Translating Social Science Theory into Behavior Change Design

1 credit **Fall 2019**

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Time TBD (6 weeks, Tuesday 1:20pm – 4:20 pm) Oct. 1-Nov. 5

Location Room 205, General Building 2.

Description Through this course, students will be introduced to existing behavior change theories, frameworks, and research. They will gain an understanding of factors that influence why and how behavior changes. Utilizing these insights, students will practice theory-driven design to nudge positive behavior change. They will analyze current behavior change applications and discuss behavior change design ethics.

Objectives Upon completion of this course, students should be able to:

- Read academic papers and apply insights into design.
- Employ theory-driven approaches to guide design decisions.
- Practice prototype, test and iterate on designs to support behavior change.
- Discuss ethical considerations for behavior change design.
- Advocate for the efficacy of their theory-driven designs.

Summary The goal of this course is to introduce students to the main theories of behavior change, and the activities and techniques for which these theory-driven insights may be applied in design.

The motivating principle for the structure of this course is that students have been hired to work as designers at a company that practices human centered design. As such, designers are asked to contribute to short-term projects in the company. To do so effectively, the students need to both leverage existing theoretical insights about people and behavior change into their designs, and learn how to share these theory-driven insights to the rest of the company.

There are three key activities in this class. One is the generation of design cards. Every two weeks, students are given readings on two behavior change theories. Then, students are asked to translate the insights from the theories into design cards that other designers may utilize in their work (examples: http://lucascolusso.com/pdf/bcds_cards.pdf). The act of generating these cards should facilitate students' understanding of the specific theories, but also improve the students' general ability to read academic papers.

The other key activity is the design activity modules, called "sprints." These are explorations in doing, using the tools and methodologies of human centered design to learn and practice the craft. For each sprint, students are presented with a behavior change design challenge and a

persona that they are asked to design for. We have developed a process called Behavior Change Design Sprints (http://lucascolusso.com/bcds), which will scaffold the use of theoretical insights (i.e., design cards) into the design process. As part of the process, students will be asked to think about ethical implications of their design, as well as learn to advocate for the efficacy of their designs.

The third activity is a longitudinal exploration of a behavior change design problem. Students can choose from one of the three design challenges that they have already explored in the sprints and expand on the designs. This project challenges students to consider issues that can arise during long-term behavior change and to address these issues through designs. Students are required to develop and then design for 3 scenarios that represent three different time points of behavior change – initial attempt, short-term, and long-term.

Through this class, students will learn ten sets of behavior change theories, explore how to communicate these theoretical insights to others, and incorporate them in their own designs to support behavior change.

Schedule

Week	Topic	In-Class Activities	Deliverables
1	Introduction Behavior Change • Ethics	Syllabus Cards creation	
2	Module #1 Theories • Transtheoretical Model of Change • Health Belief Model	Theory discussion Card feedback Design exercise	
3	Module #1 Design Sprint (Client: NYT)	Sprint	Design cards
4	Module #2 Theories • Theory of Planned Behavior • Social Cognitive Theory	Theory discussion Card feedback Design exercise	Sprint designs
5	Module #2 Design Sprint (Client: Apple)	Sprint	Design cards
6	Module #3 Theories • Self-Determination Theory • Incentives • Goal-Setting	Theory discussion Card feedback Design exercise	Sprint designs

Grading

Category	Assignment	Weight
Cards		**40%**
	Module #1 (one card per theory)	10%
	Module #2 (one card per theory)	10%
	Module #3 (one card per theory)	10%
Sprints		**50%**
	Client: NYT	25%
	Client: Apple	25%
Participation		**10%**

Assignments for team sprints will be assessed and graded based on the team's work. Each member of the project team will receive the same grade for those assignments. However, in the event of continuing evidence of a team member not fully contributing to the team effort, or being a disruptive influence on group dynamics, or otherwise negatively affecting team efforts, we reserve the right to selectively lower that team member's grade on group assignments, or to consider this in the overall participation grade for the course.

Submitting late work is strongly frowned upon. This is to encourage you to keep up with the work and to be fair to all students. However, recognizing that unforeseen problems may arise, every student will receive three "free" late days. These late days may be used for any reason on any combination of assignments, with no request required. An assignment is considered one day late if it is submitted past the deadline in Canvas. If an assignment has multiple deliverables that are submitted separately, each late deliverable will consume separate free late days. Once a student has used up all free late days, each additional late day for any deliverable will result in a loss of 10% of the total possible grade for that assignment.

Materials

Students will need access to a computer to complete many of the course assignments. A laptop is highly desirable, especially for use in the sprint sections. Any fairly recent model should suffice. Sample recommendations may be found at hcde.uw.edu/ policies/laptop. Smartphones, tablets, cameras, or other mobile computing devices are also helpful as they are able to capture various artifacts of your work during these sessions.

We strongly recommend that students maintain a personal journal and sketchbook of their work and activities in this course. A significant component of each assignment involves thorough documentation of the design process, not just the results, in an online process blog. Recording sketches, thoughts, ideas, questions, and reflections in a journal will facilitate that online documentation.

Policies

Respect

If there were only one policy allowed in a course syllabus, we would choose the word respect to represent our goals for a healthy and

engaging educational environment. Treating each other respectfully, in the broadest sense and in all ways, is a necessary and probably sufficient condition for a successful experience together. But since we are not limited to one policy, some other, more specific ones, can be stated.

Attendance & Participation
Students are expected to attend class regularly, be on time and prepared for all sessions. Although attendance is not specifically graded, missing a significant number of classes will likely have a negative impact on your grade. Active participation in class activities is one of the requirements of the course. You are expected to engage in group activities, class discussions, interactions with your peers, and constructive critiques as part of the course work. This will help you hone your communication and other professional skills.

Communication
We will use your NTHU email address for all class-related communications such as announcements and reminders. It is your responsibility to check that email regularly so that you are aware of these messages.

Collaboration
Working in groups or on teams is an essential part of all design and engineering disciplines. In many activities in this course you will be expected to work with others and your success in those situations will be a part of your grade. Some assignments will be individual, however.

Academic Integrity
Simply stated, academic integrity means that you are to do your own work in all of your classes, unless collaboration is part of an assignment as defined in the course. In any case, you must be responsible for citing and acknowledging outside sources of ideas in work you submit. Plagiarism and all other forms of academic misconduct are not tolerated.

Assignment Quality
You are expected to produce work in all of the assignments that reflects the highest standards of professionalism. For written documents, this means proper spelling, grammar, and formatting. Adherence to these good practices will be considered in your grades. For visually oriented material, we recognize that not everyone is an accomplished designer, but you should strive for neat and clear visual communications in your work.

Privacy
Students have the right for aspects of their personal life that they do not wish to share with others to remain private. Please respect that policy.

Disclaimer This syllabus and all associated assignments, requirements, deadlines, and procedures are subject to change.