**ME 301 INITIALS ASSIGNMENT**  
Draw your initials in the top plane using minimum dimensions and maximum relations. This should be a ‘powerful’ sketch that can be easily rescaled. Properly use the origin and define your sketch without using "fix". Next, make your initials "cool and 3D" using feature tools like extrude, shell, fillet, chamfer, etc.  Add personal touches like shading, texture, color, etc.

Turn in the following **pre-CAD plan**:

design layout sketch/notes (2-D hand drawing with construction lines, basic shapes, origin selection, basic dimensions, planned use of relations to create fully defined sketches, simplifying assumptions, and general plan of attack)

Turn in the following **process documentation**:

design journal (including sketches with relations and dimensions, discussion of your use of sketch tools, development of your extruded final product, annotated design tree, completed part file properties summary and custom tabs, and at least three lessons learned through the assignment). Capture and comment on your work at intermediate stages of development. Note: completed part properties should include Author in the *Summary* tab, and Quantity, PartNo, Material, and Description in the *Custom* tab.

Turn in the following **products**:  
  
fully-defined sketch of your initials before extrusion.

solid model showing details of your finished product in the display window. Use color printing for a more impactful presentation.   
  
engineering drawing of your finished product (including shaded isometric view, non-redundant orthographic views, part properties, necessary and non-redundant dimensional annotations). Use the ME drawing template (3rd angle orientation and data exchanged between the part and drawing using part property information).

**CHECKSHEET FOR INITIALS ASSIGNMENT (HW6)**

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NAME:

**Part A. Pre-CAD Plan**

\_\_\_ Identification/description of basic shapes

\_\_\_ Consideration of dimensions (attempting to minimize these)

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\_\_\_ Consideration of supporting relations

\_\_\_ Selection of sketch plane and positioning of origin

\_\_\_ Initial thoughts about reference geometry

\_\_\_ Ordered list of feature creation steps and assumptions (if any)

**Part B. Process Documentation**

\_\_\_ Rationale for usage of sketch tools

/8

\_\_\_ Clear visualization of relations

\_\_\_ Thoughtful use of reference geometry

\_\_\_ Details on implementation of SW features

\_\_\_ Annotated design tree and completed part properties custom tab

\_\_\_ Compelling lessons learned

**Part C. Products** (based on finished model and drawing)

\_\_\_ Fully-defined sketches

/8

\_\_\_ Creativity/complexity of solid model

\_\_\_ Enhancements to appearance of solid model

\_\_\_ Use of ME drawing template

\_\_\_ Multiple, non-redundant views in 3rd Angle orientation

\_\_\_ Thoughtful dimensioning scheme