EDIT 705 Section 001: Instructional Design (Updated June 3, 2010)

DAYS / TIME / LOCATION	INSTRUCTOR: Wanda Mally	
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June 7 – July 28, 2010	Phone Number: (207) 738-2414; (207) 738-2449 (FAX)	
	Teleconference and Online Office Hours by Appointment Mon-Fri	

COURSE OVERVIEW

Course Description from the University Catalog

Helps students analyze, apply, and evaluate principles of instructional design to develop education and training materials spanning a wide range of knowledge domains and instructional technologies. The course focuses on a variety of instructional design models, with emphasis on recent contributions from cognitive science and related fields.

Course Prerequisites

Prerequisites for this course are teaching, training or technical development or equivalent experience.

Course Objectives

Upon completing the course, students will be able to:

- Define instructional design
- Consider realistic aspects of the practice of instructional design
- Compare and contrast models of instructional design
- Debate existing perspectives on learning
- Gather and analyze informal or formal data related to an identified instructional need
- Produce production calendar for semester prototype development
- Conduct task analysis using an identified technique
- Conduct learner analysis
- Write instructional and/or performance objectives
- Determine types or levels of learning addressed
- Articulate design approach for learning environment and corresponding instructional activities and strategies
- Create storyboard and navigation layout for an instructional design project
- Produce limited prototype of design concept using electronic media of choice (e.g. Articulate, Word, Powerpoint, Camtasia, Captivate, Dreamweaver, RoboHelp, etc.)
- Conduct regular peer reviews or formative evaluation of prototype and report on findings
- Describe how summative evaluation of learning environment might take place

Delivery Format

All course activities for the semester will be held online. The course will be conducted primarily using an asynchronous format consisting of the following:

- Assigned readings & research
- Instructor-provided notes
- Discussions on selected topics and case studies
- Student practical applications and peer in-progress reviews (IPRs)

Each week we will cover different topics in instructional design. Readings, instructions, activities and assignments for the week will be released every Monday morning by 7 a.m. and will remain available through the end of the semester. It is the student's responsibility to keep track of the weekly course schedule of topics, readings, activities, and assignments due. Instructor office hours are available by appointment and can be conducted via telephone or via a private Blackboard chat forum. I do not have office hours on Sundays.

RESOURCES REQUIRED BY STUDENTS

Required Texts

Brown, A. & Green, T.D. (2006). *The essentials of instructional design*. Upper Saddle River, NJ: Pearson, Prentice Hall. (ISBN 0-13-118220-X)

Ertmer, P.A. & Quinn, J. (2007) *The ID Casebook: Case studies in instructional design*. 3rd Edition. Upper Saddle River, NJ: Pearson, Merrill, Prentice, Hall. (ISBN 0-13-171705-7)

Additional relevant online readings/resources reviewed on specific weeks will be provided.

Mason email Account and IT Listserv

As a GMU student, you will need to acquire a GMU email account. Contact the IT Support Center (http://itusupport.gmu.edu/student.asp) to activate your account. If you are an IT student, please also subscribe to the IT Listserv which will post job opportunities, program announcements, etc. Directions about how to subscribe can be located on the IT Program Website (http://it.gse.gmu.edu/listserv/). Additional resources you will need for this course are listed below:

- Internet access
- Access to Blackboard (CE6) http://www.irc.gmu.edu/ce6transition/studentquickguidece6.pdf provides information on how to log in)
- Adobe Acrobat Reader

PROFESSIONAL STANDARDS

Association for Educational Communications and Technology (AECT); International Society for Technology in Education (ISTE) and National Educational Technology Standards (NETS):

- To design conditions for learning by applying principles of instructional systems design, message design, instructional strategies, and learner characteristics. (AECT)
- To develop instructional materials and experiences using print, audiovisual, computer-based, and integrated technologies. (AECT, ISTE-NETS)
- To use processes and resources for learning by applying principles and theories of media utilization, diffusion, implementation, and policy-making. (AECT)
- To plan, organize, coordinate, and supervise instructional technology by applying principles of project, resource, delivery system, and information management. (AECT)
- To evaluate the adequacy of instruction and learning by applying principles of problem analysis, criterion-referenced measurement, formative and summative evaluation, and long-range planning. (AECT, ISTE-NETS)
- Demonstrate a sound understanding of technology operations and concepts. (ISTE and NETS) use technology to enhance their productivity and professional practice. (ISTE and NETS)
- Understand the social, ethical, legal, and human issues surrounding the use of technology and apply that understanding in practice. (ISTE and NETS)

COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT STATEMENT OF EXPECTATIONS

All students must abide by the following:

- Students are expected to exhibit professional behavior and dispositions. See http://gse.gmu.edu for a listing of these dispositions.
- Students must follow the guidelines of the University Honor Code. See http://www.gmu.edu/catalog/apolicies/#TOC_H12 for the full honor code.
- Students must agree to abide by the university policy for Responsible Use of Computing. See http://mail.gmu.edu and click on Responsible Use of Computing at the bottom of the screen.
- Students with disabilities who seek accommodations in a course must be registered with the GMU Disability Resource Center (DRC) and inform the instructor, in writing, at the beginning of the semester. See http://www.gmu.edu/student/drc or call 703-993-2474 to access the DRC.

COURSE REQUIREMENTS

Discussion/Project/Presentation assignments

Students are expected to keep track of the scheduled assignments, which include the readings in preparation for each week, discussions and regular reviews/revisions of design & prototype materials.

Communication

Working 100% online requires dedication on the part of the instructor/facilitator and the students. As the instructor/facilitator, I rely on you to communicate to me any questions or problems that might arise. In such cases, you need to contact me immediately by email or phone.

PERFORMANCE-BASED ASSESSMENTS

Instructional Design Case Study Discussions (18%)

Each team will be assigned a case study from the Ertmer & Quinn text. During the scheduled weeks, teams will lead an online discussion forum on their assigned case study. In addition to keeping the relevant individual design project materials updated and uploaded in accordance with the schedule (see the schedule section of the syllabus), teams are required to have the case study review/synthesis posted and the discussion initiated by Monday morning at 9 a.m. on the week the case study is scheduled. Failure to post your design case on time will result in an automatic grade reduction in points per the rubric. (See the section on Evaluation Criteria.)

Preparing for the Design Case Study as a Facilitators

Team members will be expected to have read the case several times, review the preliminary analysis questions and implications for ID practice at the end of each chapter and go beyond the material presented in the text by connecting prominent issues in the case to personal experience or other research/applied information in the field of instructional design (e.g. academic journal publications, applied work contexts, learning theory, professional organizations in the field, relevant online materials, etc.). The format of the discussion is open but the discussion questions should be an attempt to create an engaging learning experience. Creativity is encouraged as well as exploration into the affordances of online learning environments (for example, role-playing, game-based, online synchronous/asynchronous approaches as well as engaging presentations, teaching and learning experiences or other instructional/training approaches). NOTE: Discussion blogs have been created for each of the case studies. These will be used for you to initiate the discussion and attach your analysis which is required. The analysis can be in Powerpoint or Word. Teams must notify the instructor in advance if any additional or special resources need to be arranged or set up for your case study. As previously noted, your case study analysis and questions must be posted by 9:00 am Monday of the week you are scheduled to facilitate. It will be up to each team to determine how to split up the work for the case study. One approach would be that one team member prepare the analysis and the other member(s) develop the discussion questions. All members must take part in leading the discussion.

Preparing for the Design Case as a Discussion Participant

All students will be expected to have read each case, review the preliminary analysis questions and implications for ID practice at the end of each chapter and participate in all case study discussions. Students are also expected to have completed the other assigned readings for the week in advance. Review the facilitators' analysis/synthesis/summary and post your perspective and feedback, responding to questions or points posed, or specific directions (in cases of role-playing, etc.) given by the facilitators. Tie in personal experiences as an instructional designer as well as relevant points from the week's readings. All postings and activities relating to the case study must be completed by 11:59 pm on the Saturday night before the start of each new week. See the Course Schedule for details and the deadlines posted throughout the Blackboard course's weekly links. Do not wait until the last day of the week to participate in the case study discussions, as this will impact your final course grade. Instead, pace yourself during the week while keeping in mind we will cover one to two cases during each of the scheduled weeks depending on the final enrollment numbers.

