Three-Dimensional Modeling, IET-265 Name: _____
Spring 2012, Week 9, Monday,
GD&T Drawings Day and date: _____
40 points total

GD&T Housing Drawing (20pts)

- Modified Housing Drawing from this week, B sized template, printed full sized to scale and gray scale, typical precision (2pts). Add the following GD&T items:
- Datum A on the axis that defines the center of the Base feature (1pt)
- Datum B on the back face (1pt)
- Datum C on the face of the front of the housing (1pt)
- Put a Bilateral Tolerance on the dimension defining the top handle distance from the center axis of no more than 0.010 and no less than 0.020 inches (2pts)
- Add a Feature Control Frame on this surface stating flatness of 0.005 inches (2pts)
- Put a Limit tolerance on the full length dimension of no less than the basic dimension but can be 0.050 inches longer (2pts)
- Add a Feature Control Frame with this dimension stating perpendicularity of 0.010 inches at the MMC referencing Datum A (2pts)
- Put a Symmetric tolerance on the diameter dimension on your base feature with a deviation of 0.010 inches (2pts)
- Add a Feature Control Frame on this dimension stating cylindricity of 0.005 inches (2pts)
- Add a Feature Control Frame on an edge at the Battery Loft Plane stating parallelism of 0.020 inches at the MMC referencing Datums B and C (3pts)

Assembly Model Part Drawing (20 pts)

- For your Assembly Model part use the drawing created in Week 7 or a new one from your Final Project and add the following GD&T items of your choice (the items below must make sense)
- B sized template, printed full sized to scale and gray scale (2pts)
- At least 3 dimensions with at least 3 different types of tolerances (6pts)
- At least 3 datums of your choice (3pts)
- At least 3 feature control frames of your choice (6pts), the feature control frame has to be completely filled out with material conditions referring to the appropriate datum
- Cannot all be the same as the *Housing Drawing*, choose at least 2 unique ones of your choice (3pts)