ACAD 480: Design Research

Units: 04
Spring 2024; MW 6:00-7:50pm

Meeting Times: 4 hours of lecture/lab a week
Location: IYH 213

Instructor: Yihyun Lim
Office: Online
Office Hours: By Appointment
Contact Info: yihyun@usc.edu
Timeline for reply: within 48 hours.

IT Help: https://uscedu.sharepoint.com/sites/IYAStudent/SitePages/IT-Resources.aspx
Hours of Service: 8:30am - 6:30pm
Contact Info: iyahelp@usc.edu

Course Description

Design is a way to ask questions. When Design Research is integrated into the design process, new and unexpected questions emerge directly from the act of design. What are the methods we can use to engage people in a respectful and equitable way throughout the design research process?
The course will introduce different techniques used in design ethnography to engage users (from passive subjects to collaborators, active participants and co-creators) to collect and produce 'thick' data, as well as techniques used to make sense of qualitative data in order to inform design decisions and to inspire products that are built upon an empathetic lens. We will also discuss the ethical challenges designers face in this enlarged scope of design research with people.

Learning Objectives and Outcomes

In this course, students will learn research methods for human-centered design-based inquiry, through a series of lectures and hands-on workshops and assignments. Key learning outcomes include:

- An understanding of design research practices, methods, and techniques.
- The ability to identify topics for design-research based inquiry, develop hypothesis and questions for further research.
- The ability to design research protocols (tools, guides, workshop agenda, interactive activities) for field and lab research.

- Experience in workshop facilitation, and in the conducting of design research studies and interviews that are both traditional/conversational and contextual/observational.
- An understanding of how to synthesize key insights and observations into actionable design challenges and briefs.
- Engage in critical reflection on ethics of people-based research and roles of design researchers.

Prerequisite(s): N/A
Co-Requisite(s): N/A
Concurrent Enrollment: N/A
Recommended Preparation: N/A

Course Notes

This is a hands-on, intensive course that requires participation during class and planning outside of class, as many assignments depend on field research activities. You cannot put off assignments until the night before they are due.

This course will address the following topics and themes throughout the semester:

1. **Understanding:** Identifying a topic for inquiry, conducting secondary (desk) research.
2. **Defining:** creating a research proposal, scope of research, design brief.
3. **Asking and Listening:** Interviewing is one of our most powerful ways to understand people. This includes in-depth interviews on a one-to-one basis, group interviews, and also expert interviews. We'll practice how to have an empathetic conversation with people, ask open-ended questions, and putting people first. Exponential listening enables a person to express their thoughts, needs and perspectives with the design researcher.
4. **Looking:** A core method in design research is contextual research. Looking involves observing people's behavior in their 'natural habitat'. The method is differentiated when a design researcher's presence is made aware to people (participated observation), or unknown to people (fly-on-the wall observations).
5. **Parallel Looking:** Design researchers can also seek for insights by researching analogous situations. Analogous studies call for observing and studying parallel examples of selected attributes or characteristics of defined problem areas.
6. **Immersing:** This is about empathy building through full immersion within a context, environment, experience or community. It requires the designer to deeply experience other people's worlds. It may involve shadowing activity, or use of props to simulate a physical or environmental state to fully experience the other world.
7. **Co-creating:** Co-creation involves people as valued contributors and even as co-authors of ideas. As a generative method, co-creation workshops allow for participants to work on any sort of design challenge together.
8. **Provoking & Futuring:** Provoking and Futuring involve showing people props, sketches or visuals to stimulate discussion and engage with people's imagination. This is not about validating ideas but about provoking responses from participants and envisioning futures together.
9. **Synthesizing:** We need to make sense of qualitative data collected from different phases of the research. We practice the use of persona profiles, journey maps, and affinity maps to generate insights.

Required Materials/Readings
- 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
- "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
- *Exponential Listening* Toolkit, which can be downloaded for free at https://gumroad.com/l/listeningtoolkit.
- Design for the Real World: Human Ecology and Social Change, Victor Papanek (Amazon)
- Innovating for People Handbook of Human-Centered Design Methods, LUMA Institute (Amazon)
- The Design of Everyday Things, Don Norman (Amazon)

USC Technology Support Links:

Zoom information for students, Blackboard help for students, Software available to USC Campus.

