

## **Unit 8: Fluid Mechanics**

### **LAB: Buoyancy**

Objectives:

- Accurately determine the mass of an object that is floating in water.<sup>1</sup>

Hypothesis: State your hypothesis.

Background: On what principles did you base your hypothesis and your procedure?

Equipment:

- Archimedes balance apparatus, water, triple beam balance

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<sup>1</sup> Helpful information: 1 mL of water is 1 cm<sup>3</sup> (1 cubic centimeter), and the density of water is 1000 kg/m<sup>3</sup>.

Procedure:

Data and Calculations: (Include below an error analysis that will help you conclude about your hypothesis.)

Conclusion:

- What can you conclude? Justify your conclusion(s) with evidence.
- Were there errors? If so, account for them.