Course Assessment Report Washtenaw Community College

Discipline	Course Number	Title
Motorcycle Service Technology	110	MST 110 08/10/2017- Motorcycle Service Technology I
Division	Department	Faculty Preparer
Advanced Technologies and Public Service Careers	Motorcycle Technology	Michael Shute
Date of Last Filed Assessm	ent Report	

### I. Assessment Results per Student Learning Outcome

Outcome 1: Identify the basic structure of a service department from both a theoretical and operational perspective.

- Assessment Plan
  - Assessment Tool: Final written and practical exam
  - Assessment Date: Fall 2015
  - Course section(s)/other population: All
  - Number students to be assessed: All
  - How the assessment will be scored: Answer key and departmentallydeveloped rubric
  - Standard of success to be used for this assessment: 75% 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)
2016		

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

# of students enrolled	# of students assessed
16	7

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.

Data from only one section of students was available. In the future, data from all sections of the course will be collected.

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.

This course was taught on campus in a face-to-face mode.

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

Students were given a final exam that contained questions related to outcomes #1, #2 and the practical application. An answer key was used to score the data.

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

There were 12 questions on the final that were related to outcome #1. Of the 7 students all of them correctly answered 9 or more questions (75%). Of the 12 questions, 5 or more students (75%) correctly answered all questions except #5. This meets the standard of success.

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

Overall students did very well on this outcome. 100% of the students scored 70% or higher on the outcome-related questions.

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 one question where students had more difficulty was related to the definition and calculation of productivity. Productivity is a measure of the technician and the support of the technician. This is essential to running a service program that is financially viable. Outcome 2: Demonstrate time and quality proficiency in vehicle maintenance such as tear down, inspection and reassembly of an internal combustion engine, replacing tires and wheel bearings, and mileage-based maintenance.

- Assessment Plan
  - Assessment Tool: Final written and practical exam
  - Assessment Date: Fall 2015
  - Course section(s)/other population: All
  - Number students to be assessed: All
  - How the assessment will be scored: Answer key and departmentallydeveloped rubric
  - Standard of success to be used for this assessment: 75% 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)
2016		

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

# of students enrolled	# of students assessed
16	7

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.

Data from only one section of students was available. In the future, data from all sections of the course will be collected.

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.

This course was taught on campus in a face-to-face mode.

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

Students were given a final exam that contained questions related to outcomes #1, #2 and the practical application. An answer key was used to score the data.

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

There were 37 questions on the final that were related to outcome #2. Of the 7 students all of them correctly answered 28 or more questions (75%). Of the 27 questions, 5 or more students (75%) correctly answered all questions except #41. This meets the standard of success.

There were 10 exam questions related to the practical application of this outcome. Again, all students correctly answered 8 or more (80%) of the questions correctly. Of the 10 questions, 5 or more students (75%) correctly answered each question. This meets the standard of success.

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

Again, students did very well on this outcome, on both the written exam and the practical portion of the final.

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.

More students had difficulty remembering and applying the correct calculation of the displacement of a 72 cubic inch engine in cubic centimeters. This is a matter of memorizing a formula.

### **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?

Overall, students are doing very well in the course. They understand and are able to apply the concepts of the course.

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

This information will be shared with our full- and part-time faculty at a department meeting.

3.

Intended Change(s)

Intended Change	Description of the change	Rationale	Implementation Date
No changes intended.			

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

5.	

# **III. Attached Files**

MST 110 assessment data

Faculty/Preparer:	Michael Shute	Date:	08/10/2017
Department Chair:	Shawn Deron	Date:	08/22/2017
Dean:	Brandon Tucker	Date:	08/23/2017
Assessment Committee Chair:	Michelle Garey	Date:	10/30/2017

Course Assessment Report Washtenaw Community College

Discipline	Course Number	Title
Motorcycle Service Technology	110	MST 110 04/23/2014- Motorcycle Service Technology I
Division	Department	Faculty Preparer
Advanced Technologies and Public Service Careers Motorcycle Technology		Michael Shute
Date of Last Filed Assessment Report		

### I. Assessment Results per Student Learning Outcome

Outcome 1: Students will identify the basic structure of a service department from both a theoretical and operational perspective.

- Assessment Plan
  - Assessment Tool: Final and practical lab exams
  - Assessment Date: Winter 2009
  - Course section(s)/other population: All
  - Number students to be assessed: All
  - How the assessment will be scored:
  - Standard of success to be used for this assessment:
  - Who will score and analyze the data:
- 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)
2012		

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

# of students enrolled	# of students assessed
44	40

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 who completed the final 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.

All students were selected.

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

The final exam included both a written and practical component. The scores from both components were combined and the total score on the exam was used to assess the course.

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

Using the complete (written and practical) final exam, we identified that 82.5% (33 students) of the students scored 70% (175 of 250 points) or higher.

Using item analysis of test questions related to outcome #1 we identified that a minimum of 89% of students answered each question correctly. No individual questions were identified for review. This meets the standard of success.

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

Students were able to answer questions related to the operational stuicture of a service department, the operation of internal combustion enginges, the use of service and parts manuals.

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.

No issues were identified.

Outcome 2: Students will demonstrate time and quality proficiency in basic motorcycle setup and maintenance (tear down, inspection and reassembly of an internal combustion engine, replacing tires and wheel bearings, vehicle set-up and mileage based maintenance).

- Assessment Plan
  - Assessment Tool: Final and practical lab exams
  - Assessment Date: Winter 2009
  - Course section(s)/other population: All
  - Number students to be assessed: All
  - How the assessment will be scored:
  - Standard of success to be used for this assessment:
  - Who will score and analyze the data:
- 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)
2012		

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

# of students enrolled	# of students assessed
44	40

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 who completed the final 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.

All students were selected.

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

The final exam included both a written and practical component. The scores from both components were combined and the total score on the exam was used to assess the course.

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

Using the complete (written and practical) final exam, we identified that 82.5% (33 students) of the students scored 70% (175 of 250 points) or higher.

Using the practical portion of the exam to assess outcome #2 we determined that 56% of the students scored 70% or higher. This does not meet the standard of success.

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

Students performed well on fastener identification.

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.

Students had more difficulty with precision measuring. Students are asked to measure within 1/10,000 of an inch.

### **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?

This course meets the needs of students as an introductory course on motorcycle Technology. We were surprised that students weren't able to measure as accurately as they should have after two weeks of instruction and practice.

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

This information will be shared at a department meeting.

3.

Intended Change(s)

Intended C nange	Description of the change	Rationale	Implementation Date
Assessment Tool	The practical exam was expanded so that a two task test was turned into an	better identify where the problems	2016

eight task/statio	on those exactly.
test. Each static	
less time consu	
but requires the	e
same level of	
accuracy. This	
allowed us to	
identify precise	lv
where students	•
having trouble	
intervene earlie	
When there we	
only two	
tasks/stations, a	
error at any poi	nt
jeapordized the	
final results.	

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

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# **III. Attached Files**

### MST 110 final exam results

Faculty/Preparer:	Michael Shute	<b>Date:</b> 04/23/2014
Department Chair:	Shawn Deron	<b>Date:</b> 04/23/2014
Dean:	Marilyn Donham	<b>Date:</b> 04/25/2014
Assessment Committee Chair:	Michelle Garey	Date: 05/22/2014

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