PID Servo Control

Goals: *The student will be able to:*

Write and troubleshoot a program to use PID control to set the location for a ball, and utilize a servo to move the ball to that location.

Tasks: *Include flow charts for each step.

1. Using Visual Basic, a PIR senor, and a servo connected to the PIC16f883 control a ball by moving the servo to adjust the position of the ball while measuring the distance with the PIR sensor. Use VB to give a distance position for the ball to move to. Use PID control to accurately move the ball to that position an effective manor to the instructor's expectation. Servo positions will need to be increased for this to run smoothly.

Demonstrate to the instructor before signing check off.