

51-422 VISUAL INTERFACE DESIGN

Spring 2005
MW 10:30-11:50
MM 227

<http://www.odannyboy.com/vid05>

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Hours: By appointment
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Official Course Description

Intended for HCI double majors, this is the spring offering of 51-421 Introduction to Visual Interface Design. This course highlights the role that visual interface designers play in the multi-disciplinary attempt to bridge the gap between functionality and usability and to introduce students to some of the unique challenges of designing within the realm of a digital, interactive medium.

Unofficial Course Description

The course title is a misnomer. This class isn't only about visual interface; in fact, it's not even primarily about visual interface. It's about interface and interaction design: how the features and functions of a product get translated into something humans find usable, useful, and desirable.

We're starting with a series of simple, foundational exercises ("Five Easy Pieces"), interspersed with readings and discussions about the fundamentals of interaction and interface design. Then, we will move on to three larger projects that will further develop your skills in this emerging field. Readings related to the larger assignments will be read and discussed.

This isn't a class on the basics of communication design. We will look at the elements of visual design (color, typography, composition, etc.) as they arise during the course of projects, but I don't predict we'll spend a lot of time on each *except as they relate to interface or interaction design*. If you feel you are particularly weak in the basics of communication design, I urge you to take Communication Design Fundamentals before taking this class. It will help immensely.

Although this is a class for HCI double majors, it is a Design class. While the tools and techniques of traditional human-computer interaction are important to the creation of successful digital products, we're going to be focused on the arts and methods of Design. Thus, literature reviews and usability testing, while encouraged, will play a less important role in this class than in an HCI class. Instead, we'll be looking at the design process as a mechanism for the creation of innovative solutions to complex problems.

Prerequisites

This class will require you to make several different kinds of documents and even a few objects. Additionally, you will need some method of presenting (digitally) your final three projects. To do all this, you will probably need to know (or be willing to learn):

Visio OR OmniGraffle OR InDesign OR some sort of diagramming software

AND

Illustrator OR Freehand OR Photoshop OR some sort of drawing/illustration software

AND

PowerPoint OR Flash OR Keynote or some sort of presentation software

As stated previously, this isn't a class on the basics of communication design. That being said, no design background is required to take it. What is expected is an awareness and appreciation of Design, which will hopefully grow over the course of the semester. Be deliberate in the choices you make in color, fonts, and placement.

Course Objectives

By the end of this class, you should be able to:

- Design a variety of interactive products using a design process in a competent, professional manner

Your grade will be based on your mastery of this objective.

Grading

Although half of life is just showing up, none of your grade will be based on that. HOWEVER, participation in discussion and critiques (for which you obviously must be in attendance to do) is the magic bullet of this class. Participation will cause me to think better of you as a student and your final grade will likely reflect that. As you know, I can't give +s or -s for the final grade, and most students generally end up in the B+ range. If you are active in class, I'm more predisposed to move your grade upwards into the A range.

Show up prepared with any assignments for that day ready to be posted on the wall or displayed onscreen for critiques and any assigned reading done. I'm not going to take attendance, but it's a small class and absences, especially frequent absences, will be duly noted.

This is much less a lecture course than it is a discussion and studio class. Your involvement in discussions is essential to the success of this class. I also expect you to participate in the critiques of others' work; one of the best ways of learning about interface design is to critically look at work.

The rest of your grade will be based on the projects you do, broken down thusly:

Project 1, Five Easy Pieces: 6% each, for a total of 30%

Project 2, Communication Device: 30%

Project 3, Adaptive Product: 40%

Each project will be graded based on the following things:

30% Ideation (the concepts you come up with)

30% Appropriateness (how well your solution fits the constraints given and fits the problem you are addressing)

20% Craft (how professional your documentation and solution is)

20% Presentation (how well you can talk about and defend your solution)

For each project, you will get a feedback sheet that will show you the grade for each facet of the project and the corresponding overall grade.

Textbook

There's no required textbook for the class. Readings will be individual articles, most of which can be found on the web. Those that can't will be handed out in class.

Schedule

I've tried to take into consideration things like Presidents' Day Weekend and Spring Break when setting up this schedule. If we stick to this schedule, there won't be assignments due over breaks.

Monday, January 10, 2005

Syllabus Review

Easy Piece #1 Assigned: Physical Cube

Wednesday, January 12, 2005

What is an interface? What is interaction design? What is visual design? Why study interface design?

