

D-Lab Project Framing Seminar: Sustainable Innovations in Food Systems

ABT 298/198 Fall Quarter 2017

Units: 2 units

Meetings: 2 hours/week: Tuesdays from 4:10 pm to 6 pm.

CRN #: please contact Kurt Kornbluth (kkorn@ucdavis.edu)

Location: TBA

Grading: Pass/No Pass

Prerequisites 298: Graduate student, all disciplines welcome

Prerequisites 198: Upper division only, with permission from instructor

Instructor: Kurt Kornbluth (BAE)

Teaching Assistants: Leanne Bolano, Sean Maxson

Office: Tilia 1605, West Village.

Email: kkornbluth@ucdavis.edu, lbolano@ucdavis.edu, smaxson@ucdavis.edu

Summary: In partnership with the UC Davis D-Lab and Innovation Institute for Food and Health (IIFH), this two-unit course is aimed at graduate and undergraduate students who want to learn more about creating sustainable food systems for the developed and developing world. This 2-hour seminar leads the student through a process of framing projects concerned with sustainable food systems including but not limited to farming practices, post-harvest, and processing. Using the D-Lab 4-lens framework (social environmental, economic, and technical), student teams we will work with real world clients to create design briefs to address their needs. Selected briefs from this course will be used as projects in D-Lab 1 during Winter quarter.

Syllabus:

1. **September 21st: Introductory Class:**
 - a. Course overview
 - b. Tell us more about you.
 - c. Team building activity: Speed dating
 - d. Learn more about the projects

2. **September 28th: Design for Sustainability:**
 - a. Speaker: Bob Adams
 - b. Activity: Design criteria
 - c. Watch video before class: <https://www.ideo.com/people/bob-adams>

3. **October 5th: 4 Lenses of Sustainability Methodology and Defining the problem:**
 - a. Speaker: Kurt Kornbluth
 - b. Activity: Problem Tree and 4 lenses analysis
 - c. In-class deliverable: Problem Tree and Client definition

4. **October 12th: Social and Financial Lens:**
 - a. Speaker: TBA
 - b. Activity: Feasibility Notebook Step 1
 - c. In-class deliverable: Goals statement, objective function, criteria definition

5. **October 19th: Environmental Lens:**
 - a. Speakers: TBA
 - b. Activity: Feasibility Notebook Step 2
 - c. In-class deliverable: Articulate considerations and identify Design criteria

6. **October 26th: Mid-quarter Presentations:**
 - a. 2-minute presentations using the NABC approach
 - b. Mentoring session: Identifying knowledge gaps
 - c. Feedback from experts

7. **November 2nd: Technology Lens**
 - a. Speaker: TBD
 - b. Activity: Feasibility Notebook Step 3
 - c. In-class deliverable: Research directions, literature review

8. **November 9th: Social and Financial Lenses:**
 - a. Speaker: TBD
 - b. Activity: Feasibility Notebook Step 4
 - c. In-class deliverable: Determine Criteria and weights.

9. **November 16th:**
 - a. Speaker: TBD
 - b. Activity: Feasibility Notebook Step 5
 - c. In-class deliverable: Tools and methodologies to address the design challenge

10. **November 23rd:**
 - a. Speaker: TBD
 - b. Activity: Feasibility Notebook Step 6
 - c. In-class deliverable: Objective functions and evaluation methods

11. **November 30th: Final Presentations**
 - a. Deadline Project Report
 - b. 5-minute presentations
 - c. Feedback from experts

Assignments:

In-class assignments - Deliverables: Students will be given in-class activities to help them form their projects. Their participation in these activities will be a basis for their participation grade.

Presentations: Each group of students will give a 10-minute presentation to the class on their project at the end of the course.

Grading:

Pass/No Pass