

# Powersports 2019 Calendar Year Assessment Report



Curriculum Coordinator: Christopher Mayville  
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# What was assessed?

- MSPT SO 1: Diagnose and Repair
  - Course: MSPT 114
    - Outcomes: 114.2 and 114.6
  - Course: MSPT 122
    - Outcomes: 122.2 and 122.4



# What was assessed?

- MSPT SO 2: Mathematical & Analytical Thinking Skills
  - Course: MSPT 112
    - Outcomes: 112.1 and 112.2
  - Course: MSPT 110
    - Outcomes: 110.1 and 110.2



# What was assessed?

- MSPT SO 3: Communication Skills
  - Course: MSPT 110
    - Outcomes: 110.1, 110.4, and 110.6



# What was assessed?

- MSPT SO 4: Skill Mastery
  - Course: MSPT 101
    - Outcomes: 101.1 and 101.3
  - Course: MSPT 110
    - Outcomes: 110.1, 110.4, and 110.6



# How was the assessment accomplished?

- Student work assessed:
  - Quizzes
  - Homework
  - Lab activities
  - Essays
- Measurement strategy:
  - % of questions answered correctly
  - Rubrics
- Sample size:
  - All students included in assessment
  - Class size is 1 to 6 students



# Actual assessment data

## *MSPT SO 1: Diagnose and Repair*

Course	Outcome	Target	Finding
MSPT 114	MSPT 114.2	70% of students will achieve 70% or better	Met
	MSPT 114.6	70% of students will achieve 70% or better	Exceeded
MSPT 122	MSPT 122.2	70% of students will achieve 70% or better	Met
	MSPT 122.4	70% of students will achieve 70% or better	Met



# Actual assessment data

## *MSPT SO 1: Diagnose and Repair*

### Outcome: MSPT 114.2

Demonstrate procedures necessary in servicing engine ignition systems

### Measure: Ignition Testing Lab Activity

▼*Direct - Other*

Details/Description:	The students will perform ignition tests and service procedures.
Target:	70% of students will obtain a 70% grade or higher
Implementation Plan (timeline):	Spring 2019
Instructor:	Christopher Mayville
CRN:	20732

### Findings for Ignition Testing Lab Activity

Summary of Findings:	100 percent of the students met the target
Results :	Target Achievement: Met
Recommendations:	None
Reflections/Notes:	There is one student in this course. His grade on this assignment was 78.



# Actual assessment data

## *MSPT SO 1: Diagnose and Repair*

### Outcome: MSPT 114.6

Interpret data from diagnostic software to diagnose engine performance problems.

### Measure: Diagnostic Trouble Code Lab Activity

▼*Direct - Other*

Details/Description:	The students will perform diagnostic trouble code testing using diagnostic software.
Target:	70% of students will obtain a 70% grade or higher
Implementation Plan (timeline):	Spring 2019
Instructor:	Christopher Mayville
CRN:	20732

### Findings for Diagnostic Trouble Code Lab Activity

Summary of Findings:	100 percent of the students achieved the target
Results :	Target Achievement: Exceeded
Recommendations:	None
Reflections/Notes:	There is on student in this course

# Actual assessment data

## *MSPT SO 1: Diagnose and Repair*

### Outcome: MSPT 122.2

Interpret DVOM readings to diagnose electrical circuits.

**Measure:** Snap-on multimeter certification

▼*Direct - Other*

Details/Description:	The students will take the Snap-on 504 meter training and then complete the online certification exam.
Target:	70% of the students will achieve and grade of 70% or higher on the exam.
Implementation Plan (timeline):	Fall 2019
Instructor:	Christopher Mayville
CRN:	10838

### Findings for Snap-on multimeter certification

Summary of Findings:	100 percent of the students achieved a grade higher than 70 percent
Results :	Target Achievement: Met
Recommendations:	None
Reflections/Notes:	None

# Actual assessment data

## *MSPT SO 1: Diagnose and Repair*

### Outcome: MSPT 122.4

Diagnose and service the charging, starting, and accessory systems.

