

AME 40453 – Tech Memo Score Sheet

C4 – PID with Arduino

NDID#: _____

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

For all plots listed below, include a horizontal line denoting the set-point temperature.

Item and Description	Points Awarded	Possible Points
Technical writing – Using the correct format, address all questions from the lab handout, and include equations from the pre-lab.		5
A table containing the measured and extrapolated parameters from Part IV: T_{Air} , T_{max} , heater power q , time constant τ , mc_p , and Ah		5
Part V - A plot of the temperature vs. time for at least 3 different values of k_p.		5
Part VI - A plot of the temperature vs. time for at least 3 different values of k_I. This plot should demonstrate how integral feedback can result in oscillations.		5
Part VI - A plot of the temperature vs. time for at least 3 different values of k_D. This plot should demonstrate how derivative feedback effects the amplitude of oscillations.		5
TOTAL		25