Design Thinking
IMBX-SHU 211 1
Spring 2020-14 weeks
4 credits
Wednesday 13.15-16.15
RM 900, NYU Shanghai

Please note that all NYU SH courses in Spring 2020 are offered in the form of distance learning (unless further updates are announced by the university).

Instructor: Yanyue YUAN, Assistant Arts Professor, NYU Shanghai
Office: RM 949-5
Happy Hour: Wednesday (GMT+8) 11 a.m.-12 p.m. and 9-10 p.m. (or by appointment)
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Important Notice:

1. **Dates and Deadlines**

We have altogether 14 sessions this semester. Please make sure that you **complete each session (remotely) before each Thursday 11.59 p.m.**[1] (**Shanghai time: GMT+8**) (including all exercises and discussions) and **all assignments** of that session **before 11.59 p.m. within three days (before 11.59 p.m. GMT+8 on Sunday of the same week)**.

2. **Communication and Flexibility**

If you need to postpone any form of participation due to any urgent personal matters, **please make sure that you keep the instructor informed in advance. Otherwides, your grades will be affected according to the policy.**
Please be patient and flexible as plans might be changed and updated during the semester (please refer to the updated syllabus each week).

3. **Expenditure**

This course embraces sustainability and cost-effectiveness. Your expenditure related to the coursework **is expected to be between 50-200 RMB**, including transportation for your individual fieldwork (metro/bus) and purchase of project-related materials. You are highly suggested to creatively and strategically apply recycled materials and available resources to deliver your work. Should you have any financial concerns, please talk to the instructor.

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[1] **Session 5** needs to be completed **before 11.59 p.m. (Shanghai Time GMT+8) Mar 15 (Mon).**

*We will mainly be using the following digital tools:
-Zoom (for pre-recorded videos, virtual happy hours, synchronous discussions and meetings)
-Google Folder/Sheets/Slides (for submitting assignments)
-Wakelet (for posting ideas and discussions)
-Flipgrid (for posting video responses)
-Tricider (for brainstorming and idea proposals)
-PollEv (for anonymous discussions)

Quick Links:

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COURSE INFORMATION

Course Description

Design Thinking is a theoretical, methodological and practical framework that has the potential of bringing about socially responsible innovation. While most existing teaching and application of design thinking centers around the five phases loop proposed by IDEO (a global design firm that champions design thinking approach), this course will push students to apply concepts and toolkits of design thinking critically by delving into the root causes, conducting rigorous research, and practising self-critique and peer review. By situating design thinking in its historical and cultural contexts and by evaluating existing design cases, the course aims to engage students to always ask the 'why' question and to practise strategic and systematic thinking.

Prerequisites: This course does not have any prerequisites.

COURSE LEARNING OUTCOMES

By the end of the course, students will be able to
- Analyze and identify root problem(s) by applying critical thinking and observation skills;
- Summarize key concepts of design thinking and develop critical investigations and applications of design thinking frameworks and tools to solve real world problems;
- Critically evaluate design (products, systems, and concepts) in a variety of contexts;
- Experiment with initial ideas through prototyping, development and implementation;
- Offer high-quality feedback and respond to criticism;
- Synthesize all ideas developed during the project and deliver a final idea that validates your solutions to the problems with strategic and systematic thinking;
- Create an engaging oral presentation that demonstrates rationale behind decision-making process, summarizes the project in visually appealing materials and creative storytelling format.

Instructor Goals

At a minimum, I hope to pursue the following goals and solicit your open and timely feedback on how well we are meeting these goals:
- Provide a framework for lifelong learning;
- Create an open, transparent, and accessible learning environment;
- Show respect and concern for all students;
- Respond to different learning habits and needs;
- Be passionate, caring and open minded;
- Strive to stimulate and maintain students' curiosity and motivation for learning;
- Provide relatable materials that touch upon emerging practices and future trends;
- Challenge preconceptions and assumptions with questions and discussions.

GRADES (Assessment, Measurement and Evaluation)

The grade for this course will be determined according to the following formula:

Assignments/Activities	% of Final Grade
Class Participation (attendance, in-class exercises and engagement)	10
Portfolio	20
Reading Responses	10
Project Alpha (progress)	15
Project Alpha (presentation)	5
Project Beta (progress)	20
Project Beta (presentation)	10
Peer Review	10

[Assessment Criteria](#) *(please click on the hyperlink to view)*

Please note that the late penalty for all assignments is **one third of a letter grade per day.** So, an 'A' project that is one day late will be graded an 'A⁻', two days late a 'B⁺', three days late a 'B', etc.

