

Course Assessment Report
Washtenaw Community College

Discipline	Course Number	Title
Auto Services (inactive)	131	ASV 131 10/25/2018- Automotive Electrical
Division	Department	Faculty Preparer
Vocational Technologies	Automotive Services	Justin Morningstar
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: Read and interpret vehicle wiring diagrams.

- Assessment Plan
 - Assessment Tool: Common departmental exam and NATEF checklist
 - Assessment Date: Fall 2015
 - Course section(s)/other population: All sections
 - Number students to be assessed: Random sample of approximately 30 students
 - How the assessment will be scored: Common departmental exam will be scored using an answer sheet. NATEF checklist will be scored using the departmentally-developed rubric.

- Standard of success to be used for this assessment: 70% of the students will score an overall average of 70% or higher.
- Who will score and analyze the data: Departmental 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)
2018		

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

# of students enrolled	# of students assessed
59	59

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.

All student data is represented in full from fall 2018 with multiple sections.

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.

I assessed students from all sections of the selected semester. This includes all populations represented by this class with both day and evening classes, all classes are face to face.

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

The tool used for assessment is a common departmental exam scored by a numeric grade.

Evaluation Scale

[5]Superior (100 - 90%)

[4]Excellent (89 - 70%)

[3]Average (69 - 60%)

[2]Below Average (59% and below)

[1] Incomplete N/A Not Available for viewing/evaluation or did not complete.
The standard of success for this outcome is at least 70% of students will score an average of 70% or higher.

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: No

Outcome #1. Read and interpret wiring diagrams and vehicle service manuals.

Results from common departmental exam:

[5] Superior = 6 Students

[4] Excellent = 19 Students

[3] Average = 5 Students

[2] Below Average = 9 Students

[1] Incomplete N/A Not Available for viewing/evaluation or did not complete. = 20 Students

The standard of success was not met for this outcome because 70% of students did not score an average of 70% or higher.

42.3% of students scored 70% or higher.

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

Students must understand how to read and interpret wiring diagrams and vehicle service manuals to be successful in the laboratory setting. This outcome is for the beginning level class. The wide demographic of age ranges and life experiences is an unspoken aspect of this data. Adult learners in the class who have work experience and employment in the field most certainly have an advantage over traditional students. All students at all levels show benefit from exposure to unfamiliar diagrams on unfamiliar formats.

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.

The students did not meet the standard of success for outcome #1 (read and interpret wiring diagrams and vehicle service manuals). This was in large part due to the number of students that did not take the course exams. The assessment tool is embedded into the exams for this class and a student cannot pass the class without completing the embedded assessment. This class is one of the first academically challenging classes in our program. We find the students in this course that do not complete the required work may have found that they do not want to pursue a career in our field. This course is intended to be a cornerstone course in our program, students that are not successful in this course will not be successful moving forward in this program and may want/need to transfer to another discipline to become successful. As a result, the level of challenge of this class must be constantly adjusted to keep it challenging but academically rewarding as well. Therefore, we do not plan to modify the course to improve the success rate. We will continue to work with individual students to help each one be as successful as possible, while providing advisement based on their performance.

Outcome 2: Diagnose basic electrical components.

- Assessment Plan
 - Assessment Tool: Common departmental exam and NATEF checklist
 - Assessment Date: Fall 2015
 - Course section(s)/other population: All sections
 - Number students to be assessed: Random sample of approximately 30 students
 - How the assessment will be scored: Common departmental exam will be scored using an answer sheet. NATEF checklist will be scored using the departmentally-developed rubric.
 - Standard of success to be used for this assessment: 70% of the students will score an overall average of 70% or higher.
 - Who will score and analyze the data: Departmental 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)
2018		

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

# of students enrolled	# of students assessed

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.

All student data is represented in full from fall 2018 with multiple sections.

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.

I assessed students from all sections of the selected semester. This includes all populations represented by this class with both day and evening classes, all classes are face to face.

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

The tool used for assessment is a common departmental exam scored by a numeric grade.

Evaluation Scale

[5]Superior (100 - 90%)

[4]Excellent (89 - 70%)

[3]Average (69 - 60%)

[2]Below Average (59% and below)

[1]Incomplete N/A Not Available for viewing/evaluation or did not complete.

The standard of success for this outcome is at least 70% of students will score an average of 70% or higher.

