

**BUSF-SHU 211
Design Thinking
Spring 2019-14 weeks**

**Monday & Wednesday 13.15-14.30
RM 900, NYU Shanghai**

Please note that the full (interactive) syllabus is only shared with students enrolled in the class as google doc. (You can jump directly to the [course schedule](#) here or via the link in the header). Some content in this syllabus (esp. course schedule and assignment) is subject to change, and course materials will be updated on a weekly basis during the course. Please do not print this version as final reference.

Instructor Information

- [Yanyue YUAN](#), Visiting Assistant Arts Professor, [PCI \(Program on Creativity+Innovation\)](#), Arts and Sciences, NYU Shanghai
- Office: RM 1313
- Email: yanyue.yuan@nyu.edu
- **Happy Hour (Drop in): Wednesdays 10.15-11.15 a.m. (Feb 13th-May 15th 2019)**
- [NYU Classes Site](#) (please submit all assignments via NYU Classes)



A warm welcome to Design Thinking! I will work with you for 14 weeks to explore the transformative power of design thinking by **working in teams** to work out a solution to **real-world problems** that you identify within the scope of the **course challenge** (to be announced during the 1st week class). It is a workshop style course and each of you are expected to actively contribute to discussions and practices.

I love teaching this course and I believe we will learn from each other during this upcoming adventure. Please feel free to drop in during **happy hours**, or if you hope to talk about anything related to this course or to your study and life at any time, just drop me an email at yanyue.yuan@nyu.edu

Course Information

- **Spring 2019**

- **Credits: 4**

- **Course Description:**

Design Thinking is a theoretical, methodological and practical framework that has the potential of bringing about socially responsible innovation. This course will introduce the core concept and toolkits of design thinking as the foundation of innovative thinking and practices. It requires you to step out of your comfort zone and to examine and challenge your own assumptions.

Critical thinking, teamwork, and empathy are the three pillars of this course.

- **Course Overview:** *Design Thinking* a general elective course offered by Program on Creativity+Innovation (PCI). The course is delivered in a studio style and designed around project-based learning. Critical and reflective exploration and application of design thinking is the main subject of this course. Readings and discussions will be adjusted to fit each semester's design challenge.
- No prerequisite
- Face-to-face class meeting days and times: Every Monday and Wednesday 13.15-14.30 (please check the [academic calendar](#) for holidays and adjustment days) @ RM 900, NYU Shanghai

Some sessions are arranged as fieldwork and in-class challenges and the date and time might be changed, please refer to further notices if this happens.

We are
now going
to solve
real world
problems



Course Learning Outcomes

Upon completion of this course, students will be able to:

- Summarize the key concepts of design thinking and apply the framework and key tools to projects;
- Practise and apply core desk research skills (summarize main arguments and statistics of the topic under discussion; synthesize key insights based on critical review of different opinions in contexts) and field research skills (design and practice open-ended interview; prepare and carry out observation);
- Analyze and identify the root problem(s) by applying critical thinking and observation skills;
- Critically evaluate existing design (products, systems, and concepts);
- Demonstrate reflective thinking in discussions and writings (recognizing one's own perspectives and conceptual framework underlying one's opinions as well as their strengths and limitations; showing awareness of other alternatives and possibilities);
- Practise project management skills to implement your project ideas (display capacity to navigate through multiple tasks; stick to deadlines; manage and break down tasks into smaller ones);
- Experiment with initial ideas through prototyping and develop better versions by critical self-evaluation and reflection on feedback;
- Practise ability to work effectively in teams (be able to listen to, summarize and build on peer student' ideas; create and abide by team norms; collaborate on team project and be responsible for the team's progress and performance);
- Demonstrate ability to critically evaluate peer's and one's own work in progress and final delivery;
- Synthesize all ideas developed during the project and deliver a final solution that solves the identified problem through strategic and systematic thinking;
- Value ambiguity and uncertainty and develop courage to experiment with new and unfamiliar approaches.

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.

Course Requirements

Learning Materials

Handouts will be distributed in class and all materials covered in class will be shared in this document with links.

*Please note that most in-class reading materials are printed out so that it is easy to work with. **If you have a strong wish to work with e-versions to save paper**, please let the instructor know.

Supplementary (Optional) Learning Materials:

The following list provides supplementary learning resources, so that you can refer to part or all of them if you are interested (please treat them critically!). Contents in these readings and supplementary resources listed in the *resources* section in course schedule will not be covered in any form of assessment (**except for the chapters and excerpts included in in-class readings and assignments**).

