1. Pre-assessment. (TM25) [work on loose paper; submit work at the beginning of the next class period].

Imagine that you have been asked to perform a design project for a client. Your client wants you to design a small greenhouse-like device that will keep tomato plants warm during cold spring nights, while also keeping the plants watered and fertilized. Your design should ideally be solar powered, and use modern controls, sensors, software and mechanisms to activate the watering system and to enclose the plants when air temperatures drop below 50 deg F. Your device should be low cost. However, the main objective is to minimize the water usage because the passion of your client is sustainability of the environment. Imagine that you will be working by yourself on this design project. Answer the following two questions:

(a) As you work on the project, what are the three most important actions that you will take to insure that your client is delighted with your results? Why?

(b) As your work on the project, what are the five most important actions that you will take to insure successful technical outcomes? Why?

2. (TM15) Review the TIDEE flash animation on design at http://www.tidee.cea.wsu.edu/media/design-process.swf. In your logbook, write down the design process that is recommended.

3. (TM60) Review you textbook, mostly chapters 1 & 2, and summarize the Product Development Process that is recommended by Ulrich & Eppinger (hint: see Exhibit 1-4 and Exhibit 2-2 for a summary of the process). Place your work in your logbook.