Syllabus for HCI 450: Foundations of HCI, Fall 2020

Overview

Application of psychological theory to the design of computer systems. Overview of applicable research methods. Sensation, cognition, decision making, display and control design.

Learning Outcomes

By the end of this course you should be able to:

- understand the *why* behind HCI usability guidelines and heuristics.
- determine when guidelines do and do not apply
- find, evaluate, and summarize research on a given HCI research topic
- deeply understand and describe one particular HCI research area

Prerequisites

IT 403

Textbooks

"Designing with the Mind in Mind: Simple Guide to Understanding User Interface Design Guidelines", Second Edition, 2014. Jeff Johnson. ISBN-13: 978-0124079144 ISBN-10: 0124079148.
Recommended: "The Design of Everyday Things", 2013. D. Norman. Basic Books. ISBN: 0465050654.

Attendance

As I'm sure you're all aware, we're going completely online this quarter. For those of you used to online classes, this will be no big change. If you're used to taking classes face-to-face, this will require some adjustment. It will be largely up to you to ensure that you're keeping up with all of the class videos, requirements, discussions, warm-ups, and assignments.

The current plan is to have an "interactive session" via Zoom at the originally scheduled time of class, Wednesdays at 5:45 Central time. This will be for announcements, warm-ups, and other things where I'd expect more questions. If you have other commitments at this time, I can try to arrange one or two more interactive sessions. The interactive sessions will be augmented by videos where I go into more depth about the topics covered in the readings, show examples, etc. *There will also be exercises and discussion items linked to these, so make sure you watch those*.

Class Plan

The following class plan is tentative and subject to change as the course progresses.

- **Class 1:** (9/9) Course overview. Introduction.

- **Class 2:** (9/16) Research methodology
- **Class 3:** (9/23) Perception
- **Class 4:** (9/30) More perception
- **Class 5:** (10/7) Cognition: Attention and memory
- **Class 6:** (10/14) Affordances. Motion
- **Class 7:** (10/21) Multiple minds. Learning.
- **Class 8:** (10/28) Rarely rational. Timing. Stress.
- **Class 9:** (11/4) Multitasking. Social effects.
- **Class 10:** (11/11) Research Review Presentations

Instructor Information

Email	peterh@cdm.depaul.edu
Home Page	http://reed.cs.depaul.edu/peterh/
Phone	312-362-5736
Office Hours	Monday 2:30-4:00 LPC, and Wednesday: 3:30-5:00pm (except 9/9, 10/7, 11/4) or by arrangement
Address	CDM Center 717

Assessment

Your final grade will be based on:

- Weekly warm-ups: 10 points
- Class participation: 10 points
- Two written assignments: 25 points (10 and 15 points)
- Research review topic, outline, paper and presentation: 35 points total
- Final exam: 20 points

The grading scale will be:

Points	Grade
93.3+	A
90	A-
86.6	B+
83.3	B
80	B-
76.6	C+
73.3	C
70	C-
66.6	D+
60	D
< 60	F

Weekly Warm-ups:

To help you get the most out of the readings, there will be weekly warm-ups on that week's readings through D2L. The warm-ups will generally consist of around 6 questions, and must be completed **before noon** (i.e., 11:59AM) on the day of the scheduled class. (This will allow me to integrate what you did into the class for the day.) The lowest warm-up score will be dropped.

Participation / Exercises

- All students can get participation points by posting comments to the weekly discussion topics. The postings should be meaty (not e.g., "I agree", or "I disagree").
- *Please note:* Timely participation is critical! Weekly discussion forums will close before the next class.
- Each week I will include at least a couple **Exercises**. You should post your answers to these on the Discussion Forum.
- My general expectation is that you will do all of the exercises. However, instead of doing one exercise, you can post a meaty response to someone else's answer.
- [More detail on Discussion Forum participation](#)
- *Please note:* Please don't expect me to respond to every post. I will be browsing, but I can't respond to everything. *However,* there are also discussion forums for you to post questions about the assignments. I will respond to these, unless one of you makes a good response first!

You can get participation *extra credit points* (to make up for missed participation opportunities) by participating in the [CDM subject pool](#). Each hour of participation will earn 1 participation point, up to a max of 2 points.

Assignments

- Unless otherwise stated, written assignments are due via D2L at the time and date posted on the course homepage.
- Late homework submissions will be accepted up to 3 days late with a penalty of 10% per day.
- All homework assignments will count towards the final grade.
- The Research Review paper will include a video presentation to the class that describes what you learned.

The **final exam** will be administered via D2L between the day after the last day of class, and the Wednesday of finals week.

Assignment resubmissions:

If you get 85% or lower on Project A1, A2, R1, or R2, you may resubmit the assignment for up to 75% of the missed points (except for late penalty points), if you:

- submit your modified assignment (with modifications clearly indicated by track changes or highlighting) to the **Resubmissions ONLY** D2L submissions folder,
- do it within one week of receiving the grade

However, this does not apply to assignments which were not submitted at all.

When you resubmit, add a note to clearly indicate which assignment this resubmission is for. Also,

email me to notify that you have resubmitted, with the subject line: "HCI 450: Project _ RESUBMISSION for _" (filling in the project number and your name).

On Plagiarism

You are encouraged to discuss all homeworks and projects with your classmates. You are, however, required to complete them on your own. In particular, this means that you are not allowed to "cut and paste" text from anywhere else, *or to paraphrase* someone else's work, unless:

- it is a *very small* part of your submission,
- AND the copied text is clearly indicated (i.e. surrounded by quotation marks),
- AND the source is clearly identified with an immediate citation,
- AND full reference information is given in the References section.

All assignments will be submitted to TurnItIn for automatic plagiarism testing, and "Originality Scores" will be visible. This system is very good at finding things that have been copied, so *just don't do it*.

School policies on instructor evaluation, email, plagiarism and incompletes