HOW TO PURCHASE SOFTWARE AT THE DISCOUNTED ACADEMY RATE

The following software are available for purchase online at the Iovine and Young Academy discounted rate:

Software	IYA Short-Term License at USC Bookstore
Adobe Creative Cloud	$70 2023–2024 annual license (active through July 2024)

To purchase:
- Visit: https://commerce.cashnet.com/IOVINE
- Select the software license(s) you would like to purchase by clicking "View Details" or the software title, and make your purchase.
- You will receive an order confirmation receipt at the email address you provided.
- You will be notified by email when the software license has been activated.

If you have any questions about this process, please do not hesitate to contact Academy IT Support at iyahelp@usc.edu

Description and Assessment of Assignments
All assignments are performed in teams unless otherwise noted.

- **Assignment 1 - Trend Brailing:** Conduct 'trend brailing', secondary research of selected topic using variety of secondary sources, including social media, and extract insights. Output of the research will be made into <u>a sorting card</u> format.
- **Assignment 2 - Talking to People:** Conduct interview-based research. Outputs from the interviews will be made into <u>short-video</u> that captures the key findings of the research.
- **Assignment 3 - Observational Research:** Conduct field research and collect data from behavioral, spatial, and other visual cues. Outputs of the research will be made into <u>visual map</u> that communicates key findings in a visual format.
- **Assignment 4 - Analogous Research:** First, breakdown the current problem area into attributes, behaviors, and emotions. Then, identify an analogous situation where you can conduct observational studies on specific components as identified in the previous step. Output of this research should be in a format of <u>a diary</u>.
- **Assignment 5 - Immersion/Empathy Research:** How are you going to immerse yourself in the context of research? What props do you need to simulate the experience yourself? Develop the research protocol, conduct studies, and report back your findings and insights.
- **Final Project - Provocative Workshop (group):** Let's provoke participants to explore other dimensions of the problem. It could be set in the context of the future, different context, or it may involve emerging technologies. This project is broken into multiple parts as below:
    - **FP1 - Topic selection and research proposal:** create a research proposal that outlines the main research questions, goals of the research, stakeholders and target study participants, and benefits of the research.
    - **FP2 - Provocative Workshop planning and tools:** What is the workshop framework, activities, and set of tools needed to conduct a provocative workshop that stimulates discussion? Create a workshop planning package that includes: facilitators guide, activities, worksheets, and any other tools you may need for the workshop.
    - **FP3 - Provocative Workshop facilitation and report:** You will do a test-run of the workshop in-class, with your peers as participants in the workshop. Document the process, results, and key findings from the workshop. What worked well and what could improve in the next version of the workshop?

Participation
Students are expected to participate actively in class and in team assignments.

Grading Breakdown

Assignment	Points	% of Grade
Assignment 1 - Trend Brailing	100	10%
Assignment 2 - Talking to People	150	15%
Assignment 2 - Observational Research	120	12%
Assignment 3 - Analogous Research	120	12%
Assignment 4 - Immersion / Empathy Research	120	12%
Final Project. 1 - Workshop / Research proposal	40	4%

Final Project. 2 - Provocative Workshop planning document and tools	100	10%
Final Project. 3 - Provocative Workshop Facilitation & Results Report	150	15%
Participation	100	10%
Total	**1,000**	**100%**

Grading Scale

Course final grades will be determined using the following scale

A	95-100
A-	90-94
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	63-66
D-	60-62
F	59 and below

Assignment Submission Policy

Unless otherwise noted, all assignments must be submitted as a PDF presentation. For assignments delivered in class (such as presentations), the work must be completed before the commencement of the class session in which the assignment is due. For assignments that are designated for virtual submission, one team member is expected to submit the assignment to Blackboard by COB (6:00pm) the day the assignment is indicated as due. All teams should also keep their assignment materials in shared Google Drive.

Grading Timeline

Grades will be shared within, or less than, a 2-3-week time period. You are encouraged to check in with your instructor at any time to better understand your standing in the course.

Late work

Assignments will be accepted after the deadline with the following grade penalties. Do not ask for extensions.

