

SolidWorks, IET-265  
Spring 2011, Week 4,  
*Assembly Evaluation*, 30 Minutes

Name: \_\_\_\_\_

Day and date: \_\_\_\_\_

*Assembly Evaluation, Part* 10 points:

- Load and modify this part per the drawing provided (2 points), fully define sketches (1 point) with Top and Right Plane symmetry (1 point)
- ANSI dimensioning standard, rename your features (1 point)
- Material is Nylon 101, color it orange (1 point)
- Slot cut hole, through all, as shown (1 point)
- Insert Hole Wizard hole as shown (1 point), array this hole as shown using a method of your choice (sketch or feature, Mirror or Linear Pattern) (1 point)
- Errors (0.5 points each)
- Determine the mass of modified part, put in your email (1 point)

*Assembly Evaluation, Assembly* 10 points:

- ANSI dimensioning standard, units in inches to 3 decimals after origin (1 point)
- Fix the *Mounting Plate* base to the origin (2 points)
- Insert the 3 different configurations of the *Attachment Pins* per the location and instructions on the drawing (2 points). Mate the pins so that they are always midway between the supports or the base (1 point)
- Insert the supports per the drawing so that they rotate about the pins (1 point)
- Insert the modified part, mating the top curved surface or top axis of the slot cut to the axis or curved surface of the pin (1 point)
- Provide a parallel mate from the bottom of the modified part to the top of the *Mounting Plate* (1 point)
- Errors (0.5 points each)
- Describe the degrees of freedom on the basket, put in your email (1 point)

*Design Assignment, Assembly Models* 30 points total:

- Material (1 point), fully defined (2 points), rename your features (1 point), model complexity (minimum number of features or sketch elements) (2 points) for each part and base model
- Hole Wizard on the base and a part (2 points)
- Linear or Circular Pattern (1 point)
- Feature with a slot cut (1 point)
- Base Fixed to the origin (3 points)
- Flexibility (1 point)
- Appropriate part Mates (3 points)
- Errors (0.5 points each)
- Extra credit for extra effort (0.5 points each)