AME 21216 – Tech Memo Score Sheet

A11 – Chaotic Double Pendulum

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 all questions from the lab handout in the captions and paragraphs.		5
For the single pendulum, plot θ_1 vs. *t* for the three data sets (use "subplot()" in Matlab)		3
For the *double* pendulum, plot θ_1 vs. *t* for the three data sets (use "subplot()" in Matlab)		3
For the single pendulum, a phase space plot of the angular speed ω_1 as a function of the θ_1 for one the three data sets		3
For the *double* pendulum, a phase space plot of the angular speed ω_1 as a function of the θ_1 for one of the three data sets		3
Plot of accelerometer voltage V_{out} vs. pitch angle θ with the theoretical *trigonometric* curve that you derived		3
TOTAL		20

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!