COMM 499 User Experience in Practice: From Data to Design

(4 Units)

Fall 2024 – M/W 3:30-4:50
Section: #20773R
Location: ANN 209

Instructor: Angel Hwang
Office: TBD
Office Hours: M/W 5-6 pm
Contact Info: TBD

Course Description
This course focuses on practical approaches to understanding user experience (UX) and human-computer interaction (HCI) with novel technologies. We will cover (1) basic principles of UX/HCI research and design, (2) quantitative and qualitative methods for studying emerging technologies, and (3) practices of formulating data-driven insights for tech applications. Students will practice designing studies, analyzing data, and extracting insights through hands-on activities. The course is designed for students who are interested in pursuing UX/HCI practitioner roles in the industry and/or applying UX/HCI research methods in their areas of interest.

Student Learning Outcomes
Students will get an overview of quantitative and qualitative methods commonly used for user experience research. The goal is to comprehend these methods, apply them as tools to gain insights about user experience, and provide recommendations for tech applications.

Course Notes
Reading & Course materials
All reading and course materials will be distributed through Brightspace. There is no required textbook and you don’t need to purchase any course material.

Attendance
I expect consistent attendance in class. Though I will not formally take attendance, many of your assignment questions will likely be related to content that we discuss in class. If you miss two or more classes in a row, there’s a good chance that you find it challenging to complete an assignment. In that case, please reach out to me in advance.
Communication
I hope the classroom will be a safe space for every student to express their ideas. To make this happen, I ask everyone to please be thoughtful and respectful when you speak and interact with others in class and any other course-related interactions that take place outside of our regular class time (e.g., meetings for group projects). Please be mindful that your classmates might come from very different backgrounds and live quite different life experiences.

Outside of the classroom, Brightspace announcements and email will be the primary communication channels we use for this class. Likewise, please be mindful and respectful while communicating through these channels as well.

If you encounter any uncomfortable or discriminative experiences during any of these above-mentioned interactions, please reach out to me directly.

Technological Proficiency and Hardware/Software Required
Although this course is about how we study user experiences with tech, the only required piece of technology is Brightspace (Brightspace.usc.edu). Throughout the semester, I will mention relevant software and applications that can facilitate UX research. You are encouraged to try them out, but those are not required.

Description and Assessment of Assignments
UXR Reflection
Throughout the semester, there will be five UXR Reflection assignments. These are take-home, written assignments that will be distributed and submitted through Brightspace. Each UXR Reflection consists of a few questions about UXR methods that we discuss in class. You will be asked to respond to these questions in short text.

Course Group Project
Students will work in small groups to complete their course project, which asks students to focus on a tech product of their choice and propose a UXR study plan. Students are expected to work on the course project throughout the semester, instead of cramming all the work toward the end of the semester. As such, there are four key project milestones that students need to hit. The specific requirement for each milestone is specified in the course schedule. Additionally, each group will do a final presentation about their project.

Grading Breakdown

<table>
<thead>
<tr>
<th>Assessment Tool (assignments)</th>
<th>% of Grade</th>
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<tbody>
<tr>
<td>UXR Reflection x5</td>
<td>60%</td>
</tr>
<tr>
<td>Project Milestone 1</td>
<td>5%</td>
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<tr>
<td>Project Milestone 2</td>
<td>5%</td>
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### Assessment Tool (assignments)

<table>
<thead>
<tr>
<th>Assessment Tool (assignments)</th>
<th>% of Grade</th>
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<tbody>
<tr>
<td>Project Milestone 3</td>
<td>10%</td>
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<tr>
<td>Project Milestone 4</td>
<td>10%</td>
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<tr>
<td>Final Project Presentation</td>
<td>10%</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100%</strong></td>
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### Course Grading Scale

<table>
<thead>
<tr>
<th>Letter grade and corresponding numerical point range</th>
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<tbody>
<tr>
<td>94% to 100%: A</td>
</tr>
<tr>
<td>90% to 93%: A-</td>
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<tr>
<td>87% to 89%: B+</td>
</tr>
<tr>
<td>84% to 86%: B</td>
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### Grading Standards