[book] [The Design of Everyday Things \(Revised and Expanded Edition\)](#) by Don Norman (2013) Basic Books

[book] [The Design of Future Things](#) by Don Norman (2009) Basic Books

[book] [Creative People Must Be Stopped: 6 Ways We Kill Innovation](#) (Without Even Trying) by David A. Owens (2011) Wiley

[book] [Not Knowing: the Art of Turning Uncertainty into Opportunity](#) by Steven D'Souza & Diana Renner (2014) LID Publishing

[book] [Creative Confidence: Unleashing the Creative Potential within Us All](#) by David Kelly & Tom Kelly (2015) **physical copy available in the library (NYU SH) and on course reserve**

[Video] [How Beauty Feels \(Richard Seymour\)](#)

Student Response System

To better facilitate in-class discussion and interaction, we will use some student response system (SRS) to collect everyone's preliminary ideas. These will count as part of your class participation.

We will mainly be using [Poll Everywhere](#). Please click [this link](#) when the instructor publishes a new poll.

Grades (Assessment, Measurement and Evaluation)

Grading guidelines, rubrics, and procedures that will be used to assess the key course assignments will be provided. **Students will receive a score-based grade (out of 100) for each category.**

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

Assignments/Activities	% of Final Grade
Class Participation (attendance and in-class exercises and discussion)	25%
Reflective Journals	20%
Group Project Progress	30% (including 10% individual variation)
Group Project Presentation	15% (mid-term: 5% + final:10%)
Mini Design Project	10%

[Grading Criteria](#)

Group Work Policy

Everyone must take part in a group project. All members of a group will receive the same score; that is, the project progress and presentation are assessed and everyone receives this score. **However, one third of the group project progress (10% of your total grade) is individual** and refers to your contribution to teamwork and your individual performance during the group project. **This 10% is made up by the instructor’s assessment (50%) and peer evaluation (50%)** provided by every other member of your group twice during the semester (once around mid-term and once around final). Guidelines of how to use the peer evaluation form will be given in class.

How Groups are Formed

All students will be assigned to a group by the instructor (taking consideration of college level, major/program, gender, social styles theory, etc.). Students can exchange members among groups upon agreement of all members of the groups concerned. **Groups need to be finalized by the end of the first session of week 3.**

Once formed, groups 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 groups 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.

***Rationale behind group formation and assessment of group work**

The policy of how groups are formed and how group work is assessed is designed to mirror what you might experience in real life careers. The major principles are:

- Groups are initially divided to ensure similar level of diversity and skill sets within each group;
- Once formed, groups cannot be easily changed (unless upon mutual agreement, as in workplaces when you wish to change a job) so that you learn to develop commitment;
- Each member needs to take responsibility for group work: being able to offer help and feedback to peers as well as learn and grow together as a team.
- Individual variations are ensured to avoid free riders and to give credits to your contribution;
- Each student is given a certain level of autonomy to offer evaluation to your peers and to be accountable for the evaluation you receive from your peers (again, this is often practised in workplaces, though explicitly or implicitly in different formats and styles).

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

Graded tests and materials in this course will be returned individually only by request. You can access your scores at any time using the Grade Book Function of NYU Classes (if applicable.)

Course Policies (General Requirements)

Please also check resources and detailed policies via this [link](#).

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 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 in order to get an excused absence.

2. 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.

3. Submission of Assignment

Assignments are due **at the date and time indicated in the most updated syllabus (this will be stressed during each class as well).**

I do not accept late work. Missed assignments (individual and team assignment) will be given an F. Exceptions can be made only with the prior approval of the instructor. The NYU Classes Assignment portal will be configured to accept completed assignments and then it will not accept submissions. I will share complete information on assignments to allow ample time for completion if you do not procrastinate. 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 for reflective journal and team project presentation materials 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.**

Course Schedule

Given the nature of this course, please allow some flexibility regarding the course structure, collaborative partners and readings. The syllabus and schedule might be changed and updated when necessary.

