

AME 21216 – Tech Memo Score Sheet

A9 – Practical Implementation of Sensors

NDID#: _____

Lab Section (Day/time): _____

For more details on any of the items below, please refer to the lab handout.

Item and Description	Points Awarded	Possible Points
Technical Writing – Please address the “talking points” in your captions and paragraphs		5
Plot of linear calibration data mass vs. voltage for the cantilever beam		3
Equation of best fit for the linear calibration of mass vs. voltage of the cantilever beam*		1
Plot of measured mass vs. number of ping pong balls with linear curve fit		3
Estimated mass of a single ping pong ball compared with value from reference*		1
Table containing the photocell voltages for the different colored balls and the empty cup		3
Plot of the photocell output voltage vs. time for several periods of oscillation for PS3 fan		4
Plot containing temperature vs. time for (on left scale) and fan speed vs. time (on right scale) (Use ‘yyaxis’ or ‘plotyy’ command in Matlab)		5
TOTAL		25

*These should go in the paragraphs corresponding to the respective plots.

Guidelines for Deliverables

- All figures and tables are properly labeled (i.e. Figure 1, Table 1, etc.) with captions.
- All plots should be made in Matlab. Do NOT use excel to make plots.

- Axes on figures must be labeled with units, and plots with multiple data sets must include a legend.
- Note that any curve fit or theoretical curve must be plotted as a *smooth, continuous* line. (i.e. Make a new vector using linspace() for the independent variable.)
- Equations must be numbered, and the variables must be defined (i.e. “where c is the speed of sound.”).
- Variables should be written in italics.
- Students, please **print and proofread** the hardcopy of your deliverables before you turn it in. Sometimes, equations and figures do not print correctly!