ID Project Design Document Materials and In-Progress Reviews (IPRs) (42%)

During the first week of the course, all students must submit a proposed topic for an instructional/training problem. Seven of the proposed topics will be selected for this semester's projects then assigned to the teams. You will work in these teams to apply the instructional design process and related techniques to your instructional/training problem. Each team will progressively produce outputs from the design process, detailing their instructional design project, building towards a completed design document. These outputs (portions of your design document) are to be uploaded to the designated **IPR Team Discussion** area accessible from the **Discussions** link on the menu and

other areas of the course. These outputs from each stage of the design process will be separate from the final Design Brief created using Powerpoint and your Prototype described later.

We will use role playing as a means for conducting regular reviews of your design materials (and the design brief and prototype). My role will be that of an organization's Program Manager for all training projects and contracts. Your role will be that of instructional designers/project managers assigned to a team project. Each member of every team will be required to take the lead on various activities and deliverables for the project. Assignment of project responsibilities will be documented by each team in the Project Charter and Production Plan. While working on your team project, you will hold regular in-progress reviews for your projects. Therefore, it is the responsibility of each member on the team to make his or her project materials available for the scheduled reviews and to ensure you provide constructive feedback on your team members' work. Each team is expected to hold a *minimum* of 6 IPRs during the semester. (See the course schedule of the syllabus for the required IPR dates.) The list of teams can be accessed from the course content menu once the course has started. Remember: You will use your IPR Team Discussion area to post your work and exchange team feedback.

IPR Format

Teams will begin building a design document for your ID project, starting with the needs and task analyses. You will post the latest version of the design document containing the output(s) of the most recently covered instructional design phase. Each team member will be expected to walk the review team through their assigned portion of the design project to date, connecting their work to class learning and outside experiences related to instructional design. In addition to critiquing the work of your team, you, as peer reviewers will be expected to ask questions and prompt discussion of instructional design issues related to the project. You can use tools (i.e., spreadsheets, databases, etc.,) to gather and track feedback ('red lines') you will need for making updates to your materials. Examples of the types of redlines you will collect include (but are not limited to) those that are technical, typographical and of course, those relating to the instructional design approach. At the end of each IPR, each team is required to update and upload their latest/revised design document back to the IPR Team Discussion area in accordance with the schedule.

ID Project Prototype and Design Brief (36%)

Some design documents can end up being lengthy documents. Therefore, your team will need to create a high-level design brief Powerpoint presentation to serve as an "<u>executive overview</u>" (approximately 10-12 slides) of your project to accompany your prototype. The executive overview must <u>summarize</u> the following elements:

- The instructional design problem
- Results from your Needs analysis
- Identified Instructional Goal
- Results from your Task analysis
- Results from your Learner & Contextual analysis
- Instructional objectives
- Description of the design approach for the learning environment, instructional strategies/activities and assessment strategies
- Flowchart of the instructional solution
- Summary of your Formative evaluation plan
- Summary of your Summative evaluation plan
- Scope of the Prototype (For example, indicate if the prototype represents a completed topic, lesson, module, course, storyboards, etc.)

The limited prototype of the design concept should:

- Be created using electronic media of choice (e.g. Articulate, Word, Powerpoint, Camtasia, Captivate, Dreamweaver, RoboHelp, etc.); if the instructional solution is a print-based product, then use an application appropriate for the solution such as Word (or be saved in PDF format); if the instructional solution is browser or internet based, the final products should be uploaded to the GMU web site of all members of the team)
- Include sample assessment items
- Represent navigational layout of the program
- Communicate the essence of the design idea and convince a client you would be the right designer for this project

To view examples of previous student final projects, select the "Past Project Examples" link from the course menu.

Other Grading (4%)

The student-instructor discussion posting is worth 2 points and must be completed the first week. A proposed ID project topic should also be emailed to the instructor the first week for an additional 2 points.

