

PO EA 185: Design for Environmental Behavior Change

Instructor

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General course information

3 Credits (one course unit)

Tues & Thurs: 9:35 AM – 12:05 PM

Class Location: Studio 1, The Hive, 130 E. 7th

Course description

This course provides an exploration of Human-Centered Design (HCD) and also uses concepts from Systems Thinking, Social Marketing, and Environmental Education as tools for innovative and targeted environmental behavior change. The course will be taught with rotating environmental themes and related partner organizations, creating unique experiences for students while still teaching the same core concepts and strategies. The first iteration of this course will focus on behavior change in the realm of sustainable transportation in Southern California from the perspectives of a government organization, a business, and a non-profit organization. This issue has large-scale implications for decreasing GHG emissions, lowering the reliance on single occupancy vehicles, and improving the quality of life in Southern California. The course will include interactive design methods and processes, hands-on projects, and engagement with fundamental readings and concepts in design and need finding. Students will learn how user research and prototyping can be integrated into different phases of the design process.

Course learning goals and mindsets

Learning goals

- Learn about systems design, human-centered design, and other behavior change approaches in the environmental field
- Understand the community partner's issues, goals, and insights to inform and contextualize the design process
- Gain working knowledge of a range of qualitative research skills, including structured and semi-structured interviewing techniques and participant observation, in addition to writing and analyzing field notes
- Explore the history and current state of the environmental theme (e.g. sustainable transportation) in Southern California within the context of analyzing perceived benefits and barriers to alternative behaviors
- Uncover latent needs of the target audience through engagement and observation
- Generate a wide range of insights and prototype selected ideas in order to understand more about a problem space, not just about the solution itself
- Iterate ideas based on user feedback to create better and more socially appropriate prototypes
- Utilize qualitative research findings to design programs, experiences, or products for behavior change
- Communicate with visuals, prototypes, and other non-traditional means with a nuanced awareness for audience needs and dispositions

Mindsets

- Focus on Human Values — with users, teams and other collaborators
- Show-Don't-Tell Mentality — that prioritizes visual communication and prototyping

- Embrace Experimentation and Failure — by creating and testing multiple possible solutions
- Mindfulness of Process — that values the means above the end
- Bias Toward Action — that encourages doing as a way of thinking
- Radical Collaboration — that embraces and seeks diverse opinions and experiences

Course prerequisites

It is essential that students have a genuine curiosity about design and systems thinking methods and activities, and a willingness to learn experientially. The course does not require any prior design or environmental analysis education; however, teams will be selected to have a diverse useful in your semester-long group work.

Teaching method

This course will be taught using applied, project-based learning (PBL). For PBL to be successful, it is not only necessary to complete all the assigned exercises and to come on time to every class and to fully engage in group-project work for 5-8 hours weekly outside of class. Students will work in teams on a semester-long project with an outside organization beyond the college community with very real needs and expectations. Every member of the class must engage and contribute to the group projects throughout the semester for the course to succeed.

Class time will consist of a mix of traditional classroom instruction via lecturing and PowerPoint presentation in combination with open discussions and interactive hands-on exercises. The experiential learning components of this course will allow students to practice and apply the Human-Centered Design, Systems Thinking, and Environmental Behavior Change concepts covered in the course. The class will enhance the creative capacity of our students, teach them to navigate ambiguity, and foster experimental and experiential learning. Students will work to increase proficiency in project-based experiential learning, multimedia communications of project outcomes, and oral interactive presentations. Some of the class time, especially after Spring Break, will be largely unstructured and allocated towards students working on their final projects in groups with the advising from the professor on their group project progress. Teams will work with one of three partner organizations throughout all components of the research, design, and implementation stages of the behavior change strategies.

Key Due Dates

- TBD First Prototype, Brief Write-up, and Midterm Presentation
- TBD Artifacts Day Final Prototype Presentation
- TBD Final Design and Implementation Write-up sent to Community Partners

Grading and Assignments

Students will work in small teams to produce a final write-up and designed deliverables for the partner organizations. Class assignments will consist of readings, writing reflections, and a variety of different assignments (such as conducting interviews, creating design prototypes and communications materials, and preparing presentations) related to the semester-long group design project. In addition to homework assignments meant to be conducted independently, students will be expected to meet with their project group outside of class time throughout the semester. Students will be expected to write/sketch a journal entry every week throughout the semester and complete group written and visual descriptions of their behavior change strategies.

Grading in this course will be based on students' critical engagement with environmental behavior change approaches and utilization of the methods taught in the class to achieve project outcomes. Grading is inherently a judgment rather than an algorithm. That means that I will watch and interact with the students, review intermediate and final work (notebooks, presentations, etc.) and assess the processes they try (even if they are not

"successful"). I will grade the deliverables as well as the process used to create them and will ask students to help me by reflecting on their experiences on a regular basis. Class attendance is vital. Therefore, if a student misses more than three classes or is chronically late, their grade will be affected. Legitimate excuses include: medical emergencies, personal emergencies, family emergencies, and required courtroom appearances.

***Note: Due to the project-based learning curriculum, this class cannot be taken Pass/Fail.

Grading Breakdown

Showing Up (Participation and Attendance)	10%
Generous Collaboration (In Class/In Groups)	10%
Journal (weekly written/cartoon reflections on course or project)	15%
Systems Design Visual Research	10%
Midterm Design Mock-Up and Design Process Summary	20%
Artifacts Day Interactive Presentation and Final Design	25%
Final Write-up of Design and Systems Implementation Strategy	20%

Academic Accommodations

It is the policy of the Claremont Colleges to accommodate students with temporary or permanent disabilities. Any student with a documented disability who requires reasonable accommodations should contact their home college's disability officer. The disability officers at the Claremont campuses are:

CMC: Julia Easley (julia.easley@cmc.edu)

HMC: Deborah Kahn (dkahn@hmc.edu)

Pitzer: Gabriella Tempestoso (gabriella_tempestoso@pitzer.edu)

Pomona: Jan Collins-Eaglin (jan.collins-eaglin@pomona.edu)

Scripps: Leslie Schnyder (lschnyde@scrippscollege.edu)

Recommended Additional Resources

Steal like an Artist (book) - Austin Kleon

Creative Confidence (book) - David and Tom Kelley (Chapters 2-3)

A More Beautiful Question (book) - Warren Berger (Chapter 3 selection)

Stephen Johnson "Where good ideas come from" TED talk:

<https://www.youtube.com/playlist?list=PLAnPS9Rw2EErTYdjr-UzCJEXLwMpo7Wg>