

ISDN1002 – Redefining Problems for the Real Needs

Fall 2023

Lecture Times:

L1: Monday 16:30 – 17:50

L2: Friday 12:00– 13:20

Classroom: 4223 (ISD Works!)

Course Description:

This course will introduce design and user research methods to redefine problems for the real needs. These methods will be used to investigate the users' and other stakeholders' needs, understand the problems to solve, and ideate and prototype solutions. This course is practice-driven, both through in-class exercises and a semester-long project aiming to define problems on-campus and propose adequate solutions.

Learning Outcomes:

By the end of the course, students will be able to:

- Understand the different research methods and their application
- Empathise with the user and redefine problems
- Generate new ideas based on prior research
- Justify technical choices based on research findings

Grading:

Project	80%
Project deliverables	30%
Mid-project presentation	20%
Final presentation	30%
Presence and participation	20%

Resources:

This course presents materials at the intersection of multiple fields. As such, there is no reference textbook for this class. The following resources are highly related to this course:

[1] IDEO Design Kit: <https://www.designkit.org/>

[2] User Research and Design: <https://think.design/services/user-research-company/>

[3] Rodgers, P.A. and Milton, A., 2013. *Research methods for product design*.

These resources can be informative beyond the scope of the class. Note that most of these books focus on a specific field

[1] Wickens, C.D., Helton, W.S., Hollands, J.G. and Banbury, S., 2021. *Engineering psychology and human performance*. Routledge.

[2] Preece, J.; Rogers, Y. & Sharp, H. (2015), *Interaction Design: Beyond Human-Computer Interaction*, Wiley, Hoboken, NJ.

Tentative Schedule:

Week	Monday	Friday
0		1 st Sept: Introduction
1	5 th Sept: Introduction Continued	9 th Sept: Case studies
2	12 th Sept: Mid-Autumn	16 th Sept: Introduction to projects
3	19 th Sept: Design Thinking	23 rd Sept: Design Thinking activity
4	26 th Sept: Users	30 th Sept: Users
5	3 rd Oct: Observation	7 th Oct: Observation
6	10 th Oct: Interviews	14 th Oct: Interviews
7	17 th Oct: Ideation	21 st Oct: Ideation
8	25 th Oct: Mid-term	28 th Oct: Mid-term
9	31 st Oct: Prototyping	4 th Nov: Prototyping
10	7 th Nov: Prototyping	11 th Nov: Prototyping
11	14 th Nov: Usability	18 th Nov: Usability
12	21 st Nov: Project	25 th Nov: Project
13	28 th Nov: Final Presentation	