Lab 8 Photoelectric Effect Tasks

Reports due Saturday, November 21st and December 5th at 5pm
Read Ch. 2, sections 2.6-10 in your Lyons text (pp 56-70)

Using filters to isolate a spectral line from a mercury lamp or using the light from a red laser, shine the light on the anode of a vacuum tube. For each frequency of light, find the stopping voltage V_s that prevents any current flow from anode to cathode. Then plot V_s vs. frequency and use this plot to find a value for Planck's constant divided by the electron charge.

Wavelengths in nm	Violet 405	Blue 435	Green 546	Yellow 578	Red 633