ME 421

Advanced CAD

- Assemble your **Howell Engine Parts**
 - o It is only required to assemble one rocker arm set.
 - o You will have to use the rigid to flexible feature to allow subassemblies to move.
 - Take screen captures of several steps along the way
- Begin modeling parts for your sub-assembly mini-project
 - Create Custom LEGO parts in LEGODrawingPackagePart1.pdf
- Create three cutter/holder assemblies
 - Use Cutter and holder design tables to make base cutter and holder part files
 - o Make three credible cutter/holder assemblies from design tables & base parts
 - Save isometrics of your three cutter/holder assemblies

Deliverables:

Save a single word document in your personal folder under 'Submitted Problem Sets' with the following:

- Create Word document for grading including:
 - Howell Engine assembly construction (pictures and documentation)
 - Screen captures of LEGO parts
 - Pictures of your three cutter and holder assemblies
 - Summary of things you learned while completing this hw assignment
- In the Word document answer the following questions:
 - In assembling your Howell Engine Parts, how do you change the orientation of an offset mate?
 - o What part/assembly conditions need to exist to motivate design table creation?
 - What assumptions were necessary to make your custom LEGO parts and how could these have been simplified?