Letter Grades

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

Letter Grade	Percent
A	93% and higher
A-	90.00% – 92.99%
B+	86% - 89.99%
B	82% - 85.99%
B-	78% - 81.99%
C+	74% - 77.99%
C	70.00% - 73.99%
C-	67.5% - 69.99%

D+	65% - 67.49%
D	62.5% - 64.99%
D-	60% - 62.49%
F	59.99% and lower

Grading Evaluation Scale

NYU Shanghai follows the same grading practices as NYU New York. The following grades may be awarded: A, A-, B+, B, B-, C+, C, C-, D+, D, F. In general, A indicates excellent work, B indicates good work, C indicates satisfactory work, and D indicates passable work and is the lowest passing grade. F indicates failure. There are some additional grades—P for pass, W for Withdrawal—which are awarded administratively.

Grade Dissemination

You can access your scores at any time using the Grade Book Function of NYU Classes.

GROUP WORK POLICY

Everyone must take part in a group project. This semester, you will mainly be working in pairs (or maximum in a group of 3). All members of a group will receive the same score for group projects; that is, the project progress and presentation are assessed and everyone receives this score.

However, once serious freeriding is noted and confirmed, individual team members might be assigned a lower grading. I hope this will not happen and that you will learn to take responsibility for group work and learn and grow together as a team.

- **How Teams are Formed**

You have the freedom to choose your own teammates. You are encouraged to work with different students for the two projects.

*Once formed, teams cannot be altered or switched, except for unusual circumstances (e.g. serious illness, course withdrawal, unresolvable conflicts). Only under extreme conditions will the instructor offer permission to rearrange/split teams to ensure the best learning experience and outcome for each student. **You are encouraged to keep the instructor informed and updated about any concerns you might have over group work as early as possible.**

MAIN COURSEWORK

Important Notice

For submitting your assignments and group work, please use google folder (google doc and google slides) and share the folder with the instructor **(offering editing access)**. Submission of assignment is based on the content in the required folder before the deadline as indicated on the syllabus (unless otherwise agreed) and the instructor will review and comment on your work directly on the document unless an alternative format is preferred and communicated.

1. **Individual folder:** named as 'X (first name initial) and XX (surname)_DT_Spring 2020' (e.g. Y Yuan_DT_Spring 2020): name each portfolio work as 'Portfolio no._first name' (e.g. Portfolio 3_Yanyue) and each reading responses as 'RR no._first name' (e.g. RR 2_Yanyue)
2. **Group folder_Project Alpha:** named as 'xxxx (group name)_Alpha_DT_Spring 2020' (e.g. Sunshine_Alpha_DT_Spring 2020). Only one folder needs to be created for each group.
3. **Group folder_Project Beta:** named as 'xxxx (group name)_Beta_DT_Spring 2020' (e.g. Moonlight_Beta_DT_Spring 2020). Only one folder needs to be created for each group.

Individual Portfolio: documenting your own learning journey and reflections.

Reading Responses: documenting your responses to the questions in relation to all the required readings.

1_Project Alpha (week 2-week 6): Project Alpha is a fast-paced project that follows the commonly practised design thinking process so that you can try applying design thinking in real projects. Project Alpha focuses on *time management, learning from doing, quick prototyping and peer review.*

The design challenges for Project Alpha are (please select one topic as your own project focus):

How might we design a better distance learning experience for college students?

How might we improve personal hygiene practices?

2_Project Beta (week 7-week 14): Project Beta is the main course project during which you are expected to deliver your project by critically applying design thinking frameworks and by responding to the feedback and lessons learned from project Alpha. Project Beta focuses on *teamwork, critical thinking, iteration, self-evaluation and peer review.*

TBC

Tentative Course Schedule

The following schedule is subject to slight changes. Please consult the most updated google doc version for reference. A more detailed agenda will be provided one week before each session and links will be added accordingly.

Topics, Agenda and Assignments

Session	Outline	Assignment
Week 1 **Feb 19 (Wed)**	**Pre-session:** -Getting to know each other **Introduction and Critical Awareness** *Detailed Agenda (will be added later) -Warm up -Pain list -Class culture and expectations -Rules and regulations -Introduction to grading and course projects -You expectations -Share: Terrible Design -Critical Awareness -Design Case 001 -Creative Spectrum	**Individual Portfolio Section 1** (1-1.5 h) **Due:** 11.55 p.m. (Sun) Feb 23 *Talk to your Project Alpha team member(s) and discuss your preferred format of collaboration (meeting time, meeting platforms etc.)
Week 2 **Feb 26 (Wed)**	**What is Design Thinking** *Detailed Agenda (will be added later) -Warm up -What is Design Thinking -Exercise: save the terrible design -Brainstorming culture -Design Thinking Rule of Thumb -Kick-off of Project Alpha: Exercise: Creating a Mindmap (as your assignment: **Project Alpha Progress 1 Mindmap**) *Note on Plagiarism -Design case 002 -How Might We Question -In-class challenge	**Reading Response 1** (16 pages, 45 mins-1h) **Project Alpha Progress 2 Fact Pack and Interview Questions** (1.5-2h) **Due:** 11.55 p.m. (Sun) Mar 1 *Project Alpha Team fixed
Week 3 **Mar 4 (Wed)**	**Sensing** *Detailed Agenda (will be added later) -Warm-up -Design case 003 -User Journey Map -Interview techniques -Mock interview *Independent project time	**Individual Portfolio Section 2** (1h) **Project Alpha Profess 3 Fieldwork Plan** (45 mins) **Due:** 11.55 p.m. (Sun) Mar 8