Topics, Agenda, Readings and Assignments

*(V for Video, R for Reading, W for Website, T for Teamwork)

Week/ Date	Topic/Concept	Resources	Assignment (and DDLs)
Week 1 Feb 11 & 13	<p>Introduction and Critical Awareness</p> <ul style="list-style-type: none"> • Magic Gadget Challenge • Introduction (class culture, instructor’s expectation, rules and regulation, grades) • Brainstorm Culture • Critical Awareness: <ol style="list-style-type: none"> 1) Critical reprocess of the information you encounter 2) Awareness of your own positioning and reasoning 3) Openness to possible alternatives 4) Reflection on why things are as they are/appear to be and what you can do to make a change <p>*Announce Course Challenge</p>	<p>[V] Ben Goldacre: Battling Bad Science (00-1’48; 3’17-5.06’)</p> <p>[V] Image Hack</p> <p>[V] Brainwriting</p> <p>Supplementary Resources</p> <p>[V] Dove Real Beauty Sketches (You’re more beautiful than you think)</p> <p>[V] The Dangerous Ways Ads See Women (Jean Kilbourne)</p> <p>[V] Your Elusive Creative Genius (Elizabeth Gilbert)</p>	<p>1. Oral Sharing: Ask 5 of your friends (Do they see you as a creative person and why? Ask them to give you at least one example) Due: before Feb 13 (Wed) class</p> <p>2. Reflective Journal 1 --Think about one of the creative people you like/admire. What are some of their qualities/style/habits that attract you most? Due: before 11.59 p.m. Feb 18 (Mon)</p> <p>3.T: What is <i>design thinking</i> in 3 minutes (video or in-class presentation) Due: video before 11.59 p.m. Feb 17 (Sun) or in-class presentation before Feb 18 class (Mon)</p>

<p>Week 2 Feb 18 & 20</p>	<p style="text-align: center;"><i>Design Thinking and Teamwork</i></p> <p>Recap: What is the problem? DT Rule: Do not start with solutions What is design thinking 1 Team Presentation Case: Eatwell (real case of applying the design thinking loop) Team and teamwork Mindmap (individual mindmap)</p>	<p>[W] Eatwell https://www.eatwellset.com/ [R] Life is a beta, excerpt from <i>What Would Google Do</i> [R] Section 2 “Generate Multiple Hypotheses” in <i>Chapter 8: Leap in the Dark</i>, Excerpt from Not Knowing: The Art of Turning Uncertainty into Possibility</p> <p>Supplementary Resources</p> <p>[V] How to Find a Wonderful Idea (Ok Go)</p> <p>[V] Where Good Ideas Come From (Steven Johnson)</p> <p>[V] Building a Psychologically Safe Workplace (Amy Edmondson)</p>	<p>1. T: Mindmap Due: before 11.59 p.m. Feb 24 (Sun)</p> <p>2. Reading: Excerpt from [book] The Design of Everyday Things (Revised and Expanded Edition) by Don Norman (2013) Basic Books</p> <p>Chapter 2 Pp. 37-44 (till line. 11, before the session <i>Human Thought: Mostly Subconscious</i>); pp. 59 (line. 15, from the session <i>Blaming the Wrong Things</i>)-65 (till line 10, before the session <i>Falsely Blaming Yourself</i>); pp. 71(from line 3)-73</p> <p>Reading Notes Due: before 11.59 p.m. Feb 25 (Mon)</p>
--	--	---	--

<p>Week 3 Feb 25 & 27</p>	<p>Core Research Skill 1: Desk Research and Observation</p> <p>In-class Design Challenge Observation (why, principles and examples) Good/Bad Design 1 In- class Observation Exercise User journey and user portrait *Mini-Design Project Selection</p>	<p>[R] Observation Tips by IDEO</p>	<p>1. Data Pack Due: before 11.59 p.m. Mar 3 (Sun)</p> <p>2. Reflective Journal 2 --What does it mean to be creative? --Why has creativity been given such priority/attention in our time? Due: before 11.59 p.m. Mar 4 (Mon)</p> <p>3. Reading: Excerpt from [book] The Design of Everyday Things (Revised and Expanded Edition) by Don Norman (2013) Basic Books</p> <p>[Chapter 5 Human Error? No, Bad Design] pp. 162-173 (till line. 11, before the session <i>The Classification of Slips</i>) Reading Notes Due: before 11.59 p.m. Mar 4 (Mon)</p>
<p>Week 4 Mar 4 & 6</p>	<p>Core Research Skill 2: Interview</p> <p>Interview Techniques In-class Mock Interview Good/Bad Design 2 Offering Constructive Feedback Fieldwork Plan</p>	<p>[V] to be posted after class</p>	<p>1. Mini-Design Project Proposal Due: before 11.59 p.m. Mar 6 (Wed)</p> <p>2: Fieldwork Plan Due: before 11.59 p.m. Mar 8 (Fri)</p>
<p>Week 5 Mar 11 & 13</p>	<p>Fieldwork 1 & Bigger Picture 1</p>	<p>[V] Top 20 Trends in 2019 (Forecast by TrendHunter.com)</p>	<p>1.Fieldwork Data Pack Due: before 11.59 p.m. Mar 15 (Fri)</p>

