Wayne State University
Administration and Organizational Studies
Design, Learning and Performance Sciences
IT 6110/LIS6350 – Design Thinking and Knowledge
Winter Term 2016

Web-Based Course CRN #21056, #22672

Course Syllabus

Instructor: Monica W. Tracey, Associate Professor
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Skype Conferencing: MonicaWalchTracey
Also available via Google Hangout
Telephone Conferencing: Please email me to set up a day and time
313-577-1700 (office)
248-756-7166 (cell)
Office Hours: Monday: 9am to 5pm (via distance) and arranged

Course Description: In this course, students will explore broad conceptions of design including all activities involved in generating intentional change via artifacts and experiences; design thinking and knowledge.

While official definitions and textbooks in the instructional design field reflect a conception of design in which little has changed in decades, there has been a growing awareness since the early 1990s that broader conceptions of design could benefit practice in instructional design.

Preparations of instructional designers in college programs traditionally include the use of instructional design models and processes incorporating project work. Approaches based on research on design practice and the effectiveness of design pedagogies in the field are recently emerging in some programs as the design field is evolving.

Design is now defined as all activities involved in generating intentional change (e.g. learning or performance) via artifacts and experiences. This is in contrast to a traditional conception of design as primarily the activity of selecting instructional strategies.

Design thinking is something inherent within human cognition; it is a key part of what makes us human. Looking at design in the broad conception (e.g. anything that isn’t a simple, untouched piece of nature has been designed by someone), the quality of that design effort affects the quality of life. The ability of designers to produce effective, efficient, imaginative and stimulating designs is therefore important to all of us.
Design knowledge focuses on how specialized forms of knowledge are required in order to carry out design activities; these are distinct from scientific knowledge and include both tacit and explicit know-how, facilities embedded within designers themselves, and the knowledge.

*Monica’s course reflection*
“…all occupations engaged in converting actual to preferred situations are concerned with design.” - Donald Schön – The Reflective Practitioner

In this course we will take this quote to heart and it will drive what we are doing – design. How do we design instruction that is learner-centered and boosts learners to higher levels of thinking? Given the realities of budget, time, technology, and people, how do we choose effective instructional and delivery strategies? How can a learner-centered approach help drive the development of an impactful instructional intervention?

In this course, we are on an instructional design journey. You will experience the tenets of design thinking. You will design within a context and to reach outcomes, discover personas, and develop authentic learning. You will give yourself, your classmates, and me something to react to and you will make it rich.

Through constant interaction, you will journey out of your comfort zone and progress through the higher levels of thinking – analysis, synthesis and evaluation. At times you may feel uncertain and uncomfortable as you grapple with ambiguity and ill-structured problems. This is good, as it will make us better designers. At all times, you are encouraged to look at things from a different perspective. Your classmates and I will constantly stoke your creative fires.

As an active participant in the class and to ensure maximum learning and an enjoyable experience for all, you will approach the course in a mature, motivated, and professional manner. This means, you will:

- come to class completely prepared
- accept with enthusiasm the amount of quality work expected in this course
- participate fully in class activities
- submit quality written work
- encourage classmates to look at things from different points of view
- challenge yourself to think critically

Approaching this class in this manner will help you realize the impact a learner-centered instructional design can make. You will become a more astute and effective instructional designer.

**Learning Outcomes and Expectations**

*Course learning goal*
This course will introduce design, design thinking and design knowledge and link it to instructional design.
Learning outcomes
Upon completion of this course, you will be able to:
1. Define design, instruction, instructional design, and the role of the designer.
2. Define design space and identify the activities that occur in the design space.
3. Identify design principles and similarities and differences in the design process.
4. Define and identify design precedent through activities and case studies.
5. Given the context of an authentic instructional need or opportunity, discover your end user by designing to a precise description of learners and what they wish to accomplish.
6. Given the context of an authentic instructional need or opportunity, design to reach outcomes and show achievement by always working the problem-solution relationship.
7. Given the context of an authentic instructional need or opportunity, produce an experience design prototype.

