

# 330:135g Design For Manufacture

## A Desk Set Design Project

**Groups:** Each Group consists of 3 to 4 members.

**Problem Statement:** Each Group was commissioned to design a desk organizer. This organizer is to hold the necessities such as paper (8.5" x11"), pens/pencils, paper clips but also be expandable and customizable. At Some possible add-ons include, I-pod holder, cell phone holder, post it note dispenser. Those are some examples of add-on options ... be creative and functional on what would typically be needed on a desk organizer. At a minimum the desk organizer needs to have several add-on items available for sale.

**Design Statement:** The challenge is to design an organizer that will be purchased, and be flexible enough that the changing technology available to the consumer will not render it obsolete. Careful consideration will be given to elements of design to assure a quality product at a competitive cost.

### **Constraints**

1. Design a solution to the problem of developing a customizable desk set system that uses a common fastening system for the add-on items.
2. There needs to be a uniform attachment method designed for the base units that is used by each member of the team.
3. Each team member will design one base unit and 2 add on components.
4. Each team member's base unit will use the 2 customized add-on items personally designed plus 1-3 additional add-on items from multiple team members. A minimum of 3 add-on items must be incorporated into each base unit design.

## **General Project Description and requirements:**

This is a team based project that will be done both in and out of class.

Each member will design a base desk set. A unique fastening system must be developed, approved, and used by all team members.

Each member must:

- sketch out a fastening design to be shared with the team,
- a design matrix should be used to evaluate each fastening design,
- Once a single design is approved by the group each member will develop a base set that employs the fastening system and design 2 additional add on that uses the fastening system.

The team will create a short 5 minute Power point presentation that outlines the steps taken in the design process of the fastening system / desk set and sells their desk set design to the rest of the class. (Online students will submit their power point). If in the classroom, the design will need to be completed and documented.

If online you will be broken up into teams and your email addresses will be shared with the other teammates. Use IM and Online chat tools to accomplish the team interaction

Team Deliverables:

- PowerPoint presentation showing the mission, attachment system, and the team members desk set solutions and how the design process was followed.
- Assembly drawing (assembled and exploded) of desk set using yours and the other team members add on items
- Detail drawing of your add on items. Individual Part files of desk set and add on items (online classes only)