

Production of Computer - Based Training
InsDsg 616 Syllabus

Instructor Contact Information:

Robert Kelley

Telephone Number: (617) 818-4890

E-mail: robert.kelley@umb.edu

Office Hours: upon prior arrangement

Class Textbook:

“How to do Everything with Dreamweaver MX.” By Michael Meadhra 2002

ISBN 0-07-222470-3

Course Description: This course provides an introduction to creating interactive multimedia instruction. The class will use a combination of tutorial lab exercises and assignments so students can gain experience in structuring computer based training programs, create interactions and integrate media. The course will focus on:

- Developing skills in Macromedia Dreamweaver, Fireworks, and Flash to produce a computer-based training prototype.
- Developing the instructional design component of a computer-based training program.
- Students will gain fluency in using various interactive media (threaded discussions, groupware, course management shells) as tools for collaboration.

Instructional Methodologies: The course uses a “distributed learning” approach that incorporates both virtual and face-to-face meetings. A variety of instructional methods, including group interaction, lectures, demonstrations and student produced projects are incorporated. Emphasis is placed on allowing learners to determine their own goals and to facilitate the construction of knowledge based upon making connections to prior knowledge and experiences. In addition lab activities are designed to give students the opportunity to learn html and Macromedia Dreamweaver.

Method of Evaluation: Students performance will be determined by their participation in class, their understanding of the course reading material, a midterm project proposal and an evaluation of their final project. Grades are based upon the following criteria:

- Class participation and completion of lab exercises (10%)
- Participation in online forums (30%)
- Midterm project proposal (30%)
- Final web-based training prototype (30%)

Production of Computer - Based Training

InsDsg 616 Syllabus

Mid-term Paper: Students will produce a paper based upon a topic they have selected that will describe the following:

- The context for their project, to include a description of the environment, known facts about the users and an explanation of how technology addresses those issues.
- A description of the content to include the goals, instructional objectives and student outcome.
- A description of the entire learning challenge and the teaching strategy they plan to implement that will address the learning challenges directly.

Final Project: Students will also produce for the final a WebQuest on a topic of your choice. A WebQuest is an inquiry-oriented activity designed to focus on using information rather than looking for it, and to support learners' thinking at the levels of analysis, synthesis and evaluation.

- It will be produced in html or using Macromedia Dreamweaver.
 - A 500 word description which explains: the context for your project. A description of the content and learning challenges and the teaching.
-

Course Syllabus:

1. **Introduction:** Students are introduced to the concept of “distributed learning” a blended approach which incorporates both virtual and face-to-face meetings. They will use the Prometheus course management system tutorial and fill out a skills survey.
2. **Why deliver web-based training?** An e-Learning overview which defines e-learning and how web-based training fits into the larger industry. We will examine the effects of technology on training and education, look at products available and how they address teaching and learning. In lab we will learn the basic concepts of html.
3. **Is it the media or the message?** Media may or may not have an effect on learning but we should recognize that a relationship exists. We will discuss the critical role that instructional design has on learning and WebQuests as a tool for delivering instruction. In lab we will set-up server accounts and discuss file management issues related to html.
4. **New Media Affordance's.** Understanding the role that media plays in the design of web-based training is a critical first step towards thoughtful implementation. In class we will define the tools that are currently available and discuss their role to enhancing good instruction. In lab we will work on body tags to change the background and discuss internal and external links.
5. **Learning Theory and Web-Based Training:** Knowing how people learn involves the study of teaching and learning theories and the important skill of knowing how and when to apply them. Common theories and how the effects the web has on learning will be explored through a Teaching and Learning WebQuest. In lab we will continue to examine links and adding images.

Production of Computer - Based Training

InsDsg 616 Syllabus

- 6. Understanding Context:** To begin to design a web-based training program you must first examine the learner and their environment. What is known about the targeted audience? What motivates them? What do they already know? The Dick and Carey model for instruction provides a useful tool for exploring this area. In lab we will finish learning html and introduce Dreamweaver MX.
- 7. Understanding Content:** Defining a clearly stated goal, sound instructional objectives and worthwhile student outcomes are essential steps in the planning process but it is the content that directly effects the learners experience. We will examine the critical decisions that must be addressed to ensure fidelity between goals, objectives and the learner. In Lab we will introduce the Dreamweaver interface and show how to define a site.
- 8. Midterm Presentations:** Although Threaded discussions and chat rooms are both text based tools for instruction they have very different characteristics. Midterm presentations will be completely virtual. There will be no face-to-face meeting. Instead we will use the chat feature within Prometheus to do a peer-to-peer review of our midterm assignments. A threaded discussion will be created to discuss the use of chat as an tool for instruction.
- 9. Project Planning:** The implementation of your Webquests begins with creating storyboards and flowcharts that help organize complex projects. **Concept mapping** as developed by Joseph D. Novak (1993) at Cornell University suggests that representing knowledge in the visual format of a concept map allows one to gain an overview of a domain of knowledge. In lab we will use tables to arrange information.
- 10. Navigation:** By providing your own consistent and predictable set of navigation buttons designers help give the user a sense of a site's organization, and makes the logic and order of a site visually explicit. This reduction of "cognitive load" helps the viewer concentrate on the material rather than the technology.
- 11. Information Design:** Visual Hierarchy is the process of taking stock of your content and determining their relative importance and then designing areas that grab attention to a lesser or greater degree. General concepts of screen design and layout will be examined as they relate to the creation of a WebQuest. In lab we will build the skeletal navigation system for a students final project.
- 12. Open Lab:**
- 13. Open Lab:** In addition to the lab activities students will be assigned peer-to-peer groups and virtually review their prototypes.
- 14. Open Lab:**
- 15. Final Presentations:** Students will present their final projects to the entire class and discuss the challenges and successes that they have encountered.