

**GEORGE MASON UNIVERSITY**  
**COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT**  
Instructional Design and Technology Program

EDIT 752 Section DL2: Design and Implementation of Technology-based Learning Environments  
3 Credits Spring 2018  
4:30-7:10pm/Wednesdays Fairfax Campus –Fenwick Library Room 4010

**PROFESSOR(S):**

**Name: Dr. Brenda Bannan**

**Office phone: 703-993-2067**

**Office location: Thompson Hall L043**

**Office hours: by appointment**

**Email address: [bbannan@gmu.edu](mailto:bbannan@gmu.edu)**

**Prerequisites/Corequisites** EDIT 732 or permission of instructor

**University Catalog Description:**

Students design and produce multimedia/hypermedia applications based on current theory and research in instructional design and cognitive science. Examines user needs, information models, structure, and media selection and uses to inform design and production of final project.

**Course Overview:**

This course will provide students with face-to-face and online learning opportunities to apply principles of instructional design, design research, user research, usability and evaluation and revision techniques to a real world learning technology design project. Students will work intensively in a team-based setting to collaboratively and thoroughly design/re-design, produce, collect, evaluate, and analyze data related to the design and/or implementation of a real-world technology solution prototype geared toward a specific instructional or performance problem. The outcome of the course will be a viable and implemented user research plan that allows for several rounds of applied data collection, analysis and revision of a technology-based prototype project.

**Course Delivery Method**

This course will be delivered online (76% or more) using an asynchronous format via the Blackboard learning management system (LMS) housed in the MyMason portal, several synchronous sessions using WebEx. You will log in to the Blackboard course site, WebEx and Spark using your Mason email name (everything before @masonlive.gmu.edu) and email password. The course site will be available on January 24, 2018.

**Under no circumstances, may candidates/students participate in online class sessions (either by phone or Internet) while operating motor vehicles. Further, as expected in a face-to-face class meeting, such online participation requires undivided attention to course content and communication.**

## Technical Requirements

To participate in this course, students will need to satisfy the following technical requirements:

- High-speed Internet access with a standard up-to-date browser, either Internet Explorer or Mozilla Firefox. Opera and Safari are not compatible with Blackboard;
- Consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course
- Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of the course requirements.
- The following software may be incorporated into this course for PCs and Macs available for downloading by clicking on the link or through the instructors:  
<http://www.userzoom.com/>

## Expectations

- Course Week: Because asynchronous courses do not have a “fixed” meeting day, our week will start on Wednesday, and finish on Tuesday. Any synchronous meetings will take place as indicated on the Schedule of Classes.
- Log-in Frequency:  
Students must actively check the course Blackboard site and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least three times per week. In addition, students must log-in for all scheduled online synchronous meetings.
- Participation:  
Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions.
- Technical Competence:  
Students are expected to demonstrate competence in the use of all course technology. Students who are struggling with technical components of the course are expected to seek assistance from the instructor and/or College or University technical services.
- Technical Issues:  
Students should anticipate some technical difficulties during the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.
- Workload:  
Please be aware that this course is not self-paced. Students are expected to meet *specific deadlines* and *due dates* listed in the Class Schedule section of this syllabus. It is the student’s responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due.
- Instructor Support:  
Students may schedule a one-on-one meeting to discuss course requirements, content or other course-related issues. Those unable to come to a Mason campus can meet with the instructor via telephone or web conference. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.
- Netiquette:

The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students must always re-read their responses carefully before posting them, so as others do not consider them as personal offenses. *Be positive in your approach with others and diplomatic in selecting your words.* Remember that you are not competing with classmates, but sharing information and learning from others. All faculty are similarly expected to be respectful in all communications.

- Accommodations:  
Online learners who require effective accommodations to insure accessibility must be registered with George Mason University Disability Services.

