## Grades

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Homework \rightarrow 15%

Labs \rightarrow 15%

Paper \rightarrow 10%

Quiz \rightarrow 24% One quiz every week.

Midterm \rightarrow 15%

Final \rightarrow 21%
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All labs are mandatory, failure to complete a lab will result in failing the course.

Calculus-based introduction to classical mechanics, including: kinematics, Newton's laws, momentum, work, energy, gravity, rotational motion, oscillations, and fluids. The laboratory part is integrated into the course.

## Observations

Dropping things results in the falling. Several different objects of different masses, densities, and shapes were dropped. Do all of them take the same time to fall the same distance?

Laws  $\Rightarrow$  Observation  $\Rightarrow$  Hypothesis: Do they take the same time?  $\stackrel{\checkmark}{\Rightarrow}$  Law

We can **Observe** 

- 1. Time
- 2. Mass
- 3. Length