Course Assessment Report Washtenaw Community College

Discipline	Course Number	Title
Motorcycle Service Technology	106	MST 106 07/25/2017- Introduction to Powder Coating
Division	Department	Faculty Preparer
Advanced Technologies and Public Service Careers Motorcycle Technology		Shawn Deron
Date of Last Filed Assessment Report		

## I. Assessment Results per Student Learning Outcome

Outcome 1: Recognize and differentiate the basic powder coating processes as they relate to various base materials.

- Assessment Plan
  - Assessment Tool: Chapter test including multiple choice, T/F, and fill in the blank
  - o Assessment Date: Fall 2016
  - Course section(s)/other population: All Sections
  - Number students to be assessed: All students
  - How the assessment will be scored: Answer Key
  - Standard of success to be used for this assessment: 70% of the students will score 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)
	2017	

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

# of students enrolled	# of students assessed
9	9

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 students that were enrolled in the class were 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.

There was only one section taught during the winter 2017 semester. The class was held on campus (face-to-face) from 11:55 - 15:55.

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

Chapter test that was given to all the students to complete at a predetermined time. All of the students took the test on the same day. The test was scored using a master answer key. 20 questions on the test related to this student outcome.

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

Although the students exceeded the standard of success scoring at 100%, I feel that this outcome needs to be updated. The test was given with students having prior notice of the date and the material. We need more information - for example, including a practical portion in the exam to make sure the students are retaining the skills to meet the objective, instead of memorization.

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

What the data showed is that the students have a great understanding of the material. What isn't known is if a student can perform tasks based on the understanding of the material.

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.

What I would like to try is changing the tool or adding a tool to incorporate more data. This should determine or differentiate the students' comprehension of the materials from testing alone and adding practical results.

Outcome 2: Create time schedules and anticipate costs related to powder coating jobs.

- Assessment Plan
  - Assessment Tool: Student achievement checklist
  - o Assessment Date: Fall 2016
  - Course section(s)/other population: All Sections
  - Number students to be assessed: All Students
  - How the assessment will be scored: Departmentally-developed rubric
  - Standard of success to be used for this assessment: 70% of the students will score 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)
	2017	

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

# of students enrolled	# of students assessed
9	9

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 students that were enrolled in the class were 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.

There was only one section taught during the winter 2017 semester. The class was held on campus (face-to-face) from 11:55 - 15:55.

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

A checklist was developed that students are responsible for completing. The checklist is comprised of six projects that need to be completed during the

semester. One line item for each of the six projects relates to this outcome. The students are required to present the checklist as it's completed to get signed by the instructor. The checklist has to be submitted at the end of the semester as part of their final grade.

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

The standards of success were met for this outcome. More than 70% of the students received higher than 70%. To develop a time schedule, we need to move the assessment tool from a checklist to a test or exam. Scheduling and any accompanying issues involve day-to-day time management that needs to be laid out on a calendar and/or work schedule. I don't feel the importance of time management was accurately captured.

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

The data can only show the use of the students' class and semester time usage. Based on the data and the students' available time, they are very successful.

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.

We need to look at the students' ability to foresee and develop a timeline based on real world projects to better prepare them for the job market. Looking at the assessment tool, I don't feel that we are capturing the data that is needed. A better tool needs to be developed, such as an exam or assignment, to collect data that would determine if the comprehension has developed understanding time management.

Outcome 3: Determine and perform the procedures required for inspecting and preparing parts for refinishing.

- Assessment Plan
  - Assessment Tool: Chapter test including multiple choice, T/F, and fill in the blank
  - Assessment Date: Fall 2016
  - Course section(s)/other population: All Sections

- Number students to be assessed: All Students
- How the assessment will be scored: Answer Key
- Standard of success to be used for this assessment: 70% of the students will score 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)
	2017	

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

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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 students that were enrolled in the class were 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.

There was only one section taught during the winter 2017 semester. The class was held on campus (face-to-face) from 11:55 - 15:55.

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

Chapter test that was given to all the students to be completed at a predetermined time. All of the students took the test on the same day. The test was scored using a master answer sheet. 12 questions related to this student outcome.

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

Although the students exceeded the standard of success scoring at 93% out of more than 70% of the students, I feel that this outcome needs to be changed

because it seems very similar to outcome number one. I believe better data could be gained to show if the students are mastering this class if there was a quality or final inspection/critique component added to the master syllabus and/or student objectives. This new outcome would need a new assessment tool developed.

