AME 40453 – Tech Memo Score Sheet

C6 – Coupled Water Tanks

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 I - A table containing the system parameters: tank area A_T [in^2], time constant τ [s], and calculated LQR coefficients k_{p1} and k_{p2} [in^2/s].		5
Part I - A plot of the water heights vs. time for the case where $h_{1S} = h_{2S}$.		5
Part I - A plot of the water heights vs. time for the case where $h_{1S} \neq h_{2S}$.		5
Part II - A table containing the system parameters: tank area A_T [in^2], time constants τ_1 and τ_2 [s], and calculated LQR coefficients k_{11}, k_{12}, k_{22}, and k_{21} [in^2/s].		5
Part II - A plot of the water height vs. time for the case where $h_{1S} > h_{2S}$.		5
TOTAL		30