CLARKSON UNIVERSITY
ES220 Statics
Design Problem Grading Rubric

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

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

Design Team #____
Design Points: ____
Review Points Kept (0 or +15 pts): ____
Review Points Earned (-5, 0, +5 pts): ____
Review Points Captured (0 or +10 pts): ____

Total: ____