LOGISTICS

**Required Portfolio Elements for IT students (EDIT601/EDIT701)

If you are a student in the IT program, it is strongly suggested that you retain your design brief/prototype elements produced in this course for your required online Masters electronic portfolio assessment process at the mid-point and end of your coursework (EDIT601/701). You may also want to document the feedback from your peers and indicate what elements of the design were adjusted based on collected formative feedback. You will be asked to reflect on your learning within this course and the best time to formulate those reflections is when you are currently in the course. Please retain these electronic materials for your required portfolio assessment.

COURSE SCHEDULE

The following is a summary of the topics and activities covered in the course. Please keep in mind that the activities and syllabus are subject to change based on my determination of needs of the class. You will be notified via email and Blackboard announcements if changes to the schedule become necessary.

Note: The following schedule identifies the most possible case studies covered. The actual list will be finalized after the roster has been finalized.

Week	Topics / Activities / Assignments
Week 1	Course Kick-off and Administrative Items
6/7 - 6/12	 Verify Blackboard (and email) access Review syllabus and course requirements Review previous EDIT 705 projects & begin thinking about a project topic Participate in Student/Instructor intros (using Blackboard discussion tool) Participate in discussion for case study 15 Email a proposed instructional design project topic to instructor
	Topics: Introduction to Instructional Design, Thinking & Cognition Content we'll cover: Brown & Green, Chapters 1-3 Ertmer & Quinn, Case Study 15 Discussion hosted by instructor Also see related readings under wk 1 link in Blackboard Read for next week: Brown & Green, Chapter 4 Ertmer & Quinn, Case Study 26 Ertmer & Quinn, Case Study 27
Week 2 6/14 - 6/19	Topic: Media, Production and Project Management Content we'll cover: Brown & Green, Chapter 4 Ertmer & Quinn, Case Study 26 Discussion hosted by Team 1 Ertmer & Quinn, Case Study 27 Discussion hosted by Team 2 Also see related readings under wk 2 link in Blackboard Wednesday, upload draft of production plan/calendar for your ID project/prototype IPR #1: Thursday, Friday, IPR Teams conduct kick-off meeting (Identify forms to be used, standards, etc.; also, review production plans/calendars; update as appropriate before Monday) Read for next week: Brown & Green, Chapters 5-6 Ertmer & Quinn, Case Study 8 Ertmer & Quinn, Case Study 18
Week 3 6/21 - 6/26	Topic: Needs and Task Analyses Content we'll cover: Brown & Green, Chapters 5-6 Ertmer & Quinn, Case Study 8 Discussion hosted by Team 3 Ertmer & Quinn, Case Study 18 Discussion hosted by Team 4 Also see related readings under wk 3 link in Blackboard Wednesday, upload draft needs and task analyses IPR #2: Thursday, Needs and Task Analyses IPR (Note: This IPR should include a review of your draft needs and task analyses) Friday, Gather, analyze and summarize feedback from needs and task analyses IPR; update as appropriate before Monday Read for next week: Brown & Green, Chapter 7 Ertmer & Quinn, Case Study 28

Week 4 6/28 - 7/3	Topics: Learner & Contextual Analyses Content we'll cover: Brown & Green, Chapter 7 Fettmer & Quinn, Case Study 28 Discussion hosted by Team 5 Also see related readings under wk 4 link in Blackboard Wednesday, upload learner & contextual analyses IPR #3: Thursday, Learner & Contextual Analyses IPR (Note: This IPR should include a review of your draft learner & contextual analyses) Friday, Gather, analyze and summarize feedback from learner & contextual analyses IPR; update as appropriate before Monday Read for next week: Brown & Green, Chapters 8-10 Fettmer & Quinn, Case Study 21
Week 5 7/6 - 7/11	 Topics: Design and Development Content we'll cover: Brown & Green, Chapters 8-10 Ertmer & Quinn, Case Study 21 Discussion hosted by Team 6 Also see related readings under wk 5 link in Blackboard Wednesday, upload instructional goals & objectives, flowchart, executive summary of learning environment/activities IPR #4: Thursday, Conduct design & development IPR (Note: This IPR should include a review of your instructional goals & objectives, flowchart, executive summary of learning environment/activities) Friday, Gather, analyze and summarize feedback from the design & development IPR; update as appropriate update as appropriate before Monday Read for next week: Brown & Green, Chapters 11-12 Ertmer & Quinn, Case Study 14
Week 6 7/12 - 7/18	 Topics: Assessment, Evaluation and Metrics Content we'll cover: Brown & Green, Chapters 11-12 Ertmer & Quinn, Case Study 14 Discussion hosted by Team 7 Wednesday, Upload description of learner assessment approach/items, summative evaluation plan, and formative evaluation plan. (Your formative evaluation plan can include but not be limited to a write-up of how you are collecting feedback during IPRs accompanied by samples of any forms you are using; Your summative evaluation should include an explanation of long-term plans for metrics collection) IPR #5: Thursday, Conduct Assessment and Evaluation IPR (Note: This IPR should include a review of your draft learner assessment items, your draft formative and summative evaluation plans) Friday, Gather, analyze and summarize formative feedback from Evaluation IPR; update as appropriate before Monday

