

**ME 777/877 – Computer-Aided Engineering**  
**Project #2 – Crane Grading Sheet**

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- A. SolidWorks kinematics (Steps 1 and 2) – (20%)
  - a) Overall model geometry (5%)
  - b) SolidWorks kinematic analysis (15%)
  
- B. Hand calculations (Steps 3 and 4) – (30%)
  - a) Pins B and D analysis (shear and pullout) (15%)
  - b) Motion analysis of Pin C (with A aligned on OAB if necessary) (15%)
  
- C. “Optimize” the three members of the structure (Step 5) – (30%)
  - a) Identify and display orientation of highest stress (10%)
  - b) Redesign and rationale (20%)
  
- D. Results from testing (Step 6) – (10%)
  - a) Goal of minimized mass without failure
  - b) Grade based on weight compared to other teams
  
- E. Quality of Report and Writing (Step 7) – (10%)
  - a) Readability and conciseness
  - b) Grammar and spelling
  - c) Report format (Table of Contents, page #s, list of figures, figures referenced in text, etc.)

Total \_\_\_\_\_

Comments: