Brooklyn College Department of Computer and Information Science

CISC 1035 [3.1] Multimedia Production for the World Wide Web

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

The Web Wizard's Guide to Multimedia, Lengel, Addison Wesley, 2002

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

David Siegel, Creating Killer Web Sites, Second Edition, Hayden Books, 1997

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

Edward R. Tufte, Visual Explanations : Images and Quantities, Evidence and Narrative, Graphics Press, 1997