

HON312: Sensor project 2 (due Thu. Mar. 27th).

Build (individually or as a group) a sensor of your choice on a breadboard. The sensor will be powered with a 9V battery. Connect the sensor to a computer through a microcontroller.

Show that the data arriving to the computer changes as the environmental conditions affecting your sensor change.

Together with the instructor test your sensor and assess how well the sensor performed.

Grading: late submissions, 10pts down + 5 for every extra day.

Rubric:

A	Sensor works and performs well in test data appear at the computer (A- if minor details missing).
B	Sensor works, data appear on computer but does not change as conditions are changed.
C	Sensor works but no data on the computer.
D	Sensor works poorly and no data on the computer.
E	Some components are attached but no output is measurable.
F	No homework turned in.

See lab resources regarding different types of sensors.

Suggested reading:

Physical Computing: Sensing and Controlling the Physical World with Computers, *Dan O'Sullivan and Tom Igoe*, 2004, Thomson Course Technology PTR; ISBN: 159200346X

http://tigoe.net/pcomp/basic_elec.shtml

http://www.owlnet.rice.edu/~elec201/Book/basic_elec.html