AME 21216 – Tech Memo Score Sheet

A11 – Transient Signals

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 and format – Please address all questions from the lab handout in the paragraphs and captions. You should have the relevant equations in your paragraphs!		5
Plot of measured transient temperature <i>T</i> vs. <i>t</i> (both heating and cooling on same plot)		3
Plot of the linearized temperature data y(t) vs. t with linear curve fits (both heating and cooling on same plot)		4
Plot of measured amplitude vs. driving frequency with theoretical curve for ultrasonic transducer		4
A table containing: • Extrapolated time constant for heating τ_H • Extrapolated time constant for cooling τ_c • Resonance frequency f_0 for the UT • Damping ratio ζ_{UT} for the UT		4
TOTAL		20