

## AME 30358 – Score Sheet

M11 – RC Retrieval Vehicle

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
<b>Subsystem A: Electric Power Train</b> The battery, fuse, kill switch, RC receiver, and motor driver board are connected. The student is able to drive the vehicle around the lab in a controlled fashion.		3
<b>Subsystem B: Robotic Gripper</b> The gripper is correctly assembled. It can be opened and closed using the knob at the top of the remote control.		3
<b>Subsystem C: Mechanical Arm</b> The gripper is securely mounted to the end of a mechanical arm. The mechanical arm can be raised and lowered from the vehicle chassis the remote.		3
<b>Design Challenge 1 – 4-bar Mechanism</b> A 4-bar mechanism has been implemented for raising and lowering the robotic arm.		5
<b>Design Challenge 2 – Retrieval</b> The vehicle is able to drive to a can, pick it up, and place it in the plastic basket.		5
<b>Clean-up</b> The robotic arm was removed, disassembled, and all parts were put away in their appropriate locations. The students returned the lab bench to its initial state.		2
<b>TOTAL</b>		18