

**Course Assessment Report
Washtenaw Community College**

Discipline	Course Number	Title
Auto Services (new)	279	ASV 279 06/05/2020- Automotive Dynamometer and Test
Division	Department	Faculty Preparer
Advanced Technologies and Public Service Careers	Transportation Technologies	Allen Day
Date of Last Filed Assessment Report		

I. Review previous assessment reports submitted for this course and provide the following information.

1. Was this course previously assessed and if so, when?

No

2. Briefly describe the results of previous assessment report(s).

3.

4. Briefly describe the Action Plan/Intended Changes from the previous report(s), when and how changes were implemented.

5.

II. Assessment Results per Student Learning Outcome

Outcome 1: Execute an engine test cycle while collecting data to determine sensor data validity.

- Assessment Plan
 - Assessment Tool: Project
 - Assessment Date: Fall 2016
 - Course section(s)/other population: All
 - Number students to be assessed: All
 - How the assessment will be scored: Departmentally-developed rubric

- Standard of success to be used for this assessment: 75% of students will score 75% or better.
- Who will score and analyze the data: ASV faculty

1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

Fall (indicate years below)	Winter (indicate years below)	SP/SU (indicate years below)
	2020	

2. Provide assessment sample size data in the table below.

# of students enrolled	# of students assessed
18	35

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

CurricUNET only has Winter 2020 enrollment data available due to the reorganization of the departments. However, all students in both semesters were assessed. This sample is from the Fall 2019 ASV279-W1 section and the Fall 2020 ASV279-W1 section. There is only one section of this course offered each year. All enrolled students were assessed for the sections assessed.

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

All sections were offered as a face-to-face course. Only one section of this course offered each year, but the course is offered in the afternoon one year and then at night the next time it is offered.

5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

The project was assessed using a rubric with a total of 200 points. The rubric required students to write and execute an automated test sequence. They were required to collect data during the execution of the test sequence. They analyzed that data for sensor validity and submitted the data with their determinations through a Blackboard assignment.

6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: Yes

34 out of 35 students completed all this project. 34 out of 35 (97%) students scored 75% or better. The standard of success was met using this outcome and project-based tool.

One of the students in the Winter 2020 section did not develop a test sequence, and did not execute the test sequence. Further the student did not collect data during the execution of the test sequence. Subsequently, the student did not determine sensor data validity.

7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

The students that participated in this course content performed at a very high level. Executing a test sequence on a vehicle on WCC's dynamometer is very exciting and engaging for the students. The pattern is that if the students show up to the face-to-face class time and participate, they typically meet all of the learning objectives at a high level.

8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

One area of improvement is that the scoring rubric, while it does indicate "200 points" it is split into four 25-point sections for the first Blackboard column. The students see "100" in the first column with no specific delineation. In the second 100-point column there are two 50-point sections in the Rubric. The students see "100" in the second column as well. These two columns are groupings of the measure of success. While it did not happen in this case, it may be better to score and present the information in separate columns even if it is the same project with the same points. This could help identify areas of improvement when the student is only able to complete part of the project.

III. Course Summary and Intended Changes Based on Assessment Results

1. Based on the previous report's Intended Change(s) identified in Section I above, please discuss how effective the changes were in improving student learning.

This is the first assessment report for this course and as such, there were no intended changes identified.

2. Describe your overall impression of how this course is meeting the needs of students. Did the assessment process bring to light anything about student achievement of learning outcomes that surprised you?

I think this course is doing a great job of meeting the needs of students. I do feel that there should be more granularity in the analysis of each student's performance. This will allow for better analysis of the student's success in the event that a student does not earn all of the points associated with the project. This should be done with 6 Blackboard grading columns for the objective.

Write a test sequence suitable for execution 25 points

Load test sequence on dynamometer 25 points

Debug and finish test sequence 25 points

Execute a full test 25 points

Collect data during the execution of a test 50 points

Analyze and submit data with the analysis 50 points

A total column (200 points) would still be used.

3. Describe when and how this information, including the action plan, was or will be shared with Departmental Faculty.

The updates to the grading rubric and the associated Blackboard columns in MyGrades will be added to the "All Sections" master Blackboard site.

- 4.

Intended Change(s)

Intended Change	Description of the change	Rationale	Implementation Date
Other: Grading Rubric	The sections of the grading rubric will be specified clearly in six columns in Blackboard as described in the report.	This will allow a more specific analysis of each student's performance.	2021

5. Is there anything that you would like to mention that was not already captured?

6.

III. Attached Files

[Project Data](#)

Faculty/Preparer: Allen Day **Date:** 01/08/2021
Department Chair: Allen Day **Date:** 01/08/2021
Dean: Jimmie Baber **Date:** 01/11/2021
Assessment Committee Chair: Shawn Deron **Date:** 03/03/2021