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School of Information
University of Michigan

Fall 2019

Tuesdays, 1-4pm
Secret Lab – Ann Arbor District Library

Office Hours, Thursdays 4:30-6:00pm, North Quad 4384. Please sign up [here](#)

[\(https://calendar.google.com/calendar/selfsched?
sstoken=UU5abmVjSnRybFMxfGRIZmF1bHR8YzdiYjMyZDRiYjZiM2VhYzUzOTRIZjFiYWnkZGFiZmY\)](https://calendar.google.com/calendar/selfsched?sstoken=UU5abmVjSnRybFMxfGRIZmF1bHR8YzdiYjMyZDRiYjZiM2VhYzUzOTRIZjFiYWnkZGFiZmY)

User Experience Research & Design is an interdisciplinary approach to technology that emerged out of earlier research and design methods and fields including but not limited to Participatory Design, Human-Computer Interaction and User Interface Design. It is often understood as a reaction to and intervention into engineering approaches to technological development. User Experience Research and Design as such can mean a variety of approaches and range of activities – often what is meant is highly dependent on the specific culture of an employer or the institution. Across various instantiations it is always though some form of blend of social scientific, technical, creative, and critical thinking skills, and this course will reflect this interdisciplinary commitment.

Course Structure:

Experience design is both fascinating and challenging because of its elusive character and its politics of inclusion. What is experience? Who gets to say so? What makes an experience fun, challenging, novel, or different? Are experiences shared, individual, or collective? How is it that some people are excluded from certain experience spaces? Is it possible to design experiences, or can we only design interactive things? Who is the user in user experience design? And what form can design take in user experience design? The first weeks of the class “Understanding User Experience Design” will help you articulate answers to these questions as well as work out your own approach to user experience design. The second part of the course “Prototyping and Hacking User Experience Design” will be focused on the hands-on engagement with a user experience design project.

This is a mastery course, i.e. an advanced one-semester course that requires students to demonstrate command of the key methods, theories, approaches, and capabilities that they have acquired in their training at UMSI so far. Unlike other courses with significant faculty-led structure and scaffolding, mastery courses require you to demonstrate initiative and show that you can critically engage with a contemporary societal, technological, economic and/or political issue and conceive of a design project in

relation to this issue. I see my role as guiding you through this process. The goal is not to teach you technical or social science methods, but help you think out of the box, think beyond familiar and comfortable frames, and engage with issues of design and use in an ethical and responsible manner.

Problem Framing vs. Problem Solving

Bill Buxton makes a distinction between “getting the idea right” and “getting the right idea.” Getting the idea right is about refining and iterating on an idea, when you already know what the idea is. Getting the right idea is about exploring and surfacing many ways of addressing a given design opportunity, and selecting the best from among them—in other words, it’s what you do when you don’t know what you want to do. Example: Many people commute between cities A and B. Getting the idea right might be improving existing highways between those cities. Getting the right idea would be stepping back and considering whether automotive traffic is the best way to address this situation. Perhaps instead it is rail, boat, or air infrastructure that’s needed; or perhaps a better communications infrastructure would suffice; or maybe building up the area in the middle, or (etc.)...

My experience is that most students are more comfortable with getting the idea right and tend to jump to it too quickly. In other words, instead of patiently exploring different possible design directions, students tend to jump on the first plausible one and then start iterating on it. Often, they do so because they feel pressure to make progress and are afraid they will fall behind. In this course, I will argue that getting the right idea is an outcome or result of a design process, not the beginning of one. And I will use assignments to disrupt students’ tendency to commit to one idea early on—to the point that some of you might even feel frustrated. Sorry in advance for that bad experience, but hey, all doing is accompanied by a corresponding undergoing, which must be suffered, and yet it will all be worth it once it is all infused with an emotional coherence and thereby consummated as an (aesthetic) experience.^[1]

In all seriousness, your ability to get the right idea and persuade others to pursue it is arguably your biggest selling point as a designer.

Computational Hardware Is Part of Your Job Description Now, Too

Looking at trends in computing, it is clear that the paradigm of phones/tablets and apps is well established and even past its prime. That means that if you want to look for a job in 2008, you should be focusing on apps. But if you want to get a job in 2018, it’s time to look forward, not back.

The energy in the design and HCI communities is on topics such as “smart” spaces (e.g., cars, homes, cities); robotics; the Internet of Things; voice-controlled interfaces (like Apple Siri and Amazon Echo); the maker movement; and so on. Common to all of these is that hardware is part of the design problem space. 15 years ago most interaction designers were limited to software—running on Windows, web servers, etc., but hardware was out of scope. That is changing. So I will challenge you throughout this course to educate yourself about upcoming computing trends, with an emphasis on computational/digital environments, what “smart” can or should mean when applied to cars or cities or whatever, and how users’ understandings of the physical/virtual divide will be changing in the next decade. And, of course, what sorts of experiences all of that will afford.

This course takes place in the Secret Lab, the makerspace of our local Ann Arbor District Library, providing you the room and materials to explore hardware design and research. The Secret Lab offers a myriad of resources, machines, and prototyping tools for you to use if you chose to do so.

Course Objectives:

Course readings, activities, and assignments were designed to provide students opportunities to achieve the following goals by the end of the semester:

- Complete and document a portfolio-quality design using recognized experience design methods
- Choose appropriate methods and theories in practical situations based on an understanding of the strengths and limitations of available approaches
- Articulate your approach to design and user experience design specifically in a clear manner
- Describe popular research and design processes used in UX as well as alternative approaches to UX design
- Implement prototypes common in design including but not limited to photoshop, illustrator, Arduino, 3d printing, proto.io, html, css, sketch, Axure.
- Practice peer design critique

[1] This is an Experience Design inside joke, which you will get in about 2 weeks, if you don't already.