Syllabus for MLS610 Design Thinking, Fall 2017

Welcome to MLS610: Design Thinking!

"[Design Thinking] Look at problems

first through the prism of users' needs,

research those needs with real people and

then build prototype products/services quickly."

Lohr, S. (2015). "IBM's Design-Centered Strategy to Set Free the Squares." *Nytimes.com*.Retrieved from **http://tinyurl.com/pllubqj** (Links to an external site.)

Design thinking is a human-centered approach to problem-solving and innovation. With design thinking you can confidently generate solutions to problems like a failing business, an outdated curriculum, or switching to sustainable practices. It can launch a new product or enterprise. And it can resolve social issues such as inadequate health services. It is being used by teachers, businesses, designers, social entrepreneurs, and activists for developing meaningful and useful responses to contemporary challenges.

Design thinking is unique among methods of innovation by putting the user first. A New York Times article described design thinking thusly, "Look at problems first through the prism of users' needs, research those needs with real people and then build prototype products quickly " (Lohr, 2015). Thus empathy or an empathetic understanding of the users is paramount. This ensures the user's satisfaction and the designer's success.

The process used in this course moves from Inspiration to Ideation to Implementation. For each of these phases you'll be introduced to a set of tools or methods that you may choose from and apply. Our text will introduce each of these tools and remain a trustworthy guide to their successful application.

During these seven weeks you'll move from identifying users' needs to entertaining diverse solutions, choosing and developing the best, and finally launching one. You'll be immersed in design thinking, all the time being in dialogue with others and your professor. Your goal is to bring your project to the implementation stage. There are no formal papers, but the project will take much time and effort.

Course Goals

- Learn the theory and practice of DT.
- Understand its application to a wide range of issues and problems.
- Apply DT to real-life innovation in your own project.
- Be equipped to pursue real-life innovative projects after this course.

Text for this course:

The text for this course is the *The Field Guide to Human-Centered Design*, produced by IDEO (ISBN: 978-0-9914063-1-9). You can download the free PDF from their website using the steps below.

Step 1: Sign Up: http://www.designkit.org/#register (Links to an external site.)
Step 2: Download the PDF at the bottom of this page: http://www.designkit.org/resources/1 (Links to an external site.)

You may also purchase a hard copy of the book from IDEO at this link: http://design-kit-field-guide.myshopify.com/ (Links to an external site.)

Articles, videos, and websites such as www.ideo.com/work/ (Links to an external site.)will be mentioned as readings for this course.

Requirements

1. Rapid identification of your challenge and formation of a Project Team.

2. Faithful and timely completion of weekly assignments. Late posts will reduce your weekly score.

3. Consistent collaboration: Participate each week in your Peer Review Group.

4. Completion of a project.

Grading

1. Assignments for Weeks 1–5 are worth 10 points.

2. Responses to Peer Review Group member's posts are worth 2 points each week.

3. Weeks 6 and 7 are each worth 15 points.

4. The response to the Project is worth 4 points.

5. Define Success, a list of 10 indicators of success, is worth 4 points.

6. There is a total of 100 points.

7. Remember, stay connected to your Project Team and your Peer Review Group.

Peer Review Groups

Each of you will be assigned to a group of 6 classmates. Since we are not face to face, it's important to interact with group members each week by email, Google Hangouts, or Skype sessions or other types of video conferences, or by phone. While each of you will have your own project, you will support the others by reading over the weekly posts and responding appreciatively and critically ("Here's what I like" and "Here's what I would change"). Your responses are worth 2 points per week. You may be called on to lend a hand in other ways as well.

Note: *Your Peer Review Group is not your Project Team.* You form your own team as part of your project

Calendar

Oct 12-22   Week 1: Introduction to DT through Case Studies
        See Schedule for all assignments
        Post assignments by 6 pm Sunday, Oct 15 *and* Oct 22

Phase One: Inspiration

Oct 23-29   Week 2: Framing Your Design Challenge
        See Schedule for all assignments
        Post assignment by 6 pm Sunday, Oct 29
        Respond to each of your Peer Review Group members by 6 pm Mon, Oct 30

Oct 30-Nov 5 Week 3: Empathy = Interviewing + Immersion
        See Schedule for all assignments
        Post assignment by 6 pm Sunday, Nov 5
        Respond to each of your Peer Review Group members by 6pm Monday, Nov 6

Phase Two: Ideation

Nov 6-12   Week 4: Making Sense of Your Research
        See Schedule for all assignments
        Post assignment by 6 pm Sunday, Nov 12
        Respond to each of your Peer Review Group members by 6pm Mon, Nov 13

Nov 13-19   Week 5: Brainstorming and Bundling
        See Schedule for all assignments
        Post assignment by 6 pm Sunday, Nov 19
        Respond to each of your Peer Review Group members by 6pm, Nov 20

Nov 20-28*   Week 6: Prototyping
        See Schedule for all assignments
        Post assignment by 6 pm Tuesday, Nov 28*
        Respond to each of your Peer Review Group members by 6pm, Nov 29
        *Date change due to Thanksgiving Day, Nov 23

Phase Three: Implementation

Nov 29-Dec 5   Week 7: Pitching Your Innovation
      See Schedule for all assignments
      Post assignment by 6 pm Tuesday, Dec 5
      Respond to each of your Peer Review Group members by 6 pm Wed, Dec 6

Dec 6   Addendum: Defining Success
      See Schedule for all assignments
      Post assignment by 6 pm Wednesday, Dec 6
      No Peer Review Group response necessary

Sample weekly assignment: this is only one of seven units.

Step 1: Framing Your Design Challenge

Goals for this week

- *Get started by framing your design challenge.*
- *Make a plan that includes assembling a team, and research your issue.*
- *Continue to work within your group.*

Reading

- *The Field Guide, pp 31–37*

Case Studies

Again, if you need inspiration, go to IDEO here (Links to an external site.) and peruse the Selected Work. Remember, there are layers of case studies. So begin with one page and new listings will appear. Explore your areas of concern or venture out into something different like Energy or Food.

Activity: Framing your Design Challenge, and More

You begin the process of design thinking by identifying your concern or problem and then framing it: identifying it, "measuring" it, scoping it, and roughly organizing it. This is an important step; don't skip over it. You may change your Challenge, but this initial statement clarifies your thinking and gets you organized. You need to know what your vision is from the beginning, the impact of your project, and the constraints you will work within.

Follow the steps on page 31, learn from the example on pp 32–33 and fill in the blank form on pp 165. This "frame" will be your initial and basic description.

Now take the extra step of creating a project plan, pp 34. Follow Steps 1–5 and write a one-page plan. This should include the who (your team, hopefully, already formed), what,

and when of your project. Notice that the steps include elements of pp 35–37 about your team, tools, and research.

Then (1) form your team (if you haven't already), (2) set your calendar, and (3) begin your research.

Post both 1-page documents in Canvas by Sunday 6pm and respond to your Peer Review Group members by midnight Sunday.

Goal reached

You now have a good understanding of the issue you will resolve and how you'll do it (but not what your solutions are; that's for the Ideation phase). Next, you'll go out into the field and interview others in order to learn who are your users and what are their needs.