- Submission in the 24 hours after the deadline   10% deduction

- Submission between 24 and one week after the deadline   25% deduction

- Submission more than 1 week after the deadline   100% deduction

Keep copies of all your files and emails until the end of the semester.

Class 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 ⅓ 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.

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.

Iovine 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 Iovine and Young Hall will be discarded two days after final exams end. No exceptions.

Course Content Distribution and Synchronous Session Recordings Policies
USC has policies that prohibit recording and distribution of any synchronous and asynchronous course content outside of the learning environment.

Recording a university class without the express permission of the instructor and announcement to the class, or unless conducted pursuant to an Office of Student Accessibility Services (OSAS) accommodation. Recording can inhibit free discussion in the future, and thus infringe on the academic freedom of other students as well as the instructor. ([Living our Unifying Values: The USC Student Handbook](#), page 13).

Distribution or use of notes, recordings, exams, or other intellectual property, based on university classes or lectures without the express permission of the instructor for purposes other than individual or group study. This includes but is not limited to providing materials for distribution by services publishing course materials. 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. ([Living our Unifying Values: The USC Student Handbook](#), page 13).

USC Learning Experience Evaluations

USC Learning Experience Evaluations otherwise known as course evaluations occurs at the end of the semester university-wide. It is an important review of students' experience in the class. The process and intent of the end-of-semester evaluation should be provided.

Course Schedule: A Weekly Breakdown

Wk	Session 1 - Mon	Session 2 - Wed
1	1/8 **Introduction** - **What is Design Research and Design Ethnography?**	1/10 **Activity:** Mapping your own design research experiences, Topic brainstorming **Lecture: Research Methods and Tools** **Read:** Beyond Design Ethnography, "Design Ethnography?" pgs 29-42
2	1/15 **MLK DAY - No Class**	1/17 **Lecture: Secondary Research - Cultural Brailing** ***Launch Assignment 1 - Trend Brailing** **Read:** • Beyond Design Ethnography, "Field Research and Design" pgs. 45-66 • Chapter 2, The Trend Forecaster's Toolkit - from Raymond Martin. Trend Forecaster's Handbook. 1st ed. Laurence King Publishing; 2010. (Chapter PDF in G.Drive, full text available online through USC Libraries)
3	**1/22** **Lecture:** Presenting secondary research - from texts to visual maps.	**1/24** **Studio time:** 1-1 check ins
4	**1/29** **DUE: Assignment 1 - Trend Brailing** Present assignment 1	**1/31** **Lecture: ASK & LISTEN** - How to conduct interviews and contextual research ***Launch Assignment 2 - Talking to People** **Activity:** Creating design research protocols for Interview Based (expert, user, focus-group) research **READ:** Research for Designers, Chapter 4 - Qualitative Research
5	**2/5** **Lecture:** Storytelling interview findings - short videos **Activity:** Progress check-ins	**2/7** **Activity:** storytelling of data - Script writing and video making

Wk	Session 1 - Mon	Session 2 - Wed
6	**2/12** **DUE: Assignment 2 - Talking to People** Present assignment 2	**2/14** **Lecture: LOOKING - Observational Field Research:** Shadowing, Fly-on-the-wall, and Participated Observation. ***Launch Assignment 3 - Observational Research** **Activity:** Developing protocols and performing research **READ:** Read selection (PDF) from *Innovating for People*
7	**2/19** **No Class - President's Day**	**2/21** **Lecture:** Presenting data through mapping **Activity:** Progress check-ins
8	**2/26** **DUE: Assignment 3 - Observational research** Present assignment 3	**2/28** **Lecture: PARALLEL LOOKING -** What is Analogous Studies ***Launch Assignment 4 - Analogous Research** **Activity:** Developing protocols for analogous studies **Read:** pg. 53-65 of IDEO Field Guide to HCD
9	**3/4** **Lecture:** Journaling as research documentation **Activity:** Progress check-ins	**3/6** **Activity** - Studio time
	3/11-15 SPRING BREAK	
10	**3/18** **DUE: Assignment 4 - Analogous Research**	**3/20** **Lecture: IMMERSING -** Immersion (empathy) Studies with designed props and technology **Activity:** Developing research protocols, methods, and tools for immersion studies

