

# Design Thinking

## INF 385 T, Fall 2015

### 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.

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

**Meeting Room:** UTA 1.204

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### Fall 2015 Course Topic

#### CITIZEN ENGAGEMENT

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 Citizen Engagement in Austin and frame an opportunity space in which to apply design thinking.

#### City of Austin Community Engagement Task Force Mission Statement

To examine existing community engagement tools and innovative techniques and technologies used in the City and across the country, identify best practices, and make recommendations on how the City Council may broaden and foster meaningful and lasting public engagement and communication under Austin's new form of governance.

#### Context for Why Citizen Engagement is Critical

*From the Open Government Guide (<http://www.opengovguide.com/topics/citizen-engagement/>):*

In an increasingly complex world, citizens' input is a critical resource for policy-making. Good decision-making requires the knowledge, experiences, views and values of the public. Implementing difficult decisions depends on citizens' consent and support. Unless citizens understand and are engaged in the decision themselves, trust is easily lost (OECD, 2009).

Civil liberties provide the critical foundations which enable people to participate without fear and to disagree peacefully with each other and with their government. Basic human rights including freedom of speech, expression and the press; freedom of religion; freedom of assembly and association; and the right to due judicial process are critical in supporting a political culture where citizens are willing and able to participate in public debate.

People around the world consistently indicate that they are not content simply to engage with government through periodic elections. But they are discouraged by the real and perceived control of public decisions and decision-makers by small political and economic elites.. It is important that citizen engagement is well designed and properly resourced, and that it is born from a genuine desire to involve the public and take their input into account. Good citizen engagement can support the effective functioning of democracy, the legitimacy of government, the successful implementation of policy and the achievement of social outcomes. Bad engagement practice can lead to poor decisions, and disengagement by citizens (Brodie et al, 2011).

Overcoming public disengagement, and effectively responding to citizens requires a culture change in how governments interact and cooperate with the public, mechanisms for hearing and taking into account the voices of citizens institutionalized into the behaviour and culture of public institutions.

### Weekly Class Schedule

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

<b>Session</b>	<b>Topic &amp; Activities</b>	<b>To-Do BEFORE Class</b>
31 Aug	<b>Defining Design Thinking</b> <ul style="list-style-type: none"> <li>• Introductions and course overview</li> <li>• What is Design Thinking?</li> <li>• How is HCD different?</li> <li>• Design Thinking process</li> <li>• Project overview</li> </ul>	
07 Sept	<b>LABOR DAY – NO CLASS</b>	
14 Sept	<b>Project Introduction</b> <ul style="list-style-type: none"> <li>• Citizen Engagement overview</li> <li>• <i>Activity: Mind map</i></li> <li>• Homework share out</li> <li>• Team assignments</li> <li>• <i>Working session: Begin defining your innovation challenge</i></li> </ul>	<p><b>DO:</b> Identify 3 innovative solutions/experiences that cities or organizations have created to engage citizens.</p> <p><b>READ:</b> <b><i>Design Thinking: What is That?</i></b> Article in Fast Company, 2006. <a href="http://www.fastcompany.com/919258/design-thinking-what">http://www.fastcompany.com/919258/design-thinking-what</a></p> <p><b><i>Design Thinking Comes of Age.</i></b> HBR. Sept 2015. <a href="https://hbr.org/2015/09/design-thinking-comes-of-age">https://hbr.org/2015/09/design-thinking-comes-of-age</a></p> <p><b><i>Design For Action.</i></b> HBR. Sept 2015. <a href="https://hbr.org/2015/09/design-for-action">https://hbr.org/2015/09/design-for-action</a></p> <p><b><i>Naked Innovation.</i></b> 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</p> <p>Free download at: <a href="http://nakedinnovation.com/">http://nakedinnovation.com/</a></p>

21 Sept	<b>Design Research</b> <ul style="list-style-type: none"> <li>• Research methods</li> <li>• Research planning</li> <li>• Seton case study</li> <li>• <i>Working session: Begin research plan</i></li> </ul>	<b>DO:</b> Create your team's Innovation Challenge Statement.  <b>WATCH:</b> <i>Getting People to Talk: An Ethnography and Interviewing Primer [VIDEO]</i> <a href="http://vimeo.com/1269848">http://vimeo.com/1269848</a>
28 Sept	<b>Interviewing and Data Capture</b> <ul style="list-style-type: none"> <li>• Interviewing techniques</li> <li>• <i>Activity: Interviewing</i></li> <li>• Debriefing</li> <li>• Data capture</li> <li>• <i>Working session: Finalize research plan</i></li> </ul>	<b>DO:</b> Create Research Plan. Include research questions, methods, and desired participants.  <b>READ:</b> <i>Interviewing Users: How to Uncover Compelling Insights</i> . 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
05 Oct	<b>Communicating Insights</b> <ul style="list-style-type: none"> <li>• <i>Working session: Debrief and write post-its</i></li> </ul>	<b>DO:</b> Research. Capture data.  <b>READ:</b> <i>101 Design Methods: A Structured Approach for Driving Innovation in Your Organization</i> by Vijay Kumar. Read Section 3: Know People (pages 87-127).
12 Oct	<b>Analysis Frameworks</b> <ul style="list-style-type: none"> <li>• Visual tools to make meaning</li> <li>• Emdeon case study</li> <li>• <i>Working session: Journey mapping and share out</i></li> </ul>	<b>DO:</b> Research. Capture data.  <i>Exposing the Magic of Design</i> by Jon Kolko. Read Chapter 4 (The Value of Synthesis in Driving Innovation) and Chapter 6 (Methods for Making Meaning out of Data).
19 Oct	<b>Making Sense of Data</b> <ul style="list-style-type: none"> <li>• Insights &amp; themes</li> <li>• Dell case study</li> <li>• <i>Working session: Insight generation</i></li> </ul>	<b>DO:</b> Research. Capture data.
26 Oct	<b>Design Principles</b> <ul style="list-style-type: none"> <li>• Storytelling session</li> <li>• Design Principles</li> <li>• <i>Working session: Principle definition</i></li> </ul>	<b>DO:</b> Define final insights and themes. Do storytelling presentation (10 mins each). Three insights with a story for each one.
02 Nov	<b>Concept Generation</b> <ul style="list-style-type: none"> <li>• From principles to opportunities</li> <li>• Amway case study</li> <li>• <i>Working session: Principle-driven concept generation</i></li> </ul>	<b>DO:</b> Define final principles.  <b>WATCH:</b> <i>Where Good Ideas Come From [VIDEO]</i> <a href="http://www.youtube.com/watch?v=NugRZGDbPFU">http://www.youtube.com/watch?v=NugRZGDbPFU</a>  <b>READ:</b> <i>Sketching User Experiences</i> , 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.
09 Nov	<b>Concept Generation</b> <ul style="list-style-type: none"> <li>Ideation techniques</li> <li><i>Working session: Random Object, Yes And...</i></li> </ul>	<b>DO:</b> Define initial set of concepts (10-15).
16 Nov	<b>Concept Evaluation</b> <ul style="list-style-type: none"> <li>Working session with City (TBD)</li> </ul>	<b>DO:</b> Define final set of concepts (20-30).
23 Nov	<b>Scenarios and Storyboarding</b> <ul style="list-style-type: none"> <li><i>Working session: Sketching stories</i></li> </ul>	
30 Nov	<b>Final Presentations</b>	

### 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 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%