PHYS221
Prelab- Experiment # 8
Conservation of Energy & Momentum

1. What is the objective of this experiment? 1 pt.

2. Define Momentum. 1 pt.

3. Define mechanical energy. Is mechanical energy conserved in this experiment? 2 pts.

4. Explain what Eq. 3 means and define the terms. 3 pts.

5. You shoot a ball of mass 50g into a pendulum arm of mass 200g, whose center of mass rises 15 cm. Calculate the initial velocity of ball. Hint. Find the velocity of the ball-arm system (using Eq. 3) and then use Eq. 2.   Show all work. 3 pts.