

ENDS 374 Multimedia Design and Development  
Texas A&M University

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## I COURSE DESCRIPTION

Multimedia Concepts and Practice Credit 3 Spring.  
Multimedia: the combination of animation, graphics, text, sound and video with user interactivity; projects directed towards the production of computer presentations and interactive kiosks; techniques discussed include computer animation, graphics, the production and use of digital photographs and digitizing sound and video for both free-standing programs and for the web.

## II INTRODUCTION

The purpose of this course is to develop the tools needed to produce computer generated presentations and interactive, computer generated kiosks. To accomplish these goals there will be two, three hour blocks of time for lecture, discussion and lab work each week. The "lab work" can be done in the MAC lab (20 - 20" iMacs 109 Langford C. Any other machine which has the needed software can be used; most of the software works equally well on a Mac or a PC. **You need to maintain PC file naming even when working on a Mac so that the file can port over to and been used on a PC also.** Some people have the needed software on their personal machines (PC or Mac); students should feel free to use their own machines (PC or Mac).. You should be able to get at your ARCH account from anywhere to store and retrieve your materials; however it is a good idea to keep back-up copies of your work on some other device regularly.

In the MAC lab, *Director* must be used in local sign-on and files must be initially saved on the local machine. Make sure that you keep a file of everything, by dragging a copy to your network volume and also your own USB drive.

## III COURSE OBJECTIVES

The objective of this course is to produce an in-depth interactive kiosk as well as a web site for a company or organization

To produce these the student will learn and become proficient in the following:

1. Macromedia *Director* – animation software that puts everything together in finished form. We are using *Director* MX (not MX 2004).
2. *PhotoShop* – photo and graphics arts software to produce images for kiosks and web
3. *Audacity* – sound editing software to produce sound for multimedia
4. *Final Cut Pro / Premiere* – video editing software to produce digital video

## IV Course Schedule

Week	Tuesday	Thursday
I	20 Jan Intro to Multimedia: course aims and goals and means of meeting the goals Log-in to computers / get ARCH account	22 Jan Graphic File formats: scanning Do scanning
II	27 Jan Animation concepts :flip card, cell animation, in-betweening, motion techniques, animation tools. do tutorial Cameleon ball <b>DUE: Scanning – Chameleon Ball tutorial</b>	29 Jan work on tutorials work on Simple Animation project <b>DUE: 1<sup>st</sup> Demo</b>
III	3 Feb Animation continued – Painting techniques available in Director. Concepts of loops, keyframes, layering, stage sizes. Sprite properties: setting stage locations and properties of sprites. work on tutorials and Simple Animation project <b>DUE: Key Frames</b>	5 Feb Work on simple animation project
IV	10 Feb <b>DUE: simple animation project</b> Show&Tell Simple animation Directed animation: using sound and transitions Work on Airplane exercise	12 Feb Work on Airplane exercise <b>DUE: Airplane exercise</b>
V	17 Feb Principles of typography. Uses of color. Fonts and characteristics of type as used on CRTs. Uses of color. Making graphic illustrations for multimedia.	19 Feb Navigation of movies. Movie design: branching and looping. Using Lingo: events and handlers. “Finishing” programs (timing, score layout, transitions, intro/exit) do Interactive Chameleon ball tutorial <b>DUE: Interactive Chameleon ball tutorial</b>

VI	24 Feb Work on Navigation Project <b>DUE: Buttons exercise, Logo project</b>	26 Feb Work on Navigation project
VII	3 Mar <b>DUE: Simple Navigation project</b> Show and tell navigation project and Logo project Advanced navigation Do advanced navigation tutorial Restaurant <b>DUE: Advanced navigation exercise</b>	5 Mar Work on advanced navigation project <b>DUE: Cursor change exercise</b>
VIII	10 Mar Kiosk discussion <b>Due: Advanced navigation project</b> Show and tell advanced navigation project	12 Mar Digitizing sound: principles of sound – quality, sampling. Using natural sound mixed with narration. Work on sound
IX	17 Mar Spring Break	19 Mar Spring Break
X	24 Mar Using Power Pt to make clean presentations <b>DUE: Sound exercise</b>	26 Mar Principles of digital video: non-linear editing. Shooting video: using the “primary shot,” “cover video” and the “secondary shots. Clean entrances and exits.
XI	31 Mar <b>DUE: Power Pt. show and tell</b>	2 Apr Synchronizing video and sound with animation.
XII	7 Apr Puppets: using puppets to create animation and sound. Rollovers; adding sound and narration to buttons (puppetSound). Simple sprite animation using program control. <b>DUE: puppet Chameleon ball lingo tutorial</b>	9 Apr Work on puppets <b>DUE: puppet tutorials</b>