Week 4 **Mar 11 (Wed)**	**Fieldwork and Ideation** *Detailed Agenda (will be added later) *Independent project time (for fieldwork) -Warm-up -In-class Challenge -Team Presentation 1: Share your field story -Random Forces -What if questions -Ideation Jackpot	**Individual Portfolio** **Section 3** (45 mins-1h) **Project Alpha Profess 4** **Fieldwork Findings** (1-1.5h) **Project Alpha Progress 5** **Illustrated Solutions** (30-45 mins) **Reading Response 2** (14 pages, 30-45 mins) **Due:** 11.55 p.m. (Sun) Mar 15
Week 5 **Mar 14 (Sat)**	**Prototype and User test** *Detailed Agenda (will be added later) -Warm-up -What is prototyping? -Design case 004 -Why prototyping? -Rapid prototyping -Team Presentation 2: Prototype	**Individual Portfolio** **Section 4** (30-45 mins) **Due: 11.55 p.m. (Tue) Mar 17**
Week 6 **Mar 18 (Wed)**	**User Test and Storytelling** *Detailed Agenda (will be added later) -Warm-up -User test design -Storytelling methods	**Project Alpha Progress 6** **Prototype and User Test** **Individual Portfolio** **Section 5** (30-45 mins) **Due:** 11.55 p.m. (Sun) Mar 22
Week 7 **Mar 25 (Wed)**	**From Alpha to Beta** *Detailed Agenda (will be added later) **-Project Alpha Presentation** -Warm-up -Peer review -Reflection on Project Alpha (Expectations of Project Beta) -Share: My favourite design -Design case 005	**Reading Response 3** (30 pages, 1h) **Due:** 11.55 p.m. (Sun) Mar 29 ***Forming Project Beta Team**
Week 8 **April 1 (Wed)**	**Rethink Design Thinking and Value Statement** *Detailed Agenda (will be added later) -Warm up -Role play on design thinking -Value Statement -Design case 006 -Ethics of design -Project timeline and self-evaluation criteria	**Reading Response 4** (18 pages, 1-1.5h) **Project Beta Progress 1** **Project Timeline and Mindmap** **Individual Portfolio** **Section 6** **Due:** 11.55 p.m. (Sun) April 5 ***Project Beta Team fixed**

Week 9 **April 8 (Wed)**	**Thoughtless Acts and Existing Design** *Detailed Agenda (will be added later) -Warm-up -Ethics of design -In-class reading: The Ethics of Design (in *Ruined by Design*) ([8 pages](#)) -Interview Mock -Evaluation of Existing Design	**Reading Response [5](#)** (18 pages, 1-1.5h) **Project Beta Progress 2** **Inspiration Gallery and Fieldwork Plan** **Due:** 11.55 p.m. (Sun) April 12
Week 10 **April 15 (Wed)**	**Fieldwork for Project Beta** Independent project time (no class meeting)	**Reading Response [6](#)** (6 pages, 30-40 mins) **Project Beta Progress 3** **Fieldwork Summary** **Due:** 11.55 p.m. (Sun) April 19
Week 11 **April 22 (Wed)**	**Potential Solutions and Prototype** *Detailed Agenda (will be added later) -Warm up -Design case 007 -Team Presentation 1 *Project Time	**Project Beta Progress 4** **HMW Question and Solutions** **Individual Portfolio Section 7** **Due:** 11.55 p.m. (Sun) April 26
Week 12 **April 29 (Wed)**	**Prototype and User Test** *Detailed Agenda (will be added later) -Warm up -Design case 008 *Project Time -Team Presentation 2	**Project Beta Progress 5** **Prototype and User Test** **Due:** 11.55 p.m. (Sun) May 3
Week 13 **May 6 (Wed)**	**Project Beta Presentation** *Detailed Agenda (will be added later) **Final Presentation of Project Beta** **Peer Feedback**	**Individual Portfolio Section 8** **Due:** 11.55 p.m. (Sun) May 10
Week 14 **May 13 (Wed)**	**Reflections** *Detailed Agenda (will be added later) -Warm-up -Review: What is design thinking -Design Thinking Sprint -Writing to future me	

COURSE POLICIES

1. Attendance

Attendance in all classes is mandatory. If you are unable to attend a class, please let me know in advance so we can figure out how you can make up for what you missed in class. Two unexcused absences will lead to a failing grade. If you are ill and need to miss more than a week of classes, you must speak to the Health & Wellness Office to get an excused absence.

