

Behaviorally Informed Design for Energy Conservation (XEIET202)

Course Syllabus

Course Description

Typically energy initiatives do not incorporate a behavior change approach. Reducing energy use and the adoption of supply side innovations requires understanding of community-based social marketing, psychology and behavioral economics for successful public action and support.

This course covers strategies for designing and implementing effective behavior change programs for promoting environmental sustainability using innovation and design decision frameworks.

Course Modules

Module 1: Course Overview

The first module of the course provides a complete overview of the course including introductions and setting expectations. Prof. Banerjee will present the course goals and objectives in examining what design thinking methodology, analyze behavior change theory, and examine how to apply those methods and theories to the design of energy-focused behavior change interventions.

Module 2: Introduction to Behaviorally Informed Design

In this module, you will learn about why we are focusing on behavior change, its relation to complex energy systems and the potential for scaled impact. In addition, look at how to use behavior change as an intervention technique in reducing the demand for energy by learning the frameworks that define behavior change.

The following topics will be discussed in this module:

- Why Behavior Informed Design?
- Behavior Based Intervention for Energy
- Behavior Change Models
- Norms
- Biases and Errors
- Intrinsic Motivation and Social Cognitive Theory

Module 3: Behavior Informed Design Principles

Understanding behavioral gaps and failure modes will help us avoid falling into change traps while designing interventions. We will evaluate useful schema to drive design decisions early on when designing interventions and learn design principles. Overall, we will learn how to diffuse an energy intervention among a population of target users and further look into other popular behavior change techniques.

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The following topics will be discussed in this module:

- Behavior Change Gaps & Failure Modes
- Behavior Change Schema
- Design Principles and Tips
- Diffusion Principles and Tips
- Motivationally Aligned Interventions
- Behavior Change Techniques that have been shown to work

Module 4: Behaviorally Informed Design Tools

We wrap the course up by providing a summary of resources and instructions on how to use design tools.

The following topics will be discussed in this module:

- Formulate a High-Level Intervention Strategy
- Brainstorm Platform Concepts
- Design the Platform Architecture
- Nudge-Storm- Select Behavior Mechanisms and Touch Points
- Interaction (or Experience) Design

Instructor

[Banny Banerjee](#)

Professor of Practice and Director of Stanford ChangeLabs, Stanford University

To contact any of the instructors in this course or the Teaching Team in general, please email ask-the-professor-energy@lists.stanford.edu

Course Requirements

Please watch all course videos and review the summary tip sheets for each module, if applicable. Successful completion of the final examination and course evaluation are required to complete this course. The exam consists of multiple choice questions and is done online. A link will unlock within the “Final Steps” section of the learning platform after you have completed all of the other course activities. You may attempt the final examination multiple times. A score of 90% is required to successfully pass the exam. Once you have passed the examination and completed the evaluation, a digital record of completion will be emailed to you.

Course Materials

All course materials are provided within the course learning platform. These include the course videos, course handouts and all assignment instructions.

The course learning platform is available to you for 90 days after date of enrollment via your **mystanford** connection account. For more information regarding how to use the course

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learning platform, please visit

<http://player.vimeo.com/external/99190590.hd.mp4?s=02b5cdd84bc1d9e48f2320ce1d15b25b>

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Questions

For content-related questions, please contact ask-the-professor-energy@lists.stanford.edu.

Be sure to include your name, the course you are taking and your questions.

For questions relating to course materials, billing, testing, general program information, etc., please contact SCPD Student Services at scpd-energy@stanford.edu or 650- 273-5459.

Available 8:30am- 4:30pm Pacific Time, Monday- Friday.

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