

PRIN 503
**Principles of Human-Centered Design: Learning
from users - Design Ethnography**

Units: 2

Fall 2022 – Tuesdays – 3:00-5:50pm

Location: IYH 112

Instructor: Yihyun Lim

Office: via Zoom appointment

Office Hours: By appointment

Contact Info: yihyun@usc.edu

IT Help:

<https://uscedu.sharepoint.com/sites/IYASStudent/SitePages/IT-Resources.aspx>

Hours of Service: 9 a.m. – 6 p.m.

Contact Info: iyahelp@usc.edu

USC Technology Support Links

[Zoom information for students](#)

[Blackboard help for students](#)

[Software available to USC Campus](#)

Course Description

What does it mean to design with, design for, and design by people? What are the relationships between observing, interviewing and workshoping with people and designing products or services? The course will start with exploring evolving discourse around human-centered design, user-centered design, and people-centered design. The course will introduce different techniques used in 'design ethnography' to engage users (from passive subjects to active participants or co-designers) to collect and produce 'thick' data, as well as techniques used to make sense of qualitative data in order to frame design decisions and to inspire products that are built upon an empathetic lens with the end user. We will also discuss the ethical challenges designers face in this enlarged scope of HCD/design ethnography with users.

Learning Objectives and Outcomes

In this course, students will learn the key principles of human-centered design through a series of lectures and hands-on workshops and assignments. Key learning outcomes include:

- An understanding of design research practices and applications of HCD/design ethnography methods through case studies.
- Learn set of tools and techniques to perform HCD/design ethnography to get holistic understanding of users.
- The ability to design research protocols (tools, guides, workshop agenda, interactive activities) for field and lab research.

- An understanding of how to synthesize key insights and observations into actionable design challenges and briefs for framing and inspiring design.
- Experience in workshop facilitation, and in the conducting of design research studies and interviews that are both traditional/conversational and contextual/observational.

Course Notes

The course will cover a range of deliverable types. Some are graded, according to a supplied assignment rubric; others are credit/no credit. All assignments will be shared ahead of time in class and will be discussed to address outstanding questions. Blackboard will be implemented for notifications, group messaging, submission URLs, and grading. Google Drive will house all relevant resources and be the repository for assignment work product.

Students are responsible for all readings, and assignments; to include homework, in-class work, lectures, discussion, and presentations. Principles of Human-Centered Design is a lecture, discussion, and workshop class.

- Regular access to computer, color printer, and copier
- Powerpoint, Keynote and/or Google Slides will be necessary for deliverables that include presentations.
- Adobe CC is suggested, though not required for visual rendering of ideas.
- Notebook/Sketchbook
- Project materials to be purchased at the student's selection on a per project basis.
- USB Portable storage device/flash drive or other digital storage devices (cellphones, external storage devices, CD).

It is the student's responsibility to BACK EVERYTHING UP, losing work is not an acceptable excuse for missing work. It cannot be emphasized enough that you should have a reliable backup arrangement, and process material to outline your work.

Required Readings and Content Materials:

Readings are available in the course Google Drive (log in with USC to access)

- Nova, N. (2014). Beyond Design Ethnography: How Designers Practice Ethnographic Research. Germany: SHS Publishing.
- Muratovski, G. (2015). Research for Designers: A Guide to Methods and Practice. United Kingdom: SAGE Publications
- Innovating for People Handbook of Human-Centered Design Methods, LUMA Institute
- "The Importance of Synthesis during the design process." Jon Kolko
<http://www.jonkolko.com/writingInfoArchDesignStrategy.php>
- Abductive Thinking and Sensemaking: The Drivers of Design Synthesis. Jon Kolko
<http://www.jonkolko.com/writingAbductiveThinking.php>
- Other related reading materials will be distributed during class.

Additional Recommended Readings and Resources

(some digital versions are available)