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Description</th>
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<tbody>
<tr>
<td>A</td>
<td>Excellent; demonstrates extraordinarily high achievement; comprehensive knowledge and understanding of subject matter; all expectations met and exceeded.</td>
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<tr>
<td>B</td>
<td>Good; moderately broad knowledge and understanding of subject matter; explicitly or implicitly demonstrates good, if not thorough understanding; only minor substantive shortcomings.</td>
</tr>
<tr>
<td>C</td>
<td>Satisfactory/Fair; reasonable knowledge and understanding of subject matter; most expectations are met; despite any shortcomings, demonstrates basic level of understanding.</td>
</tr>
<tr>
<td>D</td>
<td>Marginal; minimal knowledge and understanding of subject matter; more than one significant shortcoming; deficiencies indicate only the most rudimentary level of understanding.</td>
</tr>
<tr>
<td>F</td>
<td>Failing; unacceptably low level of knowledge and understanding of subject matter; deficiencies indicate lack of understanding.</td>
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### Grading Timeline

I target to distribute the grades and comments for each assignment and project milestone within 2 weeks after your submission. I will make an announcement (either in class or through Brightspace) if I expect a delay on releasing grades.
Course Specific Policies

Assignment Submission
All assignments should be submitted by their corresponding due dates (see the specific time and date in the course schedule). I understand (unexpected) things happen in life, and so everyone has the opportunity to submit one of the individual assignments late, but no later than 3 days after the due dates. Beyond that, I will deduct 5% of the total points for every 24-hr late.

If your group expects to submit your group assignment late, please discuss with me at least one week before the deadline. However, it is rather unlikely that I will grant permission for late submission of a group assignment. Likewise, I will deduct 5% of the total points for every 24-hr late.

Use of Generative AI
This class does not ban the use of AI for course purposes. As a researcher who studies AI, I personally believe AI will become more commonplace in your life. Therefore, if you see a way to apply AI to facilitate your coursework, that could be a helpful skill to pick up. However, as the bulk part of the coursework requires you to apply knowledge, if you simply use AI to automatically complete some/all parts of your assignments or projects, it is unlikely that you will get the most out of the course. And, this might reflect on your grades as well.

If you use AI for your coursework:
1. Be thoughtful when you formulate your prompts. Low-quality prompts result in low-quality output.
2. Think critically about the output you received. AI-generated output can have flaws and involve hallucinations.
3. Cross-check the output with trustworthy sources. As mentioned above, AI-generated output can be wrong. If you adopt false content in your assignments or projects, you are responsible for it and might risk point deductions.
4. Highlight where you adopt AI-generated text in your written assignments and projects, if any.
5. If you use AI in other ways (see below), please declare them at the end of your submission, copy the prompt(s) you use, and the raw, unedited output from AI. This part will not count toward the word/page limit of your submission.
   a. Brainstorming and idea generation
   b. Background and secondary research
   c. Source valuation and validation
   d. Creating an outline for your responses
   e. Drafting
   f. Paraphrasing and finding synonyms
   g. Revising and polishing
   h. Transforming styles
   i. Other usage (please specify)
**Course Schedule: A Weekly Breakdown**
I will upload the slides for each class at least one week ahead. Required reading for each class will be specified in the slide deck.

**Important note to students:** *Be advised that this syllabus is subject to change.*

<table>
<thead>
<tr>
<th>Topics/Daily Activities</th>
<th>Readings</th>
<th>Course Assignments</th>
<th>Course Project Milestones</th>
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<tbody>
<tr>
<td><strong>Module 1: Why UX and HCI research?</strong></td>
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| **Week 1** (8/26 – 9/1) | Class (1): Course introduction; What is user research? What is research in HCI?  
| **Week 2** (9/2 – 9/8) | Class (1): Labor Day – No class  
Class (2): Understanding the status quo; Background research; Formative interviews; Profiling user persona; Working with stakeholders; Introduction of course group project | Hartson & Pyla (2019). Chapter 2: The Wheel: UX Processes, Lifecycles, Methods, and Technique. In *UX Book: Agile UX Design for a Quality User Experience*.  