## **Learner Outcomes or Objectives**

This course is designed to enable students to:

1. understand the process of instructional design and development as applied to a User Experience (UX) real-world project;
2. apply instructional design, UX design, learning theories and interdisciplinary design principles to technology prototype development;
3. apply product development, evaluation, research and design research methodologies to instructional design and development
4. collect and analyze user data related to iterative instructional design and development
5. contribute positively to the team's mission and goals and support of individual members and team members' professional growth and development
6. document individual's contributions to team's mission and goals
7. contribute to project management and accomplishment of goals
8. write research management plan
9. implement cycles of rapid evaluation of technology-based prototype and revisions and present results

## **Professional Standards (International Board of Standards for Training, Performance and Instruction (IBSTPI) :**

Upon completion of this course, students will have met the following professional standards

### *Professional Foundations:*

- Communicate effectively in written & oral form
- Apply data collection & analysis skills to instructional design projects

### Design & Development:

- Use an instructional design and development process appropriate for a given project
- Organize instructional programs and/or products to be designed, developed, and evaluated

### Evaluation & Implementation:

- Evaluate instructional & non-instructional interventions
- Revise instructional & non-instructional solutions based on data
- 

### Management:

- Manage partnerships & collaborative relationships
- Plan and manage instructional design projects.

## Required Texts

- 1) Hartson, R. & Pyla, P.S. (2012) *The UX Book: Process and guidelines for ensuring a quality user experience*. Waltham, MA:Elsevier.

## Course Performance Evaluation

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, Tk20, hard copy, etc.).

- **Assignments and Examinations**
- **Performance-Based Assessments** - This course includes performance-based assessments with allocated percentages and corresponding point values (listed in rubric at end of syllabus):
- **Percentage of Grade (each deliverable worth 100 points for a total of 1000 points but weighted with varying percentages) – are displayed as a running total point value. The User Research, Revision and Presentation – the core performance-based assignment, for example, has several components that each total 100 and *combined* are 70% of your grade. Therefore the running total point value you see on Blackboard will reflect the number of points you have earned *at that time* rather than your total grade for that *entire* assignment.)**

Individual Team Member Evaluation (TME) Participation/Contributions to Group	30%
Project Process	
UX Research, Revision and Presentation of Prototype	70%
<u>Research Management Plan</u>	10%
<u>Progression and Revision of Prototype</u>	10%
<u>Round 1 Data Collection and Analysis</u>	20%
<u>Round 2 Data Collection and Analysis</u>	20%
<u>User Experience Research Presentation</u>	10%
Total percentage (referred to as points in individual items in rubrics below)	100%

- **Grading**

Your final grade will be based on the following scale:

- A+ = 97-100 percent
- A = 94-96 percent
- A - = 90-93 percent
- B+ = 87-89 percent
- B = 84-86 percent
- B- = 80-83 percent
- C+ = 77-79 percent
- C=74-76 percent
- C=70-74 percent
- F = <70

### Other Requirements/Instructor Availability

Due to intense nature of this blended project-based course, the instructor will release content progressively in the Blackboard course site typically the day of the course session (e.g. by Tuesday 4:30pm of specific class session content or sometimes earlier). Any course questions should be posted to the course question section on Blackboard for all class participants to view and benefit from the collaborative responses. The instructor will typically respond to the majority of questions/concerns on the day of the class allocated to that particular topic and remaining responses will likely occur periodically on Monday through Thursday.

Please note: Response to questions/concerns posted on Friday through Sunday will typically require some additional turn-around time.

### Professional Dispositions

See <https://cehd.gmu.edu/students/polices-procedures/>

### Class Schedule

Note: Faculty reserves the right to alter the schedule as necessary, with notification to students.

WEEK	IN CLASS ACTIVITIES	OUT OF CLASS ACTIVITIES
1 Jan 24 <b>(F to F)</b>	Overview of Syllabus: Schedule and Requirements  Introduction to UX Research  Meet as groups, revisit and identify issues and questions with prototype, draft goals to progress prototype based on last semester input	- Read Hartson & Pyla, Chapters 20 -23  - Review Online Resources  - As a group, re-examine prototype, feedback from last semester and draft some revision and research goals for prototype for the next month  - Begin to think about and plan for connecting with target audience members related to UX research cycles

