

## AME 30358 – In-Lab Score Sheet

M11 – Autonomous Vehicle

Name(s): \_\_\_\_\_

Item and Description	Points Awarded	Possible Points
<b>Drive Straight</b> – The robot is able to drive 20 ft in a straight line going either forward or reverse.		5
<b>90 Degree Turn</b> – The robot is able to execute a 90 degree turn going either left or right.		5
<b>Forward, Reverse</b> – The vehicle drives forward in a straight line for 4 seconds, stops for 2 second, drives in reverse for 4 seconds, stops for 2 second, and repeats.		5
<b>Collision Avoidance 1</b> – The vehicle drives in a straight line and stops within 4 feet of a barrier without touching the barrier.		5
<b>Collision Avoidance 2</b> – The vehicle drives in a straight line, stops within 4 feet of a barrier without touching the barrier, then turns away from the barrier and continuous moving forward.		4
<b>Collision Avoidance 3</b> – The vehicle drives in a straight line, stops within 4 feet of a barrier without touching the barrier, then executes a 180 degree turn and returns to its initial location.		4
<b>Autonomous Navigation 1</b> – The vehicle travels the entire length of the east-west hallway on the B-level of Fitzpatrick without touching anything, time limit of 4 minutes.		4
<b>Autonomous Navigation 2</b> – The vehicle navigates the entire hallway on the B-level of Fitzpatrick without touching anything, completing a full lap beginning and ending outside the lab entrance, time limit of 10 minutes.		3
<b>Clean-up</b> Vehicle disassembled. Hardware properly put away.		5
<b>TOTAL</b>		40