

AME 40453 – Tech Memo Score Sheet

C5 – Single Water Tank

NDID#: _____

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

Please include a horizontal line denoting the set-point height for the relevant plots listed below.

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
Part II - Plot of the measured flow rate in in³/s as a function of the % duty cycle for the PWM circuit		3
Part II - Table containing the system parameters: tank area A, time constant τ, PI feedback coefficients k_p and k_i, and calculated LQR coefficient k.		5
Part III - Plot of the water height vs. time for a few different set points for the open loop controller (use horizontal lines to denote set points)		5
Part IV - Plot of the water height vs. time for a few different set points for the PI feedback controller (use horizontal lines to denote set points)		5
Part V - Plot of the water height vs. time for a few different set points for the LQR feedback controller (use horizontal lines to denote set points)		5
TOTAL		28