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

The data showed that the students mastered this task.

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.

This outcome looks very similar to the first outcome. Based on the data it seems too easy. I believe a different outcome needs to be developed. A new outcome should incorporate a final or quality inspection looking at completed projects. New data would give us an indication of the students' ability to self-critique.

Outcome 3: Determine and perform the procedures required for inspecting and preparing parts for refinishing.

- Assessment Plan
  - Assessment Tool: Student achievement checklist
  - Assessment Date: Fall 2016
  - Course section(s)/other population: All Sections
  - Number students to be assessed: All Students
  - How the assessment will be scored: Departmentally-developed rubric
  - Standard of success to be used for this assessment: 70% of the students will score 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)
	2017	

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

# of students enrolled	# of students assessed
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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 students that were enrolled in the class were 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.

There was only one section taught during the winter 2017 semester. The class was held on campus (face-to-face) from 11:55 - 15:55.

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

A checklist was developed that students are responsible for completing. The checklist is comprised of six projects that need to be completed during the semester. Two line items for each of the six projects relates to this outcome. The students are required to present the checklist as it's completed to get signed by the instructor. The checklist has to be submitted at the end of the semester as part of their final grade.

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

The standards of success were met by more than 70% of the students grading at 70% or higher. The students show an understanding of how to complete the inspection procedures needed to complete this outcome. More than three different pieces of equipment are needed in the correct order at the proper settings in the correct sequence to complete their projects. I feel that this tool could either be incorporated in one of the other assessment tools or possibly be eliminated.

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

The data showed that the students mastered this task.

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.

This outcome looks very similar to the first outcome. Based on the data it seems too easy. I believe a different outcome needs to be developed. A new outcome should incorporate a final or quality inspection looking at completed projects. New data would give us an indication of the students' ability to self-critique.

Outcome 4: Operate appropriate equipment to powder coat various motorcycle components.

- Assessment Plan
  - Assessment Tool: Student achievement checklist
  - Assessment Date: Fall 2016
  - Course section(s)/other population: All Sections
  - Number students to be assessed: All Students
  - How the assessment will be scored: Departmentally-developed rubric
  - Standard of success to be used for this assessment: 70% of the students will score 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)
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2. Provide assessment sample size data in the table below.

# of students enrolled	# of students assessed
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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 students that were enrolled in the class were 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.

There was only one section taught during the winter 2017 semester. The class was held on campus (face-to-face) from 11:55 - 15:55.

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

A checklist was developed that students are responsible for completing. The checklist is comprised of six projects that need to be completed during the semester. One line item for each of the six projects relates to this outcome. The students are required to present the checklist as its' completed to get signed by the instructor. The checklist has to be submitted at the end of the semester as part of their final grade.

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>Yes</u>

The standards of success were met by more than 70% of the students grading at 70% or higher. The students show an understanding of how the equipment needs to be used to complete this outcome. More than three different pieces of equipment are needed in the correct order at the proper settings in the correct sequence to complete their projects.

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

The data shows that the students receive the proper amount of class training and lab time to develop the skills to safely use the supplied equipment, with excellent 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 only way to improve this is by possibly having more projects added to the checklist or by making the class lab time longer.

#### **II.** Course Summary and Action Plans Based on Assessment Results

1. 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?

The course has good outcomes except for outcome number three, for which a better outcome needs to be developed. The assessment process pointed out a few

shortcomings of the assessment tool on outcome number two, which also needs to be changed.

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

The results will be shared with the faculty electronically and discussed at the monthly department meeting.

3.

Intended Change(s)

Intended Change	Description of the change	Rationale	Implementation Date
Outcome Language	outcome needs to be	captured from this outcome can be included in outcome number one.	2018
Assessment Tool	We would find it useful to include practical exams or checklists that would be completed in labs to assess the competency of the students' ability based on the outcomes.	After reviewing the student outcomes, we would like to include other ways to capture what the students complete to include them as tools in the assessment process.	2018

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

# **III. Attached Files**

106 Assessment spreadsheet.

Faculty/Preparer:	Shawn Deron	<b>Date:</b> 08/22/2017
Department Chair:	Shawn Deron	Date: 08/22/2017
Dean:	Brandon Tucker	<b>Date:</b> 08/23/2017

Assessment Committee Chair: Michelle Garey Date: 10/30/2017