XIII	<p>14 Apr  Built-in behaviors / making custom cursors / using Alpha masking channels for blending.  Color pallets / using color cycling and color blending of movies: animation by manipulating color.  Work on Behavior project  <b>DUE: Synchronous Video Project</b>  Show and tell Synchronous Video Movies</p>	<p>16 Apr  <b>DUE: puppet project</b>  Work on behaviors project</p>
XIV	<p>21 Apr  <b>Due: Behaviors project</b>  Testing and verifying movie programs. Duplication and distribution.  Platform considerations.  Burning CDs for multi-platform use</p>	<p>23 Apr  Work on Kiosk, etc.</p>
XV	<p>28 Apr  Work on Kiosk</p>	<p>30 Apr  Work on Kiosk</p>
XVI	<p>5 May  Redefined day, but you may work on kiosk</p>	

Final presentation of Kiosks:

Wed 13 May – 1 pm (or Tues 12 May)

Major	Creative	Tutorials
Kiosk	Simple Animation Logo Navigation (simple) Advanced navigation Puppets Synchronous video Power Pt production Behaviors	Scanning Chameleon Ball 1 <sup>st</sup> Demo Key Frames Airplane Interactive Chameleon ball Interactive navigation (branding) Advanced navigation tutorial Cursor change Digitizing Sound Puppet Chameleon ball Puppet tutorials (2)

Project/exercise -----	Discuss -----	DUE/show&tell	
Kiosk -----	T VIII	Final time for the course	
Simple Animation -----	T-R II-III	T IV	10 Feb
Logo -----	T V	T VI	24 Feb
Navigation (simple) -----	R V	T VII	3 Mar
Advanced navigation -----	T VII	T VIII	10 Mar
Puppets -----	T XII	R XIII	16 Apr
Synchronous video -----	R XI	T XIII	14 Apr
Power Pt production -----	T X	T XI	31 Mar
Behaviors -----	T XIII	T XIV	21 Apr
Scanning -----	R I	T II	27 Jan
Chameleon Ball -----	T II	T II	27 Jan
1 <sup>st</sup> Demo -----	T II	R II	29 Jan
Key Frames -----	T III	T III	3 Feb
Airplane -----	T IV	R IV	12 Feb
Interactive Chameleon Ball -----	R V	R V	19 Feb
Interactive navigation -----	R V	T VI	24 Feb
Advanced navigation tutorial -----	T VII	T VII	3 Mar
Cursor change -----	T VII	R VII	5 Mar
Digitizing sound -----	R VIII	T X	24 Mar
Puppet Chameleon ball -----	T XII	T XII	7 Apr
Puppet tutorials -----	T XII	R XII	9 Apr

V PERFORMANCE EVALUTATION

The course is aimed at production; I want the student to be able to demonstrate both conceptual (theoretical) and practical understanding of multimedia that will make him/her highly competitive in the job market.. That is the “proof of the student’s knowledge” will be in the successful completion of the multimedia projects. The major project is the creation of an interactive multimedia kiosk. A business type presentation and web pages also count for more credit. The exact number and content of the exercise/projects will be determined throughout the semester; these are aimed at teaching the student all the tools necessary in order to produce the major projects.

The course will be broken into three type of projects: exercises, learning projects and major projects. The grading will be determined as follows:

Interactive multimedia Kiosk	35%
Creative projects	45%
Exercises (approx 15) for multimedia	20%

VI MATERIALS

You will want some recordable CDs to keep your project material on.

VII TEXTBOOKS AND RESOURCES

No textbook is used. The instructor will provide materials by Xerox duplication or will deposit files in your **Resources folder** that is inside the **ENDS374500 Classes folder**.

VIII DISABILITIES

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statue that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a

disability requiring an accommodation, please contact the Department of Student Services, Services for Students with Disabilities, in room 126 of the Koldus Building, or call 845-1637.

IX AGGIE HONOR CODE

"An Aggie does not lie, cheat, steal or tolerate those that do." Upon accepting admission to Texas A&M University, a student automatically assumes a commitment to up hold the Honor Code, to accept responsibility for learning and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the Texas A&M University community from the requirements or the processes of the Honor System. For additional information please visit: [www.tamu.edu/aggiehonor/](http://www.tamu.edu/aggiehonor/)