Course Structure
This course combines research and theory with experimental and reflective learning and emphasizes active participation. Class sessions will consist of lectures, problem solving exercises, small group and large group discussion, and hands-on activities to support the development of your instructional design. Since topics will build on one another, your participation is crucial to your success. We will begin by looking at what design is all about. From there, we will develop learner personas, learner context, and discover and define context. Be it lectures or experiential approaches, we will explore different active training strategies that ensure learners think at higher levels. Our journey will lead us to the development of sound performance outcomes and measurements. During every class, we will enthusiastically explore and reject-in-action on design thinking.

Course Readings
We use three books that provide a solid foundation to our weekly topics. In order to have a course where collaboration, learning and imagination thrive, you are expected to come to each class prepared. This means that you have read the assigned readings and reflected on the key points and how the readings relate to what we are doing in the classroom.

Required Text: All three are available at Barnes and Noble Bookstore.


Online Course Site: All course instructional and administrative material will be posted on the course Blackboard site.

Including:
- Course Syllabus
- Weekly outcomes and reading assignments
- Instruction via Video or PPT slides
- Assignments
- Announcements

*****Every student will be assigned to a peer group and will work with the group in a Google document. Each member will gain access to the document along with the instructor. ****

Class Policies:
All policies stated in the Graduate Bulletin of Wayne State University will be adhered to.

1. **Attendance:** Weekly participation via the web is required and is crucial for a passing grade.
   
   a. **Reflective Journals:** Reflective journals are a significant requirement of each student in the course. The guidelines for each journal assignment are the same. You will be required to thoughtfully answer guiding questions based on readings and assignments. You will create a google document and name it with your last name, then share it with the instructor ONLY. Your journal must be completed by **Sunday at 11:59pm for the prior week.**
   
   Please make sure you are thoughtful in your journal postings. Meaningful breath and depth of your response is expected. You will be graded on your comprehension and depth of response, NOT by the length. Each journal entry is worth 5 points for a total of **30 points.**

   b. **Peer Review Group:** Every student will be assigned a peer review group for the semester. Each group will create a Google document and provide peer feedback throughout the semester on assignments and case studies. Once again, meaningful breath and depth in feedback is expected. You will be graded on your depth of response and the final products you create in the class based on the feedback from your group.
NOTE: There are several characteristics a designer must embrace; some which will be developed through the semester through reflective journals and in the peer review groups. Designers must be articulate and excellent writers. They must be active, moral, political, influential change agents who work in a space that includes interpersonal, professional and institutional and societal dimensions (Campbell & Kenny, 2007). Designers must use reflection, conceptualization and judgment (Nelson & Stolterman, 2001) in their designs. Critique throughout design is critical and must be embraced at the individual designer level, with peers and instructor.

2. Final Grades: Grades will be based on work completed and turned in by April 24, 2016 by 11:59pm. No work will be accepted after this date.

3. ATTENTION STUDENTS WITH DISABILITIES: If you have a documented disability that requires accommodations, you will need to register with Student Disability Services (SDS) for coordination of your academic accommodations. The Student Disability Services (SDS) office is located at 1600 David Adamany Undergraduate Library in the Student Academic Success Services department. SDS telephone number is 313-577-1851 or 313-577-3365 (TDD only). Once you have your accommodations in place, I will be glad to meet with you privately during my office hours to discuss your special needs. Student Disability Services’ mission is to assist the university in creating an accessible community where students with disabilities have an equal opportunity to fully participate in their educational experience at Wayne State University.

Please be aware that a delay in getting SDS accommodation letters for the current semester may hinder the availability or facilitation of those accommodations in a timely manner. Therefore, it is in your best interest to get your accommodation letters as early in the semester as possible.

4. Plagiarism: includes copying material (any more then 5 consecutive words) from outside texts or presenting outside information as if it were your own by not crediting authors through citations. It can be deliberate or unintended. If you’re in doubt about the use of a source, cite it. Students caught plagiarizing information from other sources will receive a failing grade in the course. University policy states that students can be subject to multiple sanctions, from reprimand to expulsion as a consequence of academic dishonesty. To enforce this policy, all outside references must be submitted with assignments.

5. Withdrawal Policy: Enrollment/ Withdrawal Policy
Students must add classes no later than the end of the first week of classes. This includes online classes. Students may continue to drop classes (with full tuition cancellation) through the first two weeks of the term.

Students who withdraw from a course after the end of the 4th week of class will receive a grade of WP, WF, or WN.

