

Contact Info

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Virtual and Physical Office Hours for Fall 2005

drop in, phone, or IM Tuesday 3:30-5:30
And, as always, by appointment

Course Description

In this course, students work on collaborative projects to design innovative human-computer interactions (HCIs) aimed at transforming the way people do things in their everyday lives at work, in the home, and at play. Students work with activity analysis to observe and analyze everyday practices, with object-oriented modeling to represent and transform those practices, and with UI prototyping for selected implementation.

Prerequisites: In general: at least one course in one of the following areas: web design, database design, graphics design, document design, usability/ taks analysis, or software engineering design.

This semester, in addition to the objectives mentioned in the above description, we'll be upping the ante a bit. I will ask that each team think carefully about how their project will benefit users by changing the social dynamics of the environment they are designing for. For the final project, which will be a construction of a UI/system prototype along with a specification for the system, teams will be asked to involve users in a process of iterative development and testing.

Texts

1. Hugh Beyer & Karen Holtzblatt, *Contextual Design: Defining Customer-Centered Systems*. Morgan Kaufmann Publishers, ISBN: 1558604111

Other readings made available on the class website.

Course Policies

Attendance & Participation

Attendance and participation in this class are very important because it is a studio course.

In this class, much of the work you will do requires you to present your ideas, results, and designs in class. Often you will be working in collaboration with your peers. For both of these reasons it is difficult or impossible to make up missed work. A lack of participation will lead to bad blood among your peers and poor results for your client.

You should make every effort to attend class. You should contact me prior to missing class by e-mail, phone, or otherwise. If your absence will affect your colleagues in class, you should notify them as well. Each day will be clearly outlined in the course schedule, so check there regularly so that you are prepared for class on any given day.

Assignments

You must complete all major assignments. If you do not submit all materials for each project, you will not pass the class.

Late Work

You should submit your work on time. Late work will only be accepted if you consult with me prior to the class period in which the work is due. Work is considered to be late after 5:00 pm (your time) on the due date.

Grading

Grades are on a straight scale (89.5-100 = A, 79.5-89.49=B, etc.). You will be given a letter grade on each project you complete. In advance you will be notified as to the percentage that each project counts towards your overall grade.

If at any time during the semester you are concerned about your grade in the course or on a specific project, talk with me. Last minute arguments about grades at the end of the semester will usually go in my favor because I keep careful records of your progress. You should do this as well.

Course Projects

Below is a list of the graded assignments for the course. Each of the assignments is a component of a larger, semester-long project which will require you to research and develop a set of Human-Computer Interactions which transform a social practice you have observed. You should work as part of a team, though individual projects will be considered in special circumstances.

The specific purpose and even the venue for your design can vary widely. You may choose to develop interactions appropriate to a hand-held wireless device, a website, an information panel integrated into another product, etc. In fact, I encourage you to be creative and resist deciding on a particular format for your design until you have identified and begun to study the specific social practice(s) you wish to transform. Our aim in this course is true innovation, which requires thinking beyond the state-of-the-art in any particular social setting or, as we will come to know it, activity system.

To break it down, your final project will yield a user-interface interface prototype and a specification document. If your design is deployed via a handheld device which incorporates interface features into the hardware unit, you should plan to produce a physical prototype of that as well. Teams usually have fun with this aspect of the project.

#1 Individual Assessment (15%)

This is a self-assessment in which you will describe your skills and abilities in five key areas: tools and techniques, teaming, design process, presentation & persuasion, and deliverables. You'll complete an initial assessment at the beginning of the course and a final assessment at the end. You should advance in each of these five areas over the course of the semester and, in the final assessment, point to evidence of this advancement.

#2 Requirements Presentation & Memo (20%)

Introduce your design concept and persuade the group of the user needs which support it. Discuss the activity analysis which supports your design concept, solicit feedback, and forecast next steps. This

#3 Design Walkthrough w/ Work Models and Conceptual Design Memo (20%)

Introduce the group to your initial design concept using object-oriented modeling diagrams and low-fi prototyping techniques as support.

#4 Final Design Presentation w/ Consolidated Work Models and Specification (30%)

Presentation: showcase your hi-fi prototype and persuade the group that your design choices are appropriate and buildable. Spec: document your design in a way that communicates to potential developers and/or supporters that your design is viable.

Peer Review and Exercises 15%)

The class format permits us to operate much like a professional design group might. So in addition to the major project, each team and individual will be asked to engage in peer review of others' work and to lead panel discussions which will examine important issues in interaction design. We'll also have a few exercises, one during each phase, which will help you get a handle on the techniques and design processes we'll use in the class. You'll be evaluated on how well you execute each exercise.

Course Format

The class will consist of

- 9 studio/discussion meetings
- 2 Team consultations with Bill H-D (scheduled outside class time, following presentations 1&2)
- 3 Presentation days
- 1 required textbook: Holtzblatt's *Rapid Contextual Design*
- 6 major deliverables, 1 presentation and 1 written report for each of three development phases

Academic Integrity

Student-teacher relationships are built on trust. You should assume that I've made good decisions about the content and structure of the course; I should assume that the assignments you hand in are yours (that you are the one who produced them); and so on. Acts that violate this trust undermine the educational process.

HCI design is an activity that relies heavily on collaboration; members of teams work with writers, editors, programmers, engineers, human factors specialists, managers, and even customers. It would be unrealistic of me to assume that you will work in total isolation; that's not the way that the best jobs are done. (Some of the most unusable products and interfaces we encounter were developed by people who would not or did not work with others.) So, bounce ideas off each other, offer each other suggestions on how to improve assignments, etc. By working with each other, you can increase your learning and understanding. Some of the projects for this class will be done as group projects. I'll assume that you understand the difference between "working together" and merely copying. I'll also offer explicit guidelines for turning in work that has been co-authored so that we can negotiate the terms of working together. Please ask if you have questions about the way your team is working and how your work, as an individual, will be evaluated.