EDET/AEET 793 - Advanced Instructional Design and Development - Spring 2009

Catalog Description:

Incorporation of instructional design criteria, multimedia development skills, knowledge of instructional methods, learning theory and evaluation in developing multimedia and web-based instructional projects.

Course Credit: 3 Graduate Hours

Prerequisites: AEET or EDET 703; Knowledge of Adobe Photoshop, Flash and Dreamweaver, or their equivalents.

Intended Audience

Graduate students enrolled in the Educational Technology degree program.

Instructor: Thomas J. C. Smyth, Ph.D.

Course Goal

The goal of this course is to integrate theory and skills of design and development, learning principles and assessment into a comprehensive multimedia instructional project, and to develop a program portfolio that demonstrates the candidate's growth as an educational technology specialist.

Objectives

Author a comprehensive multimedia project incorporating knowledge of the appropriate application of

- Behavioral and cognitive learning principles
- Instructional design and assessment principles
- Design and development tools (graphics, animation, audio and video)
- Contemporary trends, problem areas, and issues in educational technology.

Develop a program portfolio (draft) which demonstrates the breadth and depth of what you have learned throughout your course of study and integrates them into a whole to represent the knowledge, skills and dispositions you are taking with you to advance your career.

Recommended Readings

1. Alessi, S. M. & Trollip, S. R. (2001). Multimedia for Learning: Methods and Development (3rd ed.). Boston: Allyn and Bacon.
2. Ivers, K. S. & Barron, A. E. (2002) Multimedia Projects in Education: Designing, Producing, and Assessing (2nd ed.). Westport, CT: Libraries Unlimited.
3. Kemp, J., Morrison, G., & Ross, S. (1996). Designing effective instruction. Upper Saddle River, New Jersey: Prentice-Hall, Inc.
4. Mayer, R., Ed. (2005) The Cambridge Handbook of Multimedia Learning. Boston: Cambridge University Press.
5. Newby, T., Stepich, D., Lehman, J., & Russell, J. (1996). Instructional technology for teaching and learning. Englewood Cliffs, New Jersey: Prentice-Hall Inc.
6. Seels, B. & Glasgow, Z. (1998). Making instructional design decisions. Columbus, Ohio: Merrill Publishing Company.
7. Sharma, R.C. (2004) Interactive Multimedia in Education and Training. Hershey, PA: Idea Group, Inc.

To complete your projects, you may be required to purchase software packages and/or manuals for the programs, and/or peripherals for your computer. Because of the wide variation of possible projects, no single text can cover all of the possible applications you might encounter. Be prepared to invest in applications, not in a broad-based text.

Instructional Methodologies

In this web-based course, you will work on projects independently and in groups, consulting about and critiquing each other's work frequently. This course requires several hours per week. As with most distance education courses, it requires excellent time management skills. The course presupposes a set of knowledge and skills gained though experiences in previous educational technology courses, including AEET/EDET 603, 703, 709 and

722. You will be expected to create flowcharts and storyboards, write scripts, and use specialized software such as Dreamweaver, Flash, Fireworks, Freehand, PhotoShop, iMovie and Final Cut Pro as well as free Web 2.0 tools.

Academic Course Requirements

1. Present a Web-Related Technology (WRT)

   Investigate specific, **related** tools associated with Web 2.0 and synthesize information into a presentation which explains what the tools do, how they work, and their contribution to the development of powerful instructional strategies that enhance the learning process.

2. Develop an Instructional Multimedia Project (MMP)

   Design and develop a web-based multimedia instructional or training application.

3. Develop a Program Portfolio

   Design and develop your program portfolio.

4. Participate in critiques of colleagues' work

   Critique the draft and final edition of your colleagues' Web-Related Technologies project.
   Critique the design, development and final edition of your colleagues' multimedia project (MMP).

5. Work with a variety of other technologies, including, for example, Mobile Web development and iTunesU formats.

   These activities will be assigned throughout the semester.

Evaluation

	Assignment	**Due Dates (see Schedule)**
15%	Mobile Web Development	
20%	Web-Related Technology (WRT)	
5%	Critiques of WRT	
30%	Instructional Multimedia Project (MMP)	
5%	Critiques of MMP	
25%	Program Portfolio	

Evaluation of your performance in this course is holistic. "A" represents superior, exceptional work; "B" represents very good performance in completing all assignments; "C" represents average work overall; "D" represents below average performance. Your assignments will be evaluated on their overall quality and thoroughness.

AECT Standards

This course meets the following AECT Standards for School Media and Educational Technology Specialists (SMETS):

Design

1.1.2.d Incorporate contemporary instructional technology processes in the development of interactive lessons that promote student learning.
1.1.3.a Produce instructional materials which require the use of multiple media (e.g., computers, video, projection).

Development

2.0.1 Select appropriate media to produce effective learning environments using technology resources.
2.0.2 Use appropriate analog and digital productivity tools to develop instructional and professional products.
2.0.3 Apply instructional design principles to select appropriate technological tools for the development of instructional and professional products.
2.0.6 Use the results of evaluation methods and techniques to revise and update instructional and professional products.
2.4.3 Combine electronic and non-electronic media to produce instructional materials, presentations, and products.

http://www.aect.org/

Conceptual Framework

This course fulfills the following aspects and elements of the USC Columbia and USC Aiken Conceptual Frameworks:

Planning, Managing, Instructing Knowledge, Practice, Theory and Research, Creating Opportunities, Technology