consist of multiple choice questions.

B. Laboratory Expectations:

Not applicable

C. Field Work:

Not applicable

D. Other Evaluation Methods:

- Project and Assignments: 50 percent of grade. Students will be required to complete projects utilizing the code and concepts covered in the textbook. The projects will be completed in the course of reading and working through the textbook. The files will be uploaded to web server space.
- Online Communication Tools and Participation: 10 percent of grade. Since this is an online class, attendance will be graded based on weekly discussion board participation. This participation will be based on quantity and quality of postings. Quality participation is required to pass this course.

E. Grading Scale:

A	90-100 %
B+	85-89 %
B	80-84 %
C+	75-79 %
C	70-74 %
D	60-69 %
F	0-59 %

V. Policies:

A. Attendance Policy:

Pellissippi State expects students to attend all scheduled instructional activities. As a minimum,

students in all courses (excluding distance learning courses) must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course. Individual departments/programs/disciplines, with the approval of the vice president of the Learning Division, may have requirements that are more stringent. In very specific circumstances, an appeal of the policy may be addressed to the head of the department in which the course was taken. If further action is warranted, the appeal may be addressed to the vice president of Academic Affairs.

B. Academic Dishonesty:

Academic misconduct committed either directly or indirectly by an individual or group is subject to disciplinary action. Prohibited activities include but are not limited to the following practices:
• Cheating, including but not limited to unauthorized assistance from material, people, or devices when taking a test, quiz, or examination; writing papers or reports; solving problems; or completing academic assignments.
• Plagiarism, including but not limited to paraphrasing, summarizing, or directly quoting published or unpublished work of another person, including online or computerized services, without proper documentation of the original source.
• Purchasing or otherwise obtaining prewritten essays, research papers, or materials prepared by another person or agency that sells term papers or other academic materials to be presented as one's own work.
• Taking an exam for another student.
• Providing others with information and/or answers regarding exams, quizzes, homework or other classroom assignments unless explicitly authorized by the instructor.
• Any of the above occurring within the Web or distance learning environment.

C. Accommodations for disabilities:

Students who need accommodations because of a disability, have emergency medical information to share, or need special arrangements in case the building must be evacuated should inform the instructor immediately, privately after class or in her or his office. Students must present a current accommodation plan from a staff member in Services for Students with Disabilities (SSWD) in order to receive accommodations in this course. Services for Students with Disabilities may be contacted by going to Goins 127, 132, 134, 135, 131 or by phone: 539-7153 or TTY 694-6429. More information is available at http://www.pstcc.edu/sswd/.

D. Other Policies:

Students must have a valid PSCC ID to be presented on demand to gain access to PSCC facilities.