- Designing Interactions, Bill Moggridge, MIT Press
- The Art of Innovation: Lessons in Creativity by Tom Kelley, by Crown Business
- Human-Centered Design Toolkit: An Open-Source Toolkit to Inspire New Solutions in the Developing World by IDEO, IDEO Press
- HCD Toolkit by IDEO: <https://www.ideo.com/post/design-kit>
- Stanford d.School Bootcamp (previously Hasso Platner Institute of Design): <https://dschool.stanford.edu/>
- HABI Education Labs Framework: <http://habieducationlab.org/design/>
- Design Thinking Handbook: Chapter 1 – Why we need design thinking. <https://www.designbetter.co/design-thinking/why-we-need-design-thinking>
- IDEO Shopping Cart Project. <https://www.youtube.com/watch?v=M66ZU2PClCM>
- Innovation Management articles: <http://www.innovationmanagement.se/latest-articles/>
- Jeremy Alexis: What is Problem Framing in Design? <https://vimeo.com/6180364> <https://vimeo.com/groups/iitdesigncommunity/videos/21770257>
- What fuels great design (and why most startups don't do it) <https://library.gv.com/what-fuels-great-design-and-why-most-startups-don-t-do-it-a8dd2c4f5cb4>
- Getting People to Talk: An Ethnography & Interviewing Primer: <https://vimeo.com/1269848>
- Going Deeper, Seeing Further: Enhancing ethnographic interpretations. http://5a5f89b8e10a225a44ac-cbed124c38c4f7a3066210c073e7d55.r9.cf1.rackcdn.com/files/pdfs/news/jar_2006.pdf
- Complete Beginner's Guide to UX Research, <http://www.uxbooth.com/articles/complete-beginners-guide-to-design-research/>
- Needfinding: The why and how of uncovering people's needs. Dev Patnaik. <http://www.paulos.net/teaching/2011/BID/readings/needfinding.pdf>
- A Beginner's Guide to Finding User Needs. Jan Dittrich. Read the 'Analysis' section only. <https://jdittrich.github.io/userNeedResearchBook/#toc53>
- Design Research: From Interview to Insight Part 1 Summarizing the Interview: <https://medium.com/design-research-methods/design-research-from-interview-to-insight-part-one-summarising-the-interview-dceee9ba0969>
- Design Research: From Interview to Insight Part 2, Synthesizing Insight: <https://medium.com/design-research-methods/design-research-from-interview-to-insight-f6957b37c698>
- Case Study: How to use empathy to create products people love. Start at 25m20s through end. <https://vimeo.com/126976733#t=1520s>
- Mental Models: Digging beyond user preferences: <https://www.youtube.com/watch?v=M4AsxNg9nNU>

Course Hours

This 2-unit course requires 1500 minutes of instructional time per semester, which equals 100 minutes of instructional time each week. In addition, it is expected that students will work on average, an additional 200 minutes per week outside of class — on readings/viewings, homework assignments, field experiences, and individual or team projects.

Principles of Human-Centered Design

Course Schedule: A Weekly Breakdown (subject to change as needed)

Green highlight = Zoom day

Yellow highlight = Flexible/Hybrid day

	Topics/Daily Activities	Readings	Deliverable/ Due Dates
Week 1 Aug 23	1: Introduction <i>Discuss:</i> Overview of the Course <i>Lecture:</i> What is Human-Centered Design <i>Activity:</i> Mapping your own experiences, Introduce Assignment 1		
Week 2 Aug 30	2: Learning about users: Design Ethnography <i>Discuss:</i> Readings, Presentation of Assignment 1 <i>Lecture:</i> What is Design Ethnography? <i>Activity:</i> Unpacking Research methods, Introduce Assignment 2	Beyond Design Ethnography, "Design Ethnography?" pgs 29-42	Due: Individual Assignment 01 – Mapping your own design research experiences
Week 3 Sept 6	3: Overview of research methods <i>Discuss:</i> Readings, Presentation of Assignment 2 <i>Lecture:</i> Research in Design <i>Activity:</i> Introduce Assignment 3	Beyond Design Ethnography, "Field Research and Design" pgs. 45-66	Due: Individual Assignment 02 – Design research methods
Week 4 Sept 13	4: Applied research in Design <i>Discuss:</i> Readings, Presentation of Assignment 3 <i>Lecture:</i> Design research in Action <i>Activity:</i> Opportunity finding and defining topics, Introduce Assignment 4	Research for Designers, Chapter 4 – Qualitative Research	Due: Individual Assignment 03 - Case study analysis
Week 5 Sept 20	5: Learn – What do we know? <i>Discuss:</i> Presentation of Assignment 4 <i>Lecture:</i> Methods and Tools for Secondary Research <i>Activity:</i> Conduct secondary research, Introduce Assignment 5		Due: Individual Assignment 04 – Opportunity and Topic Selection
Week 6 Sept 27	6: Look – Learn from Observation <i>Discuss:</i> Presentation of Assignment 5 <i>Lecture:</i> Methods and Tools for Observational Field Research <i>Activity:</i> Design protocols for field research, Introduce Assignment 6		Due: Individual Assignment 05 – Secondary Research Report
Week 7 Oct 4	7: Ask - Talking to People <i>Discuss:</i> Presentation of Assignment 6 <i>Lecture:</i> Methods and Tools for Interview and Contextual Research		Due: Individual Assignment 06 – Field Studies and

