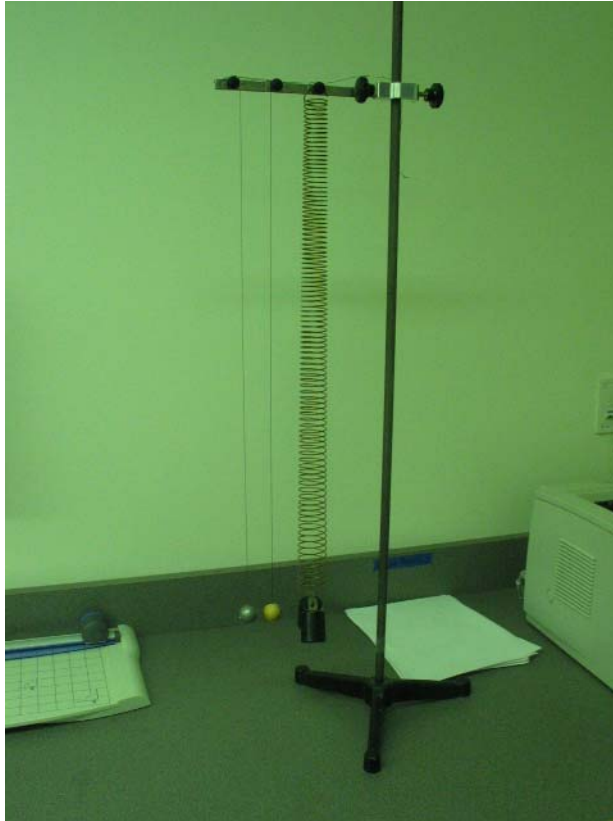


Simple Oscillations: Pendula and Springs



Purpose: To demonstrate simple oscillations of pendula and masses on springs.

Location: Room 144, between sink and printer (There is also a large pendulum in the rear of room 148.)

This setup can be used to demonstrate the simple harmonic motion of a mass hanging on a string. Two different mass balls are provided to permit demonstration that the period of oscillation does not depend on the mass. The length of string may be varied to show that it does, however, depend on the length. Two masses are also provided for the spring, to show that the period does depend on the mass in this case. In both cases, the wall clock can be used to estimate the period by counting out and measuring the time for, say, twenty full oscillations and calculating the average time per oscillation.