### Measure: Charging system lab activity

▼*Direct - Other*

Details/Description:	The students will complete a lab activity where they test powersports charging system components.
Target:	70% of the students will achieve a grade of 70% or higher.
Implementation Plan (timeline):	Fall 2019
Instructor:	Christopher Mayville
CRN:	10838

### Findings for Charging system lab activity

Summary of Findings:	80 percent of the students achieved a grade higher than 70 percent
Results :	Target Achievement: Met
Recommendations:	None
Reflections/Notes:	None

# Actual assessment data

## *MSPT SO 2: Mathematical & Analytical Thinking Skills*

Course	Outcome	Target	Finding
MSPT 110	MSPT 110.1	70% of students will achieve 70% or better	Exceeded
	MSPT 110.2	70% of students will achieve 70% or better	Exceeded
MSPT 112	MSPT 112.1	70% of students will achieve 70% or better	2 Met and 1 Exceeded
	MSPT 112.2	70% of students will achieve 70% or better	Exceeded



# Actual assessment data

## MSPT SO 2: Mathematical & Analytical Thinking Skills

### Outcome: MSPT110.1

Perform precision measurements key to engine overhaul

### Measure: Lab Activity

▼Direct - Other

Details/Description:	The students will write a report about the measurements they perform during their engine inspection and what parts needed replacement.
Target:	70% of students will obtain a 70% grade or higher
Implementation Plan (timeline):	Spring 2019
Instructor:	Christopher Mayville
CRN:	20099, 20097

### Findings for Lab Activity

Summary of Findings:	100 percent of the students achieved a grade higher than 70 percent
Results :	Target Achievement: Exceeded
Recommendations:	None
Reflections/Notes:	None

# Actual assessment data

## *MSPT SO 2: Mathematical & Analytical Thinking Skills*

### **Outcome: MSPT 110.2**

Identify various engine design configurations

### **Measure: Midterm**

▼*Direct - Exam*

Details/Description:	The students will complete a midterm exam covering the construction and operation of an internal combustion engine.
Target:	70% of students will obtain a 70% grade or higher
Implementation Plan (timeline):	Spring 2019
Instructor:	Christopher Mayville
CRN:	20099, 20097

### Findings for Midterm

Summary of Findings:	100 percent of the students achieved a grade higher than 70 percent.
Results :	Target Achievement: Exceeded
Recommendations:	None
Reflections/Notes:	None



# Actual assessment data

## *MSPT SO 2: Mathematical & Analytical Thinking Skills*

### **Outcome: MSPT 112.1**

Construct series, parallel, and series-parallel circuits demonstrating fundamentals of electricity.

### **Measure:** Parallel Circuit Homework

▼*Direct - Student Artifact*

Details/Description:	The students will complete a worksheet that requires them to use the rules of parallel circuits and calculate missing circuit values.
Target:	70 % of the students will achieve a grade of 70% or higher
Implementation Plan (timeline):	Fall 2019
Instructor:	Christopher Mayville
CRN:	10837

### Findings for Parallel Circuit Homework

Summary of Findings:	80 percent of the students achieved a grade higher than 70 percent on this assignment/
Results :	Target Achievement: Met
Recommendations:	None
Reflections/Notes:	Three worksheets were given on this subject to give the students practice and a chance to improve.

# Actual assessment data

## *MSPT SO 2: Mathematical & Analytical Thinking Skills*

### **Outcome: MSPT 112.1**

Construct series, parallel, and series-parallel circuits demonstrating fundamentals of electricity.

### **Measure: Series Circuit Homework**

▼*Direct - Student Artifact*

Details/Description:	The students will complete a worksheet that requires them to use the rules of series circuits and calculate missing circuit values.
Target:	70 % of the students will achieve a grade of 70% or higher
Implementation Plan (timeline):	Fall 2019
Instructor:	Christopher Mayville
CRN:	10837

### Findings for Series Circuit Homework

Summary of Findings:	80 percent of the students achieved a grade higher than 70 percent.
Results :	Target Achievement: Met
Recommendations:	None
Reflections/Notes:	Three worksheets were completed by the students to give them practice and a chance to improve.



# Actual assessment data

## *MSPT SO 2: Mathematical & Analytical Thinking Skills*

### **Outcome: MSPT 112.1**

Construct series, parallel, and series-parallel circuits demonstrating fundamentals of electricity.

