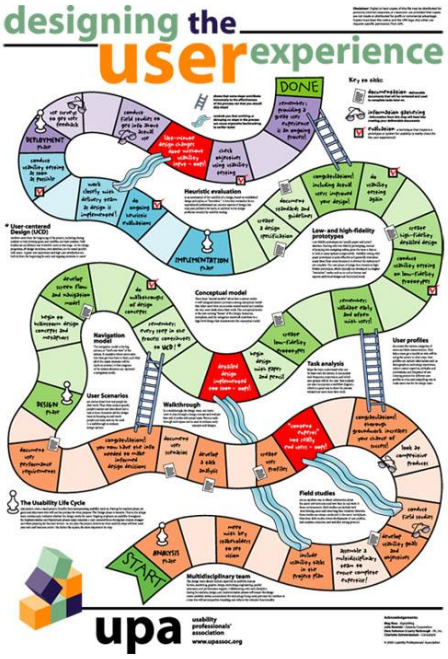
HCDE Human Centered Design & Engineering
University of Washington

User Centered Design

HCDE 518, Section B
Autumn Quarter 2015

Meeting	Tuesday, 6-950 pm Dempsey Hall 112
Instructor	Sarah Zuberec zuberec@uw.edu *Email is the best way to contact me!* office hours by appointment
Teaching Assistant	Kerem Ozcan, HCDE PhD Student kozcan@uw office hours by appointment
Website	https://canvas.uw.edu/courses/990034



Description

Explores the user-centered design paradigm from a broad perspective, emphasizing how user research and prototype assessment can be integrated into different phases of the design process. Students learn to think like a user-centered designer and carry out activities that are key to user-centered design.

Summary

- HCDE 518 is an introduction to the user-centered design process and is oriented toward practical methods for approaching a design problem.
- Design is a unique form of inquiry. We design whenever we change some existing situation into a preferred one. The difficulty, of course, is how to envision a preferred situation and arrive at it. In this class, we will develop an appreciation for the nature of design, and we will develop specific skills for studying and designing interactive systems.
- You will find the concepts and methods covered in this class to be widely applicable. You will be able to use them when designing organizations of people, when designing information structures, and when designing a business plan. But in this class we will focus on the design of interactive systems, on human-centeredness, and on usability.
- The major question is: how do we design interactive systems that are useful, usable, and enjoyable?

Objectives

The general aims of this course are to:

- Develop an appreciation for the theory and sensibilities of design.
- Develop skills in the use and application of a variety of design methods, specifically applicable to user-centered design.
- Improve individual and collaborative skills in design-based problem solving.

Upon the successful completion of this course, you should be able to:

- Given a problem setting, critically discuss the appropriateness of potential design methodologies such as contextual design, scenario-based design, participatory, etc.
- Describe the issues and challenges to achieving a human-centered design process.
- Gather useful information about users and activities through observation or systematic inquiry.
- Use, adapt and extend classic design standards, guidelines, and patterns.
- Employ selected design methods at a basic level of competence: affinity diagrams, card sorting, scenarios of use, personas, storyboarding, sketching, and usability evaluation.
- Create a low-fidelity prototype for a small system and plan and perform a usability evaluation.

Materials

The following materials and books are required or recommended for this course. Readings will be drawn from the books, but they will be available as PDFs online, so you are not required to purchase the books.

REQUIRED — Sketchbook -- paper-based is required. You will need to be able to scan/photograph and upload sketches to Canvas. A binder with loose leaf paper will work and so will a bound book of blank pages.

RECOMMENDED — Buxton, B. (2007) *Sketching User Experiences*. San Francisco: Morgan Kaufmann.

Moggridge, B. (2007) *Designing Interactions*. Cambridge, MA: The M.I.T. Press.

SUPPLEMENTAL — Courage, C. and K. Baxter. (2005) *Understanding Your Users*. Elsevier.

Norman, D.A. (1988) *The Design of Everyday Things*. New York: Basic Books.

