**Course Learning Outcomes as they apply to the balloon project**

1. Apply the fundamentals required for 2D and 3D static system analysis
   * 3D equilibrium calculations to design a system without exceeding a maximum tension
2. Examine the ways in which the physics you analyze on paper is manifested in the physical world
   * During the hands on day they see how anchored balloons behave with subjected to wind loading. This shows how the tensions change with balloon height and wind direction.
3. Apply engineering skills to analyze the real world structures that surround you
   * 3D particle equilibrium on a real world turbine application
4. Situate technical analysis within a societal context
   * Analyzing the pros and cons of installing infrastructure as well as the effects of what they are powering with the community
5. Examine peer work and provide critical feedback
   * Critique peer work through the assigned QC process