		<ul style="list-style-type: none"> <li>- Review examples of user research/project management plans and presentations from last year</li> </ul>
<p>2</p> <p>Jan 31</p> <p>(Asynch)</p>	<p>Cognitive Affordances and Interactions</p> <p>UX Mobile Design</p> <p>When to Use UX Research</p>	<ul style="list-style-type: none"> <li>- Read Hartson &amp; Pyla, Chapters 12-13</li> <li>- Review Online Resources</li> <li>- Revisit the design of your prototype identifying affordances and interactions their implications for design as grist for redesign</li> <li>- Review UX interaction design principles to apply to progressively improving your prototype</li> <li>- Begin to implement any changes to prototype based on feedback from last semester and prepare prototype for initial research cycle</li> <li>- Begin thinking about UX research management plan and post initial <i>drafts</i> of potential research goals and questions in group area</li> <li>- Determine accessible target audience and begin to recruit audience members</li> </ul>
<p>3</p> <p>Feb 7</p> <p>(Asynch)</p>	<p>UX Research Questions and Methods</p> <p>Overview of Traditional Metrics and Methods</p> <p>Overview of Rapid Evaluation Methods</p> <p>Brief Introduction to Remote Research</p> <p>UX Research Planning</p>	<ul style="list-style-type: none"> <li>- Read Hartson &amp; Pyla, Chapters 14-15</li> <li>- Review Online Resources</li> <li>- <b>Revise posted initial user research goals and research questions for review by instructor</b></li> <li>- <b>Associate goal/questions with potential UX research method</b></li> <li>- Continue to work on revising, progressing and fleshing out prototype based on last semester</li> </ul>

		<p>feedback to prepare for UX research cycles</p> <ul style="list-style-type: none"> <li>- Determine accessible target audience and begin to recruit audience members</li> </ul>
<p>4</p> <p>Feb 14</p> <p>(Asynch)</p>	<p><b>Draft Research Questions</b></p> <p>Rapid UX Evaluation Methods</p> <p>Examples of UX Research Approach, Methods and Strategy</p> <p>Sharing preparation and plans at this point</p>	<ul style="list-style-type: none"> <li>- Review Online Resources</li> <li>- Continue work on revisions to production prototype</li> <li>- Collaboratively work on UX research management plan</li> <li>- Identify and recruit target audience members</li> </ul>
<p>5</p> <p>Feb 21</p> <p>(*Asynch-changed from F-to-F)</p>	<p>Remote Research</p> <p>Examples of UX Research Approach, Methods and Strategy</p> <p>Sharing preparation and plans at this point</p>	<ul style="list-style-type: none"> <li>- Review Online Resources</li> <li>- Collaboratively work on UX research management plan</li> <li>- Continue work on prototype to get in shape for further research and evaluation</li> <li>- Identify and recruit target audience members</li> </ul>
<p>6</p> <p>Feb 28</p> <p>(Asynch)</p>	<p><b>Research Management Plan DUE</b></p> <p>Tools for Remote Research</p> <p>Introduction to UserZoom Tools</p>	<ul style="list-style-type: none"> <li>- Review Online Resources</li> <li>- pilot test materials for research sessions</li> <li>- Confirm recruitment of target audience members and prepare materials for user research sessions</li> </ul>

<p>7</p> <p>Mar 7</p> <p>(Asynch)</p>	<p>Introduction to Analysis</p> <p>Planning for different UX research methods, approach and strategy Studies</p> <p>Round 1: Data Collection</p> <p>Sharing Opportunity on Upcoming Research Cycle</p>	<ul style="list-style-type: none"> <li>- Read Hartson &amp; Pyla, Chapters 16</li> <li>- Review Online Resources</li> <li>- Implement User Research Plan</li> <li>- Begin data collection and analysis</li> <li>- Report results and related prototype revisions on online system</li> <li>- Cycle of development/revision of prototype based on analyzed results begins</li> </ul>
<p>8</p> <p>Mar 14</p>	<p><b><i>SPRING BREAK</i></b></p>	<p><b><i>SPRING BREAK</i></b></p>
<p>9</p> <p>Mar 21</p> <p>(F-to-F)</p>	<p><b>Initial Revisions to Prototype DUE on course site</b></p> <p>Round 1: Data Collection and Analysis begins</p> <p>Field Observations, Video observation, Diary Studies</p> <p>Analysis Methods</p>	<ul style="list-style-type: none"> <li>- Review Online Resources</li> <li>- Read Hartman &amp; Pyla, Chapter 17</li> </ul>
<p>10</p> <p>Mar 28</p> <p>(Asynch)</p>	<p>Round 1: Data Collection and Analysis</p> <p>Communicating Results</p> <p>Draft Report Results in Briefing</p>	<ul style="list-style-type: none"> <li>- Read Hartman &amp; Pyla, Chapter 18</li> <li>- Review Online Resources</li> <li>- Round 1: Data Analysis and Revisions to Prototype</li> </ul>



