2 hours lecture, 2 hours laboratory; 3 credits

Study of interface development and animation for the Internet. Focus on technical and aesthetic considerations of website development. This course is the same as ARTD 3812 [Art 48.13]. (Not open to students who are taking or have completed Computer and Information Science 3800 [13.2] or 3630 [52].)

Objectives
   This course focuses on computer-human interaction and multimedia production.

   • Students will gain an appreciation for both technical issues and aesthetics.
   • Students will learn how to produce their own web pages and digital media using a variety of tools.
   • Students will develop a thematic web site that showcases their own digital multimedia.

Syllabus

Lecture:

1.  Introduction (1 week)
   a)  What is multimedia?
   b)  role of the World Wide Web
   c)  market needs; issues

2.  The Internet (1 week)
   a)  network basics
   b)  packet switching; internet protocols
   c)  client-server model; browsers

3.  Digital display basics (2 weeks)
   a)  raster-scan devices
   b)  color models, frame buffer mechanics
   c)  digital image formats, compression

4.  Continuous media (2 weeks)
   a)  audio and video formats
   b)  animation
   c)  streaming media

5.  Web page aesthetics (4 weeks)
a) interface design guidelines  
b) composition and navigation  
c) selection of representations; use of color; creating a mood 

6. Supporting interaction (3 weeks)  
a) hyperlinks  
b) plug-ins: Shockwave, Quicktime VR, PDF  
c) programming languages: Javascript; Java; databases; CGI  

Laboratory: 

1. Building web pages (6 weeks)  
a) browser basics  
b) HTML basics  
c) colors & backgrounds  
d) image maps  
e) tables & frames  
f) Javascript  

2. Tools for creating digital media (8 weeks)  
a) Macromedia Director, Flash  
b) Dreamweaver  
c) Photoshop  
d) SoundEdit Pro  

Textbook  
Learning Web Design, Niederst; O’Reilly, 2003  

Suggested Reading List: 

Randall H. Trigg, Kaj Gronbaek, From Web to Workplace : Designing Open Hypermedia, MIT Press, 1999  

Andrew Sather (Editor), Ardith Ibanez, Bernie Dechant, Creating Killer Interactive Web Sites : The Art of Integrating Interactivity and Design, Hayden Books, 1997  


James L. Mohler, Jon M. Duff, Designing Interactive Web Sites, Delmar Pub., 1999  