### **Measure: Series Parallel Circuit Homework**

▼*Direct - Student Artifact*

Details/Description:	The students will complete a worksheet that requires them to use the rules of series and parallel circuits and calculate missing circuit values.
Target:	70 % of the students will achieve a grade of 70% or higher
Implementation Plan (timeline):	Fall 2019
Instructor:	Christopher Mayville
CRN:	10837

### Findings for Series Parallel Circuit Homework

Summary of Findings:	100 percent of the students achieved a grade higher than 70 percent.
Results :	Target Achievement: Exceeded
Recommendations:	None
Reflections/Notes:	None

# Actual assessment data

## *MSPT SO 2: Mathematical & Analytical Thinking Skills*

### **Outcome: MSPT 112.2**

Calculate circuit elements of voltage, resistance, and current using Ohm's Law

### **Measure: Series Parallel Circuit Homework**

▼*Direct - Student Artifact*

Details/Description:	The students will complete a worksheet that requires them to use the rules of series and parallel circuits and calculate missing circuit values.
Target:	70 % of the students will achieve a grade of 70% or higher
Implementation Plan (timeline):	Fall 2019
Instructor:	Christopher Mayville
CRN:	10837

### Findings for Series Parallel Circuit Homework

Summary of Findings:	100 percent of the students achieved a grade higher than 70 percent.
Results :	Target Achievement: Exceeded
Recommendations:	None
Reflections/Notes:	None

# Actual assessment data

## *MSPT SO 3: Communication Skills*

Course	Outcome	Target	Finding
MSPT 110	MSPT 110.1	70% of students will achieve 70% or better	Exceeded
	MSPT 110.4	70% of students will achieve 70% or better	Exceeded
	MSPT 110.6	70% of students will achieve 70% or better	Exceeded



# Actual assessment data

## MSPT SO 3: Communication Skills

### Outcome: MSPT110.1

Perform precision measurements key to engine overhaul

### Measure: Lab Activity

▼Direct - Other

Details/Description:	The students will write a report about the measurements they perform during their engine inspection and what parts needed replacement.
Target:	70% of students will obtain a 70% grade or higher
Implementation Plan (timeline):	Spring 2019
Instructor:	Christopher Mayville
CRN:	20099, 20097

### Findings for Lab Activity

Summary of Findings:	100 percent of the students achieved a grade higher than 70 percent
Results :	Target Achievement: Exceeded
Recommendations:	None
Reflections/Notes:	None

# Actual assessment data

## MSPT SO 3: Communication Skills

### Outcome: MSPT 110.4

Diagnose and repair modular constructed powertrain assembly problems

### Measure: Lab Activity

▼Direct - Other

Details/Description:	The students will write a report about the procedures involved in the rebuild of an engine and transmission in class.
Target:	70% of students will obtain a 70% grade or higher
Implementation Plan (timeline):	Spring 2019
Instructor:	Christopher Mayville
CRN:	20099, 20097

### Findings for Lab Activity

Summary of Findings:	100 percent of the students achieved a grade higher than 70 percent.
Results :	Target Achievement: Exceeded
Recommendations:	None
Reflections/Notes:	None

# Actual assessment data

## *MSPT SO 3: Communication Skills*

### **Outcome: MSPT 110.6**

Practice fundamentals associated with engine blueprinting

### **Measure:** Lab Activity

▼*Direct - Other*

Details/Description:	The students will write a report about the measurements they perform during their engine inspection and what parts needed replacement.
Target:	70% of students will obtain a 70% grade or higher
Implementation Plan (timeline):	Spring 2019
Instructor:	Christopher Mayville
CRN:	20099, 20097

### Findings for Lab Activity

Summary of Findings:	100 percent of the students achieved a grade higher than 70 percent.
Results :	Target Achievement: Exceeded
Recommendations:	None
Reflections/Notes:	None

# Actual assessment data

## *MSPT SO 4: Skill Mastery*

Course	Outcome	Target	Finding
MSPT 101	MSPT 101.1	70% of students will achieve 70% or better	Exceeded
	MSPT 101.3	70% of students will achieve 70% or better	Exceeded
MSPT 110	MSPT 110.1	70% of students will achieve 70% or better	Exceeded
	MSPT 110.4	70% of students will achieve 70% or better	Exceeded
	MSPT 110.6	70% of students will achieve 70% or better	Exceeded



# Actual assessment data

## *MSPT SO 4: Skill Mastery*

### **Outcome: MSPT 101.1**

Perform routine maintenance procedures associated with powersports vehicles.