University Policy on Make-up of Absence from Class due to illness:

When students are ill, they are expected to notify professors in advance of class, if at all possible. Students should negotiate with professors the time and place for make-up of assignments, tests and/or examinations missed. In cases where students are seriously ill and will miss more than a week of classes, the Office of Health and Wellness should be contacted so that the student's other professors may be contacted. The Office of Health & Wellness will not verify medical absences of under a week.

2. Submission of Assignment

Assignments are due **at the date and time indicated in the most updated syllabus. Extension of submission deadlines** can be made only with the prior approval of the instructor. Please respect my time and your colleagues'; plan ahead and submit on time so that we can all progress through this learning experience together.
The late penalty is one third of a letter grade per day. So, an 'A' project that is one day late will be graded an 'A⁻', two days late a 'B⁺', three days late a 'B', etc.

3. Academic Integrity

Students should read and adhere to the NYU Shanghai policy on academic integrity as described in the current NYU Shanghai Academic Bulletin. Plagiarism and cheating will be penalized. If you have any questions or doubts about plagiarism, please do not hesitate to contact me. Issues regarding academic integrity and plagiarism will be emphasized in class and if any minor signs of violating academic integrity or committing plagiarism are noted, you will receive an oral warning. Second time violation may lead to an F of the assignment/project. And if the case is thought to be serious by the instructor, it will be reported to the Assistant Dean for Academic Affairs for further investigation.

4. Instructional Technology

Email/NYU Classes Message: You are welcome to contact the instructor via email or NYU Classes messages. Under usual circumstances, issues related to the course or your academic life in general will be responded within 24 hours (and 48 hours if sent during weekends).
Mobile Devices (laptop/tablet/smartphone) Expectations: I welcome and encourage use of mobile devices during class to facilitate reading, discussion and team collaboration and I have confidence in your self-discipline to regulate your use of these devices. It is your responsibility, as a college student, ensure that you are devoted to the course and the team project and not using such devices to surf the Internet or spend time on social media for non-course related

matters. If you have difficulty managing tasks that involve electronic devices, please do not hesitate to talk to me.

5. Professionalism Policy

Promptness, punctual attendance, participation, and responsible behavior will influence the instructor's (and future employers) perception of student professionalism. Active, positive, engaging, participation in class activities is essential. As pre-professionals, you should be at the point in your career where you have learned to ask and answer these questions:

1. How do I know when I know something?
2. What is the evidence and how reliable is it?
3. How are events, theories, models or people connected?
4. What is the cause and effect?
5. What is new and what is old - have I run across this idea before? When, where, what did it mean to me then, and how I can further connect the concept now?
6. So what? Why does it matter? What does it all mean?

RESOURCES

- **Access your grading**: [NYU Classes](#)   (www.nyu.edu/its/classes)
- **Obtain 24/7 technology assistance:** [IT Help Desk](#) (www.nyu.edu/it/servicedesk)
- **Moses Center Statement of Disability.** If you are student with a disability who is requesting accommodations, please contact New York University's Moses Center for Students with Disabilities (CSD) at 212-998-4980 or mosescsd@nyu.edu. You must be registered with CSD to receive accommodations. Information about the Moses Center can be found at www.nyu.edu/csd.
- **Tutoring and Writing Support**. The Academic Resource Center (ARC) provides tutoring and support to students looking to reach their highest academic potential. Students can schedule a meeting, or drop by, for individual and small group tutoring in over 30 other STEM and Business & Economics courses. The ARC also offers individual writing consultations at any stage of the writing process, as well as academic coaching in areas such as time management, reading and note-taking strategies, and exam preparation. Visit the [online schedule](#) to check availability. Students are also welcome to study on their own in the comfortable, supportive atmosphere of the ARC.
- *Library and Research Services*. The Library is available to support your research needs. They have access to 14,000 print resources, 2,000 DVDs, and 1,000 databases (including over a million ebooks, streaming audio and video and image databases). Librarians with expertise in Business, Economics, Humanities, Science (STEM), and Social Sciences are available in-person and online to help. Visit the Library on the 4th floor, or go to shanghai.nyu.edu/library to learn more.