Design Thinking:
A Creative Approach to Problem Solving and Creating Impact

Instructor
Professor Esther Kang
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Office Hours
By appointment

Dates / Times / Location
May 22 - July 5, 2018
Tuesdays & Thursdays, 6:45pm - 8:25pm
7 East 12th Street Room No 125

Prerequisites
None

Course Description
This course description acts as a framework for the design thinking class. Given the nature of design thinking and the innovation process, syllabus may be adapted during the semester in response to student and project needs.

The word design has traditionally been used to describe the visual aesthetics of objects such as books, websites, products, interiors, architecture, and fashion. But increasingly, the definition of design has expanded to include experiences, services, and systems.

As the challenges and opportunities facing businesses, organizations, and societies 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 action-oriented problem solving methodology that employs various design-based techniques to gain insight and yield creative solutions for complex challenges. At the heart of this approach is a deep sensitivity to the needs of people. In Design Thinking: A Creative Approach to Problem Solving and Creating Impact, we will unpack each fundamental step of the design thinking process and become familiar with the design thinker's mindset and toolkit.

This learning will be supported through lectures, discussions, readings, in-class exercises, and a series of formal and informal design reviews that encourage reflection on students' progress and their insights. Success in the course will depend on the amount of time and degree of involvement of the student.

The structure of the class will consist of 1) lectures + interactive exercises; 2) short weekly assignments and/or readings + videos; and 3) a final project.

Course Objectives
The objectives of this course are to develop your knowledge, understanding, skills, and competencies in design thinking; and to equip you to appropriately apply the principles of design thinking to your line of work should you choose to use it.
Objective: | Assessment:
---|---
**Understand**
Introduce you to a methodology--design thinking--that attempts to deeply understand and consider people directly impacted by whatever is being designed--product, service, policy--in addition to complex historical, social, and environmental contexts. | Class participation, weekly assignments, and final project.

**Build**
Strengthen your capabilities to identify underlying problems; to collect and analyze qualitative data to deeply understand needs and contexts; to design thoughtful co-creation processes with users and stakeholders; to develop ways to receive continuous feedback and to build an iterative model. | Class participation, weekly assignments, final project, braintrust / peer review, office hours.

**Experience**
Provide you with opportunities to apply learnings to a real context and to gain a deeper understanding of the design thinking methodology. | Final project, braintrust / peer review.

Upon completion of the course, you will be able to:
- Walk others through the fundamental steps of the design thinking process
- Identify the necessary skill sets and mindset to practice design thinking
- Share case studies illustrating how the design thinking process was used in different sectors
- Have an action plan detailing how you will personally apply design thinking to your line of work, if desired

Reading Assignments
There will be a combination of required and recommended readings throughout the course. Readings will be emailed prior to each session and will typically be paired with a short reflection or skill building exercise.

Final Presentation + Paper
A final presentation and paper will be key deliverables for this course. Final papers will be due Thursday, June 28, and presentations will take place on Thursday, June 28; Tuesday, July 3; and potentially Thursday, July 5. Attendance on all three dates is mandatory. As weeks go on, students will learn different tools and ways of thinking that advance project work and build toward the final presentation.

Presentations can take the form of a TEDTalk-like lecture or an interactive workshop. This culminating moment will allow students to deeply think about ways design thinking can be applied to their line of work and future projects.
## Weekly Course Breakdown

| Week 1:       | Tuesday, May 22 | **Class 1:** Intro to Design Thinking PT 1  Lecture & Lab  
Overview of the design thinking process, class content, and course structure |
|--------------|----------------|----------------------------------------------------------------|
|              | Thursday, May 24 | **Class 2:** Intro to Design Thinking PT 2  Lecture & Lab  
How design thinkers approach complex issues and the type of mindset they aim to foster |
| Week 2:      | Tuesday, May 29 | **Class 3:** User-Centered & Human-Centered  Lecture  
How we use the user-centered methodology and human-centered framework to tackle complex social problems |
|              | Thursday, May 31 | **Class 4:** Design Research - Ethnography  Lecture & Lab  
How we aim to understand deeply complex problems by attempting to uncover latent human needs |
| Week 3:      | Tuesday, June 5 | **Class 5:** Design Research - Synthesis  Lecture & Lab  
How we analyze complex qualitative data sets to gain insight to factors that may be influencing a user's experience  
Final project check-in |
|              | Thursday, June 7 | **Class 6:** Ideation & Co-Creation  Lecture & Lab  
How we brainstorm with multiple stakeholders and strategize next steps for complex projects |
| Week 4:      | Tuesday, June 12 | **Class 7:** Office Hours  Mandatory office hours to review progress of final project  
Sign up list will circulate closer to the date |
|              | Thursday, June 14 | **Class 8:** Office Hours  Mandatory office hours to review progress of final project  
Sign up list will circulate closer to the date |
| Week 5:      | Tuesday, June 19 | **Class 9:** Prototype  Lecture & Lab  
How we use rapid prototyping to test, modify, and refine ideas  
Final project check-in |
|              | Thursday, June 21 | **Class 10:** Implement  Lecture  
How we build a people-centered and evidence-based foundation that includes an iterative model, a feedback loop, et al |
| Week 6:      | Tuesday, June 26 | **Class 11:** Panel of Guest Speakers  
A stellar panel of all-star practitioners who are in philanthropy, government, and social enterprise (Attendance will be based on students' interests, panelists' availability, and theme of panel)  
Final project check-in |
|              | Thursday, June 28 | **Class 12:** FINAL PROJECTS  
Final papers are due.  
Presentations will take place over potentially three days; these can be in the format of a TEDTalk-like lecture or an interactive workshop. Details on format will be shared on day one of class |
| Week 7: | Tuesday, July 3 | **Class 13: FINAL PROJECTS**  
Final Presentations |
|--------|-----------------|--------------------------------------------------|
|        | Thursday, July 5| **Class 14: FINAL PROJECTS**  
Last day of presentations and last day of class |

**Accommodations**
NYU is committed to facilitating equal access for students with disabilities, including hearing and visual impairments, mobility impairments, learning disabilities and attention deficit disorders, chronic illness, and psychological impairments. If you are not comfortable discussing your needs with me, I encourage you to contact the Moses Center on 240 Greene Street, 2nd Floor, 212-998-4980, for assistance in ensuring that you receive any necessary accommodations.

**Grades**
Students will be graded on their weekly assignments, class participation, general attendance, and final presentations and papers. Grading is based on NYU’s universal criteria.

The grading breakdown is as follows:
- **30%** Class participation and attendance
- **10%** Homework assignments
- **10%** Mandatory office hours
- **50%** Final project

**Attendance**
Students are expected to attend all sessions unless noted. Five unexcused absences will result in a failing grade. An excused absence (religious holidays, medical issue, family emergency, natural disaster) will not put you at risk of failure. If you need an excused absence, email Professor Kang at ek121@nyu.edu.

**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 attribute 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 please don’t do it.

**Title IX Accommodation**
New York University, including its Schools and other units, Global Network University sites, and all University Affiliates (together, “NYU”) seeks to maintain a safe learning, living, and working environment. To that end, this policy prohibits Sexual Misconduct, which includes Sexual or Gender-Based Harassment, Sexual Assault, and Sexual Exploitation. If you have encountered sexual harassment/misconduct/assault, we encourage you to report this. Disclosures made to faculty must be reported to the Title IX Coordinator, Mary Signor, 212-998-6807 + mary.signor@nyu.edu.