	Topics/Daily Activities	Readings	Deliverable/ Due Dates
	<i>Activity:</i> Design research protocols for Interview-based research, Introduce Assignment 7		Contextual Inquiry Report
<i>Week 8</i> Oct 11	8: Try - Empathy Building <i>Discuss:</i> Presentation of Assignment 7 <i>Lecture:</i> Methods and Tools for Empathy Research <i>Activity:</i> Design protocols for empathy building, Introduce Assignment 8		Due: Individual Assignment 07 – Interviews and Focus Groups Report
<i>Week 9</i> Oct 18	9: Generative Workshops <i>Discuss:</i> Presentation of Assignment 8 <i>Lecture:</i> What is a Generative Workshop <i>Activity:</i> Designing a generative workshop, Introduce Assignment 9		Due: Individual Assignment 08 – Empathy Building Activities Report
<i>Week 10</i> Oct 25	10: Synthesize <i>Discuss:</i> Presentation of Assignment 9 <i>Lecture:</i> How to synthesize qualitative data <i>Activity:</i> Synthesis and insights mapping, Introduce Assignment 10	Two articles by Jon Kolko (see above for links) “The Importance of Synthesis during the design process.” “Abductive Thinking and Sensemaking: The Drivers of Design Synthesis”	Due: Individual Assignment 09 – Generative Workshop Design Report
<i>Week 11</i> Nov 1	11: FP – Identify your Design Challenge <i>Discuss:</i> Individual Assignment 10, Final Project Intro + Team Set up <i>Activity:</i> Topic selection and map existing knowledge and assumptions		Due: Individual Assignment 10 - Synthesis Report
<i>Week 12</i> Nov 8	12: FP – Workshop Design and Planning <i>Discuss:</i> Design challenge and research design <i>Activity:</i> Research protocol design, 1-on-1 Team Check-ins		Due: FP1 - Final Project Topic Selection and Background Research
<i>Week 13</i> Nov 15	13: FP – Final Project Workshop Facilitation <i>Discuss:</i> Workshop progress report <i>Activity:</i> 1-on-1 Team Check-ins		Due: FP2 - Final Project Workshop Design Document
<i>Week 14</i> Nov 22	14: FP – Insights, Synthesis and Reflection <i>Discuss:</i> Workshop results and synthesized insights. <i>Activity:</i> Insights mapping, 1-on-1 Team Check-ins		Due: FP3 - Final Project Workshop Facilitation Report

	Topics/Daily Activities	Readings	Deliverable/ Due Dates
Week 15 Nov 29	15: FP - Presentations > Final Group Presentations < *Course Eval time All final materials, including team and self evaluation updates due to HCD Google Drive by EOD. *Post final URL of drive materials to Blackboard.		Due: FP4 - Final Presentations, and Documentation DUE All final Project submissions due 3 pm the afternoon of the Final Presentation date.
FINAL	Date: For the date and time of the final for this class, consult the USC <i>Schedule of Classes</i> at classes.usc.edu/ .		Due: FP5 (individual submission) - FP Reflection and Team/Self Evaluations (Due on Final Exam date)

Assignments / Deliverables Outline (subject to change as needed)

*All project and grading criteria are shared in class. They are documented and distributed as part of the in-class lecture pdfs, and assignment pdfs via Blackboard and Google Drive.

**Each assignment requires submission to google drive AND a corresponding URL submission to Blackboard. Grades and feedback to be received via Blackboard.

Participation

Students are expected to participate actively in class and in team assignments regardless of online or in-person status.

Assignment Rubrics

Assignment Rubrics vary per assignment. Please check with the instructor to ensure you have a clear understanding of what is expected of you for each assignment.

Grading Breakdown

The following is a breakdown of grading policies. The course will consist of a range of individual and team- based assignments to provide hands-on experience in Human-Centered Design.

Assignment	Points	% of Grade
Participation	150	15%
Individual Assignments (10 assignments total)	500 (50 points each)	50%
Final Project (5 assignments + Presentation)	350 (60 points each for assignments, 50 points for FP presentation)	35%
TOTAL	1000	100%

Grading Scale

Grades will be determined using the following scale:

A: (95-100%) A-: (90-94%)

EXCELLENT – Means that your work is excellent. You have a thorough understanding of the course content, theories and the ideas presented in lectures and readings. Your grades on all your assignments, attendance and participation are consistently excellent. You are engaged and actively participate in discussions and with the assignments. All your assignments are thoroughly researched and turned in on time. You consistently demonstrate a high level of comprehension in your discussions and through your assignments.

