

## ITP 210x (2 Units)

**Objective** Digital image editing using raster graphics, digital drawing using vector graphics. Concepts in digital video and audio editing.  
Interactive multimedia using frame based authoring application.

**Concepts** Interactive multimedia is fast becoming the preferred medium for the creation, storage, and distribution of information in areas of education, entertainment, and business. This course will expose the students to various multimedia applications that are used to design, develop, and produce professional quality multimedia titles. They will also learn current and future trends in multimedia technology.

**Prerequisite** ITP101x

**Lecture** 1.5hrs/week

**Lab** 1.5hrs/week

**Textbook** *Classroom in a Book, Adobe PhotoShop (required)*  
*Visual Quickstart Guide Flash 4*  
*Classroom in a Book, Adobe Premiere*  
*Macromedia Director and Lingo Authorized (required)*

**Grading** The following point-structure will be used in determining the grade for the course. Final grade will be based upon the total points received, the highest total in the class, and the average of the class.

Projects	100
Midterm	50
Lab Quizzes	50
Final Project	100
Total	300

- Policies**
- Make-up policy for exams: In order to make up for a missed exam, the student must provide a satisfactory reason along with proper documentation. Usually make-ups are allowed only under extraordinary circumstances.
  - Projects: It is YOUR responsibility to turn in your lab projects on, or before, the deadlines as set by the instructor. IT IS NOT THE RESPONSIBILITY OF THE LAB TA!
  - Late Projects: Late submission of projects will lead to loss on point, so please turn in your projects on time! No projects will be accepted after 2 weeks beyond the project's original due date. Everything regarding a project should be settled within 2 weeks of the project's due date.

- Though working together is encouraged, the projects must be your own effort. "Duplicate" projects will all receive zero points and possible referral to the Office for Student Conduct.
- All students should read, understand and abide by the University Student Conduct Code  
<http://www.usc.edu/dept/publications/SCAMPUS/governance/gov03.htm>

# Multimedia Applications for Windows

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## Course Outline

### Week 1 - Introduction

- Introduction to Multimedia
- Review WWW and Homepages

**Reading Assignment:** *Photoshop Book Chapters 1,2,3*

### Week 2 – Basics of Storyboarding

- Defining purpose, target audience, and concise outline of a multimedia title
- The importance and steps of storyboarding
- Acquiring media from other websites
- Issues and implications of electronic media
- Copyright and intellectual property

**Reading Assignment:** *Photoshop Book Chapters 4,5*

**Project:** Create a storyboard for an interactive CD-ROM

### Week 3 – Introduction to Raster Graphics

- Graphic file formats
- Interlaced GIFs
- Transparent GIFs
- JPEG graphics

**Reading Assignment:** *Photoshop Book Chapters 6,8*

**Project:** Manipulate an image in PhotoShop using layers, painting tools, masks, channels and filters

### Week 4 – Introduction to Digital Audio

- Sampling and quantization of audio
- Sound formats: wav, mid, aif, mp3

**Reading Assignment:** *Photoshop Book Chapters 9*

**Project:** Capture a sound clip and edit it in Sound Forge

### Week 5 – Introduction to Vector Graphics

- Computer Generated Art with Vector and Raster Graphics

**Reading Assignment:** *Photoshop Book Chapters 7,10*

**Project:** Create a Company Logo using Illustrator. Work with text, geometric shapes, wrapped text.

### Week 6 – Integrating raster and vector graphics

- How to use a scanner
- Creating paths and importing raster images
- Layering and compositing

**Reading Assignment:** *Lecture Notes on Illustrator*

**Project:** Scan an image and edit it in PhotoShop. Import the picture into Illustrator and add vectored text effects

### Week 7 – Introduction to Digital Video and Digital Audio Production

- Learn how to perform video capture
- Different codecs
- Learn to calculate the audio and video file size

**Reading Assignment:** *Lecture Notes on Premiere*

**Project:** Capture a video clip, edit it using Premiere and add sound to it.

**Week 8 - Midterm**

Covers material from weeks 1 – 7

**Week 9 - Video Editing & Video Production for CD-ROM**

- Rolling titles, credits & sound
- Create animated buttons and pop-down menus

**Reading Assignment:** *Lecture Notes on Premiere*

**Project:** Add transitions, text, titles and credits to the digital movie

**Week 10 - Introduction to Interactive Multimedia Production**

- Basics of a multimedia authoring tool
- Meaning of interactivity

**Reading Assignment:** *Director Book Chapters 1,2,3*

**Project:** Finish all necessary components of the Director movie. Assemble all material to start creating a Director movie.

**Week 11 – Interactive Multimedia Authoring Software**

- Meaning of cast, score, and stage
- How to achieve interactivity by using buttons

**Reading Assignment:** *Director Book Chapters 4,5*

**Project:** Create a Director movie. Learn how to work with cast, score and stage.

**Week 12 – Introduction to LINGO Programming**

- Built-in Behaviors
- An object-oriented scripting language used to control multimedia elements in Director

**Reading Assignment:** *Director Book Chapters 6,7,8*

**Project:** Assemble interactive CD-ROM from storyboard

**Week 13 – More on LINGO**

- Streaming video and audio
- Control timing of video and audio

**Reading Assignment:** *Director Book Chapters 9,10*

**Project:** Add interactivity to the Director movie using LINGO

**Week 14 – CD-ROM Application Development**

- How to use a CD-ROM burner
- Create the CD label

**Reading Assignment:** *Director Book Chapters 16*

**Project:** Generate a stand-alone executable file for a director movie

**Week 15 – Final Project**

- Work on final project and Transfer the finished executable to CD-ROM
- Prepare for final presentations

**Week 16 - Final Presentations**

- Final projects showcase
- Student critique
- Instructor feedback