**Measure:** Lab Activity

▼*Direct - Other*

Details/Description:	Students will perform periodic maintenance on powersports vehicles.
Target:	70% of students will achieve a grade of 70% or better on lab activities.
Implementation Plan (timeline):	Fall 2019
Instructor:	Christopher Mayville
CRN:	10141, 10142, 11084

### Findings for Lab Activity

Summary of Findings:	100 percent of students achieved a grade higher than 70 percent
Results :	Target Achievement: Exceeded
Recommendations:	None
Reflections/Notes:	None



# Actual assessment data

## *MSPT SO 4: Skill Mastery*

### Outcome: MSPT 101.3

Diagnose and repair powertrain assembly problems

**Measure:** Two stroke engine lab activity

▼*Direct - Other*

Details/Description:	The students will disassemble, inspect, and reassemble a two stroke engine top end.
Target:	70% of students will receive a grade of 70% or better on their lab activities.
Implementation Plan (timeline):	Fall 2019
Instructor:	Christopher Mayville
CRN:	10141, 10142, 11084

### Findings for Two stroke engine lab activity

Summary of Findings:	100 percent of the students achieved a grade higher than 70 percent
Results :	Target Achievement: Exceeded
Recommendations:	None
Reflections/Notes:	None

# Actual assessment data

## *MSPT SO 4: Skill Mastery*

### Outcome: MSPT110.1

Perform precision measurements key to engine overhaul

### Measure: Lab Activity

▼*Direct - Other*

Details/Description:	The students will write a report about the measurements they perform during their engine inspection and what parts needed replacement.
Target:	70% of students will obtain a 70% grade or higher
Implementation Plan (timeline):	Spring 2019
Instructor:	Christopher Mayville
CRN:	20099, 20097

### Findings for Lab Activity

Summary of Findings:	100 percent of the students achieved a grade higher than 70 percent
Results :	Target Achievement: Exceeded
Recommendations:	None
Reflections/Notes:	None

# Actual assessment data

## *MSPT SO 4: Skill Mastery*

### Outcome: MSPT 110.4

Diagnose and repair modular constructed powertrain assembly problems

### Measure: Lab Activity

▼*Direct - Other*

Details/Description:	The students will write a report about the procedures involved in the rebuild of an engine and transmission in class.
Target:	70% of students will obtain a 70% grade or higher
Implementation Plan (timeline):	Spring 2019
Instructor:	Christopher Mayville
CRN:	20099, 20097

### Findings for Lab Activity

Summary of Findings:	100 percent of the students achieved a grade higher than 70 percent.
Results :	Target Achievement: Exceeded
Recommendations:	None
Reflections/Notes:	None

# Actual assessment data

## *MSPT SO 4: Skill Mastery*

### **Outcome: MSPT 110.6**

Practice fundamentals associated with engine blueprinting

### **Measure: Lab Activity**

▼*Direct - Other*

Details/Description:	The students will write a report about the measurements they perform during their engine inspection and what parts needed replacement.
Target:	70% of students will obtain a 70% grade or higher
Implementation Plan (timeline):	Spring 2019
Instructor:	Christopher Mayville
CRN:	20099, 20097

### Findings for Lab Activity

Summary of Findings:	100 percent of the students achieved a grade higher than 70 percent.
Results :	Target Achievement: Exceeded
Recommendations:	None
Reflections/Notes:	None

# Assessment results: What have the data told us?

- All of the outcomes measured were met or exceeded.



Data-driven decisions: How the department has or plans to “close the loop” based on these results.

- There are no loops that need to be closed for the outcomes that were assessed.



# What resources were used or have been requested to close the loop?

- There was trouble in the past meeting outcome MSPT 112.1 and 112.2. These outcomes were met this year because of the decision made last year to provide additional work until student performance improved.



# What changes would you make to the Assessment Process?

- No changes recommended at this time.

