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

Instructors
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spark@nyu.edu

Dates / Time / Location
Thursdays, January 25–May 3, 2018
6:45–8:25 p.m.
GCASL_388

Overview
As the challenges and opportunities facing society grow more complex, an approach known as “design thinking” is playing a greater role in finding meaningful paths forward. Design thinking is an iterative problem-solving process of discovery, ideation, and experimentation. It employs design-based techniques to address all kinds of creative challenges, including those found within public service and the development sector.

In “Design Thinking: A Creative Approach to Problem Solving and Creating Impact,” we’ll work with you to explore each step of the design thinking process. You’ll develop skills as ethnographers, visual thinkers, strategists, and storytellers through a mix of seminar discussions and collaborative projects.

Over the course of the semester, you’ll apply what you learn to the challenges in public service and social entrepreneurship that you care about, exploring innovative ways to create real impact.

Oh, and it’ll be fun (and hopefully inspiring and meaningful) too.

Our work together will be highly collaborative, mirroring the way design teams work. We’ll alternate lecture-style classes with team–based sessions, during which your teams will receive feedback from instructors, special guests, and, most important, your peers. You’ll leave the course with the foundational skills necessary to approach creative problem-solving across many contexts.
Teams
The class will be broken up into interdisciplinary teams of 4–5 students. Teams will form during our first session, at which times you'll be asked to select a design challenge that you will define and work on with your team for the remainder of the semester.

In our first class, we'll decide whether you all prefer two short projects or one long project throughout the semester.

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

Examples of past design challenges include:
• How might we make NYC a great place for the elderly?
• How might we foster sustainable living in the communities of NYC?

We'll discuss this year's design challenges in more detail during the first class.

Final Presentation
The final presentation will be the key deliverable for this course. You'll learn different tools, processes, and ways of thinking that build toward this final, and a clear articulation of design thinking approaches will be expected in each presentation, regardless of differences in content and format. Final presentations should include:
• Articulation of the design challenge
• Actionable insights based on design research
• Key themes and opportunity areas identified from the insights
• Visualized concepts that address the opportunity areas
• A compelling, human-centered narrative that draws all of the work together

Grades
In addition to a final presentation, you'll be graded on participation in class, interim assignments (such as the insights presentation and class shareouts), and collaboration, as assessed by your teammates. Grading is based on NYU’s universal criteria: https://wagner.nyu.edu/files/admissions/GradingGuidelines.pdf

The breakdown is as follows:
30% Class Participation, interim assignments, and Attendance
20% Insights Presentation
35% Final Presentation
15% Team Evaluations
Academic Integrity
Please review NYU’s policy for academic integrity for students.
http://www.nyu.edu/about/policies-guidelines-compliance/policies-and-guidelines/academic-integrity-for-students-at-nyu.html

Another note: Design Thinking is a discipline that asks you to gather inspiration from many sources—experts, users, companies, not to mention your peers in this class—and to build on it. It’s imperative to acknowledge these sources of inspiration whenever you quote or “borrow” an idea. Finding inspiration and building on it is encouraged. Taking credit for other people’s ideas isn’t, so don’t do it.

Office Hours
We will be available during the week—details when classes start.

Course Readings (Required)
Books
Change By Design by Tim Brown
This is Service Design Thinking: Basics, Tools, Cases by Marc Stickdorn

Articles & Videos
"Design Matters" | Richard J. Boland Jr. and Fred Collopy
"Informing Our Intuition" | Jane Fulton Suri
"Prototyping is the Shorthand of Design" | Tom Kelley
"How IDEO Designers Persuade Companies to Accept Change" | Ashlea Powell

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

Recommended Readings (Optional)
· Creative Confidence | David M. Kelley and Tom Kelley
· Switch: How to Change Things When Change is Hard | Chip and Dan Heath
· The Field Guide to Human-Centered Design | IDEO.org
· Drive | Daniel Pink
· Nudge | Richard Thaler & Cass Sunstein
· The Lean Startup | Eric Ries
Materials
Having access to a computer, camera (your phone will do!), and printer will be essential. Bonus points if you have an audio recorder (or, again, use your phone). You will also need the items on the following page.

- A journal or sketchbook
  Recommended size: 5.5 x 8.5 inch

- Post-it notes, bright/light-colored
  3 x 3 inch and 3 x 5 inch (one 5-pack of each)

- Sharpies (fine, black)
  At least 2 per student

- Post-it self-stick easel pad
  One per team

- Scotch (or masking) tape
  One roll
## Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>what we’ll teach</th>
<th>what you’ll do</th>
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</thead>
<tbody>
<tr>
<td>Wk 1 - 1/25</td>
<td>● Intros&lt;br&gt;● Intro to IDEO&lt;br&gt;● Team Challenges&lt;br&gt;● Design Thinking&lt;br&gt;Overview&lt;br&gt;● Brainstorming Tools</td>
<td>Form teams&lt;br&gt;Define design challenges&lt;br&gt;Teamwork: wallet project</td>
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<tr>
<td>Wk 2 - 2/1</td>
<td>● Design Research&lt;br&gt;● How/Where/What/Who&lt;br&gt;● Recruiting &amp; Discussion Guide&lt;br&gt;● Empathy &amp; Tactics&lt;br&gt;● Analogous Inspiration&lt;br&gt;● Capturing data: Photos/videos/notes</td>
<td>Empathy exercise&lt;br&gt;Start research plan&lt;br&gt;Set up Dropbox / Google Drive</td>
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<tr>
<td>Wk 3 - 2/8</td>
<td>● Refine Research Plans&lt;br&gt;● Photos&lt;br&gt;● Videos&lt;br&gt;● Quotes</td>
<td>Cross-share (5 min)&lt;br&gt;Define responsibilities&lt;br&gt;Finalize Research Plan</td>
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<tr>
<td>Wk 4 - 2/15</td>
<td>● Download &amp; Synthesis&lt;br&gt;● What/how/why&lt;br&gt;● Insights&lt;br&gt;● Opportunity</td>
<td>Cross-share (5 min)&lt;br&gt;Stories from the field</td>
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<td>Wk 5 - 2/22</td>
<td>● Opportunity Areas &amp; Insights&lt;br&gt;● Observations to insights&lt;br&gt;to opportunity areas</td>
<td>Define opportunity areas&lt;br&gt;Begin crafting insights</td>
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<td>Wk 6 - 3/1</td>
<td>Insights Presentation prep</td>
<td>Team Synthesis</td>
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<td>Wk 7 - 3/8</td>
<td>Brainstorm &amp; HMWs</td>
<td>Insights</td>
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<td>Week</td>
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<tr>
<td>Wk 8 - 3/15</td>
<td>Presentation (5 min)</td>
<td>* * NO CLASS * *</td>
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<td>Wk 9 - 3/22</td>
<td>Concepting</td>
<td>Concept Shareback (5 min) Team Time</td>
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<td>Wk 10 - 3/29</td>
<td>1st Round of Prototyping</td>
<td>Start building prototyping &amp; testing</td>
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<td>Wk 11 - 4/5</td>
<td>Field Research</td>
<td>Test prototypes with friends &amp; families</td>
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<td>Wk 12 - 4/12</td>
<td>2nd Round of Prototyping</td>
<td>Revise concepts iterate on prototypes</td>
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<td>Wk 13 - 4/19</td>
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<td>Final Presentation prep</td>
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<td>Wk 14 - 4/26</td>
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<td>Final Presentation rehearsal</td>
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<td>Wk 15 - 5/3</td>
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<td>Final Presentation</td>
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