Wk	Session 1 - Mon	Session 2 - Wed
11	**3/25** **Lecture:** Other tools of empathy studies **Activity:** Progress check-ins	**3/27** **Activity** - Studio time
12	**4/1** **DUE: Assignment 5 - Immersion/Empathy Studies** **Activity:** Present research protocols, process, and outcomes.	**4/3** **Lecture: PROVOKING & FUTURING** What is a provocative workshop? How to stimulate discussion and engage with people's imagination through generative workshop activities. *Launch Final Project - Provocative Workshop*
13	**4/8** **DUE: Final Project FP1 – Topic selection and research proposal** **Activity:** Designing a workshop - framework, activities, and tools	**4/10** **Studio time:** 1-1 check-ins
14	**4/15** **DUE: Final Project FP2 – Provocative Workshop plan, tools, and facilitator guide** **Activity:** Present workshop approaches and tools	**4/17** **Activity:** Test run of Provocative & Futuring Workshop
15	**4/22** **Read & Discuss:** 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" **Activity:** Studio time	**4/24** **REFLECTION** Discuss opportunities, issues, challenges, biases, and ethics of user-based research. **Activity:** Studio time **Read:** pg. 25-48 of Design for the Pluriverse, Arturo Escobar
16	**STUDY DAYS**	**5/1** **FINAL EXAM: Wednesday May 1st, 7-9pm** **DUE: Final Project FP3** - Provocative Workshop results report/presentation Date: For the date and time of the final for this class, consult the USC *Schedule of Classes* at <u>classes.usc.edu/</u>.

Statement on Academic Conduct and Support Systems

Academic Integrity

The University of Southern California is foremost a learning community committed to fostering successful scholars and researchers dedicated to the pursuit of knowledge and the transmission of ideas. Academic misconduct is in contrast to the university's mission to educate students through a broad array of first-rank academic, professional, and extracurricular programs and includes any act of dishonesty in the submission of academic work (either in draft or final form).

This course will follow the expectations for academic integrity as stated in the USC Student Handbook. All students are expected to submit assignments that are original work and prepared specifically for the course/section in this academic term. You may not submit work written by others or "recycle" work prepared for other courses without obtaining written permission from the instructor(s). Students suspected of engaging in academic misconduct will be reported to the Office of Academic Integrity.

Other violations of academic misconduct include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

The impact of academic dishonesty is far-reaching and is considered a serious offense against the university and could result in outcomes such as failure on the assignment, failure in the course, suspension, or even expulsion from the university.

For more information about academic integrity see the student handbook or the Office of Academic Integrity's website, and university policies on Research and Scholarship Misconduct.

Please ask your instructor if you are unsure what constitutes unauthorized assistance on an exam or assignment, or what information requires citation and/or attribution.

Policy for the use of AI Generators

You should never attempt to present or include content created by others, including generative AI as your own. Attempting to take credit for content generated by AI or others without proper acknowledgement is a violation of USC's policies and standards for academic integrity and can result in disciplinary action.

As with including other sources in your research and assignments, it is critical to include proper citations and attributions when incorporating content created by generative AI. Visit the Citing Generative AI section on USC Libraries Research Guides website more details on how to cite Generative AI using common writing styles and formats.

Although critical evaluation of sources is a core component of research and academic work, it is especially important when working with generative AI. Content generated by AI should always be evaluated for its accuracy and credibility using critical thinking and additional, credible sources. Many large language models & text-based generators create content that appears accurate and may even include sources, some of which may not actually exist.

Support Systems

[Counseling and Mental Health](#) - *(213) 740-9355 – 24/7 on call*
Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

[988 Suicide and Crisis Lifeline](#) - *988 for both calls and text messages – 24/7 on call*
The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline is comprised of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

[Relationship and Sexual Violence Prevention Services (RSVP)](#) - *(213) 740-9355(WELL) – 24/7 on call*
Free and confidential therapy services, workshops, and training for situations related to gender- and power-based harm (including sexual assault, intimate partner violence, and stalking).

[Office for Equity, Equal Opportunity, and Title IX (EEO-TIX)](#) - *(213) 740-5086*
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*
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 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) 740-0411*
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*
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*
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) 442-1200 – 24/7 on call*
Non-emergency assistance or information.

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

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) 442-2850 or* otfp@med.usc.edu
Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.