

IT213

Interactive Communication Design II

[Onsite]

Course Description:

This course is a continuation of Interactive Communication Design I. Students use authoring and related software to develop complete interactive communication systems. Projects will include Development of Interactive Media for use in multiple platforms that can be accessed via the Internet, CD-ROM or multimedia. Prior knowledge of interface design, need assessment and design principles is necessary.

Prerequisite(s) and/or Corequisite(s):

Prerequisite: IT211 Interactive Communication Design I

Credit hours: 4

Contact hours: 50 (30 Theory Hours, 20 Lab Hours)

STUDENT SYLLABUS

Instructor: _____

Office hours: _____

Class hours: _____

Major Instructional Areas

Unit 1 – Taking a Tour of Director

Chapter 1

- Navigating the Director Workspace
- Customizing your Workspace
- Importing Cast Members
- Creating a Director Movie
- Playing a Director Movie
- Editing a Director Movie
- The toolbar and tool tips
- File formats
- Linking files
- Channels VS. layers
- Maximize performance of your director project
- Text Fields
- Numeric keypads
- Guides and grids
- Scaling bitmap images
- Director VS. Flash

Unit 2 – Working with Graphics and Text

Chapter 2

- Using the Basic Paint Tools
- Applying Advanced Paint Options
- Using Onion Skinning
- Creating Vector Shapes
- Using Text in Director Movies
- Importing Text Files
- Using the eraser tool
- The switch colors tool
- Identifying shortcuts
- Pros and cons of the vector shape window

Unit 3 – Working with Sprites and Basic Animation**Chapter 3**

- Working with Sprites
- Using Keyframes and Tweening
- Animating in Space and Time
- Using Realtime Recording
- Using Step Recording
- Modifying Sprite Properties
- Understanding the Registration Point
- Creating Film Loops
- Extending a single-frame sprite
- Placing sprites on the stage or in the score
- Director's pasteboard

Unit 4 – Interactivity, Navigation and Transitions**Chapter 4**

- Controlling a Main Menu
- Applying Lingo Scripts to Cast Members
- Working with Markers
- Navigating with Behaviors
- Understanding Transitions

- Using Frame-Based Transitions
- Adjusting the Tempo of a Movie
- Types of Frame Transitions

Unit 5 – Behaviors, Cursors and Color Palette

Chapter 5

- Applying Behaviors
- Editing, Organizing, and Deleting Behaviors
- Customizing Cursors
- Applying Animated Cursors
- Working with Color Palettes
- Creating Custom Color Palettes
- The behavior inspector
- The default cursor
- Tripping the hotspot
- General preferences
- Movie properties

Unit 6 – Working with Digital Media

Chapter 6

- Importing Digital Media
- Integrating Sound
- Working with Sound Cues
- Integrating Video
- Integrating Flash Content
- Acceptable file formats
- Sound Quality
- Streaming media
- Linking video files
- General sound-capture information
- Inserting cues into a sound file
- Movie in a Window (MIAW)
- Integrating DVD content

Unit 7 – File Preparation and Delivery

Chapter 7

- Printing Director Files
- Exporting Options
- Streamlining Your Productions
- Working with Fonts
- Understanding Projectors
- Using Shockwave Movies
- Publish settings
- Protecting movies

Unit 8 – Working with Lingo

Chapter 8

- Using Lingo Scripts
- Manipulating and Debugging
- Customizing Handlers
- Writing If, Then, Else Statements
- Dot syntax, Rollovers, and Variables
- Changing Properties in Lingo
- Tips for writing Lingo scripts
- The Lingo dictionary
- Dissecting Lingo instructions
- Types of scripts
- Lingo tips
- Script window preferences
- The object inspector
- onMouseEnter and onMouseOver
- Disabling scripts
- Frequently used Lingo scripts

Unit 9 – 3D and Director

Chapter 9

- Importing and Viewing 3-D Objects
- Working with 3-D Properties
- Using Actions and Triggers
- Working with 3-D Extruded Text
- Creating 3-D Objects

Unit 10 – Final Project

- Students will work on the final project, and review for the final exam

Unit 11 – Final Exam

Review and Final Examination

- Review session
- Final examination

Course Objectives

This course is designed to take the student from learning the interface of Director MX 2004, through using the Paint Window, Vector Shapes Window, Cast, and Score Window. The student will build interactive programs using animation techniques, film loops, transitions, behaviors and tempo changes. They will become familiar with Lingo, Director's scripting language, inserting digital video and Flash content, and creating both standalone projectors as well as Shockwave® content for the web. The student will also learn basic 3D sprite manipulation with Director.

Upon completion of this course, the student will be able to:

1. Navigate the Director Interface
2. Open a Director movie
3. Customize the Director workspace
4. Import and link cast members
5. Create and save a Director movie
6. Play a Director movie
7. Edit a Director movie
8. Use the basic tools in the Paint window
9. Apply the features in the Text inspector
10. Use the Text and Field Text windows
11. Create editable text and bitmap text

12. Use Ink effects and onion skinning
13. Create vector-based shapes
14. Import text files
15. Create basic animations
16. Align items on the Stage
17. Create and modify sprites
18. Reverse animations
19. Create film loops
20. Add graphics to create a menu
21. Use Lingo scripts to navigate through a movie
22. Turn cast members into interactive buttons
23. Navigate with markers and behaviors
24. Apply transitions
25. Change the tempo of a movie
26. Apply behaviors to sprite and frames
27. Use the Behavior inspector and Behavior tab
28. Turn graphics into cursors
29. Edit cursor properties
30. Create animated cursors
31. Build custom color palettes
32. Alter color palette properties
33. Apply behaviors to sprite and frames
34. Use the Behavior inspector and Behavior tab
35. Turn graphics into cursors
36. Edit cursor properties
37. Create animated cursors
38. Build custom color palettes

