

ME 360L Project – Spring 2012

Design a high performance pogo stick that can be used by people of varying weights and heights.

1. Research modern high performance pogo sticks on the web.
2. Come up with a design idea for your pogo stick.
3. Develop performance criteria (how high can one jump – how high of an object can someone jump off ...)
4. Develop appropriate safety factors to be used in the design.
5. Sketch a preliminary design.
6. Decide what materials you will use in your design.
7. Develop testing scenarios for the analysis you intend to perform in your design process.
8. Analyze loads using hand calculations, Adams and/or Working Model using each of these testing scenarios.
9. Develop analysis procedures for each part. What are the loads and constraints you will use in testing each of the major parts in your design?



Turn in a brief summary of your results. Much of this summary information can be presented in tables and in sketches. Indicate in this summary how you computed the loads. Show pictures and diagrams depicting how you will apply the loads and constraints to the parts for testing. The summary is due March 19, 2012.