B+: (87-89%) B: (83-86%) B-: (80-83%)

GOOD – Means that your work is good, and you demonstrate an above average understanding of the course content. Your grades on all your assignments, attendance and participation are consistently good or excellent. Ideas presented in class are understood and is reflected in your assignments. Your concepts are good, if not excellent, and you are usually able to bring them to life visually as needed.

C+: (77-79%) C: (73-76%) C-: (70-73%)

AVERAGE – Means that your work, attendance, and participation are fair (average). You understand some of the ideas, themes and concepts presented in class. Your attendance and participation are average. Your performance in critiques is average.

D+: (67-69%) D: (60-66%)

BELOW AVERAGE – Means that your work was below average. You did not understand most of the ideas presented in class and did not adequately demonstrate comprehension in your assignments. Assignments were routinely not turned in or turned in on time. Your assignments are mediocre or poor and you were not able to communicate comprehension. Your attendance and participated were poor.

F: (0-59%)

FAILING – Means that your work was poor or missing. You didn't understand the majority of the ideas presented in class and it is reflected in your work. Your concepts and ideas were poor or lacking and/or your work was not turned in. You did not attend and participate enough to pass.

Assignment Submission Policy

Assignments must be submitted to the google drive, AND as a URL submission to Blackboard, in advance of the class due. Assignments submitted late will be accepted but will incur the following grade penalties:

- 24 hours after deadline is a 10% deduction
- 24-48 hours after the deadline is a 20% deduction
- 48 hours to 3 days late is a 50% deduction
- Submissions more than 3 days late will receive NO CREDIT, unless approved in advance by the instructor.

*Please note deliverable criteria as sighted on each assignment rubric (as shared in class and course materials), as deductions will be incurred by inaccurate submission processes.

Correcting a Grading Error or Disputing a Grade

If you don't inform the instructor of missing or incorrect grades within two weeks of those grades being posted, the grades will be assumed correct. Do not wait until the semester's end to check or appeal any grades. If you feel a grade merits re-evaluation, you are encouraged, within one week of the instructor providing a grade and initial feedback, to send the instructor a memo in which you request reconsideration. The memo should include a thoughtful and professional explanation of your concerns. Be aware that the re-evaluation process can result in three types of grade adjustments: positive, none, or negative. (Note: Complaints on the date of a graded assignment's return to you will not be addressed; it is essential to wait one full day prior to raising a concern.)

Grading Timeline

Grades for each assignment to be shared within 2-3 weeks of submission. Grading notifications will go out via Blackboard system in RESPONSE to URL submissions on Blackboard. Students will be notified of their standing in detail after the midterm mark of the semester, approx. week 9. Students are welcomed, and encouraged, to check in at any time regarding their standing in the class.

Academy Attendance Policy

The Academy maintains rigorous academic standards for its students and on-time attendance at all class meetings is expected. Each student will be allowed two excused absences over the course of the semester for which no explanation is required. Students are admonished to not waste excused absences on non-critical issues, and to use them carefully for illness or other issues that may arise unexpectedly. Except in the case of prolonged illness or other serious issue (see below), no additional absences will be excused. Each unexcused absence will result in the lowering of the final grade by $\frac{1}{3}$ of a grade (e.g., an A will be lowered to A-, and A- will be lowered to a B+, etc.). In addition, being tardy to class will count as one-third of an absence. Three tardies will equal a full course absence.

Students remain responsible for any missed work from excused or unexcused absences. Immediately following an absence, students should contact the instructor to obtain missed assignments or lecture notes and to confirm new deadlines or due dates. Extensions or other accommodations are at the discretion of the instructor.

Automatically excused absences normally may not be used for quiz, exam or presentation days. Using an excused absence for a quiz, exam or presentation, such as in the case of sudden illness or other emergency, is at the discretion of the instructor.

In the case of prolonged illness, family emergencies, or other unforeseen serious issues, the student should contact the instructor to arrange for accommodation. Accommodation may also be made for essential professional or career-related events or opportunities. Additionally, students who need accommodations for religious observations should provide advanced notice to instructors and student athletes should provide Travel Request Letters. All accommodations remain at the discretion of the instructor, and appropriate documentation may be required.