			<p>2. Reading (TBC) Due: before 11.59 p.m. Mar 17 (Sun)</p> <p>3.Reflective Journal 3 --Who can be a designer? Think about the things and experience you encounter in your everyday life, what have been designed? --What are the differences between a designer and an artist? Due: before 11.59 p.m. Mar 18 (Mon)</p>
<p>Week 6 Mar 18 & 20</p>	<p><i>Framing the Question</i></p> <p>Insights from Fieldwork HMW Questions Human-centered Design Value Proposition What is design thinking 2 In-Class exercise: 1st person narrative Good/Bad Design 3</p>	TBC	<p>1. Reading (TBC) 2.Mid-Term Presentation Materials Due: before 11.59 p.m. Mar 24 (Sun)</p>
<p>Week 7 Mar 25 & 27</p>	<p>Mid Term</p> <p>Mid-Term Presentation Feedback and Comments Good/Bad Design 4 Ideation Kick-off Ideation Exercises: What if ...?</p>		<p>1.Mid-Term Presentation Materials Due: before 11.59 p.m. Mar 24 (Sun)</p> <p>2.Mini-Design Project Progress 1 Due: before 11.59 p.m. April 1 (Mon)</p>

<p>Week 8 April 1 & 3</p>	<p style="text-align: center;">Ideation</p> <p>Ideation Techniques --Building Blocks --Random Force --Idea Jackpot --What would your mother do? In-Class Challenge: Time Magazine Cover</p>	<p>[V] Play This Game to Come Up with Original Ideas (Shimpei Takahashi)</p>	<p>1.100 illustrated solutions Due: before 11.59 p.m. Mar 24 (Sun)</p>
<p>Week 9 April 8 & 10</p>	<p style="text-align: center;">Solution and Prototyping</p> <p>Selecting and Evaluating Solutions Good/Bad Design Discussion 5 Prototype sketching/storyboarding/3D modelling)</p>	<p>[V] Rapid prototyping Google Glass - Tom Chi</p> <p>[V] Elmo's Monster Prototyping</p> <p>[R] Test Critical Assumptions</p> <p>Supplementary Resources</p> <p>[V] Nonsense Machine (Meiwa Denki)</p> <p>[V] Why You Should Make Useless Things (Simone Giertz)</p>	<p>1.Reading: Excerpt from [book] The Design of Everyday Things (Revised and Expanded Edition) by Don Norman (2013) Basic Books</p> <p>[Chapter 6 Design Thinking] Pp. 227- 236 (till line. 22, before the session <i>What I just told you? It doesn't really work that way</i>) Reading Notes Due: before 11.59 p.m. April 15 (Mon)</p> <p>2.Mini-Design Project Progress 2 Due: before 11.59 p.m. April 15 (Mon)</p>
<p>Week 10 April 15 & 17</p>	<p>Bigger Picture 2 & Fieldwork 2</p> <p>Bigger Picture Good/Bad Design 6 Fieldwork 2 (team project user feedback)</p>	<p>User Test Questions Sample</p>	<p>T: User Test Summary Due: before 11.59 p.m. April 21 (Sun)</p>

<p>Week 11 April 22 & 24</p>	<p>Story-Telling Self-Evaluation Storytelling In-class Challenge: Designing your campaign video Solution Pop Up Good/Bad Design 7</p>	<p>[V] to be posted after class</p>	<p>1. T: Campaign Video Due: before 11.59 p.m. April 29 (Sun) 2. Reflective Journal 4 --Please share one of your favourite design? --What problem(s) does it solve? --Why do you like it (think about human centred design and your value proposition) ? Due: before 11.59 p.m. April 29 (Mon)</p>
<p>Week 12 April 29 & May 5</p>	<p>Mini-Design Project and Presentation Fieldwork/Project Time/Mini-Design Project Final Presentation of Team Project</p>		<p>1. Final Presentation Materials Due: before 11.59 p.m. May 4 (Tue) 2. Mini-Design End of Term Show Material Due: before 11.59 p.m. May 6 (Mon)</p>
<p>Week 13 May 6 & 8</p>	<p>End of Term Show Mini-Design Project End of Term Show Good/Bad Design 8</p>		<p>1. Reflective Journal 5 --How would you rate yourself on a creative spectrum and why? --What are the 3 take-away lessons from this course? Due: before 11.59 p.m. May 13 (Mon)</p>
<p>Week 14 May 13 & 15</p>	<p>Mini-Design Project and Reflection Mini-Design Project Final Presentation Reflection</p>		<p>Mini Project Final Materials Due: before 11.59 p.m. May 14 (Tue)</p>