

## **Design Thinking for Social Impact**

NPLD 5930 Summer 2023

### **COURSE OVERVIEW**

Design Thinking is quickly becoming a fundamental tool for innovation. It is a creative problem-solving methodology that can help people find new, creative solutions to increasingly complex global challenges. This skillset is particularly useful for social innovators working in ambiguous and rapidly changing environments. Design Thinking for Social Innovation teaches students to develop empathy for stakeholders, generate innovative ideas, and prototype and refine those ideas so they can be successfully implemented. The course introduces a deeply human process that taps into abilities we all have but get overlooked by more conventional problem-solving practices. The course will also explore critiques of design thinking, and how to bring a design justice perspective to social innovation work informed by design thinking.

You can only learn design by doing, so we'll get out into the world and tackle a design challenge of our own together. Students will develop product/business/service/experience concepts using techniques such as empathy, problem definition, ideation, concept refinement and prototyping. You will learn design tools and techniques to generate and communicate innovative solutions. At the end of this class you'll have a new set of skills to apply to any challenge you face and the tools and techniques to infuse your day-to-day work with creativity.

Instructor: Sarah Rottenberg, [srot@upenn.edu](mailto:srot@upenn.edu)

TA: Chuming Zhang [chumingz@seas.upenn.edu](mailto:chumingz@seas.upenn.edu)

-  
Meeting pattern: 10:00 -5:59pm in Tangen Hall, room 706 (5/30 to 6/3)

[Links to an external site.](#)

### **KEY LEARNING OBJECTIVES**

- Understand creative design processes and how they relate to social innovation
- Implement design practices/habits in your work
- Develop design-actionable insights based on domain analysis and user empathy
- Visualize, sketch and prototype your ideas
- Bring a design justice/ design for equity perspective to your work

### **COURSE STRUCTURE**

The course is being run as a five-day intensive. Each day will consist of a mix of lectures, hands on learning, group, and individual activities.

Design thinking is something that can only be learned well by doing so the course will emphasize doing. Students will be expected to be present for the majority of class time and to stay fully engaged in the coursework while we are together. We will take periodic breaks

for meals and to allow students to check in on other demands but expect a good deal of focus over the five days we are together.

Readings will provide more detail on the course content and can be completed during class time, between classes or after the course is finished.

There will be individual and team assignments on that will be worked on and handed in during class time.

Once the class meetings have completed there will be two final assignments: 1) a portfolio documenting the work that they did in the class and 2) a reflection on the design process and how it might apply to their future work.

## **COURSE OVERVIEW**

### **Day 1, May 30:**

#### **What is design thinking and why is it relevant to social innovation?**

Learning objectives: Understand the design thinking process and how it can help with social innovation initiatives; Define what we mean by 'social innovation'. Discuss design justice and critiques of design thinking.

#### **Empathy: Understanding the needs of your users**

Learning objective: Learn techniques to identify key stakeholders and methods for understanding their needs. Research planning. Articulate your position and biases as you engage in the work.

### **Day 2, May 31:**

#### **Executing Design Research**

Learning objective: conduct design research, practice interviewing and observation skills, understanding user needs

#### **Opportunity Definition: Framing a problem/opportunity to address**

Learning objective: Learn how to synthesize information from stakeholders into a well-defined problem to address through design

### **Day 3, June 1:**

#### **Ideation: Generating a wide range of diverse ideas**

Learning objective: Understand why a range of divergent ideas is helpful and learn techniques for generating new ideas

#### **Prototype: Creating prototypes**

Learning objective: Learn how to use prototypes to refine and test your hypotheses and ideas, learn how to develop prototypes with the least bit of effort for the most impact. Learn how to engage communities in co-designing.

### **Day 4, June 2:**

#### **Implementing Your Prototype and Getting Feedback on Your Ideas**

Learning objective: Implementing prototypes, getting feedback on ideas, refining ideas based on learnings

#### **Implementation & Storytelling**

Learning objective: What next? Learn how to move forward with implementation and storytelling to increase your chances of success.

### **Day 5, June 3**

## Final Presentations

Learning objective: Share your work and learn about your classmates’.

## DTSI In Your World

Learning objective: Reflect on the process and impact of your project as well as learnings and takeaways from the course. Begin to identify what design thinking tools and practices might be useful in your work or home life.