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: No

Outcome #2 Diagnose basic electrical components.

Results from common departmental exam:

[5]Superior = 2 Students

[4]Excellent = 16 Students

[3]Average = 10 Students

[2]Below Average = 9 Students

[1]Incomplete N/A Not Available for viewing/evaluation or did not complete. = 22 Students

The standard of success was not met for this outcome because 70% of students did not score an average of 70% or higher.

30.5% of students scored 70% or higher.

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

Students must understand how to diagnose basic electrical components to be successful in the laboratory setting. This outcome is for the beginning level class. The wide demographic of age range and life experience is an unspoken aspect of this data. Adult learners in the class who have work experience and employment in the field most certainly have an advantage over traditional students. This is most noticeably displayed in the lab performance results.

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.

The students did not meet the standard of success for outcome #2 Diagnose basic electrical components. This was in large part due to the number of students that did not take the course exams. The assessment tool is embedded into the exams for this class and a student cannot pass the class without completing the embedded assessment. This class is one of the first academically challenging classes in our program. We find the students in this course that do not complete the required work may have found that they do not want to pursue a career in our field. This course is intended to be a cornerstone course in our program, students that are not successful in this course will not be successful moving forward in this program and may want/need to transfer to another discipline to become successful. As a result, the level of challenge of this class must be constantly adjusted to keep it challenging but academically rewarding as well. Therefore, we do not plan to modify the course to improve the success rate. We will continue to work with

individual students to help each one be as successful as possible, while providing advisement based on their performance.

Outcome 3: Identify and perform basic service on PCM systems.

- Assessment Plan
 - Assessment Tool: Common departmental exam and NATEF checklist
 - Assessment Date: Fall 2015
 - Course section(s)/other population: All sections
 - Number students to be assessed: Random sample of approximately 30 students
 - How the assessment will be scored: Common departmental exam will be scored using an answer sheet. NATEF checklist will be scored using the departmentally-developed rubric.
 - Standard of success to be used for this assessment: 70% of the students will score an overall average of 70% or higher.
 - Who will score and analyze the data: Departmental 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)
2018		

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

# of students enrolled	# of students assessed
59	59

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.

All student data is represented in full from fall 2018 with multiple sections.

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.

I assessed students from all sections of the selected semester. This includes all populations represented by this class with both day and evening classes, all classes are face to face.

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

The tool used for assessment is a common departmental exam scored by a numeric grade.

Evaluation Scale

[5]Superior (100 - 90%)

[4]Excellent (89 - 70%)

[3]Average (69 - 60%)

[2]Below Average (59% and below)

[1]Incomplete N/A Not Available for viewing/evaluation or did not complete.

The standard of success for this outcome is at least 70% of students will score an average of 70% or higher.

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: No

Outcome #3 Identify and perform basic service on PCM systems.

Results from common departmental exam:

[5]Superior = 5 Students

[4]Excellent = 18 Students

[3]Average = 7 Students

[2]Below Average = 8 Students

[1]Incomplete N/A Not Available for viewing/evaluation or did not complete. = 21 Students

The standard of success was not met for this outcome because 70% of students did not score an average of 70% or higher.

38.9% of students scored 70% or higher.

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

Assessment results for this outcome have proven that this outcome is more advanced than will fit into this curriculum. Due to the poor performance, this learning outcome will be moved to the advanced class ASV 256. This will be reflected in the updated ASV256 Master syllabus. Recommend removing this outcome in the master syllabus update. This is necessary to focus on more core skills.

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.

Assessment results for this outcome have proven that this outcome is more advanced than will fit into this curriculum. Due to the poor performance, this learning outcome will be moved to the advanced class ASV 256. This will be reflected in the updated ASV256 Master syllabus. Recommend removing this outcome in the master syllabus update. This is necessary to focus on more core skills.

Outcome 4: Recognize and service ignition management system.

- Assessment Plan
 - Assessment Tool: Common departmental exam and NATEF checklist
 - Assessment Date: Fall 2015
 - Course section(s)/other population: All sections
 - Number students to be assessed: Random sample of approximately 30 students
 - How the assessment will be scored: Common departmental exam will be scored using an answer sheet. NATEF checklist will be scored using the departmentally-developed rubric.
 - Standard of success to be used for this assessment: 70% of the students will score an overall average of 70% or higher.
 - Who will score and analyze the data: Departmental 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)
2018		

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

# of students enrolled	# of students assessed
59	59

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.