Greenberg, S., Carpendale, S., Marquardt, N., & Buxton, W. (2012). *Sketching User Experiences: The Workbook*. Amsterdam: Elsevier/Morgan Kaufmann.

Schedule — A summary of the weekly course topics is listed below. This schedule is subject to change; details and updates will be found on the course website.

Week	Date	Topic
1	Oct 6	Syllabus & Introduction
2	Oct 13	UCD Process
3	Oct 20	Investigate: UR Methodologies
4	Oct 27	Investigate: Analysis

Week	Date	Topic
5	Nov 3	Requirements: Personas, Scenarios
6	Nov 10	Ideation: Brainstorming, Storyboards
7	Nov 17	Prototyping
8	Nov 24	Evaluation
9	Dec 1	Futures in UCD
10	Dec 8	Final Presentations
11	Finals Week	*no class meeting – final assignments due* ***Dec 15***

Assignments

There are six components of assignments for this course. Grades will be determined according to the distribution below. Further details about the assignments in each component may be found on the course website.

Component	Weight
Reading Presentation	10%
Sketching	10%
Exercises	20%
Project	40%
Reflection	10%
Participation	10%
Total	100%

In detail:

Component	Description	Weight
Reading Presentation	*Reading presentations* Most weeks, there will be assigned readings. You will be responsible for presenting one or more of these readings to the class and lead a short discussion. If you are not presenting, you will be responsible for participating in a group discussion.	10%
Sketching	*Sketching exercises* During the course, you will keep a sketchbook and turn in scanned images of your sketches. You will also write a final reflection paper on your sketching experiences.	10%

Component	Description	Weight
Exercises	*Design exercises* To give you practice with specific methods for interaction design, you will complete three individual assignments during the course: 1. Design in the world around you 2. Learn, Look, Ask, Try 3. Paper Prototype	20%
Project	*Group UCD Project* This large project forms the spine of the course, applying all of the UCD techniques to a real-world design project, working in teams. Project components: 1. Project Declaration 2. User Research & Personas 3. Ideation & Sketching 4. Prototype & Evaluation 5. Design Specification 6. Presentation & Summary	40%
Reflection	*Summary of course experience* To summarize and reflect on your learning and experience in the course, you will write a short report as a final reflection. Alternative, narrative report forms (such as a rap, video, animation, interactive stories, etc.) are encouraged!	10%
Participation	*Course engagement* Although attendance, per se, is not graded, active participation and engagement with your peers is an important aspect of your learning. Your participation grade is based on your contributions to the group efforts.	10%
Total		100%

Grading

Each assignment is designed to test your achievement against one or more of the learning objectives. Different assignments emphasize different learning objectives, and note that some grading will be subjective in nature. The following chart characterizes the numeric grades in words:

Grade	Letter	%	Performance quality*
3.9 - 4.0	A/A+	96 - 100	Superior performance in all aspects of the course with work exemplifying the highest quality. Unquestionably prepared for subsequent courses in field.
3.5 - 3.8	A-/B+	89 - 95	Superior performance in most aspects of the course; high quality work. Unquestionably prepared for subsequent courses in field.
3.2 - 3.4**	B	85 - 88	High quality performance in all or most aspects of the course. Very good chance of success in subsequent courses in field.
2.9 - 3.1	B-	82 - 84	High quality performance in some of the course; satisfactory performance in the remainder. Good chance of success in subsequent courses in field.
2.5 - 2.8	C+	78 - 81	Satisfactory performance in the course. Evidence of sufficient learning to succeed in subsequent courses in field.
2.2 - 2.4	C	75 - 77	Satisfactory performance in most of the course, with the remainder being somewhat substandard. Evidence of sufficient learning to succeed in subsequent courses in field with effort.
1.9 - 2.1	C-	72 - 74	Evidence of some learning but generally marginal performance. Marginal chance of success in subsequent courses in field.

*Taken from Faculty Resource on Grading, http://depts.washington.edu/grading/practices/guidelines.html

**Simply "doing" the assignments will likely earn this grade range.

The minimum passing score for the course is 70%.