Fall 2022 addendum:

- Unless students provide an accommodation letter from USC's Office of Student Accessibility Services (OSAS) or a letter from IYA Student Services detailing visa or travel restrictions, attendance and active participation is expected in the classroom. Any student with such accommodations should submit their accommodation document to the instructor as soon as possible to discuss appropriate accommodations. Either classroom recordings or live remote access to the class via Zoom will be provided.
- Students who are experiencing illness should not attend class in person. Please inform the instructor in advance of any class sessions that you can't attend for medical reasons, and accommodations will be arranged to view recorded lectures and submit alternatives to any missed class participation. Students will not be penalized for not attending class in person under these circumstances.

- In the event that you find yourself experiencing COVID-19 related symptoms, in keeping with university recommendations, you should Stay home! This is the best way to prevent spreading COVID-19 as supported by scientific evidence; Please do not come to an in-person class if you are feeling ill, particularly if you are experiencing symptoms of COVID-19.

Irvine and Young Hall Cleanout

The Academy is unable to store student projects and materials beyond the end of the semester. Students must remove all projects and personal materials from the Creators Studio, lockers/locker room, and other classrooms by the end of each semester. **All projects and materials left in Irvine and Young Hall will be discarded two days after final exams end. No exceptions.**

Classroom norms

Students are encouraged to actively engage during class zoom sessions both verbally and via chat. Students are also encouraged to post questions and thoughts via the IYA course Slack channel.

Zoom etiquette

When class is held in hybrid or Zoom-only mode including presentation sessions, all students should keep their camera on to show respect to your peers and to all participating guests. If you are unable to keep your camera on during the synchronous Zoom session, please contact the instructor prior to discuss expectations and accommodations needed. Instructors will enable screenshare to allow students to share screens in the main zoom session and in breakout rooms.

Synchronous session recording notice

Synchronous sessions will be recorded and provided to all students asynchronously (generally through recorded Zoom sessions, integrated into Blackboard).

Sharing of course materials outside of the learning environment

USC has a policy that prohibits sharing of any synchronous and asynchronous course content outside of the learning environment.

SCampus Section 11.12(B)

Distribution or use of notes or recordings based on university classes or lectures without the express permission of the instructor for purposes other than individual or group study is a violation of the USC Student Conduct Code. This includes, but is not limited to, providing materials for distribution by services publishing class notes. This restriction on unauthorized use also applies to all information, which had been distributed to students or in any way had been displayed for use in relationship to the class, whether obtained in class, via email, on the Internet or via any other media. (See Section C.1 Class Notes Policy).

Additional Policies

Throughout the course, we will be using a variety of tools to create practice work. Please be prepared with laptop, cellphone, and sketch pad as each of these items may be employed at any given time. It is understood that technology is key to the contemporary learning environment, but it should not hinder communication and comprehension between instructor and student, nor be a detractor to others around you.

Please stay present in class or group discussions, as this will be reflected in your participation grade.

Statement on Academic Conduct and Support Systems

Academic Conduct:

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, “Behavior Violating University Standards” policy.usc.edu/scampus-part-b. Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on [Research and Scholarship Misconduct](#).

Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University’s educational programs. The Office of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at osas.usc.edu. You may contact OSAS at (213) 740-0776 or via email at osasfrontdesk@usc.edu.

Support Systems:

Counseling and Mental Health - (213) 740-9355 – 24/7 on call

studenthealth.usc.edu/counseling

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

National Suicide Prevention Lifeline - 1 (800) 273-8255 – 24/7 on call

suicidepreventionlifeline.org

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-9355(WELL), press “0” after hours – 24/7 on call

Studenthealth.usc.edu/sexual-assault

Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Office for Equity, Equal Opportunity, and Title IX (EEO-TIX) - (213) 740-5086

eeotix.usc.edu

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298

usc-advocate.symplicity.com/care_report

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

The Office of Student Accessibility Services (OSAS) - (213) 740-0776

osas.usc.edu

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

USC Campus Support and Intervention - (213) 821-4710

campussupport.usc.edu

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity, Equity and Inclusion - (213) 740-2101

diversity.usc.edu

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

dps.usc.edu, emergency.usc.edu

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call

dps.usc.edu

Non-emergency assistance or information.

Office of the Ombuds - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

ombuds.usc.edu

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

Occupational Therapy Faculty Practice - (323) 442-3340 or otfp@med.usc.edu

chan.usc.edu/otfp

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.