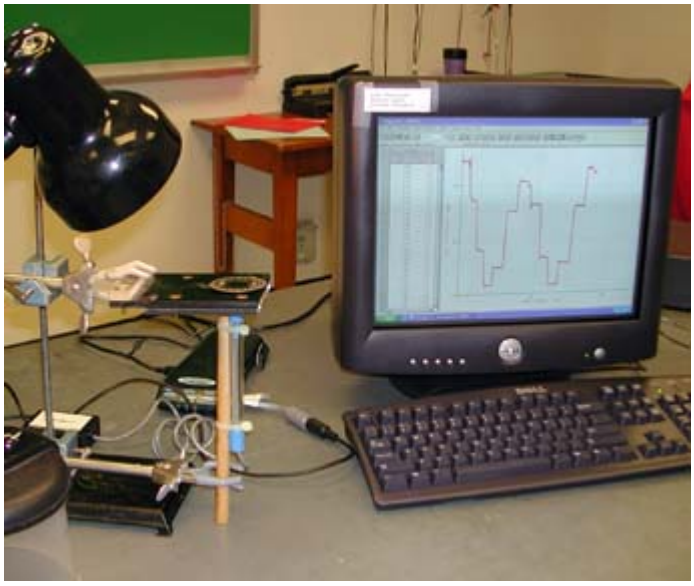
Lab #7B – Waves B

Lab#7A is set up in Roc 402 while Lab #7B is set up in Roc 403. You will switch rooms 90 minutes into the period.

For Lab #7, there is no report and you do not have to hand in your lab notebook copy. Simply upload your worksheet and graphs to Canvas ***before you leave the lab*** and you are finished with physics lab for the semester. The worksheet for Labs 7A & 7B will be graded as a single entity, worth 30 points total.

Section C: Polarization by Transmission

The setup for section C is shown below. (*Note the data on the monitor; your data should resemble this.*)



Section D.2 Polarization by Reflection - qualitative measurements

The following three photographs should give you some idea what to expect when you do this section, standing by the door holding a sheet of Polaroid.

First, when you stand in the proper location WITHOUT a Polaroid, you should be able to see through the glass, at an angle, but you should also see reflections of objects in the hallway, particularly posters or doorways (things that aren't white). The effect should appear more dramatic in real life than in these pictures, since most of the room lights will be off.

When you look through the Polaroid sheet, you should see something like each of the following photographs, depending on the orientation of the sheet. The first photo still shows reflections of the poster on the opposite wall. In the second photo, taken after rotating the sheet 90 degrees, the reflected images are relatively dimmer and it is much easier to see through the glass into the room.

Section E.2 Michelson Interferometer Measurements

You should ignore the italicized portion of the paragraph at the top of page 7. We have changed setups for the Micheslon Interferometer since that was written and no longer use the Elenco power supply to power the lasers.

The micrometer for the Michelson interferometer is the calibrated knob on the left side of the instrument. It is labeled in the pictures below.