



1. Reviewing literature (Roswell-- done)
 - Going over past MathCad files for HRS team
 - Studying relevant 4540 slides on flocculation
 - Reading HRS past papers
2. Calculating relevant parameters (Tanvi-- done)
 - Identifying constraints from various teams
 - Calculating tubing size and length, as well as G and theta
 - Formulating general flocculator design for all particle removal teams
3. Fabricate apparatus (All-- September 28)
 - a. Flocculator, 0.17 in ID
 - Obtaining tubing (ordered)
 - Coiling around cardboard tube of required radius
 - Connecting to pumps and sed tank
 - b. Pump calibration (flow rate to RPM)
 - Finding exact relationship between RPM and flow rate
 - Verifying that flow rate is correct repeatedly
 - c. Sed tank, 1 in ID
 - Obtaining design from HRS team
 - Fabricating in machine shop
4. Confirm that HRS, Contact Chamber, Humic Acid teams are using same apparatus (Luna-- September 28)
5. Symposium (Roswell-- October 16)
 - Creating slideshow
 - Practicing slideshow
6. Vary G and collect turbidity data (Tanvi-- November 16)

- a. G is 100 to 500 Hz
 - Change flow rate to vary G
 - Use ProCoda for running experiments
7. Vary coagulant dosage (Luna-- If time allows)
 - Apply different quantities of coagulant to study effect on removal efficiency
8. Find optimal G and coagulant dosage (Roswell-- December 1)
 - Identify G and coagulant dose with max removal efficiency
9. Formulate failure rate (Tanvi-- December 1)
 - Graph relationship between G and removal efficiency
10. Work on research report and presentation (All- Final due December 1)
 - Compile research
 - Spell and Grammar check
 - Compile and practice presentation

Team coordinator: Tanvi Naidu-- Responsible for facilitating meetings and communicating with people outside the subteam.

Materials coordinator: Luna Oiwa-- Taking inventory of materials used in experimental apparatus. In charge of ordering materials.

Research/data coordinator: Roswell Lo-- Organizing and storing research data, and naming files.