## **PADM-GP 2145**

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

## Spring 2023

## **Instructor Information**

- Carolyn Hou
- Email: carolyn.hou@nyu.edu
- Office Hours: Please schedule an appointment via Calendly

### **Course Information**

- Class Meeting Times: Thursdays, 6:45PM 8:25PM
- Class Location: 60 5<sup>th</sup> Avenue, Room 110

## 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 and empathetic understanding of the needs of people and building solutions that are specifically targeted at addressing 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 researchers, 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 frameworks to integrate design thinking into their own praxis.

## Course and Learning Objectives

- Understand the historical and current application of design thinking;
- Understand and embody the mindset necessary for effective design thinking, e.g., non-linear thinking, divergent and convergent thinking, empathetic thinking, ethnographic research, problem definition and framing, ideation, and verbal and visual communication;
- Be able to execute the end-to-end design thinking process to various social, organizational, and business challenges;
- Be able to explain and advocate for design thinking in a team or 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 October 27<sup>th</sup>. 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: 30%

- Class Participation and Discussion: 20%
- Individual Reflection Paper #1: 5% (Due Thurs, October 27<sup>th</sup> 5PM)
  - One-page reflection on the design thinking mindset and method
- Individual Reflection Paper #2: 5% (Due Thurs, December 15<sup>th</sup> 5PM)
  - One-page reflection on the group design challenge and output

#### Group Assessment: 70%

- Group Assignment #1: Research Plan:10% (Due Wed, November 9th)
  - Each team will outline its research approach and plan to the design challenge they're given.
- Group Assignment #2: Research Learnings: 20% (Due Thurs, November 17th)
  - Each team will conduct interviews and synthesize their learnings, as well as write up the key insights and problem statements to address.
- Group Assignment #3: Early Concepts & Prototypes: 20% (Due Thurs, Dec 1st)
  - 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: 20% (Due Thurs, Dec 15<sup>th</sup>)
  - Each team will conduct final interviews to validate the concepts and 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 September 1
  - 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 – September 8

- o Topic: Introduction to Design Thinking: Design Thinking in Practice
- o Readings:
  - Design Thinking for Social Innovation, Tim Brown and Jocelyn Wyatt
  - Design Thinking Comes of Age, Jon Kolko
  - Systems Design Thinking: The Making of the GE Adventure Series, Cornell University Case Study
- o Watch:
  - Transforming Healthcare for Children and Their Families, Doug Dietz

#### • Week 3 – September 15

- o Topic: Doing Design Research: Empathy & Ethnography
- o Readings:
  - Design Thinking: Getting Started with Empathy, Rikke Dam & Teo Siang
  - <u>Design Meets Ethnography: Reflections on Design, Innovation, Value</u>
     Creation and Ethnography, Froydis Sollie Ronning

#### • Week 4 – September 22

- o Topic: Doing Design Research: Interview Techniques
- o Readings:
  - Generative Research: Definition, Methods, and Examples, Maze Group

#### Week 5 – September 29

o Topic: Getting to Insights: Analysis & Synthesis

- o Readings:
  - The Most Neglected Part of the Design Practice, Daniel Klein
  - Abductive Thinking and Sensemaking: The Drivers of Design Synthesis, Jon Kolko

#### Week 6 – October 6

- Topic: Turning Insights into Action: Problem Definition
- No readings

#### • Week 7 – October 13

- Topic: Solutioning: Concept Testing & Prototyping
- o Readings:
  - What do Prototypes Prototype?, Stephanie Houde and Charles Hill

#### • Week 8 – October 20

- Topic: Solutioning: Prototyping Feedback
- Guest Lecture: Chris Larkin, Managing Director, IDEO.org
- o Readings:
  - No readings

#### • Week 9 – October 27

- Topic: Group Project Project Brief
- Students will be given a social impact challenge and in groups asked to create a project brief for how to address it using design thinking.
- o Guest Lecture: Katie Sibinski, Chief Innovation Officer, Planned Parenthood
- Class will also be used to discuss our two core readings: Change by Design and How Design Makes the World
- o Individual Reflection Paper #1 due at 5PM EST

#### Week 10 – November 3

- o Topic: Group Project Research Plan
- Guest Lecturer: Jennifer Killian, Partner, McKinsey Design
- Each team will work to outlines its research approach to the design problem they are given.
- o Group Assignment: Research Plan Due Wed, November 9<sup>th</sup>

#### Week 11 – November 10

- Topic: Group Project Research Learnings & Problem Definition
- Over the next two weeks, groups will conduct research and identify key learnings and problem statements.
- o Group Assignment: Research Learnings Due Thurs, November 17<sup>th</sup>

#### Week 12 – November 17

- o Topic: Group Project Research Learnings & Problem Definition
- o Each group will present their key research learnings to the class.
- Group Assignment: Early Concepts & Prototypes Due Thurs, Dec 1st

#### THANKSGIVING RECESS – NO CLASS – NOVEMBER 24

#### Week 13 – December 1

- o Topic: Group Project Ideation & Concepting
- Each team will share 2-3 concepts/prototypes for how to address the problem area and present to the class for feedback.

#### Week 14 – December 8 – Last Class Session

- o Topic: Group Presentations
- Each group will present their design thinking project, outlining their process, learnings, and recommendations in front of an expert panel.

#### • Week 15 – December 15 – No Class

- o Group Report due 5PM
- o Individual Reflection Paper #2 due 5PM

#### **Letter Grades**

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

Letter Grade	Points
А	4.0 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

Letter Grade	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 <u>Wagner's Academic Code</u>. All Wagner students have already read and signed the <u>Wagner Academic Oath</u>. 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 <a href="mailto:mosescsd@nyu.edu">mosescsd@nyu.edu</a>) 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.