

## Egg Drop Rules & Rubric

### Location:

June 5<sup>th</sup> 4pm Kelley Engineering Center

### Guidelines:

- Due to safety concerns any design that does not pass a judge's approval will not be able to participate. If you are not sure if your design is safe please check in advance. In general, avoid large pieces of metal, glass, anything that may shatter into dangerous pieces.
- No electric motors. No fire. No compressed gasses. No chemical reactions. Stored mechanical energy is okay. E.g. springs or rubber bands.
- Some aspects of score are based on the general designs submitted to the competition, so that uniqueness and cleverness are encouraged. For example, if everyone uses a parachute, then a design should receive few points in the creativity and design sections, but may receive full points in the success section.
- When designing your egg drop, keep the audience in mind. Our judges will likely be a variety of engineers and business professionals, and as such will likely have different ideas of what a creative and well-made design will be.
- As more clarifications are made new revisions of the rules will be made.

**Rubric Scoring Weights:**

$$\text{Final Score} = \text{Success}^{1.5} + \text{Aesthetics} + \text{Creativity} + \text{3D Printedness}$$

	Meh 1	Neat 2	Sweet 3	Awesomeness 4
Success	Egg splattered on ground	Egg mostly crushed	Small cracks in shell, no external fluids	Perfectly intact egg.
Creativity	Clearly little thought and planning went into the design. ("Parachute egg")	Somewhat unique design, could have been better.	Shows some thought and engineering intuition went into design, effectively executed.	Unique and clever design that still meets the requirements. Clearly and eloquently engineered/designed.
Aesthetics	Abomination	Some artistry put into the overall design	Relatively aesthetic design, clearly took some time and effort.	One of a kind apparatus that is both aesthetically pleasing and well made. Clearly much time and effort was involved.
3D Printedness	No 3D printed parts.	Between 25%-50% 3D printed material.	50%-90% 3D printed materials	90%+ 3D printed design. Measured by eye-balled volume.

## Tie breakers:

1. 3D printedness score
2. Success score
3. Creativity score
4. Judges' Decision