PHYS 221
Archimedes' Principle
Prelab

1. What is Archimedes' principle? (2 pts.)

2. Explain the relationship $F_B = \rho V g$. (2 pts.)

3. Briefly explain the three methods to be used in the lab to determine buoyant forces (i.e., the force measurement method and the displaced volume method and the buoyant force equation method). (3 pts.)

4. Draw a force diagram for an object of mass M, for the following two situations:
   (a) a floating object; (b) a submerged object suspended by a string. Draw to scale. (3 pts.)