Rapid Design for Slow Change
Fall 2013 Syllabus

The crux of our problem with self-control is the future and how much reagrd we have for it. Today the future looks scary, in part because we are so lax—about warming the planet, increasing our indebtedness, and eating ourselves into obesity. We can do better, both individually and collectively. But we should also remember that things could be much worse. If technology helped get us into this mess, it may well have the power to get us out.

— Daniel Akst

From D. Akst, "Who's in Charge Here?" Wilson Quarterly, Summer 2006, p. 31

Whether it's diet, exercise, disease prevention, addiction recovery, financial planning, citizenship awareness, or environmental responsibility, appropriate behaviors in these and similar domains are particularly challenging to initiate and sustain. Moreover, web sites that support these behaviors are unsuccessful for many people beyond an initial period of compliance.

Why are these behaviors unsustainable? Do our modern technologies and ubiquitous access conspire against us? For designers, are there new considerations or principles beyond current practice that should be applied to these domains? We refer to this design research, characterized by initiating and sustaining slow behavioral change, as "slow change interaction design" (SCID). These issues provide the backdrop of this course. For the designer, SCID problems are particularly messy, ill-structured, and wicked.

The course will be divided into five parts –
(1) a theoretical exploration of slow change;
(2) exemplar exploration of slow change;
(3) rapid design practice (general problems);
(4) rapid design practice (specific to slow change problems); and
(5) a culminating SCID project.

Most rapid design practice projects will last one week or less (two projects will last two weeks each); the final SCID project will last three weeks.

Thus, the course will include 10 rapid design projects and one final project; the first set of general rapid design problems can be thought of as "warm-up" exercises. In addition, we will articulate a set of design principles for SCID, deriving them from our theoretical explorations and our design work.

An important feature of the course is that you will learn to communicate your design via personas, experience models, concept models, site maps, flowcharts, and wireframes. In particular, we will use *Axure, Balsamiq*, and *Fireworks* so you can experience these tools and develop some expertise with them. We may explore other tools too.

Finally, the course will include many "curve balls;" these are common in business settings.

Class Times The class meets on Tuesdays and Thursdays from 5:45 – 7:15 P.M. All classes will meet in room 150 of the new Informatics building, and we will begin and end *on time!*

Prerequisites IDP (I541) or consent of the instructor.

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Required Reading

Four books are required for the course:

Switch

The Power of Habit

101 Design Methods

Manage Your Day-to-Day

Because of the amount of reading required for the course, I do not expect you to read every word. In the book *Switch*, read the first chapter carefully. After that, skim the essence of each chapter; when you find an interesting section, read it completely.

The book, 101 Design Methods, is a reference book; what I like about this book is that it has a strategic perspective.

The *Power of Habit* presents a behavioral change approach; there are a number of books similar to this one.

Manage Your Day-to-Day is a wonderful guide to help you manage your time and to keep focused on your highest priorities. This is a must-read.

Online Forum

The online forum primarily is for discussion of project work, course announcements, and discussion of slow change interaction design. I hope you will contribute to it frequently. All reflections welcomed!

Our system will be announced soon, but we may simply use *Oncourse*.

Attendance

Class attendance is expected and noticed. We will start promptly and end on time. It's your responsibility to be on time. Arriving late or not at all will have negative impact on your final grade.

Sleeping in class or reading non-class materials is not allowed. Come into class ready to work. You need to be "checked in" not "checked out." If you find yourself feeling drowsy, then quietly leave the room and drink some coffee or splash cold water on your face and then return quietly to the room (make sure that the door closes quietly behind you).

Laptops may be used in class but not for e-mail, texting, Facebook, Twitter, etc. Contrary to popular belief, there is increasing evidence that our brains do not multi-task! Bring your laptop to the first class; we will use it.

Note: If you are unable to attend class or a team activity because of a religious observance, it is your responsibility to alert your team members and the instructor *prior* to your absence. Give notice early so we can help you make up the work.

Recorded Storytelling

Storytelling plays an important role in this class. Each session begins with a different essay of "This I Believe." ***Once the story begins, stop talking, stop reading, stop texting, etc. Listen to the story! Empathize with the author!*** From time-to-time other recordings will be used.

Class Format

Much of the time we'll be discussing the current design project, with some class time devoted to actual work on the project. We'll have critique time too. Of course we'll talk about slow change research and how it relates to our projects.

