CLARKSON UNIVERSITY
ES220 Statics
Design Problem Grading Rubric

Design Points: ____

Review Points Kept (0 or +15 pts): ____

Review Points Earned (-5, 0, +5 pts): ____

Review Points Captured (0 or +10 pts): ____

1. Problem Statement (5 points)
- ☐ States assignment objectives
- ☐ Describes item(s) to be designed

Total: ____

2. Design Specifications (10 points)
- ☐ Includes specifications from assignments handout
- ☐ Provides additional specifications determined by the team for the selected design
- ☐ Explains/justifies any assumptions

3. Design Drawings (20 points)
- ☐ Provides drawings for all design elements: properly labeled, titled, and dimensioned
- ☐ Neatly drawn with a straight edge (including dimension lines)
- ☐ Large enough to be easily read (approximately ½ page each for primary drawings)
- ☐ Drawn to scale; provide scale
- ☐ No missing or erroneous dimensions, angles or units

4. Calculations and Analyses (35 points)
- ☐ Formulae are appropriate for the required analyses
- ☐ Provides symbolic equation, then substitutes numerical values
- ☐ Uses proper units; conversion factors included if needed
- ☐ Provides additional sketches (e.g. FBD's) needed to perform analyses (must be drawn with a straight edge)
- ☐ No substitution or calculation errors
- ☐ Uses final design parameters in calculations to determine actual values
- ☐ Explains/justifies any assumptions

5. Discussion, Summary, and Conclusions (15 points)
- ☐ Summarizes results from analyses
- ☐ Discusses any questions/issues as required by the assignment handout
- ☐ Lists and/or discusses some useful/interesting things the team learned

6. General (15 points)
- ☐ Design document is neat, professional, well organized, and photocopy-ready (writing and figures must be sufficiently dark, no color, 1" margins all around, and single sided)
- ☐ Text sections are insightful, yet concise

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