All student data is represented in full from fall 2018 with multiple sections.

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.

I assessed students from all sections of the selected semester. This includes all populations represented by this class with both day and evening classes, all classes are face to face.

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

The tool used for assessment is a common departmental exam scored by a numeric grade.

Evaluation Scale

[5]Superior (100 - 90%)

[4]Excellent (89 - 70%)

[3]Average (69 - 60%)

[2]Below Average (59% and below)

[1]Incomplete N/A Not Available for viewing/evaluation or did not complete.

The standard of success for this outcome is at least 70% of students will score an average of 70% or higher.

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: <u>No</u>
Outcome #4 Recognize and interpret ignition management systems.
Results from common departmental exam:
[5]Superior = 5 Students
[4]Excellent = 22 Students
[3]Average = 7 Students
[2]Below Average = 2 Students
[1]Incomplete N/A Not Available for viewing/evaluation or did not complete. = 23 Students
The standard of success was not met for this outcome because 70% of students did not score an average of 70% or higher.
45.8% of students scored 70% or higher.

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

Assessment results for this outcome have proven that this outcome is more advanced than will fit into this curriculum. Due to the poor performance, this learning outcome will be moved to the advanced class ASV 256. This will be reflected in the updated ASV256 Master syllabus. Recommend removing this outcome in the master syllabus update. This is necessary to focus on more core skills.

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.

Assessment results for this outcome have proven that this outcome is more advanced than will fit into this curriculum. Due to the poor performance, this learning outcome will be moved to the advanced class ASV 256. This will be reflected in the updated ASV256 Master syllabus. Recommend removing this

outcome in the master syllabus update. This is necessary to focus on more core skills.

Outcome 5: Replace commonly serviced electrical components.

- Assessment Plan
 - Assessment Tool: Common departmental exam and NATEF checklist
 - Assessment Date: Fall 2015
 - Course section(s)/other population: All sections
 - Number students to be assessed: Random sample of approximately 30 students
 - How the assessment will be scored: Common departmental exam will be scored using an answer sheet. NATEF checklist will be scored using the departmentally-developed rubric.
 - Standard of success to be used for this assessment: 70% of the students will score an overall average of 70% or higher.
 - Who will score and analyze the data: Departmental 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)
2018		

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

# of students enrolled	# of students assessed
59	59

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.

All student data is represented in full from fall 2018 with multiple sections.

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.

I assessed students from all sections of the selected semester. This includes all populations represented by this class with both day and evening classes, all classes are face to face.

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

The tool used for assessment is a common departmental exam scored by a numeric grade.

Evaluation Scale

[5]Superior (100 - 90%)

[4]Excellent (89 - 70%)

[3]Average (69 - 60%)

[2]Below Average (59% and below)

[1]Incomplete N/A Not Available for viewing/evaluation or did not complete.

The standard of success for this outcome is at least 70% of students will score an average of 70% or higher.

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: No

Outcome #5. Replace commonly serviced electrical components.

Results from common departmental exam:

[5]Superior = 3 Students

[4]Excellent = 15 Students

[3]Average = 11 Students

[2]Below Average = 6 Students

[1]Incomplete N/A Not Available for viewing/evaluation or did not complete. = 24 Students

The standard of success was not met for this outcome because 70% of students did not score an average of 70% or higher.

30.5% of students scored 70% or higher.

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

Assessment results for this outcome have proven that this outcome is more advanced than will fit into this curriculum. Due to the poor performance, this learning outcome will be moved to the advanced class ASV 256. This will be reflected in the updated ASV256 Master syllabus. Recommend removing this outcome in the master syllabus update. This curriculum will now only practice the replacement of basic electrical components as they apply to the understanding of theory.

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.

Assessment results for this outcome have proven that this outcome is more advanced than will fit into this curriculum. Due to the poor performance, this learning outcome will be moved to the advanced class ASV 256. This will be reflected in the updated ASV256 Master syllabus. Recommend removing this outcome in the master syllabus update. This curriculum will now only practice the replacement of basic electrical components as they apply to the understanding of theory.

Outcome 6: Recognize basic electrical theory.

- Assessment Plan
 - Assessment Tool: Common departmental exam and NATEF checklist
 - Assessment Date: Fall 2015
 - Course section(s)/other population: All sections
 - Number students to be assessed: Random sample of approximately 30 students
 - How the assessment will be scored: Common departmental exam will be scored using an answer sheet. NATEF checklist will be scored using the departmentally-developed rubric.
 - Standard of success to be used for this assessment: 70% of the students will score an overall average of 70% or higher.

- Who will score and analyze the data: Departmental 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)
2018		

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

# of students enrolled	# of students assessed
59	59

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.

All student data is represented in full from fall 2018 with multiple sections.

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.

I assessed students from all sections of the selected semester. This includes all populations represented by this class with both day and evening classes, all classes are face to face.

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

The tool used for assessment is a common departmental exam scored by a numeric grade.

Evaluation Scale

[5] Superior (100 - 90%)

[4] Excellent (89 - 70%)

[3] Average (69 - 60%)

[2] Below Average (59% and below)

[1] Incomplete N/A Not Available for viewing/evaluation or did not complete.

The standard of success for this outcome is at least 70% of students will score an average of 70% or higher.

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: No

Outcome # 6 Recognize basic electrical theory

Results from common departmental exam:

[5]Superior = 8 Students

[4]Excellent = 24 Students

[3]Average = 5 Students

[2]Below Average = 6 Students

[1]Incomplete N/A Not Available for viewing/evaluation or did not complete. = 16 Students

The standard of success was not met for this outcome because 70% of students did not score an average of 70% or higher.

54.2% of students scored 70% or higher.

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

Students must understand how to recognize basic electrical theory to be successful in the laboratory setting. This outcome is for the beginning level class. The wide demographic of age range and life experience is an unspoken aspect of this data. This outcome is frequently challenging for learners from all cross sections of life. Students with a low amount of time separation from high school often have an easier time with theories and formulas.

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.

The students did not meet the standard of success for outcome #6 Recognize basic electrical theory. This was in large part due to the number of students that did not take the course exams. The assessment tool is embedded into the exams for this

class and a student cannot pass the class without completing the embedded assessment. This class is one of the first academically challenging classes in our program. We find the students in this course that do not complete the required work may have found that they do not want to pursue a career in our field. This course is intended to be a cornerstone course in our program, students that are not successful in this course will not be successful moving forward in this program and may want/need to transfer to another discipline to become successful. As a result the level of challenge of this class must be constantly adjusted to keep it challenging but academically rewarding as well. Therefore, we do not plan to modify the course to improve the success rate. We will continue to work with individual students to help each one be as successful as possible, while providing advisement based on their performance.

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.

2.

3. 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?

Overall, this class is doing an excellent job of meeting the needs of our students. The data shows that students who attend the class in its entirety have a high success rate. The assessment process showed that I need to do some work on the master syllabus, specifically on how the outcomes are assessed. Outcomes 3,4, and 5 have been moved to the advanced electrical class when its master syllabi was updated and need to be removed
Currently, the laboratory-based skills in outcomes 1-6 are being assessed by both a common departmental exam and a NATEF Skills checklist; going forward, a common departmental exam should prove to be appropriate and sufficient.

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

During our next scheduled department meeting, I will present my action plan based on this assessment. I will point out areas of success and weakness, and give my recommendations for improvement.

5. Intended Change(s)

Intended Change	Description of the change	Rationale	Implementation Date
Objectives	<p>Outcomes 3,4,and 5 were moved to the advanced electrical class when its master syllabi was updated and need to be removed from this course.</p> <p>Currently, the laboratory-based skills in outcomes 1,2,and 6 are being assessed by both a common departmental exam and a NATEF Skills checklist; going forward, a common departmental exam should prove to be appropriate and sufficient.</p>	<p>The changes mentioned above will reflect the realignment of outcomes 3.4.and 5 into the advanced class ASV 256 when its master syllabi was updated. The removal of the NATEF skills checklist will allow the department to collect usable date for future assesments, since the NATEF checklist software does not give us any usable data.</p>	2019

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

7.

III. Attached Files

[ASV-131-F18-All](#)

Faculty/Preparer: Justin Morningstar **Date:** 04/15/2019
Department Chair: Justin Morningstar **Date:** 04/15/2019
Dean: Brandon Tucker **Date:** 04/16/2019
Assessment Committee Chair: Shawn Deron **Date:** 09/20/2019