39. Alter color palette properties
40. Streamline your files
41. Set up stand-alone applications
42. Create files that run through a browser
43. Export animations as QuickTime movies
44. Print your presentations
45. Use the Message, Script, and debugger windows
46. Customize handlers
47. Construct basic Lingo scripts
48. Modify Lingo scripts
49. Apply dot syntax
50. Troubleshoot basic script errors
51. Import 3-D files
52. Build a 3-D object
53. Use the Shockwave 3D viewer
54. Explore 3-D object properties
55. Create 3-D type elements.

Teaching Strategies

Curriculum is designed to promote a variety of teaching strategies that support the outcomes described in the course objectives and that foster higher cognitive skills. Delivery makes use of various media and delivery tools in the classrooms.

Student Textbook and Materials

Gray, Tara. Essentials for Design: Macromedia® Director® MX 2004 Comprehensive, Pearson/Prentice Hall, 2005.

Companion Website: <http://www.prenhall.com/essentials> This site provides reinforcement materials, on-line study guide and access to the resource files for the chapters in the book. See “Student Information and Resources”, pp. xiv-xv in the text.

Course Outline

Unit	Topic (Lecture Period)	Chapters	Lab and Other Coverage
1	Taking a Tour of Director	1	Lab, Key Terms, Checking Concepts and Terms, read Chapter 1 &2, Project Planning
2	Working with Graphics and Text	2	Lab, Key Terms, Checking Concepts and Terms, read Chapter 3
3	Working with Sprites and Basic Animation	3	Lab, Key Terms, Checking Concepts and Terms, read Chapter 4, Project Interface Design
4	Interactivity, Navigation, and Transitions	4	Lab, Key Terms, Checking Concepts and Terms, read Chapter 5, Project Navigation Map
5	Behaviors, Cursors, and Color Palettes	5	Lab, Key Terms, Checking Concepts and Terms, read Chapter 6
6	Working with Digital Media	6	Lab, Key Terms, Checking Concepts and Terms, read Chapter 7
7	File Preparation and Delivery	7	Lab, Key Terms, Checking Concepts and Terms, read Chapter 8
8	Working with Lingo	8	Lab, Key Terms, Checking Concepts and Terms, read Chapter 9
9	3-D and Director	9	Lab, Key Terms, Checking Concepts and Terms
10	Final Project		Final Project
11	Review and Final Examination	The final examination will be based on the content covered in chapters 1-9.	

Evaluation Criteria and Grade Weights

■ Quizzes	10%
■ Participation	10 %
■ Final Exam	20%
■ Assignments (Labs and Homework)	30%
■ Project 1 - Interface Design	10%
■ Project 2 - Navigation Map	10%
■ Project 3 - Final Project	10%

Final grades will be calculated from the percentages earned in class as follows:

A	90 - 100%	4.0
B+	85 - 89%	3.5
B	80 - 84%	3.0
C+	75 - 79%	2.5
C	70 - 74%	2.0
D+	65 - 69%	1.5
D	60 - 64%	1.0
F	<60%	0.0

References

- Web references
 - http://www.macromedia.com/support/director/tutorial_index.html - This is the Macromedia® Director® Support Center. There are articles and tutorials on using Director®.
 - <http://www.macromedia.com/devnet/mx/director/> - The Director Developer Center includes additional links and articles on using Director. This is a very useful resource.
 - <http://www.macromedia.com/cfusion/webforums/forum/index.cfm?forumid=11> - The Director Support Forums can either be used on-line, or setup as a news reader under Outlook and Outlook Express. This is the place to get your

questions answered by professionals, or search the forums for a problem you encounter

- <http://www.directordev.com/> - DirectorDev is now hosted by Macromedia, and contains Lingo code examples, links, and additional downloadable behaviors for Director's Behavior Library
 - <http://www.mcli.dist.maricopa.edu/director/> - Director Web is a standby when it comes to information and resources for Director. It has been supporting users since 1994 (Director 3).
 - <http://www.updatestage.com/> - UpdateStage
 - <http://www.directxtras.com> - Xtras for Director. A great resource for Xtras to extend Directors capabilities, and fix Director's shortcomings (like e-mail).
 - <http://www.shocknet.org.uk/index.asp> - Shocknet is a must-see for those who will be using Director for the web (Shockwave). There are also several demo sites to see.
 - <http://shocksites.com> - Dedicated to finding Shockwave sites on the net, this resource is another must-see for the student using Shockwave.
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■ Virtual Library references

Ebrary

- *Advergaming Developer's Guide: Using Macromedia Flash MX 2004 and Director MX*, by Rod Afshar, ISBN 158450-3165
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■ Books (hardcopy)

- *Macromedia Director MX 2004 Bible*, Underdahl, Nyquist, Martin, ©2004 Wiley, ISBN 0-7645-6990-2
- *Shockwave 3D*, Wolf, ©2002 NewRiders, ISBN 0-7357-1197-6
- *Advanced Lingo for Games*, Rozenzweig, ©2000. Hayden Books, ISBN 0-7987-2331-x
- *Macromedia Director 8.5 Shockwave Studio for 3D Training from the Source*, Gross & Gross, ©2002, Macromedia Press, ISBN 0-201-74164-4