Week 7 Teams work on final materials: Prototype 7/19 - 7/25 Design Brief Finalized Design Document Wednesday, upload "near final" materials IPR #6: Thursday, Friday, conduct final review of all materials then update as Post your final design brief, prototype and design document by 11:59 pm (just before midnight) Sunday night to avoid penalty Week 8 Monday, 7/26 through Wednesday, 7/28, participate in the virtual designers showcase, hosted online beginning. To participate, all students must visit each virtual "design Course Wrap brief' of all exhibitors (your classmates) that were not part of your regular team. Select 7/26 - 7/28 the design briefs and corresponding prototypes to evaluate then supply feedback using the discussion forum for each respective team. The doors to the designer's showcase close at 11:59 pm on 7/28. Therefore all visits and feedback must be finished no later than that date and time to avoid penalty. Thursday, 7/28 Course Ends Closing remarks from instructor (via email) Course Evaluations to be completed online (You will receive instructions via GMU email on the evaluation process)

EVALUATION CRITERIA

Summary of Graded Activities and Products

The following list is a summary of all graded items. Items with an asterisk (*) are graded using one of the rubrics in the next section.

Item/Activity	Points
Intro discussion	2
Proposed topic for ID Project	2
Case Study (Facilitation)*	10
Case Study (Discussion Participation)*	8
ID Project (see below)	
IPR Participation*	42
Final Project Deliverables*	36

Total points = 100

Attendance

Attendance in the course is mandatory. Simply put, students are expected to participate in all discussions and IPRs. The rubrics in the following section break down the total possible number of points that can be earned in the course.

The assessment of learning in this course will be based on a criterion model. The ID cases and design reviews will use a competency based model in that if there is clear evidence in online interactions that an individual has met the criteria, then he or she will gain full credit. For the design brief/prototype, each major phase of the instructional design prototype will be assessed as a potential client might evaluate a design concept in a realistic setting. The work and importance that the team places on the first phase of the design greatly impacts the quality of the following two major phases. Therefore, it is highly suggested you place increased effort on the first phase (e.g. understanding the problem, audience, context) to ensure higher evaluations as you progress through the process.

Particular components of the design brief/prototype may be improved throughout the semester based on additional learning of the process through modeling of others' work and cycles of feedback by peers and the instructor. At the design review and conclusion of the semester, judgments will be made as to the level of persuasiveness of the design concept by other designers in the class. This input will be considered by the professor who will assign the mid-point and final grade.

RUBRICS USED TO EVALUATE WORK ON CASE STUDY DISCUSSIONS

Team Grading Criteria for Case Study Analysis and Facilitation (worth up to 10 points)