## ASSIGNMENTS

We will work in teams during class on a project. All assignments will relate to that project topic as you move through the design thinking process. Please PDF all submissions.

Overview of assignments and their contribution to your grade. Completion of an assignment will result in full points, while an incomplete will result in 0 points. The portfolio assignment will be graded traditionally, with students earning a percentage of points corresponding to the rubric.

In-class submissions will include:

Interview notes	10 points
Generate 20 ideas	10 points
Idea storyboards	10 points
Prototype feedback	10 points
Final presentation	10 points

**Total in-class assignments    50 points**

Follow-on assignments will include:

Portfolio submission	20 points
Reflection assignment	20 points

**Total follow-on assignments    40 points**

In addition, each student will start the class with 50 participation points. Because of the short duration of the class, and the teaching style, attendance is critical to your learning. Missing class and failure to fully engage in the class activities will result in a loss of points.

**Total course points        150 points**

## GRADING

In class assignments will be graded on a complete/incomplete basis, with comments and feedback provided.

Evaluation in this course will adhere to University guidelines as outlined in the [SP2 Master's Student Handbook](#). Grades will be given in relation to the student’s ability to meet the course deadlines, deliverables and course objectives. Final grades will be given by the course instructor and the letter grades are understood to mean the following, with + and – understood as qualifiers.

A+ 97-100% complete

A 93- 96 % complete

A- 90-92 % complete

B+ 87-89 % complete

B 83-86 % complete

B- 80-82 % complete

C+ 77-79 % complete

C 73-76 % complete

C- 70-72 % complete

Students are entitled to one unexcused absence. Students who are absent more than once are expected to email the teaching team to discuss how they will catch up on the work.

Three absences will result in lowering your final grade by one full letter. Absences will be excused in accordance with university policy and will require a note from a physician.

Please notify your instructor in advance if you know that you will not attend class for any reason.

#### University Code of Academic Integrity

Students are expected to be familiar with the [Code](#) and to adhere to academic standards that honor the individual, all students, and the integrity of the University. Work submitted is expected to be your own original work, or in cases of group assignments, to represent the collaborative efforts of the group members. Instances of academic dishonesty will be referred to [The Center for Community Standards and Accountability](#).

#### Course Resources

- Technical Help and Questions: Submit requests for technical help to [sp2help@sp2.upenn.edu](mailto:sp2help@sp2.upenn.edu).
- Canvas Help and Questions: You can search the [online Canvas documentation](#)[Links to an external site.](#)[Links to an external site.](#)[Links to an external site.](#) for students and [Penn's Canvas for Students page](#) and email [canvas@pobox.upenn.edu](mailto:canvas@pobox.upenn.edu) with any further issues.
- [Course Policies and Expectations](#): Please make sure you are familiar with the policies for this course.
- Accessing Penn Libraries Resources: Learn how to:
  - [Access resources from off-campus](#)
  - [Search Franklin Articles+](#): Penn Libraries' large collection of ebooks, scholarly journals, newspaper articles, conference proceedings, and more.
  - [Scan and Deliver](#): Enables you to obtain scans of selected book chapters and journal articles in the general, non-Reserve collections of the University of Pennsylvania Libraries for your research.
  - [Get books by mail](#): A service offered to Penn patrons with no geographic limitation. Register and request via Books by Mail to have Penn materials shipped to your off- campus home address. The library pays for the outbound shipment. Users are responsible for paying return shipping or returning materials to the Van Pelt Library.
- [Weingarten Learning Resources Center](#): Provides professional instruction in university relevant skills such as academic reading, writing, study strategies, and time management. (Please note that one-on-one learning consultations are not available to online students.) Weingarten also provides services and programs for

students who self-identify with disabilities to ensure equal academic opportunities and participation in University-sponsored programs.

- [SP2 Writing Support](#): SP2 master's program students (online and on-campus) can access one-on-one writing support from peer tutors enrolled in our doctoral programs. Zoom-based sessions help students sharpen skills and leverage best practices in areas such as writing style, organization, editing, APA standards, redundancy, and avoiding plagiarism. To access this service, request a referral from an instructor or your Academic Advisor.