Design Thinking: A creative approach to problem solving and creating impact

Instructors
Randy Plemel, Karin Soukup and Nili Metuki (IDEO)

Overview
The word “design” has traditionally been used to describe the visual aesthetics of objects, including books, websites, products, interiors, architecture, and fashion. But increasingly, the definition of design has broadened to include not just outcomes but a process as well. Design Thinking is an iterative approach that begins with a well defined problem and employs a variety of design based methodologies and tools to address virtually any type of organizational or business challenge—including those within public service.

In Design Thinking: A creative approach to problem solving and creating impact, we will examine each step of the design process and the methods and tools that make up a designer’s toolkit. We will learn how to apply this approach to key contemporary public service issues and find innovative ways to create impact.

Similar to the design environment, this course is comprehensively team–based and extremely collaborative. We’ll alternate lecture style classes with collaborative, team–based work–sessions where teams will receive feedback from instructors, special guests, and importantly, from their peers. Students will leave the course with the foundational skills necessary to approach problem solving flexibly across contexts.

Dates / Time / Location
Wednesdays, September 2–December 9, 2014
6:45-8:25 p.m.
Building WAVE — Room 567
Teams
The class will be broken up into interdisciplinary teams of 4-5. Teams will be composed during our first session. The first homework assignment asks students to select a design challenge which they will hone in on with their teams and work on for the remainder of the course.

Design Challenges
The design challenges will address complex issues within the public service sector here in New York City.

Examples of past design challenge topics include:
- How might we improve housing for those new to the city?
- How might we foster sustainable living in the communities of NYC?

More specific details around this year’s design challenges will be discussed in the first class.

Project Blog
Each team will create a project blog and will be asked to update it weekly. Weekly, teams will be asked to write a blog post about their design challenge, based on where we are in the design process. For example, during the ‘Design Research and Inspiration’ phase, teams may write a post about the things they are seeing in the world that are inspiring for their project. During the ‘Prototyping’ phase, teams may post pictures about their current prototypes and feedback they are receiving in response. During each class, teams will be asked to present findings or inspiration via comments on other team’s blog posts. The project blog will be the central communication vehicle for the team.

Final Presentation
The final presentation will be the key deliverable for this course. Each week, students will learn different tools, processes, and ways of thinking that build toward this final. Although each group’s presentation content
and form will be different from one another, the design thinking involved in each presentation will need to be clearly articulated. As we will learn throughout the course, this will include:

- Articulation of the design challenge
- Actionable insights based on the design research conducted
- Key themes and opportunity areas identified from the insights
- Visualized concepts that address the opportunity areas
- A compelling, human-centered narrative that ties all the points above together

**Grades**

Students will be graded on their interim and final presentations as well as their participation in class and on their blog. Grading is based on NYU’s universal criteria:

https://wagner.nyu.edu/files/admissions/GradingGuidelines.pdf

The breakdown is as follows:
- 20% Class Participation and Attendance
- 20% Blog Entries
- 20% Interim Presentation
- 40% Final Presentation
Course Readings (Required)
Change By Design by Tim Brown
This is Service Design Thinking: Basics, Tools, Cases by Marc Stickdorn

In addition, each week, a set of short articles and/or videos relevant to each phase of the design process will be assigned.

Weekly articles may include, but are not limited to, the following. We will let you know which articles to read for specific classes during the course:

“Design Thinking” | Tim Brown
“Design Matters” | Richard J. Boland Jr. and Fred Collopy
“Informing Our Intuition” | Jane Fulton Suri

“Prototyping is Shorthand of Design” | Tom Kelley
“Ira Glass on Storytelling” | Ira Glass
http://www.youtube.com/watch?v=loxJ3FtCJJA
http://www.youtube.com/watch?v=KW6x7OIsPE
http://www.youtube.com/watch?v=BI23U7U2aUY
http://www.youtube.com/watch?v=baCJFAGEuJM

“Creative Confidence: Cultivating the Mindset of Today’s Innovators” | David Kelley
http://www.aifestival.org/session/creative-confidence-cultivating-mindset-todays-innovators

Recommended Readings (Optional)
∙ Made to Stick | Chip and Dan Heath
∙ Switch: How to Change Things When Change is Hard | Chip and Dan Heath
∙ Herd: Change Mass Behavior by Harnessing Our True Nature | Mark Earl
∙ Drive | Daniel Pink
∙ Nudge | Richard Thaler & Cass Sunstein
∙ The Lean Startup | Eric Ries
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<tr>
<th>Week</th>
<th>Date</th>
<th>What We’ll Teach</th>
<th>What You’ll Do</th>
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<tr>
<td>Week 1</td>
<td>Sept 2nd</td>
<td><strong>Introductions</strong>&lt;br&gt;Intro to IDEO/Team Challenges/Design Thinking Overview</td>
<td>Form Teams&lt;br&gt;Team Challenges&lt;br&gt;Preflight Team Meeting</td>
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<td>Week 2</td>
<td>Sept 9</td>
<td><strong>Project Management</strong>&lt;br&gt;Brainstorming/Meetings/Tools</td>
<td>Teamwork: Wallet Project&lt;br&gt;Empathy Exercise&lt;br&gt;Setup Dropbox &amp; blogs in class</td>
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<td>Week 3</td>
<td>Sept 16</td>
<td><strong>Observations</strong>&lt;br&gt;How/Where/What/Who Recruiting &amp; Discussion Guide Empathy &amp; Tactics Analogous Capturing data: Blogs/photos/notes</td>
<td>Observation Plan&lt;br&gt;First respondent</td>
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<td>Week 4</td>
<td>Sept 23</td>
<td><strong>Observations</strong>&lt;br&gt;Photos Videos Quotes</td>
<td><strong>Cross-share (5 min)</strong>&lt;br&gt;_Research Plan&lt;br&gt;_HWWW&lt;br&gt;Finalize Research Plan</td>
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<td>Week 5</td>
<td>Sept 30</td>
<td><strong>Synthesis</strong>&lt;br&gt;_What/how/why _Insights _Opportunity</td>
<td><strong>Cross-share (5 min)</strong>&lt;br&gt;_Stories from the field</td>
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<td>Week 6</td>
<td>Oct 7</td>
<td><strong>Opportunity Areas</strong>&lt;br&gt;Observations to insights to opportunity areas</td>
<td>Team Synthesis</td>
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<td>Week 7</td>
<td>Oct 17</td>
<td><strong>Insights Presentation review</strong></td>
<td>Team Synthesis</td>
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<td>Week 8</td>
<td>Oct 21</td>
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<td><strong>Insights Presentation (5 min)</strong></td>
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<td>Week 9</td>
<td>Oct 28</td>
<td><strong>Brainstorm &amp; HMW’s</strong></td>
<td>Brainstorms (40 min)</td>
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<td>Week 10</td>
<td>Nov 4</td>
<td><strong>Conceiving</strong></td>
<td>Concept Shareback (5 min)&lt;br&gt;Team Time</td>
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<td>Week 11</td>
<td>Nov 11</td>
<td><strong>Prototyping</strong></td>
<td>Start building prototyping &amp; testing</td>
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<td>Week 12</td>
<td>Nov 18</td>
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<td><strong>Final Presentation Rehearsal</strong></td>
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<td>Week 13</td>
<td>Nov 25</td>
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<td><strong>NO CLASS</strong></td>
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<td>Week 14</td>
<td>Dec 2</td>
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<td><strong>Final Presentation Prep</strong></td>
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<td>Week 15</td>
<td>Dec 9</td>
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<td><strong>Final Presentation</strong></td>
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