<p>11 Apr 4 (Asynch)</p>	<p><b>Reported Results Briefing on Round 1 and Associated Revisions DUE</b></p> <p>Round 2: Data Collection begins</p> <p>Overview of Learning Analytics</p>	<ul style="list-style-type: none"> <li>- Review Online Resources</li> <li>- Begin to Prepare for Round 2: Data Collection</li> <li>- Recruit and implement data collection</li> </ul>
<p>12 Apr 11 (Asynch)</p>	<p>Round 2: Data Collection begins</p> <p>Overview of Agile, Lean (and other various terms about)development</p> <p>Sharing Opportunity on Research Cycle</p>	<ul style="list-style-type: none"> <li>- Review Online Resources</li> </ul>
<p>13 Apr 18 (F-to-F)</p>	<p>Round 2: Data Collection and Analysis</p> <p>Groupwork in Data Analysis and Identified Revisions of Prototoype</p>	<ul style="list-style-type: none"> <li>- Round 2: Data Analysis and Revisions to Prototype</li> </ul> <p>Round 2: Data Analysis and Identified Revisions to Prototype</p>
<p>14 Apr 25 (F-to-F)</p>	<p>Round 2: Data Collection and Analysis</p> <p>Groupwork in Data Analysis and Identified Revisions of Prototoype</p> <p>Prepare for final presentation of user research</p>	<ul style="list-style-type: none"> <li>- Round 2: Data Analysis and Implemented Revisions to Prototype</li> <li>- Work on Reporting Results from Round 2</li> <li>- Work on Final Presentation</li> </ul>
<p>15 May 2 (Asynch)</p>	<p><b>Reported Results Briefing on Round 2 and Associated Revisions DUE</b></p> <p>Prepare for final presentation of user research</p>	<ul style="list-style-type: none"> <li>- Work on Final Presentation</li> </ul>

16	<b>FINAL Presentation</b>	
May 9	<b>FINAL Presentation DUE</b>	<b>Congratulations!</b>
<b>(F to F)</b>		

## Core Values Commitment

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: <http://cehd.gmu.edu/values/>.

## GMU Policies and Resources for Students

### *Policies*

- Students must adhere to the guidelines of the Mason Honor Code (see <https://catalog.gmu.edu/policies/honor-code-system/> ).
- Students must follow the university policy for Responsible Use of Computing (see <http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>).
- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students **solely** through their Mason email account.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see <http://ods.gmu.edu/>).
- Students must follow the university policy stating that all sound emitting devices shall be silenced during class unless otherwise authorized by the instructor.

### *Campus Resources*

- Support for submission of assignments to Tk20 should be directed to [tk20help@gmu.edu](mailto:tk20help@gmu.edu) or <https://cehd.gmu.edu/aero/tk20>. Questions or concerns regarding use of Blackboard should be directed to <http://coursessupport.gmu.edu/>.
- For information on student support resources on campus, see <https://ctfe.gmu.edu/teaching/student-support-resources-on-campus>

For additional information on the College of Education and Human Development, please visit our website <https://cehd.gmu.edu/students/> .

