PADM-GP 2145

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

Spring 2022

Instructor Information

- Carolyn Hou
- Email: carolyn.hou@nyu.edu
- Office Hours: Please schedule an appointment by e-mail

Course Information

- Class Meeting Times: Thursdays, 6:45PM 8:25PM
- Class Location: 194 Mercer Street. Room 206

Course Prerequisites

None

Course Description

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 not just artifacts but strategic services and systems. As the challenges and opportunities facing businesses, organizations, and 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 that employs various design-based techniques to gain insight and yield innovative solutions for virtually any type of organizational or business challenge. At the heart of this approach is a gaining a deep understanding of the needs of people and building solutions that are specifically targeted at solving those needs.

In this course, we will unpack each step of the design thinking process and become familiar with the design thinker's toolkit. Students will develop skills as ethnographers, service designers, strategists, and storytellers through a hybrid of lectures, discussions, and group projects. This course will demystify design thinking beyond the media and business buzzwords and provide students with the theory and practical frameworks to integrate design thinking into their own public service practice.

Course and Learning Objectives

By the end of the course, students will have the fundamental competencies of a design thinker:

- Understand the historical and current application of design thinking;
- Understand and embody the dynamic mindset necessary for effective design thinking, e.g. non-linear thinking, empathetic thinking, ethnographic research, problem definition and framing, divergent and convergent thinking, and verbal and visual thinking and communication
- Understand and be able to execute the end-to-end design thinking methodology;
- Be able to explain and advocate for design thinking in a team/organizational context

Course Readings

Please note that readings for this course are front-loaded in the first half of the semester. The second half of the semester will be focused on group projects.

There are two core required readings which we will discuss in class on March 9th, 2022. Additional readings and references for each week are assigned accordingly below.

Required Readings:

- Change by Design, Tim Brown
- How Design Makes the World, Scott Berkun

Recommended Readings:

- The Design of Business: Why Design Thinking is the Next Competitive Advantage, Roger L. Martin
- Ethnographic Thinking: From Method to Mindset, Jay Hasbrouck
- Wired to Care: How Companies Prosper When They Create Widespread Empathy, Dev Patnaik
- Exposing the Magic of Design: A Practitioner's Guide to the Methods and Theory of Synthesis, Jon Kolko

Assessment Assignments and Evaluation

Individual Assessment

Class Participation and Discussion: 30%

Group Assessment

- Group Assignment #1: Research Plan (Class Presentation on April 14th): 15%
 - Each team will outline its research approach to the design challenge they're given.
- Group Assignment #2: Research Learnings (Class Presentation on April 21st): 15%
 - Each team will conduct observations and interviews and synthesize their findings and write up the key insights and problem statements to address.
- Group Assignment #3: Concepting Solutions (Class Presentation on April 28th): 20%
 - Each team will come up with 2-3 service concepts/prototypes for how to address the problem space, including its limitations and constraints.
- Group Assignment #4: Final Presentation & Report (Class Presentation on May 5th and Final Report sent by e-mail May 12th at 5PM): 20%
 - Each team will conduct final interviews to validate the concepts/prototypes and put together a final presentation and report outlining the research approach, key learnings, problem space, and opportunity for moving forward.

Late Submission Policy for Assignments

Extensions will be granted only in case of emergency, out of respect to those who abide by deadlines despite equally hectic schedules. Late submissions without extensions will be penalized 20% per 24-hour period.

Overview of the Semester

- Week 1 January 27
 - o Topic: Introduction to Design Thinking: History & Fundamentals
 - Readings:
 - Design Thinking Origin Story, Jo Szczepanska
 - What is Design Thinking and Why Is It So Popular? Rikke Dam and Teo Siang
- Week 2 February 3
 - o Topic: Introduction to Design Thinking: Design Thinking in Practice

- Readings:
 - Design Thinking for Social Innovation, Tim Brown and Jocelyn Wyatt
 - Design Thinking Comes of Age, Jon Kolko
- o Watch:
 - <u>Transforming Healthcare for Children and Their Families, Doug</u>
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Week 3 – February 10

- Topic: Doing Design Research: Empathy & Ethnography
- Readings:
 - Design Thinking: Getting Started with Empathy, Rikke Dam & Teo Siang
 - Beyond the Toolbox: What Ethnographic Thinking Can Offer in a Shifting Marketplace, Jay Hasbrouck

Week 4 – February 17

- o Topic: Doing Design Research: Interview Techniques
- Readings:
 - The Essential Guide to User Research by Mona Yang

Week 5 – February 24

- Topic: Getting to Insights: Sensemaking
- Guest Lecturer (TBD)
- Readings:
 - The Most Neglected Part of the Design Practice, Daniel Klein
 - The Nature of Design Thinking, Kees Dorst

Week 6 – March 3

- Topic: Getting to Insights: Analysis & Synthesis
- Readings:
 - Abductive Thinking and Sensemaking: The Drivers of Design Synthesis, Jon Kolko
- o Watch:
 - Design Synthesis, Jon Kolko

• Week 7 - March 10

- o Topic: Turning Insights into Action: Problem Definition
- No Readings

SPRING BREAK – NO CLASS – MARCH 17

• Week 8 - March 24

- Topic: Turning Insights into Action: Concept Testing & Prototyping
- Readings:
 - What do Prototypes Prototype?, Stephanie Houde and Charles Hill

• Week 9 - March 31

- Topic: Group Project Project Brief
- Students will be given a social impact challenge and in groups asked to determine to carve out project brief for how to approach solving it using design thinking.