Class Structure

Here's how the class will unfold:

- The first five (or so) warm-up problems will be variations of general design challenges encountered in corporate or non-profit settings; you will know who provided the problem as well as the person's company affiliation.
- The next set of five problems (may be less)—SCID problems—will come from the field, if possible, or from the instructor.
- The project's author will receive copies of your solution (not for grading, but for the project author to see how you responded to the challenge). In many cases the author(s) will show up in class or connect electronically.
- Your team, self-selected, will determine the final, culminating SCID design problem, choosing from one of many possible domains—health, wellness, education, addiction, finance, civics, and so on.
- Most projects will last one week or less, although two projects—one with Microsoft and the other with Fine Arts—will last two weeks each; the final project will last 2-3 weeks. Any project may include a "curve ball." The project is real; it's a variation of a problem challenge actually encountered by the project's author (or instructor). In most cases, the author will be available on a limited basis to answer questions; the instructor will be readily available. :)

- One of the two-week projects will be a joint project with graphic design students in Fine Arts. Last year's theme was Charles and Ray Eames; this year's theme will be Buckminster Fuller.

- Each of the first 10 projects will be solved in teams of two or three. Teams will rotate each week so that you will have an opportunity to partner with most if not all the students in the class.

http://www.thedomecenter.com/resources/rbfuller.jpg
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- The final SCID project will consist of a three to four person team, self-selected.

- On Mondays, you will receive the new problem; you may find it on *Oncourse* by Monday noon.

- On Tuesdays, team pairs will do private swap critiques on the previous week's project. Instructor-led insight lessons and theory discussions will follow. This means that you will need to review that team's project the previous day.

- On Thursdays, there will be a public critique of two projects; these will be "deep critiques." From these we will draw design insights.

- On Fridays, by 5 P.M., you will submit all projects to the "Assignment" section of *Oncourse*. You may view other team submissions here after 5 P.M. Friday.

- The final assignment will be to write a reflective essay on the nature of design and what it means to you. This is optional, but if you do it, you will have an opportunity to raise your grade. It will be impossible to achieve an A+ without doing this final assignment.

- The logistics of the class will likely require some adjustments as we proceed. Please provide feedback/advice, and we'll design good solutions together.

Grades

I will determine grades accordingly: your peers will critique every project. Several teams will get deep critiques. My assumption is that your motivation is high in this course given that it is an elective. It is imperative that you work hard on every assignment every week; if you don't do this, I will ask that you drop the course.

Throughout the course, you will receive a lot of feedback. At the end of the course, I will assign a single letter grade to each person. There are no points; it will be a cumulative assessment where I will value improvement, perseverance, and class contributions.

Feedback

You will receive a lot of feedback from us. However, we value your feedback too. Please let us know how to make this a more productive learning experience for you. **If you wait until the end of the semester to tell us what you did not like, it will help the next group of students but it will not help you.**

Perspective

The word "rapid" has many connotations: fast, extreme, and dangerous. If we think of white water rapids, it will imply the kind of "ride" through this course. You may think of the semester-long experience more like this:

http://onestep4ward.com/wp-content/uploads/2011/03/Me-rafting-at-the-source-of-the-Nile-in-Uganda.jpg @ 8.27.2013 used here under educational fair use only

Whitewater classification (http://en.wikipedia.org/wiki/Whitewater):

- **Class 1:** Very small rough areas, requires no maneuvering. (Skill Level: None)
- **Class 2:** Some rough water, maybe some rocks, small drops, might require maneuvering. (Skill Level: Basic Paddling Skill)
- **Class 3:** Whitewater, medium waves, maybe a 3–5 foot drop, but not much considerable danger. May require significant maneuvering. (Skill Level: Experienced paddling skills)
- **Class 4:** Whitewater, large waves, long rapids, rocks, maybe a considerable drop, and sharp maneuvers may be needed. (Skill Level: Whitewater Experience)
- **Class 5:** Whitewater, large waves, continuous rapids, large rocks and hazards, maybe a large drop, precise maneuvering (Skill Level: Advanced Whitewater Experience)
- **Class 6:** Whitewater, typically with huge waves, huge rocks and hazards, huge drops, but sometimes labeled this way due to largely invisible dangers (e.g., a smooth slide that creates a near-perfect, almost inescapable hydraulic…). Class 6 rapids are considered hazardous even for expert paddlers using state-of-the-art equipment, and come with the warning "danger to life or limb." (Skill Level: Expert)

Warning: RDSC will navigate through "Class 3 to 5" problems.

We will have fun and work hard; there will be no mentors to guide you, so we will need to help each other. You will encounter you own slow change as an interaction designer and reflective practitioner. You will get to do this mostly in the context of Slow Change Interaction Design, a category of design that is challenging and consequential.