# EDIT 732 Analysis and Design of Multimedia/Hypermedia Environments Course Syllabus Fall 2010

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Tuesday 12:30pm – 3:10pm or by appointment

### **Required Texts:**

- 1. Fast Things First Allison Rossett, 1999
- 2. Planning and Conducting Needs Assessments Witkin & Altschuld, 1995

#### **Recommended Texts:**

- 1. Designing for the Digital Age Kim Goodwin, 2009
- 2. Job Aids & Performance Support Allison Rossett & Lisa Schafer, 2007

#### **Course Objectives:**

- connect the instructional design literature to the practice of analysis, design, and development
- provide opportunities for reflection and dialogue about the instructional design process
- apply the instructional design process to the development of computer-based instruction through authentic prototype projects
- interact with clients and/or subject matter experts in project development
- investigate of learning theory, research and applied practice issues related to computerbased instruction

### Methodology:

This course will provide students with opportunities to experience the instructional design process as applied to the development of a computer-based instructional prototype module. Students will have the opportunity to interact with subject matter experts, draft a comprehensive design approach and implement their ideas using an authoring system. The course will be focused on facilitating connections between the instructional design literature and the practice of designing and developing instruction using multimedia technology.

## Assignments

<u>1. TEXT PRESENTATIONS (15 Points)</u>: Students will present text chapters to the class. Students are required to create and use an example to illustrate the concepts presented in the case study or chapter text. Students must produce a detailed outline or PowerPoint presentation.

<u>4. PERFORMANCE ANALYSIS & REPORT (20 Points)</u>: This assignment will provide the opportunity to familiarize students with proposed project(s) and define the specific parameters of the project. Assisting the clients in defining their goals, determining relevant data sources and planning data gathering will take place both inside and outside of class. The initial requirements of this assignment include detailing and documenting the performance analysis plan including the following elements:

- Goals of organization
- List of data sources
- Planned methods of data gathering
- Description of type of opportunities (roll-out, problems, development, strategic planning)
- Description of performance analysis approach including identified stages, questions and communication strategies (interviews, focus groups, observations, or surveys)

Once contact has been made with subject matter experts and data has been collected, the performance analysis report will be completed. An example of this document is provided. This document will be delivered to the client with recommendations and rationale and will include the following elements:

- o Description of organizational and individual drivers (and barriers) to success
- Priorities for Training or Development
- List of matching findings, drivers and potential solutions
- Recommendations and rationale

5. NEEDS ANALYSIS (10 Points): Once the Performance Analysis recommendations have been approved by the client and/or subject matter experts, you will determine the specific needs of identified project modules (selected from the performance analysis recommendations) through a needs assessment, audience and environment analysis. This will result in detailed description of needs related to specific content for instruction or training. This document will be shared with the instructor and subject matter experts for approval to proceed and include the following elements:

- Determine present condition related to a specific need
- Define related specific knowledge and skills
- Identify any missing knowledge and skills
- Review environment comparing average with ideal performance
- List any discrepancies
- Identify what is working
- Set priorities for action
- Conduct and document audience analysis
- Conduct and document technology analysis
- Conduct and document environmental/situational analysis
- Team member roles and responsibilities

<u>6. TASK ANALYSIS (10 Points)</u>: The task analysis assignment will permit you to further explore the content related to their specific instructional module need. Students will thoroughly investigate the content and use task analysis to determine priorities for instructional design. In addition, students will write objects.

- Task analysis
- Write and analyze objectives

7. DESIGN TREATMENT (15 points): You will collaboratively develop a multimedia design treatment or design approach document that will provide sufficient detail for the client regarding the proposed module development. Both the instructor and client will review and approve the design treatment or approach prior to extensive development of the module. The treatment will present the design concept and related materials in a professionally-polished document and will include the following components:

- Overview of problem, setting and client need
- Needs analysis
- Task analysis
- Instructional components of lesson module(s) and detailed explanation/rationale of approaches and instructional strategies
- Flowcharts & Storyboards
- Formative evaluation
- Recommendations

8. PROTOTYPE (10 points): You will design and develop a multimedia prototype instructional module on a specific content area selected from several topics early in the course. Groups will apply the instructional design process (from audience analysis to formative evaluation) to multimedia development. You will work with the clients to determine the scope of the content, and formatively evaluate the design. The prototype should be robust enough to communicate the overall design approach and actively engage the user with creative application of instructional strategies. The prototype and a report on the process and results of the formative evaluation of the module will be presented to the client and the class at the conclusion of the semester.