Week 10 – April 7

- Topic: Group Project Research Plan
- Each team will work to outlines its research approach to the design problem they are given and present to the class in Week 11.

Week 11 – April 14

- Topic: Group Project Research Learnings & Problem Definition
- Each team will plan how to conduct observations and interviews. Over the
 week, the group will conduct research and synthesize their findings and
 write up the key insights and problem statements and present to the class
 in Week 12.

Week 12 – April 21

- Topic: Group Project Ideation & Concepting
- Each team will come up with 2-3 service concepts/prototypes for how to address the problem space, including its limitations and constraints, and present to class in Week 13.

Week 13 – April 28

- Topic: Group Project Solutioning
- Each team will conduct final interviews to validate the concepts/prototypes and present the learnings and opportunities for moving forward to the class in Week 14.

Week 14 – May 5 – LAST CLASS SESSION

Topic: Final Group Presentations

Week 15 – May 12 – NO CLASS

Final Group Report due 5PM EST

Letter Grades

Letter grades for the entire course will be assigned as follows:

| Letter Grade | Points |
|--------------|------------|
| Α | 4.0 points |

| Letter Grade | Points |
|--------------|------------|
| A- | 3.7 points |
| B+ | 3.3 points |
| В | 3.0 points |
| B- | 2.7 points |
| C+ | 2.3 points |
| С | 2.0 points |
| C- | 1.7 points |
| F | 0.0 points |

Student grades will be assigned according to the following criteria:

- (A) Excellent: Exceptional work for a graduate student. Work at this level is unusually thorough, well-reasoned, creative, methodologically sophisticated, and well written. Work is of exceptional, professional quality.
- (A-) Very good: Very strong work for a graduate student. Work at this level shows signs of creativity, is thorough and well-reasoned, indicates strong understanding of appropriate methodological or analytical approaches, and meets professional standards.
- (B+) Good: Sound work for a graduate student; well-reasoned and thorough, methodologically sound. This is the graduate student grade that indicates the student has fully accomplished the basic objectives of the course.
- (B) Adequate: Competent work for a graduate student even though some weaknesses are evident. Demonstrates competency in the key course objectives but shows some indication that understanding of some important issues is less than complete. Methodological or analytical approaches used are adequate but student has not been thorough or has shown other weaknesses or limitations.
- (B-) Borderline: Weak work for a graduate student; meets the minimal expectations for a graduate student in the course. Understanding of salient issues is somewhat incomplete. Methodological or analytical work performed in

the course is minimally adequate. Overall performance, if consistent in graduate courses, would not suffice to sustain graduate status in "good standing."

- (C/-/+) Deficient: Inadequate work for a graduate student; does not meet the
 minimal expectations for a graduate student in the course. Work is inadequately
 developed or flawed by numerous errors and misunderstanding of important
 issues. Methodological or analytical work performed is weak and fails to
 demonstrate knowledge or technical competence expected of graduate students.
- (F) Fail: Work fails to meet even minimal expectations for course credit for a
 graduate student. Performance has been consistently weak in methodology and
 understanding, with serious limits in many areas. Weaknesses or limits are
 pervasive.

Brightspace

All announcements, resources, and assignments will be delivered through the Brightspace site. I may modify assignments, due dates, and other aspects of the course as we go through the term with advance notice provided as soon as possible through the course website.

Academic Integrity

Academic integrity is a vital component of Wagner and NYU. All students enrolled in this class are required to read and abide by Wagner's Academic Code. All Wagner students have already read and signed the Wagner Academic Oath. Plagiarism of any form will not be tolerated and students in this class are expected to report violations to me. If any student in this class is unsure about what is expected of you and how to abide by the academic code, you should consult with me.

Henry and Lucy Moses Center for Student Accessibility

Academic accommodations are available for students with disabilities. Please visit the Moses Center for Students with Disabilities (CSD) website and click the "Get Started" button. You can also call or email CSD (212-998-4980 or mosescsd@nyu.edu) for information. Students who are requesting academic accommodations are strongly advised to reach out to the Moses Center as early as possible in the semester for assistance.

NYU's Calendar Policy on Religious Holidays

NYU's Calendar Policy on Religious Holidays states that members of any religious group may, without penalty, absent themselves from classes when required in compliance with their religious obligations. Please notify me in advance of religious holidays that might coincide with exams to schedule mutually acceptable alternatives.

NYU's Wellness Exchange

NYU's Wellness Exchange has extensive student health and mental health resources. A private hotline (212-443-9999) is available 24/7 that connects students with a professional who can help them address day-to-day challenges as well as other health-related concerns.

Class Policies

The best way to learn design thinking is through *doing* designing thinking and thus attendance and participation are extremely important. We understand that everyone has a busy schedule and some of you may work full-time so absences may be unavoidable but please keep your instructor and peers in the loop.