## Assignment Details

Table 1 Summary of Individual Team Member Evaluation (TME) Participation/Contributions to Group

- 1. Individual Team Member Evaluation (TME) Participation/Contributions to Group Project Process (30%)** - This course requires significant online asynchronous, synchronous and face-to-face participation and interaction. Each member of small teams (5-6 people) will interact to conduct UX research, analyze results and revise a prototype of a technology-based learning environment. Each student will be expected to participate and contribute to each assignment in a self-selected, rotating role with each student taking leadership on one designated assignment (co-leadership can be facilitated if necessary to evenly distribute tasks). However, each student is also expected to individually contribute to all project deliverables and document their own and others contribution in the Team Member Evaluation (TME) form provided by the instructor. Successful collaboration and respectful, professional interaction among team members is a core competency of this course and will be facilitated by team meetings through Blackboard Collaborate or another selected form of online and off-line interaction. Student design teams must schedule at least one group meeting per week. Students may elect to use Blackboard Collaborate or another tool but should capture and post some evidence of their meeting (e.g. meeting notes, document sharing link, video or audio with a trail of communication accessible to the instructor) to provide evidence of participation in the UX research process. Student design team members may elect to assign rotating roles for each project deliverable assignment.

As part of this course, students are expected to find ways to work online and face-to-face respectfully and successfully in their teams as would be expected in a consulting or professional position. Each student will complete an individual team member evaluation for each assignment commenting on their own and their team members' contribution to the assignments. This information is one of many points of data considered and triangulated by the instructor along with individual online presence and interaction surrounding each team deliverable that will comprise individual grades.

- 2. Research Management Plan (10%)** – Each team member will contribute to the conceptualization, drafting and implementation of a research management plan for the semester that includes further development of the prototype, selection of UX research methods (related to rapid evaluation methods) and implementation of at least two UX research evaluation cycles (referred to as round 1 and round 2 UX research cycles). **The research management plan will include background on the UX project, as well as for each of the two rounds of research: 1) study goals; 2) research questions; methodology(ies); participants; 4)schedule and; 5)sample protocol or script.** Implementation of these two UX research evaluation cycles will uncover problems with the prototype through group implementation of selected data-driven, rapid evaluation techniques and analysis that will feed into progression and revision of prototype (see assignments 4 & 5). Each student will work with his or her team to successfully break down tasks in a plan to accomplish these objectives across the semester that will be carried out by all team members who each will assume lead on one deliverable and will be posted to the course online system early in the semester.
- 3. Progression and Revision of Prototype (10%)** - Collectively and individually, students will continue to contribute to progressing toward quality UX design, re-design through rapid UX evaluation and iterative cycles for the established project prototype. The first iterative production and revision cycle will be based on revisiting the prototype and feedback from last semester as well as reviewed design implications. The second iteration will occur after the first round of data collection and analysis (described below). If time permits, a final round of improvement or iteration of the

prototype will occur after round two data collection and analysis (if not possible, then changes should be mocked up in the presentation of the prototype or at the very least described and listed as recommendations). Major changes to the prototype should be directly linked to analytic findings and posted on the course online system with designation of lead group member and other members' contributions and activity related to the progression and revision of the prototype.

4. **Round 1 Data Collection and Analysis (20%)** – Collectively, each student will contribute to conducting two rounds of UX research cycles (selected from rapid evaluation and other methods reviewed in course), analysis and appropriate revisions to the prototype. Groups will implement the two rounds of UX research, analyze the data between each round and make corresponding targeted revisions to the prototype based on the analysis. The two rounds of data collection and analysis that may include any (or a combination) of the following rapid evaluation methods: cognitive walk-throughs, expert evaluation, heuristic evaluation, focus groups, field observations, diary studies, usability tests, video observation, remote research techniques, etc. There will be two separate rounds of data (Round 1 and Round 2) and separate analyses that with reported results collection (due dates indicated on schedule) with resulting, identified logical and carried out revisions to the prototype between rounds. Each round will be summarized in a report or briefing and described or illustrated changes to the prototype submitted on the course system with designation of lead group member and contributions of other group members. The report, outline or briefing will include the following components: 1) background and description of the product; 2) goals of the testing; 3) description or map of participants; 4) research questions; 5) protocol and/or; 6) task; 7) methods; 8) data collection; 9) results, participant quotes, or themes; 10) artifacts such as photographs, videos, graphics, etc. Each student will also post a brief reflection on their experience at each round in their TME and online discussion about implementing their selected research method (e.g. lessons learned, what they wished they would have done differently after each implemented round of data collection and analysis, what worked well in their selected methodology and what did not, etc.).
5. **Round 2 Data Collection and Analysis (20%).** See above description.
6. **User Experience Research Presentation (10%)** - Each group will present their initial revisions to prototype, UX research cycles, their data collection, analyses and corresponding prototype revisions from rounds 1 and 2 for the class and clients, if available. Each presentation will consist of an overview of initial revisions, two rounds of evaluation, results, analysis and associated revisions (screen shots) to prototype and highlight the group's process/accomplishments and progress in user research throughout the semester.

