Human-Centered Sustainable Design Module Schedule

Week + Topic	Monday	Wednesday	Friday	Section	Homework
1 Project Start + Bug List Feb. 11-15	Logistics/Overview What is Human-Centered Design? What is Sustainability? Teamwork and MBTI	Needs Finding Good design, bad design Design notebooks	Green building design Green dorm project Share observations from Section Contextual inquiry	1. Team Formation, MBTI + team building exercise 2. Mission statement 3. Contextual Inquiry exercise 4. Lab assignment Assign places to visit for contextual inquiry – Green dorm, BEST Lab (will vary with project)	Individual: good design/ bad design Due at End of Lab: Mission Statement, common meeting time
2 Creative design, Bench-marking Selection Feb. 18-22	Holiday President's Day	Life cycle analysis Design for re-use: dumpster diving, recyclables, etc.	Mike Lin and Mitch Heinrich, Design Engineers from Potenco, Inc. Energy analysis, Biomimicry.	1. Compile needs, organize needs 2. Brainstorming exercise to develop concepts 3. Personas exercise	Due at beginning of Lab: Weekend Observations Contextual Inquiry Due at End of Lab: Personas, Revised Mission Statement, 20 team ideas
3 Concept Selection Testing Feb. 25-29	Benchmarking and concept selection. Students will reduce to 2-3 concepts in class before lab.	Framing needs, metaphors, imperatives and 2x2 matrices.	Concept Testing. Go over plans from lab as discussion.	1. Revise mission statement 2. Develop ≤ 3 concepts 3. Concept testing plan	Individual assignment due on Monday: Benchmarking on concepts, ranking of ideas relative to needs and benchmarks. Due in Lab: 3 Selected Concepts, for testing Due at End of Lab: Revised Mission Statement, Develop concepts for testing, testing plan.
4 Prototyping, Testing March 3-7	Overview of prototyping	Break class up into two groups that switch over the 2 days in the Computer Lab: 1. CAD and LSA software 2. Berkeley Prototyping Facilities; FDM, student shop	1. Peer review? 2. Concept development and prototyping, testing. Lab location may vary for each project.		Due in Lab: Select 1 concept and develop Due at end of Lab 3: lessons learned from testing, prototyping plans.

5	Finalizing design & Prototyping	Design for X, costing recommendations for supplies?	Extension to third world applications.	Communications tips..	Final prototyping and concept development. Lab location may vary for each project.	Due in Lab: ONE idea that has been thought through for prototyping Due at end of Lab: rough prototype.
6	Presentation	Brief summaries of project results.	Invention and innovation opportunities.	Wrap-up Student feedback and evaluation, Where do I go from here? Sustainability at Berkeley, Human-Centered Design at Berkeley	Presentation, final prototype, evaluation	Due in Lab: prototype + short presentation. Due at End of Lab: course evaluation, self-evaluation, plans for Cal Day poster.