

Semester Schedule

Task Map

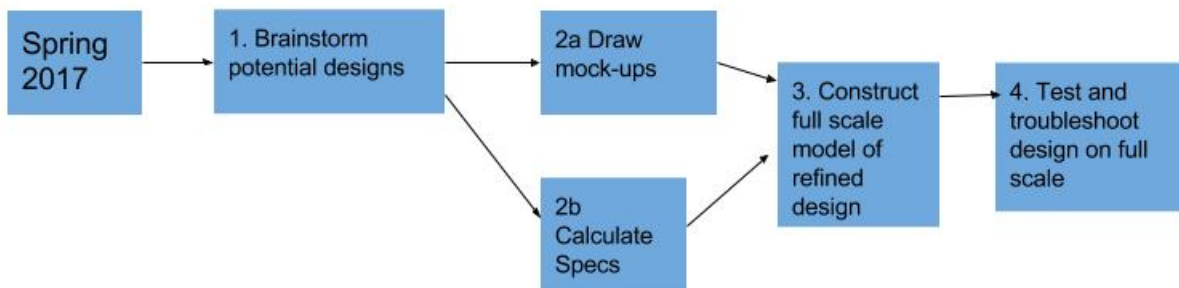


Figure 8: Task Map

Task List

1. Brainstorm designs (2/16) - All
 - (a) Draft various potential mechanisms for a movable weir
 - (b) Consider fabrication techniques appropriate to rural areas (including rough diagrams)
 - (c) Consider ease of use for the plant operator in design
 - (d) Consider sustainability and cost- how long will the design function, what happens if it breaks, how much material do we need,etc. . .
2. Draw mock-ups (2/23) - Matt
 - (a) Draw preliminary diagrams to scale in AutoCad or similar software
 - (b) Use model to finalize geometry and dimensions of pieces before purchasing
 - (c) Construct scale physical models(possibly cardboard)
 - (d) The primary aim of this exercise is to check the elements common to all of our designs, such as the partial concrete- partial PVC weir
3. Calculate specs (2/23) - Alex

- (a) Determine various specifications necessary for constructing/operating the full size model, such as:
 - i. Force required to move the weir
 - ii. Force acting on PVC section
 - iii. Fraction of weir built with concrete
 - iv. Size of second slot to limit head loss to 1mm, etc.
 - (b) Use these specs and considerations from part one to choose one design to construct
 - (c) Send chosen design to Honduras for feedback
4. Construct full scale model of refined design (3/28)- All
- (a) After troubleshooting problems observed in the mock-up and from calculation of specifications, we will begin constructing the full-size model for testing of the mechanisms and fabrication process.
 - (b) Determine ease of construction
 - (c) See if all the material was used or needed more
5. Test and troubleshoot (4/13) - All
- (a) See if the system is easy to operate
 - (b) Note places for leaks or spots of possible weakness
 - (c) Adjust design if needed

Team Coordinator: Alex- Facilitate meetings and keep the team on schedule. Be the liaison between faculty advisors and the Agua Clara team.

Materials Coordinator: Tanvi- In charge of ordering materials and keeping track of previously ordered materials.

Report Proofreader: Tanvi