

**AD420 • ME444 • MKTG594 Motorola Project**  
Fall Semester, 2006**Stephen Melamed**, Industrial Design, College of Architecture & Arts  
**Michael J. Scott**, Engineering, College of Engineering  
**Albert Page**, Marketing, College of Business Administration**Assignment**      **No. 2.d** Industrial Design - Skills Assessment 2**Project Description**      **Push Pin**

Design a new push pin. The push pin should be made from a combination of a metal pin with a body that is either molded (plastic/elastomer) or machined (wood/metal). Analyze the 'use scenario' the ways in which the product is used, and stored when not in use. Consider the size and proportions of the object as it relates to the ergonomics for the user. Take into account the surface texture, as well as color and material finish (aesthetics).

Create preliminary conceptual designs (thumbnail free-hand sketches), select the one concept/design option that is most appropriate to fulfill the requirements of this assignment. You may show and discuss your initial concepts with any of your classmates. Once the design option to be pursued is selected, refine and/or revise that concept according to feedback and input from your peers; finalize the dimensions/geometry and aesthetics.

Create a full scale layout, multi-view design control drawing (DCD) for the finalized design. The design control drawing must have enough information to be suitable so that someone else could understand the concept and fabricate an accurate model. Prepare a single rendering of the finalized concept (may be hand drawn or computer illustration). Lastly, fabricate one full scale model of the design in a suitable material to demonstrate the concept.

All presentation materials for this assignment, with the exception of the model, are to be submitted in an electronic file format. There are two available options for submission:

1. All thumbnail/concept sketches in one file, design control drawing as one file, and the rendering as one file. Preferable file format is .JPG (.PICT & .TIFF also acceptable). Place all three files into one folder, zip it up, and entitle the file per naming conventions: **IPD Assignment No.-Last Name-YYMMDD.zip**

2. Create a PowerPoint file. Import all thumbnail/concept sketches onto one page/slide, design control drawing on second page/slide, and the rendering on the third page/slide. Entitle the file, eg.: **IPD2d-Melamed-050906.ppt**

**Project Requirements**

1. Thumbnail/concept sketches
2. Overall dimension design control drawing
3. Color rendering
4. Full scale model

**Due Date**

Tuesday, September 5, 2006 (must be sent no later than 11:00am)  
Upload to IPD .ftp site as explained in the File Naming & File Transfer hand out.