### 9. FINAL PRESENTATION (10 Points)

The final presentation should include participation by all team members and cover the following topics: instructional goals, the process you used to achieve the goals, findings from research and/or analyses, recommendations, design approach, and prototype demonstration/walkthrough.

# **CLASS SCHEDULE**

DATE	TOPIC	ASSIGNMENT
WEEK 1:	Welcome, Introductions	■ Rossett, ch. Preface – 3
Aug. 31	Review syllabus	
	• Select text presentations	
	• Review proposal & client info.	
	• Overview of design process	
<b>WEEK 2:</b>	• Performance analysis (PA) - intro	Read "Interviewing subject-matter
Sept. 7		experts" (Rodriguez – handout)
		Read "Working with subject
		matter experts" (Mason –
		handout)
		Read, Getting inside an experts
		brain (handout)
		• Witkin & Altschuld, ch. 1 – 4
		• Review project charter & TTAC
		website
WEEK 3:	• W&A ch. 1 (?), ch. 2 (?), ch. $3$ (?), ch.	• Revise & send Client Letter
Sept. 14	4(?)	• Finalize Client/SME questions
	• Performance analysis	• Rossett, cn. $4 - 5$
	Questions for Client/SME	•
WEEK 4:	• Begin planning needs analysis	Document Client/SME visit
Sept. 21	• Gathering information	• Send follow-up email to client
		• Rossett, ch. $6 - 8$
		• Witkin & Altschuld, ch. $5-6$
WEEK 5:	• W&A ch. $5(?)$ , ch. $6(?)$ ,	• Begin briefing report
Sept. 28	• Debrief about client visit	
	• Performance/needs analysis	
	PA report	• Durft and line and line
WEEK 6:	• Performance/needs analysis	• Draft audience analysis,
001.5	• Needs Analysis	objectives, content outline, needs
		Witkin & Altschuld ch 7 10
WEEV 7.		
WEEK /: Oct 12	• NO CLASS – COLUMBUS DAY	-
Oct. 12	• W&A $ch 7(2) ch 8(2) ch 9(2) ch$	■PA Report peer feedback
000.17	• Wark cli. $7(2)$ , cli. $8(2)$ , cli. $9(2)$ , cli. $10(2)$	Finalize Briefing report
	Derformance/needs analysis	T manze briefing report
	Noods Applysis	
WEEK 8.	Present PA Report to class	• Finalize PA report
Oct. 26	Needs Analysis	• Work on Needs analysis
	Tack Analysis	
WEEK 9:	PA report due	• Send follow-up email to client

Nov. 2	Task Analysis	
	<ul> <li>Present PA Report to Client class</li> </ul>	
	• Tresent TA Report to Chent class	<b>- XX</b> /
WEEK 10:		• Work on treatment
Nov. 9	• Debrief about client meeting	
	<ul> <li>Task Analysis</li> </ul>	
	• Design	
<b>WEEK 11:</b>	Task Analysis	Revise treatment
Nov. 16	• Design	Peer Feedback
	Present Needs Analysis	
<b>WEEK 12:</b>	Begin Prototype	■ Treatment
Nov. 23		Begin Prototype
<b>WEEK 13:</b>	Present Task Analysis & Objectives	■ Treatment
Nov. 30	• Prototype	Prototype
<b>WEEK 14:</b>	Present Treatment	■ Treatment
		Prototype
WEEK 15:	LAST CLASS	Prototype
<b>Dec. 7</b>	Presentation Dry-run	■ Treatment
	Present Prototype	
<b>WEEK 16:</b>	Final Treatment & Prototype Due	Submit to client
Dec. 11	Final Client Presentations	Get client letter

## **Expectations for Individually Produced Documents:**

- English grammar, spelling and punctuation will be perfect!
- All documents will be delivered on time.
- All documents will be error free, thus indicating that the student problem solved and planned ahead.

### **Class Make-up Policy:**

If George Mason University is closed due to inclement weather on the day of class, the class will not be held. Material missed due to the cancellation of the first 3-hour class will be incorporated into the remaining class sessions. Should a second 3-hour session be canceled, all remaining class sessions will be 15 minutes longer. All subsequent classes missed will be rescheduled.

## **Grading Policy:**

Grades are assigned using a ten point scale, and no plus or minus grades are given: A=90-100 B = 80 - 89.9 C= 70 - 79.9 D= 60 - 69.9 F= 0 - 59.9

Late assignments will be penalized 10% for each class session past the due date.