

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