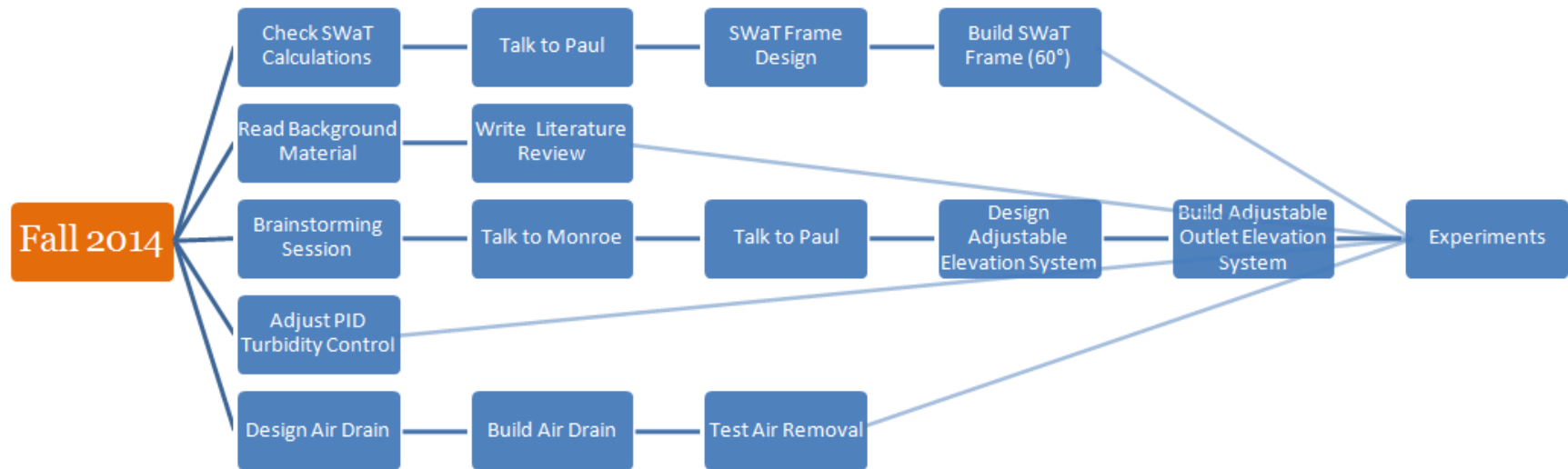


# Task List

## Task Map



## Task Details

1. Check SWaT Calculations / 9/15 Mingze. Compare Mathcad calculation with lab equation.
  - a. Talk to Paul / 9/15 - 9/19 All Members. Get fabrication ideas.
    - i. SWaT Frame Design / 9/22 - 9/26 - William. Design frame structure.
      1. Build SWaT Frame (60°) / 9/29 - 10/10 William. Construct frame.
2. Read Background Material / 9/15 - 9/19 Mingze & William. Read slides prescribed in challenges.
  - . Write Literature Review / 9/19 - 9/26 Mingze & William. Add first section of report.
3. Brainstorming Session / 9/15 - 9/19 All Members. Think about how to more elegantly change height of exit drain and come up with a tentative design scheme.
  - . Talk to Monroe / 9/15 - 9/19 All Members. Get Monroe's thoughts on design idea.
  - . Talk to Paul / 9/15 - 9/19 All Members. Check design idea against Paul's good sense.

1. Design Adjustable Elevation System / 9/22 - 9/26 Mingze. Compile final design.
  - a. Build Adjustable Outlet Elevation System / 9/29 - 10/10 Mingze. Fabricate agreed upon design for outlet drain elevation device.
- i. Experiments / November All Members. The matrix we plan to run involves varying influent turbidity (5, 15, 50, 150, 500 NTU), capture velocity (0.06, 0.12, 0.25, 0.5, 1.0 mm/s), and coagulant dose. The challenges recommend we consult with the laminar team about good coagulant doses.
  4. Adjust PID Turbidity Control / 10/15 Mingze & William. Test sensitivity of turbidity control to changes in P and I values. Ensure that the influent turbidity remains fairly constant.
  5. Design Air Drain / 10/13 - 10/17 Felice. Come up with plan to drain air before SWaT.
- . Build Air Drain / 10/20 - 10/24 Felice.
- . Test Air Removal / 10/27 - 10/31 Felice. Run system and make sure that no air bubbles enter SWaT.

### Team Roles

- Team Coordinator - William. Organizes whole team meetings including those with advisor.
- Materials Coordinator - Felice. Coordinates with Casey on orders of new parts, equipment, and materials.
- Data Coordinator - Mingze. Ensures data are collected properly and analyzes.