**The final performance-based assessment in this course is the submission of:**

- 1) **YOUR GROUP'S USER EXPERIENCE RESEARCH PRESENTATION TO BLACKBOARD ASSIGNMENTS AREA and;**
- 2) **INDIVIDUALLY SUBMITTED TEAM MEMBER EVALUATION and;**
- 3) **A SEPARATE INDIVIDUALLY SUBMITTED PDF DOCUMENT COMPILING: 1) YOUR INDIVIDUAL PROJECT TME; 2) YOUR GROUP PRESENTATION MUST be submitted UNDER THE ASSESSMENTS LINK IN BLACKBOARD IN THE TK-20 SYSTEM.** Please contact [TK20help@gmu.edu](mailto:TK20help@gmu.edu) for any questions related to the TK20 system assignment upload.

### **Assessment Rubric**

Individual Team Member Evaluation Rubric for both in-class and online participation and contributions:

- Outstanding contributor/team member: contributions and meeting evidence reflect exceptional preparation and full participation in groups. Ideas offered are always substantive, providing one or more major insights as well as suggestions for group. Attended all group meetings (unless discussed with instructor), demonstrated exceptional effort on individual and lead tasks, exceeded individual contribution requirements and was instrumental in leading the group forward. Respectfully acknowledged and integrated all members' skills in project development process. Worked as an excellent team group member and contributor. If this person were not a member of the group, the quality of project would be diminished markedly.
- Good contributor/team member: contributions and meeting evidence reflect good preparation and full participation in groups. Good insights are always offered, providing one or more major ideas as well as suggestions for group. Attended all group meetings, demonstrated good effort on individual and lead tasks, met individual contribution requirements and was valuable in leading the group forward. Respectfully acknowledged and integrated all members' skills in project development process. Worked as a good team group member and contributor. If this person were not a member of the group, the quality of project would be diminished.
- Adequate contributor/team member: contributions and meeting evidence reflect adequate preparation and adequate participation in groups. Some insights offered are occasionally, providing some ideas as well as suggestions for group. Attended majority of group meetings, demonstrated effort on individual and lead tasks, met individual contribution requirements. Respectfully acknowledged and integrated all members' skills in project development process. Worked as a team group member and contributor. If this person were not a member of the group, the quality of project would be somewhat diminished.
- Unsatisfactory contributor/team member: contributions and meeting evidence reflect inadequate preparation and adequate participation in groups. There are little insights/contributions offered as well as suggestions for group. Missed a significant amount of group meetings, demonstrated inadequate effort on individual and lead tasks, did not meet individual contribution requirements for group. Did not respectfully interact and acknowledge all members' skills in project development process. Did not work well as a team group member and contributor. If this person were not a member of the group, the quality of project would be unchanged.
- No participation or contribution to team effort on deliverable

## Rubrics

UX Research, Revision and Presentation of Prototype (Total 70 points):