**Module 2: Understanding users through qualitative data**

<table>
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<tr>
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</thead>
</table>
| **Week 3** (9/9 – 9/15) | Class (1): Overview of qualitative methods; Scoping research objects; Forming research questions  
| Week 4 (9/16 – 9/22) | Class (1): Co-design and participatory methods; Diary studies;  
Recommended reading:  
Recommended readings:  
|---|---|---|---|
| Week 5 (9/23 – 9/29) | Class (1): Planning for a qualitative study; Formulating study protocol  
Recommended reading:  
| Week 7 (10/7 – 10/13) | Class (1): Overview of quantitative methods; Scoping research objects; Forming research questions  
|---|---|---|---|
| Week 8 (10/14 – 10/20) | Class (1): Behavioral experiment; Quantitative usability testing; Experimental design  
Recommended reading: Gergle & Tan (2014). Experimental research in HCI. In *Ways of Knowing in HCI* (pp. 191-227).  
Kjeldskov & Skov (2014) Was it worth the hassle? ten years of mobile HCI research discussions on lab and field evaluations. In *Proceedings of the 16th International Conference on Human-Computer Interaction with Mobile Devices & Services.* | By 10/18: Submit UXR Reflection (3) |
| Week 9 (10/21 – 10/27) | Class (1): Planning for a quantitative study; Formulating study protocol  
| Week 11 (11/4 – 11/10) | Class (1): Recapping quantitative and qualitative UXR study plans; Project work session  
By 11/15: Submit UXR Reflection (5) |
|----------------------|-----------------|---------------------------------------------------------------------------------|------------------|
| Week 12 (11/11 – 11/17) | Class (1): In-class pilot study session  
Class (2): From data to insights; Composing a UXR “report”; Generating initial ideas for design recommendation | User Interviews Field Guide (2024). Writing effective research reports and presentations.  
| Week 13 (11/18 – 11/24) | Class (1): Presenting UXR results to your stakeholders; Collecting stakeholders’ feedback  
| Week 14 (11/25 – 12/1) | Class (1): Project work session  

**Module 4: Making sense of different data streams**


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**Table Notes:**  
- Class (1) and Class (2) indicate the two sessions per week.  
- Recommended reading sections are provided for additional learning resources.  
- The schedule is based on the academic calendar provided, with dates for each class session.  
- The parenthetical notations within the table entries indicate the specific pages or sections of the referenced texts.
Stige et al. (2023). Artificial intelligence (AI) for user experience (UX) design: a systematic literature review and future research agenda. *Information Technology & People.*

Recommended readings:


### Policies and Procedures

**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.
The School of Communication maintains a commitment to the highest standards of ethical conduct and academic excellence. Any student found responsible for plagiarism, fabrication, cheating on examinations, or purchasing papers or other assignments will be reported to the Office of Student Judicial Affairs and Community Standards and may be dismissed from the School of Communication. There are no exceptions to the school’s policy.

In addition, it is assumed that the work you submit for this course is work you have produced entirely by yourself and has not been previously produced by you for submission in another course or Learning Lab, without approval of the instructor.

**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 is prohibited 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 is also prohibited. 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).

**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**

**Annenberg Student Success Fund**

The Annenberg Student Success Fund is a donor-funded financial aid account available to USC Annenberg undergraduate and graduate students for non-tuition expenses related to extra- and co-curricular programs and opportunities.

**Annenberg Student Emergency Aid Fund**

Awards are distributed to students experiencing unforeseen circumstances and emergencies impacting their ability to pay tuition or cover everyday living expenses. These awards are not intended to cover full-tuition expenses, but rather serve as bridge funding to guarantee students’ continued enrollment at USC until other resources, such as scholarships or loans, become available. Students are encouraged to provide as much information in their application, as well as contact their academic advisor directly with questions about additional resources available to them.

*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.

*TrojansAlert*
TrojansAlert is an alert system that allows university officials to contact you during an emergency. It is your connection to real-time updates, instructions on where to go, what to do, or what not to do, who to contact and other important information. Visit the website to sign up.

Emergency Preparedness/Course Continuity in a Crisis
In case of a declared emergency if travel to campus is not feasible, USC executive leadership will announce an electronic way for instructors to teach students in their residence halls or homes using a combination of Brightspace, teleconferencing, and other technologies. See the university’s site on Campus Safety and Emergency Preparedness.

ITS Customer Support Center (CSC): (213) 740-5555
The ITS Customer Support Center (CSC) provides support to the USC community for connecting to the USC Network and using supported applications. For help with network connectivity and software, contact CSC. Walk-in support is available in Leavey Library’s Information Commons.

Violence-Free Campus
Visit the website to read more about prohibited behaviors, reporting responsibilities and where to report.

Student-Athlete Travel Excuse Letters
Prior to a university-sponsored away competition, Student-Athletes are responsible for providing their Instructor with a Competition Excuse Letter (provided by their academic counselor) for the classes missed while on the road (i.e., excused absence). It is the responsibility of the Student-Athlete to provide the letter prior to leaving on their trip and to make arrangements for a make-up of any missed assignments or exams. Please refer to the SAAS site where they detail travel and travel excuse letters.