Reading Group 1 presents:

- "So You Want to Be an Interaction Designer" by Robert Reimann
- "Action, Interaction, Reaction" by Nico MacDonald from Blueprint Magazine
- "Good Design in the Digital Age" by Richard Buchanan
- "Attractive Things Work Better" by Don Norman

Monday, January 17, 2005

Physical Cube Critique

Easy Piece #2 Assigned: Digital Cube

Wednesday, January 19, 2005

The Basics of Interaction Design

Reading Group 2 presents:

- "First Principles of Interaction Design" by Bruce Tognazzini
- "Knowing What to Do" by Donald Norman from *The Design of Everyday Things*
- "But How, Donald, Tell Us How?" by Tom Djajadiningrat, et al.
- "First Principles" by Christina Wodtke from *Information Architecture: Blueprints for the Web*

Monday, January 24, 2005

Digital Cube Critique

Easy Piece #3 Assigned: Elevator for a 1000-Floor Building

Wednesday, January 26, 2005

The Basics of Visual Interface Design

Reading Group 3 presents:

- "Designing Look and Feel" by Alan Cooper and Robert Reimann from *About Face 2.0*
- "Color for Coders" by Jason Beard
- "An Introduction to Type" by Nadav Savio
- "Design Eye for the Usability Guy" by The Design Fab Five

Monday, January 31, 2005

Elevator Critique

Easy Piece #4 Assigned: Web Form

Wednesday, February 2, 2005

Ambient Devices

Reading Group 4 presents:

- "The Computer for the 21st Century" by Mark Weiser
- "Designing Calm Technology" by Mark Weiser and John Seely Brown
- "Making the World Calmer through Ambient Technology" by IBM
- "Monofunction vs. Polyfunction" by John Maeda

Easy Piece #5 Assigned: Ambient Device

Monday, February 7, 2005

Mini Break: No Class

Wednesday, February 9, 2005

Web Form Critique

Monday, February 14, 2005

Design Process(es)

Reading Group 5 presents:

- "Meet the Elements" by Jesse James Garrett
- "The Use of Narrative in Interaction Design" by Nancy Broden, Marisa Gallagher, and Jonathan Woytek
- "Alan Cooper and the Goal-Directed Design Process" by Hugh Dubberly from *AIGA Journal of Design for the Network Economy*

- “The Interactive Development Process” by Nathan Shedroff

Wednesday, February 16, 2005

Ambient Device Critique

Communication Device Assigned

Monday, February 21, 2005

President’s Day: No Class

Wednesday, February 23, 2005

User Research

- “Design Research: Why You Need It” by Steve Calde
- “Qualitative Methods: From Boring to Brilliant” by Christopher Ireland from *Design Research*
- “Those People” by Christina Wodtke from *Information Architecture: Blueprints for the Web*
- “Modeling Users: Personas and Goals” by Alan Cooper and Robert Reimann from *About Face 2.0*

Monday, February 28, 2005

Worksession

Team meetings with Dan (mandatory)

Wednesday, March 2, 2005

Present User Research Findings for Communication Device

Monday and Wednesday, March 7 and 9

Spring break. No class. Party.

Monday, March 14, 2005

Worksession

Team meetings with Dan (mandatory)

Wednesday, March 16, 2005

Worksession

Monday, March 21, 2005

Present Communication Device Concepts

Wednesday, March 23, 2005

Worksession

Monday, March 28, 2005

Communication Device Critique

Wednesday, March 30, 2005

Adaptive and Hackable Products

"Components of Adaptive Worlds," by John Rheinfrank, Shelley Evenson, and Don Chartier

- "Insanely Great, or Just Good Enough?" by Dan Hill
- "Automatically Personalizing User Interfaces" by Daniel S. Weld, Corin Anderson, Pedro Domingos, Oren Etzioni, Krzysztof Gajos, Tessa Lau, Steve Wolfman

Adaptive Product assigned

Monday, April 4, 2005

Worksession

Team meetings with Dan (mandatory)

Wednesday, April 6, 2005

Worksession

Monday, April 11, 2005

Worksession

Team meetings with Dan (optional)

Wednesday, April 13, 2005

Present Adaptive Product User Research Findings and Initial Concepts

Monday, April 18, 2005

Worksession

Team meetings with Dan (optional)

Wednesday, April 20, 2005

Worksession

Team meetings with Dan (mandatory)

Monday, April 25, 2005

Worksession

Team meetings with Dan (optional)

Wednesday, April 27, 2005

Last day of classes

Adaptive Product Critique