- WP will be awarded if the student is passing the course (based on work due to date) at the time the withdrawal is requested
- WF will be awarded if the student is failing the course (based on work due to date) at the time the withdrawal is requested
- WN will be awarded if no materials have been submitted, and so there is no basis for a grade

Students must submit their withdrawal request on-line through Pipeline. The faculty member must approve the withdrawal request before it becomes final, and students should continue to attend class until they receive notification via email that the withdrawal has been approved. The last day to withdraw will be at the end of the 10th full week of classes. The withdrawal date for courses longer or shorter than the full 15-week terms will be adjusted proportionately. The last day to withdraw from this course is Friday, March 18th, 2016.

6. Religious Observance Policy: Because of the extraordinary variety of religious affiliations represented in the University student body and staff, the Wayne State University calendar makes no provision for religious holidays. It is University policy, however, to respect the faith and religious obligations of the individual. Students who find that their classes or examinations involve conflicts with their religious observances are expected to notify their instructors well in advance so that alternative arrangements as suitable as possible may be worked out.

Course Assignments, Due Dates and Point Value

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Due Dates</th>
<th>Points</th>
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<tbody>
<tr>
<td><strong>Journal Submissions:</strong> Reflecting on your learning, readings, class activities (Google documents with instructor access)</td>
<td>1/17, 1/24, 1/31, 2/7, 2/14, 4/24</td>
<td>5 points per submission (30 points total)</td>
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<tr>
<td>Case Studies on Design</td>
<td>1/24, 2/14, 2/21</td>
<td>5 points per submission (15 total points)</td>
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<td>Visual Thinking Exercise</td>
<td>1/31</td>
<td>5 points</td>
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Design Problem/Opportunity Assignment | 2/21 | 5 points  
On Your Mark! Get set! Design! Peer Group Assignment! | 2/21 | 5 points  
End-user Discovery Description | 3/6 | 5 points  
Content Discovery Description | 3/13 | 5 points  
Outcome and Assessment Discovery | 3/27 | 5 points  
Educational Experiences Activity Assignment | 4/3 | 5 points  
Detailed Experience Design Prototype | 4/24 | 20 points  

Course is based on 100 points:  
A = 94-100  
A- = 91-94  
B+ = 88-90  
B = 84-87  
B- = 81-83  
C+ = 78 - 80  
C = 74-77  
F = Below 74

Assignment Notes:  
1. All of the design assignments are interrelated and each assignment helps build a complete design concept map of instruction from investigation of a need through evaluation. INCORPORATING PEER REVIEW GROUP MEMBERS’ FEEDBACK IS CRITICAL IN YOUR FINAL PRODUCT SUBMISSION GRADE.

2. Assignment information will be posted in weekly folders on the course web site. Detailed instructions on how to complete and submit each assignment will be provided.

