Objectives
Upon completion of this course you should be able to:
- Build on the basics of Flash to create interactive movies
- Create buttons that move you within the movie and to outside links
- Use movie clips
- Use ActionScript

Course Topics
- Flash Objects
- Object Properties
- Object Methods
- Flash Events
- Adding ActionScript to buttons and key frames

Interface
- Timeline
- Information Box
- Property Inspector
- Stage
- Actions Box

Timeline
- The timeline is made up of many frames shown in chronological order.
- It provides easy access to all frames within your scene.
- To add things to specific pages, you will need to add a key frame.

Information Box
- Gives you information on the height and width of an object
- Gives you the X and Y coordinates for an object on the stage

Property Inspector:
- Context Sensitive
- Displays settings for what you have selected in the toolbox

Stage:
- The stage is where the flash movie is displayed.
- Think of it as the screen that projects your movies.
- The work area is everything around the stage.
Symbols
- Symbols are user-created objects that are saved and can be reused later in the movie.
- They are important because they minimize movie size, which enables Flash to run faster in a user’s Web browser.
- Creating Symbols
  o Press F8 or Insert → Create Symbol.
- They are stored in the movie Library.
  o The Library holds all symbols created in a particular movie.
  o Common Libraries
    - Flash library of symbols
- Double-click the symbol to enter its edit mode.
- Symbols can be
  o Graphics
  o Buttons
  o Movie Clips

Instances
- Instances are a single “instance” of a symbol.
- For example, if you created a symbol of a dog and wanted to use it more than once, every time you used it, it would be an “instance” of the dog.
- Reusing the symbol make Flash movies run much faster than other media such as Windows Media Player and Real Player.

Flash Objects – objects that can be manipulated using ActionScript
- Text
- Buttons
- Graphics
- Movie Clips
- Mouse
- Math
- Strings
- Many others
- You must name your objects by giving them an instance name.

Object Properties – Each Flash Object has its own set of properties.
- Mygraphic._y – is the y position of Mygraphic.
- Mybutton._alpha – is the transparency of Mybutton.
- Mymovie._visible – is the visibility of Mymovie.
- Many others
- ActionScript can be used to dynamically set these properties for named objects.

Object Methods – Methods perform actions.
- stop() – stops processing of the timeline.
- gotoAndStop(n) – jumps to Frame n and stops.
- gotoAndPlay(n) – jumps to Frame n and plays.
• myObject.nextFrame() – goes to the next frame of myObject.
• Many others

**Flash Events** – ActionScript can be triggered by events.
• rollover – the mouse rolls over an object.
• rollout – the mouse roll off an object.
• release – the mouse button is released.
• keyDown – a key is pressed on the keyboard.
• Many others

**ActionScript:**
Scripts of object names, properties, methods, and events authored for the purpose of creating the behavior desired.

**Using the Actions Panel:**
• Two modes
  o Normal
  o Advanced
• Two options for adding ActionScript into the Actions Panel
  o Typing code directly into the panel
  o Choosing prewritten code from a list

**Activity 1 – Creating a button:**

1. Go to the Insert Menu, and choose New Symbol.
2. Choose Button as the behavior.
3. Name it Button1.
4. Click OK.
5. Select the rectangle tool.
6. Set stroke and fill color.
7. Draw a small rectangle on the stage.
8. Click in the timeline for the Over state, and insert a new key frame.
9. Change the color of the rectangle.
10. When you have finished editing your button, click the Scene name at the top of the timeline.
11. Open the library, select Window and Library.
12. Drag Button1 onto the stage.

**Activity 2 – Adding ActionScript to the button:** - adding scripts to buttons allows you to add interactivity from the user. You can have the buttons take you to other places in the movie, start a movie, and

1. Using your selector tool, click on Button1.
2. If the Actions panel is minimized, maximize it.
3. From the Movie Clip Controls choices on the left hand side of the panel, choose on.
4. From the dropdown box, double-click release.
5. Move your cursor over just past the { bracket, and choose gotoAndPlay from the Timeline Control choices on the left hand side of the panel, by double-clicking it.
6. Put your cursor in-between the (), and double type 2.
7. This will send the user to frame number 2 in the timeline when they click the button. You can type in any frame number and it will go to a specific frame in the timeline. You want to add a key frame to any frame that you set an action to go to.
8. Go to the next frame, and add a new key frame.
9. On Frame 2, click the button, and hit the Delete key.
10. Using the Text tool, type in some text.

**Activity 3 – Adding ActionScript to a frame:** - adding scripts to a frame allows those scripts to be executed as soon as the movie enters that frame.
1. Click on Frame 1 in the timeline.
2. In the actions panel, type stop();
   a. This tells the movie to stop when it finishes playing this frame. If you do not have stops on pages where you want people to interact with the movie, by pressing buttons for example, the movie will continue to play through the frames.
3. Click on Frame 2 in the timeline.
4. In the actions panel, type stop();
   a. You always need to have a stop command at the end of your movie if you do not want your movie to play in a continuous loop.
5. Test that your button is working correctly by going to the Control menu and selecting Test Movie.

**Activity 4 – Using ActionScript to go to an outside link:** - you can use ActionScript to take you to another Web site outside of your movie. Note - If you know .asp, you can collect information in your movie and pass it to an Active Server Page and populate a database. This will not be covered in this class.
1. Go to Frame 2 in the timeline.
2. Create a second button (Use the instructions above for Activity 1 for creating a button).
3. Open the actions panel.
4. From the Movie Clip Controls choices on the left-hand side of the panel, choose on.
5. From the dropdown box, double-click release.
6. Move your cursor over just past the { bracket, and choose getURL from the Browser/Network choices on the left-hand side of the panel, by double-clicking it
7. Within the (), type the URL you want the button to take you to
   a. Make sure the Web address is in “ “.
   b. Make sure you type http:// in front of the www portion of the address.
8. Type a , after the ending “ then a space.
9. Next, you need to enter where you want the Web page to appear.
   a. _blank opens the page in a new browser window.
   b. _self opens the page in the same window.
c. You can also name a specific frame to open a page in by typing _name of the frame.

10. Test that your button is working correctly by going to the Control menu and selecting Test Movie.

Note - If you have other pages within your Web site that you want to link a button to, you will do it almost the same way as you did the outside link. You must have the page stored in the same folder as the Flash file. Follow Steps 1-6 of Activity 4. When you get to Step 7, type the name of the page in " " . For example, your code would look like this:

```javascript
on (release) {getURL("samplepage.html", _blank);
}
```

If you have questions, please feel free to email me at:  monica.matzner@ttu.edu or call 742-4500 x 229.