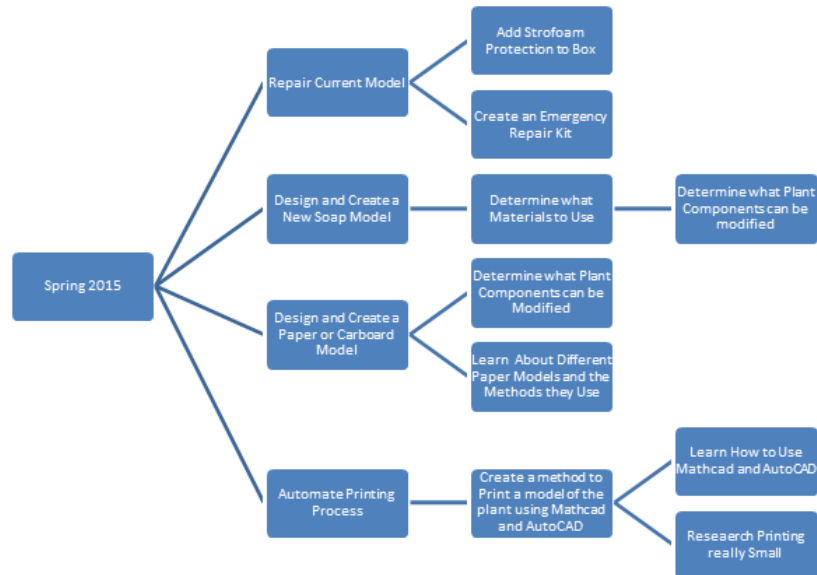


# Detailed Task List: Small Scale Plant Model Team

*Ed Cheng, Jenny (Ruoyu) Yin*

## Task List

### Task Map



## Task Details

1. *Literature Review/February 4<sup>th</sup> -- Ed, Jenny*
  - a. Read and understand the team's final report from past semester
  - b. Right research reviews
2. *Repair Current Model/March 6<sup>th</sup> -- Ed, Jenny*
  - a. Correct current Rhinoceros replacement pipes file that so it can be printed -- Ed
  - b. Print the replacements
  - c. Attach the new pieces to the current Plant
  - d. Add styrofoam protection to the current plant case
  - e. Create an Emergency Repair Kit for teams to take when traveling with the model
3. *Complete Design Trainings/February 23<sup>rd</sup> -- Jenny*
  - a. Learn how to use AutoCAD and MathCAD
4. *Design and Create a New Soap Model/April 4<sup>th</sup> -- Ed, Jenny*
  - a. Determine what materials to use.
    - i. 3D printing
    - ii. Soap
    - iii. Brown Powder

- iv. Plexiglass
    - v. Plastic
  - b. Determine what plant components to modify
- 5. *Design and Create a Paper or Cardboard Model/April 25<sup>th</sup> -- Ed, Jenny*
  - a. Design a template that can be downloaded then printed
  - b. Determine which plant components can be modified
  - c. Learn about different paper models and the techniques they use to model their technology
- 6. *Automate Printing Process/May6<sup>th</sup> -- Ed, Jenny*
  - a. Do research on of 3D printing with AutoCAD
  - b. Learn how to convert a solid into a mesh in AutoCAD
  - c. Determine which functions and commands to use when converting solids to meshes. Figure out if new plugins are needed