Criteria	0 pts Did Not Meet	1 pts Somewhat Met	2 pts Fully Met
Case study materials complete and uploaded/turned in on time.	No evidence	On time but had to update with additional instructions for clarification later.	On time, complete with abstract and clearly stated instructions.
Thorough understanding/analysis/synthesis of case study.	No evidence	Reflects limited thought processes and preparation.	Reflects outstanding thought processes and thorough preparation.
Connections made to experience/readings/theory/applied practice, etc.	No evidence	Limited references to assigned readings and experiences beyond the case itself and the course.	Often reflected ideas supported by frequent references to assigned readings in and beyond the course.
Attempts at creative format, consideration of affordances of media when preparing case study activities.	No evidence	Limited evidence of thought behind the questions and activities.	Thought-provoking questions and/or activities tied in and reinforced instructional design activities or tasks.
Was actively present throughout the week, keeping the audience engaged and the discussion going.	No evidence	Responded to 50% (or fewer) of the postings with postings spread out over a 1-2 day period; rarely supplemented comments with an additional probing question for further consideration.	Responded to 60% (or more) of the postings with postings spread out over several days; often supplemented comments with an additional probing question or hypothesis for the class to consider.

NOTE: The week you are scheduled to facilitate, you are still responsible for participating in the other case study discussions happening that week.

Individual Grading Criteria for Participation in Case Study Discussions (worth up to 8 points)

Based on 8 case studies, each discussion is worth up to 1 point.

Case Study	0 points Zero evidence of participation for the discussion	 .5 point Primary posting or activity requested by the facilitator is completed per the facilitator's questions and/or instructions for activities, but towards the end of the week. Posting submitted per facilitators' instructions reflect little thought and preparation. 6 or fewer postings, most of which are concentrated in a 1 or 2 day period. Some references are made to assigned readings, but references are generally vague and random. Infrequent application of work and/or previous learning experiences to concepts covered in class. 	Primary posting or activity requested by the facilitator is completed per the facilitator's questions and/or instructions for activities. Posting submitted per facilitators' instructions reflect outstanding thought processes and thorough preparation. of or more postings distributed over 3 or more days, including any reviews/comments for classmates as required by the facilitator's instructions. Substantive ideas supported by frequent references to assigned readings Frequent application of work and/or previous learning experiences to concepts covered in class
Case 15			
Case 26			
Case 27			
Case 8			
Case 18			
Case 28			
Case 21			
Case 14			

NOTE: On dates your team is not scheduled to facilitate a discussion, you are still expected to fully participate in the scheduled discussion led by fellow classmates or the instructor. This includes the first "student-instructor intro" discussion. This also means not waiting until the last day of a discussion to post your contributions.

RUBRICS USED TO EVALUATE WORK ON ID PROJECT

Individual Grading Criteria for In-Progress Reviews (IPRs) and Showcase Participation (worth up to 42 points)

Criteria (IPR 1-6 and Showcase Discussion)	0 pts No Participation	1 pt Limited Participation	2 pts Full Participation
All design document/prototype/design brief materials for which you are responsible are uploaded on schedule (at the beginning of the IPR and when posting final updates are due at the end of the IPR week).			
For materials you do not have the lead on, you are an active participant in reviews of others' work, allowing enough time for teammate(s) to respond and update accordingly.			
Your feedback is respectful, detailed, thorough, constructive, and connected to experiences in/outside of class.			

Team Grading Criteria – Design Brief & Prototype Presentation (worth up to 36 points)

Criteria	0 pts Not Persuasive	2 pts Somewhat Persuasive	4 pts Very Persuasive
Phase 1 – Clear description of problem, audience and objectives			
Description of instructional design problem			
Description of proposed intervention based on needs & task analysis data that has been collected, analyzed and documented			
Description of learner characteristics and how the environment relates to the problem			
Articulated instructional goals and objectives			
Phase2 - Description of logical design, approach, strategies and activities			
Articulated design approach and strategies for learning environment			
Articulated instructional activities and strategies			
Includes sample storyboards, flowcharts of prototype and/or clearly shows how product will be navigated			
Limited, professional-looking prototype depicting design idea and includes sample assessment			
Phase 3 – Description of Evaluation Strategies			
Description of formative and summative evaluations include realistic, effective strategies and tools; both target specific metrics and/or outcomes			

Final Grading

Using the following scale, the final grade is based on your performance out of the possible 100 points:

Grade	Points
A	90-100
В	80-89
Failure	0-79

GSE Syllabus Statements of Expectations

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Students must follow the guidelines of the University Honor Code. See http://www.gmu.edu/catalog/apolicies/#TOC_H12 for the full honor code.

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Approved March 2004 Revised January 2010