AME 30318 – Score Sheet

M5 – Servo Motors

Student Name(s):_____

The following items will be *demonstrated* to the lab instructor during the allotted lab time. Credit will not be given for portions completed outside of lab.

Item and Description	Points Awarded	Possible Points
Servo Mount The hole pattern was correctly drilled in the basswood sheet with counter-sunk holes. The servo is correctly attached with the 8-32 stand-offs.		5
Part I: Testing the Servo The servo spins to a location dictated by the pulse width generated by the function generator.		3
Part II: Microcontroller Implementation The student wrote down the mapping between pulse width and angle in lab notebook. The servo move correctly via the Arduino code.		3
Part III: Design Challenge 1 Turning the potentiometer knob causes the servo to rotate.		4
Part IV: Ultrasonic Rangefinder The correct distances and angles are printed to the serial monitor.		3
Part V: Pneumatic Missile Launcher The Arduino prints the 10 sec countdown to the serial monitor, then fires the foam rocket.		3
Part VI: Design Challenge 2 The turret locates the nearby target and strikes it with the foam rocket.		4
Clean-up The students returned the lab bench to its initial state.		2
TOTAL		27