

The Psychology of Design: Smart Products, Graphs, & Logos

The seminar will introduce students to the general field of Human Factors--- how to use psychology to optimize performance. We will focus primarily in the subtopic of design, and will emphasize three areas: 1) How to design easily usable products, 2) How to design easily understandable charts and graphs, and 3) How to design effective logos.

In each of these areas Human Factors researchers and design experts have uncovered methods that match the design to what is known about how people process information. These methods are what distinguish, for example, a useable computer interface or an elegant remote control, from the clunky difficult to use devices we have all encountered. In general the good designs take account of perceptual and cognitive biases, and limit strain on attention, memory, and other cognitive resources.

Texts: *The Design of Everyday Things*, Norman, Basic Books, 2002 (DOET)

The Visual Display of Quantitative Information, Tufte, Graphics Press, 2001 (VDQI)

Design Matters: Logos 01, Capsule, Rockport Publishers, 2007 (LOGO)

Schedule:

Date	Reading
	<i>Exercise due that day</i>
1/21	Introduction
1/28	DOET—Ch 1, Psychopathology of everyday things <i>Bring in a bad design</i>
2/4	Ch 2, Psychology of everyday actions (+ pp 75-80) <i>Analyze chosen bad design</i>
2/11	Ch 4, Knowing what to do (+ pp 166-172) <i>Bring in online example where it is a problem</i>
2/18	(Engel gone)—Movie: Objectified
2/25	Ch 5, To err is human <i>Analyze accident case study</i>
3/4	Ch 6, User centered design <i>(Re)Design everyday thing</i>
3/11	VDQI—Ch 1, Graphical excellence <i>Graph story</i>
3/18	(Spring break)
3/25	Ch 2, Graphical integrity

	<i>Bring in lying graphic</i>
4/1	Ch 4 & 5, Data-Ink & chartjunk
	<i>Bring in bad graphic</i>
4/8	Ch 7 & 8, Multifunctioning elements and hi-res designs
	<i>Regraph bad graphic & chosen story</i>
4/15	Logo design I (LOGO, pp. 56-88)
	<i>Bring in good and bad logo</i>
4/22	Logo design II
	<i>Redesign bad logo</i>
4/29	Talk to designer
5/6	Wrap up

Professor: Steve Engel, engel@umn.edu, Elliott S249, Office hours by appointment.

Requirements and Grading: Grading will be based on attendance, participation, and exercises. Students may miss one exercise without penalty.