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

Instructors
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Overview
As the challenges and opportunities facing society grow more complex, and as stakeholders grow more diverse, 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.

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 seven weeks, 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 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 importantly, from your peers. You’ll leave the course with the foundational skills necessary to approach creative problem solving across many contexts.

Dates / Time / Location
Wednesdays, September 7–December 14, 2014
6:45-8:25 p.m.
Building GCASL — Room 379 (Washington Square)
Teams
The class will be broken up into interdisciplinary teams of 4-5. Teams will form during our first session. The first homework assignment asks you to select a design challenge which you will define and work on with your team 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?

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

Project Blog
Each team will create a project blog and will be expected to update it weekly. Teams will write blog posts about their design challenge, capturing the phase of work they’re currently in. For example, during the ‘Design Research and Inspiration’ phase, your team may write a post about what you’re seeing in the world that’s inspiring your project. During the ‘Prototyping’ phase, your team may post pictures about your prototypes and the feedback you’re receiving. Additionally, your team will be expected to offer critique, support, and inspiration to other teams. The project blog will be the central communication vehicle for each team, and a key tool for collaboration across the 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
You’ll be graded on your interim and final presentations as well as your participation in class and on your team’s 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

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

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)**
- Switch: How to Change Things When Change is Hard | Chip and Dan Heath
- 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. We’ve included links where you can purchase them, but feel free to find comparable alternatives.
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
WHAT WE’LL TEACH

Week 1 | Sept 7
**Introductions**
Intro to IDEO/Team Challenges
Design Thinking Overview

Week 2 | Sept 14
**Project Management**
Brainstorming/Meetings/Tools

Week 3 | Sept 21
**Observations**
How/Where/What/Who
Recruiting & Discussion Guide
Empathy & Tactics
Analogous Inspiration
Capturing data: Blogs/photos/notes

Week 4 | Sept 28
**Refine Research Plans**
Photos
Videos
Quotes

Week 5 | Oct 5
**Synthesis**
_What/how/why
_Insights
_Opportunity

Week 6 | Oct 12
**Opportunity Areas**
Observations to insights
to opportunity areas

Week 7 | Oct 19
**Insights Presentation prep**

Week 8 | Oct 26

Week 9 | Nov 2
**Brainstorm & HMW’s**

Week 10 | Nov 9
**Concepting**

Week 11 | Nov 16
**Prototyping**

Week 12 | Nov 23
* * NO CLASS * *

Week 13 | Nov 30

Week 14 | Dec 7

Week 15 | Dec 14

WHAT YOU’LL DO

Form teams
Define design challenges
Preflight team meeting

Teamwork: wallet project
Empathy exercise
Set up Dropbox & blogs in class

Research plan

Cross-share (5 min)
_Research Plan
_How,Where,What,Who
_Finalize Research Plan

Cross-share (5 min)
_Stories from the field

Team Synthesis

Team Synthesis

Insights Presentation (5 min)

Brainstorms (40 min)

Concept Shareback (5 min)
Team Time

Start building prototyping & testing

Final Presentation rehearsal

Final Presentation prep

Final Presentation