Tentative Schedule

This is a tentative schedule for the semester. Please check this course syllabus weekly and pay close attention to changes to this schedule and course announcements on the course web site.
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<thead>
<tr>
<th>Wk</th>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
<th>Assignments</th>
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<tbody>
<tr>
<td>1</td>
<td>1/11 to 1/17</td>
<td>Design Thinking and Ability Tenets of Design Thinking The Changing Nature of Design</td>
<td>Boling &amp; Smith: <em>The Changing Nature of Design</em> Cross: Ch.1 Week 1 Instruction</td>
<td>Journal Reflection Questions</td>
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<td>2</td>
<td>1/19 to 1/24</td>
<td>Design in Action The Purpose of Design</td>
<td>Cross: Ch. 2 &amp; 3 Week 2 Instruction</td>
<td>Journal Reflection Questions</td>
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<td>Abby Carlin Case Study Assignment</td>
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<td>3</td>
<td>1/25 to 1/31</td>
<td>How Designers Think: Designing to Use</td>
<td>Cross: Ch. 4, 5,6, &amp; 7 Week 3 Instruction</td>
<td>Journal Reflection Questions</td>
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<td>Visual Thinking Exercise</td>
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<tr>
<td>4</td>
<td>2/1 to 2/7</td>
<td>What does design mean for instructional Design Design vs. Instruction</td>
<td>Spector: Ch. 1,2,3, &amp; 4 Week 4 Instruction</td>
<td>Journal Reflection Questions</td>
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<tr>
<td>5</td>
<td>2/8 to 2/14</td>
<td>Design Expertise Novice to Expert</td>
<td>Cross: Ch. 8 Spector: Ch. 6 Week 5 Instruction</td>
<td>Journal Reflection Questions</td>
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<td>Tracey/Unger Case Study Assignment</td>
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<td>6</td>
<td>2/15 to 2/21</td>
<td>Design Problems and Factors to Be Solved Design always working the problem-solution relationship</td>
<td>Spector: Ch. 12 Week 6 Instruction Case Study</td>
<td>Design Problem Topic/Opportunity Assignment Falkin Case Study Assignment</td>
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<tr>
<td>7</td>
<td>2/22 to 2/28</td>
<td>Design Problems and Factors to Solve Problems Old Frames moves to Useful New Frames</td>
<td>Week 7 Instruction Tessmer &amp; Wedman Article</td>
<td>Peer Group Feedback Design Topic/Opportunity Assignment</td>
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<tr>
<td>Week</td>
<td>Dates</td>
<td>Design Space: <strong>DISCOVER</strong> End-users: Design to a precise description of the end-users (learners) and what he/she wishes to accomplish</td>
<td>Theory Summaries: Systems, Communication, Learning, Constructivist ID, and Conditions-based Theories</td>
<td>Assignment</td>
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| 8    | 2/29 to 3/6 | Design Space: **DISCOVER** 
Outcomes: Design to reach outcomes and show achievement 
Outcomes: Design knowing the impact on society 
Outcomes: Design knowing the quality delivered to both internal and external clients 
Outcomes: Design with an eye on efficient operations and activities | Spector: Ch. 7 & 8 Week 8 Instruction | End-User Discovery Assignment |
| 9    | 3/7 to 3/13 | Design Space: **DISCOVER** 
Outcomes: Design to reach outcomes and show achievement 
Outcomes: Design knowing the impact on society 
Outcomes: Design knowing the quality delivered to both internal and external clients 
Outcomes: Design with an eye on efficient operations and activities | Spector: Ch. 9 & 10 Week 9 Instruction | Content Discovery Assignment 
Peer Group Feedback on Content Discovery Assignment |
| 10   | SPRING BREAK | ☐ | ☐ | ☐ |
| 11   | 3/21 to 3/27 | Design Space: **IDEATE** Ideate: Design knowledge how it is done well 
Context: Design with an eye on real life context 
Context: Design with an eye on learning context 
Context: Design within constraints | Spector: Ch. 5 & 14 Week 11 Instruction | Outcome and Assessment Assignment |
<p>| 12   | 3/28 to 4/3 | Design Space: <strong>PROTOTYPE</strong> Prototype: Design to achieve transfer of | Week 12 Instruction | Educational Experiences Activity Assignment |</p>
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<th>learning</th>
<th><strong>Prototype</strong>: Design knowing procedural and supportive content</th>
<th><strong>Prototype</strong>: Design media and delivery system</th>
<th><strong>Prototype</strong>: Design to include practice</th>
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<td></td>
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<td><strong>Peer Group Feedback</strong></td>
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<td>13</td>
<td>4/11 to 4/17</td>
<td>Design Space: <strong>PROTOTYPE Outcomes</strong>: Design always working the problem-solution relationship <strong>Context</strong>: Design knowing the quality of available resources</td>
<td><em>Week 13 Instruction Spector: Ch. 16</em></td>
<td><em>Experience Design Prototype Draft 1</em></td>
<td><em>Peer Group Review of the Experience Design Prototype</em></td>
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<td>14</td>
<td>4/18 to 4/24</td>
<td>What space are you in? Give us something to <strong>react</strong> to, and make it <strong>rich</strong>!</td>
<td><em>Week 14 Instruction</em></td>
<td><em>Peer Group Review of the Experience Design Prototype</em></td>
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<tr>
<td>15</td>
<td>4/24</td>
<td>What space are you in? Give us something to <strong>react</strong> to, and make it <strong>rich</strong>!</td>
<td><em>Week 15 Instruction</em></td>
<td><em>Journal Reflection Questions</em></td>
<td><em>-SUBMIT FINAL Experience Design Prototype (DUE 4/24/2016 BY 11:59PM)</em></td>
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