<b>IBSTPI Standard</b>	<b>Criteria</b>	<b>Does Not Meet Standards</b>	<b>Meets Standards</b>	<b>Exceeds Standards</b>
	<b>Research Management Plan (Total possible points – 10)</b>			
22 Plan and manage instructional	Research management plan includes	Limited evidence of preparation	Evidence of planning and preparation with	Outstanding, detailed evidence of planning and preparation with

design projects	plans for further development of prototype, description of two research cycles that will be implemented across the semester.		0 - 3.99 pts	posted documentation of data collection protocol 4 - 4.4 pts	posted documentation of data collection protocol 4.5 -5 pts
17 Evaluate instructional and non-instructional interventions	Description of research cycles include elements listed in assignment description for two rounds of research		Limited description of research cycles presented 0 - 3.99 pts	Description of research cycles included with some elements 4 - 4.4 pts	Thorough description of research cycles with all elements included and a clear representation of activities and logical plan. 4.5 -5 pts
<b>Individual Team Member Evaluation - Research Management Plan (Total possible points – 5)</b>					
Total points					
<b>Progression and Revision of Prototype (Total possible points – 10)</b>					
18 Revise instructional and non-instructional solutions based on data	Evidence of cycles of iterative progression and revision of prototype.		Limited evidence of progression and revision of prototype 0 - 3.99 pts	Evidence of evidence of progression and iterative revision of prototype 4 - 4.4 pts	E evidence of excellent progression and multiple revisions of prototype 4.5 -5 pts
18 Revise instructional and non-instructional solutions based on data	Progression and revisions are based on and directly linked to research analysis findings.		Little evidence of progression and revision linked to research analysis findings. 0 - 3.99 pts	Evidence of progression and revision linked to research analysis findings. 4 - 4.4 pts	Evidence of excellent level of progression and targeted revision directly linked to research analysis findings. 4.5 -5 pts
<b>Individual Team Member Evaluation - Progression and Revision of Prototype (Total possible points – 5)</b>					
Total points					
<b>Round 1 Data Collection and Analysis (Total possible points – 20)</b>					
17 Evaluate	Conduct or		Limited evidence	Evidence of	Excellent evidence of

instructional and non-instructional interventions	implement (2) cycles or round(s) of research, analyze data and identify corresponding revisions to prototype based on data analysis.		of implementation of round of research, little analysis and identified prototype revisions 0-8.99 pts	implementation of round of research, some analysis and identified prototype revisions 9-9.4 points	implementation of round of research, excellent analysis and identified prototype revisions  9.5-10 points
1 Professional Foundations: Communicate effectively in written and oral form	Professionally presented report submitted after round of research and analysis		Incomplete research report submitted  0-8.99 pts	Research report submitted with some description of components 9-9.4 pts	Professional presented research report submitted with well-described procedures and components 9.5-10 pts
<b>Individual Team Member Evaluation - Round 1 Data Collection and Analysis (Total possible points – 5)</b>					
<b>Round 2 Data Collection and Analysis (Total possible points – 20)</b>					
17 Evaluate instructional and non-instructional interventions	Conduct or implement (2) cycles or round(s) of research, analyze data and identify corresponding revisions to prototype based on data analysis.		Limited evidence of implementation of round of research, little analysis and identified prototype revisions 0-8.99 pts	Evidence of implementation of round of research, some analysis and identified prototype revisions 9-9.4 pts	Excellent evidence of implementation of round of research, excellent analysis and identified prototype revisions  9.5-10 pts
1 Professional Foundations: Communicate effectively in written and oral form	Professionally presented report submitted after round of research and analysis		Incomplete research report brief submitted  0-8.99 pts	Research report brief submitted with some description of components 9-9.4 pts	Professional presented research report brief submitted with well-described procedures and components 9.5-10 pts
<b>Individual Team Member Evaluation - Round 2 Data Collection and Analysis (Total possible points – 5)</b>					
Total points					
<b>User Experience Research Presentation (Total possible points – 10)</b>					
1 Professional Foundations:	Professional presentation or		Little evidence of preparation or	Evidence of preparation,	Excellent presentation evidenced by organized,

Communicate effectively in written and oral form	walkthrough of progression and revision of prototype based on cycles of research		organization in delivery of presentation with little evidence of progression or revision of prototype based on cycles of research  0-8.99 pts	organization and practiced delivery of presentation with evidence of progression or revision of prototype based on cycles of research  9-9.4 pts	practiced, professional delivery of presentation with outstanding evidence of progression or revision of prototype based on cycles of research  9.5-10 pts
	Total points				
	<b>Individual Team Member Evaluation - User Experience Research Presentation (Total possible points – 10)</b>				
	Total Points Across Assignments				