For graduate students, 1.7 is the minimum passing grade. Grades between that and 4.0 are scaled linearly. Note that even though a grade of 1.7 is considered passing, a minimum grade of 2.7 is required for the course to be counted toward a graduate degree.

Assignment Quality

All written assignments for this class must be of high quality: thoroughly proofread, well organized, and stylistically appropriate for the context. If in doubt, err on the more formal, polished, professional side. Writing quality will be a graded component of every written assignment.

Late Assignments

Late assignments will not be accepted after the first week of class. In-class work and class participation cannot be made up. If you miss a class, you will receive a zero for the work done in class that day. Please do not ask the professor or TA what you missed during class; check the website or ask a classmate. Required posts to the class discussion board must be made by the due date or you will receive a zero for that work. If there are legitimate extenuating circumstances for why you will be late submitting an assignment, at my discretion I will try to accommodate your needs. It is your responsibility to contact me *prior* to the due date of the assignment to inform me of your extenuating circumstance.
Final projects ***cannot*** be turned in late.

Group project

The assignments for the group project will be assessed and graded based on the team's work. Each member of the project team will receive the same grade for those assignments.

However, in the event of continuing evidence of a team member not fully contributing to the team effort, or being a disruptive influence on group dynamics, or otherwise negatively affecting team efforts, I reserve the right to selectively lower that team member's grade on group assignments.

Policies

The following general policies apply to this course:

Respect

If there were only one policy allowed in a course syllabus, I would choose the word respect to represent our goals for a healthy and engaging educational environment. Treating each other respectfully, in the broadest sense and in all ways, is a necessary and probably sufficient condition for a successful experience together. But because I am not limited to one policy, others are also stated.

Attendance

You are expected to attend class regularly. You are also expected to be on time and prepared for all sessions. Although attendance is not specifically graded, missing a significant number of classes (say, more than 2 sessions) will likely have a negative impact on your grade, as you will have fewer opportunities to participate in discussion and in-class activities.

If you must miss a class due to an illness or other extenuating circumstance, please let me know as soon as possible to make arrangements for a makeup of in-class activities.

Participation

Active participation in class activities is one of the requirements of the course. You are expected to engage in group activities, class discussions, interactions with your peers, and constructive critiques as part of the course work. This will help you hone your communication and other professional skills.

Collaboration

Working in groups or on teams is an essential part of all design and engineering disciplines. In most assignments and projects in this course, you will be expected to work with others and your success in those situations will be a part of your grade. (Some assignments will be individual, however.)

Academic Integrity

Simply stated, academic integrity means that you are to do your own work in all of your classes, unless collaboration is part of an assignment as defined in the course. In any case, you must be responsible for citing and acknowledging outside sources of ideas in work you submit. Please be aware of the UW policies on this, as described in the Student Conduct Code: www.washington.edu/students/handbook/conduct.html. These will be strictly enforced.

Assignment Quality

You are expected to produce work in all of the assignments that reflects the highest standards of professionalism. For written documents, this means proper spelling, grammar, and formatting.

Adherence to these good practices will be considered in your grades. For visually-oriented material, I recognize that not everyone is an accomplished graphic designer, but you should strive for neat and clear visual communications in your work.

Privacy

Students have the right for aspects of their personal life that they do not wish to share with others to remain private. Please respect that policy.

Office Hours

Consultation outside of regular class meeting time is available upon request. Please email instructor or teaching assistant for an appointment.

Accommodations

To request academic accommodations due to a disability, please contact UW Disability Resources for Students: depts.washington.edu/uwdrs. If you have a disability that requires academic accommodations, please discuss any accommodations you might need in the class with me.

Acknowledgment

This syllabus and course materials are based on a version of the course originally developed by Jake Wobbrock and HCDE professor Julie Kientz.

Permissions

Unless notified by you otherwise, I can use samples from your work in this course in future instructional settings (e.g., excerpts or examples in presentations).

Disclaimer

This syllabus, and all associated assignments, requirements, deadlines, and procedures are subject to change.