**Design Thinking**

**INF 385 T, Fall 2016**

**Course Description**

Students will learn the underlying philosophy and principles of Design Thinking, a problem-solving process that uses a designer’s sensibilities to identify innovative solutions that are desirable for people, viable for businesses and organizations, and technically feasible.

This interactive, project-based course will orient students to specific methods and activities that are used by design thinkers to help define opportunity spaces and create frameworks for innovative thinking. The course will cover topics including problem framing, design research and insight identification, storytelling, design principle definition, journey mapping, concept generation and evaluation, and communicating concepts.

**Instructor:** Amber Lindholm, amber.lindholm@gmail.com

**Meeting Time:** Mondays, 6-9pm

**Meeting Room:** UTA1.204

**Fall 2016 Course Topic**

**MOBILITY IN AUSTIN**

In order to ground the activities and outputs in a real-life challenge, the course will focus on a current issue that is relevant to the City of Austin. Project teams will explore the topic of Mobility in Austin and frame an opportunity space in which to apply design thinking.

**Getting From Point A to Point B**  
“Getting from place to place in a reliable, predictable manner is something Austinites expect,” Mayor Steve Adler said. “Unfortunately, we are facing serious mobility problems. Solving them won’t take just one solution, but an array of methods and tools with all of us working together.”

**Topic Context**

Text here.

**Weekly Class Schedule**

*This class schedule is an estimate and is subject to change.*

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| ***Session*** | ***Topic & Activities*** | ***To-Do BEFORE Class*** |
| 29 Aug | **Defining Design Thinking**   * Introductions and course overview * What is Design Thinking? * How is HCD different? * Design Thinking process * Project overview and example |  |
| 05 Sept | **LABOR DAY – NO CLASS** |  |
| 12 Sept | **Project Introduction**   * Transportation overview * *Activity: Mind map* * Homework share out * Team assignments * *Working session: SWOT Analysis* * *Working session: Begin defining your innovation challenge* | **DO:**  Identify an innovative solution/experience that cities or organizations have created to enable a better mobility experience.  Immerse and document your experience with a mobility activity (e.g., riding the bus/train, taking a ride share, etc.)  **READ:**  ***Design Thinking: What is That?***  Article in Fast Company, 2006.  <http://www.fastcompany.com/919258/design-thinking-what>  ***Design Thinking Comes of Age.*** HBR. Sept 2015. <https://hbr.org/2015/09/design-thinking-comes-of-age>  ***Design For Action.*** HBR. Sept 2015.  <https://hbr.org/2015/09/design-for-action>  ***Naked Innovation.***By Paradis and McGaw.  Chapter 1 – The Innovation Equation, pages 7-13  Chapter 2 – Balanced Breakthroughs, pages 15-21  Chapter 3 – Innovation Intent 1.0, pages 22-29  Free download at: <http://nakedinnovation.com/> |
| 19 Sept | **Design Research**   * Research methods * Research planning * Seton case study * *Working session:  Begin research plan* | **DO:**  Create your team’s Innovation Challenge Statement.  **WATCH:**  ***Getting People to Talk: An Ethnography and Interviewing Primer [VIDEO]*** <http://vimeo.com/1269848> |
| 26 Sept | **Interviewing and Data Capture**   * Interviewing techniques * *Activity: Interviewing* * Debriefing * Data capture * *Working session:  Finalize research plan* | **DO:**  Create Research Plan. Include research questions, methods, and desired participants.  **READ:**  ***Interviewing Users: How to Uncover Compelling Insights.*** Steve Portigal, Rosenfeld Media, 2013.  Chapter 1 – The Importance of Interviewing in Design, pages 3-11  Chapter 2 – A Framework for Interviewing, pages 14-27  Chapter 4 – More Than Just Asking Questions, pages 52-65  Chapter 6 – How to Ask Questions, pages 84-103 |
| 03 Oct | **Debrief Working Session**   * *Working session: Debrief and  write post-its* | **DO:**  Research. Capture data.  **READ:**  ***101 Design Methods: A Structured Approach for Driving Innovation in Your Organization***by Vijay Kumar. Read Section 3: Know People (pages 87-127). |
| 10 Oct | **Making Sense of Data**   * Insights * *Working session: Insight generation* | **DO:**  Research. Capture data.  ***Exposing the Magic of Design*** by Jon Kolko. Read Chapter 4 (The Value of Synthesis in Driving Innovation) and Chapter 6 (Methods for Making Meaning out of Data). |
| 17 Oct | **Analysis Frameworks**   * Visual tools to make meaning * *Working session: Journey mapping and share out* | **DO:**  Research. Capture data. |
| 24 Oct | **Design Principles**   * Storytelling session * Design Principles * *Working session: Insight Generation and Principle Definition* | **DO:**  Define final insights. Do storytelling presentation (10 mins each). Three insights with a story for each one. |
| 31 Oct | **Concept Generation**   * From principles to opportunities * Amway case study * *Working session: Principle-driven concept generation* | **DO:**  Define final principles.  **WATCH:**  ***Where Good Ideas Come From [VIDEO]*** [*http://www.youtube.com/watch?v=NugRZGDbPFU*](http://www.youtube.com/watch?v=NugRZGDbPFU)  **READ:**  ***Sketching User Experiences,*** by Bill Buxton. Read the following chapters: The Anatomy of Sketching, Clarity is not Always the Path to Enlightenment, Sketches are not Prototypes, You Make That Sound Like a Negative Thing, Visual Storytelling, and Interacting with Paper. |
| 07 Nov | **Concept Generation**   * Ideation techniques * *Working session: Random Object, Yes And…* | **DO:**  Define initial set of concepts (10-15). |
| 14 Nov | **Concept Evaluation**   * Working session | **DO:**  Define final set of concepts (20-30). |
| 22 Nov  (Amber out) | **Scenarios and Storyboarding**   * *Working session: Sketching stories* |  |
| 28 Nov | **Final Presentations** |  |

**Course Policies & Expectations**

* Keep laptops and mobile devices closed/stored during class.
* Attendance is expected. This is a highly interactive course and each week builds from the previous. If you need to miss a class, let me know in advance.
* Participate. We will be doing activities in class that require you to be active participants (this means contributing to class discussions, asking questions, trying new ways of working) and good team members.
* Ask questions. This should be a dialogue, so stop me and ask questions.
* Share experiences. I’ll be telling you about my experiences, but I want to hear yours too. The whole class will benefit.
* Assignments are due before 6pm on the day of the designated class.

**Grading Criteria**

* Active participation in class discussions and work sessions.
* Individual contribution to project checkpoints.
* Quality of delivered assignments.
* Ability to articulate design thinking process to arrive at solutions.
* Final presentation.
* Team feedback.

**Grading Breakdown**

* Final Assignment = 40%
* Class Participation = 30%
* Interim Assignments = 30%