CAD Assignment 3: Inventor Parts

Resources: Getting Started with Autodesk Inventor

Homework:

- <u>Assignment 1</u>: From drawing below and the <u>Parts Dimensions</u> create a model of the (1) Collar, (2) Bearing, and (3) Base-Plate. Insert all models on the MAE3 "Inch Template.idw" C-size border for printing. (4) Also, using the Content Center, insert and/or drag and drop two 3/8-24 UNF-1(length); choose any bolt category in library. Your name, Section number, problem number and date should appear on the border. Refer to Sample Drawing Layout 1 below.
- 2) <u>Assignment 2</u>: Using Autodesk Inventor, create a 3D parametric model of each part of your clock design.
 - Use the <u>AutoCAD files of standard acrylic parts</u> for bearings and pulleys.
 - See Inserting an AutoCAD File Into Inventor to import dxf files.
 - Use your own pendulum and escapement wheel drawings, and create the drawings for the metal shafts and bearings from scratch.
 - Insert all models on the MAE3 "Inch Template.idw" C-size border for printing. Your name, Section number, problem number and date should appear on the border. Refer to Sample Drawing Layout 2 below.
- 3) Submit a printed copy of **Assignment 1 and Assignment 2** for grading. When printing, always chose Best Fit.
- 4) Save all files for another assignment to be given at a later date.



Sample Drawing Layout 1



Sample Drawing Layout 2