Washtenaw Community College Comprehensive Report

MST 110 Motorcycle Service Technology I
Effective Term: Fall 2025

Course Cover

College: Advanced Technologies and Public Service Careers
Division: Advanced Technologies and Public Service Careers
Department: Transportation Technologies
Discipline: Motorcycle Service Technology (new)
Course Number: 110
Org Number: 14100
Full Course Title: Motorcycle Service Technology I
Transcript Title: Motorcycle Serv Technology I
Is Consultation with other department(s) required: No
Publish in the Following: College Catalog , Time Schedule , Web Page
Reason for Submission: Inactivation
Change Information:
Consultation with all departments affected by this course is required.
Rationale: The motorcycle programs have been inactivated. We have decided to inactivate the courses that are not part of the existing programs in the transportation department.
Proposed Start Semester: Fall 2022
Course Description: In this course, students will be introduced to the operation of a motorcycle service department. Through practice, students will gain confidence in the proper use of hand tools, shop tools and precision measurement tools commonly used in the powersports industry. Other topics include the use of service and parts manuals, the theory behind and the performance of mileage-based maintenance as well as the operation and tolerances of basic internal combustion engines. Time management and service quality will be discussed.

Course Credit Hours

Variable hours: No
Credits: 4
Lecture Hours: Instructor: 45 **Student:** 45
Lab: Instructor: 60 **Student:** 60
Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 105 **Student:** 105
Repeatable for Credit: NO
Grading Methods: Letter Grades
Audit
Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Requisites

General Education

Request Course Transfer

Proposed For:

Student Learning Outcomes

1. Identify the basic structure and operation of a motorcycle service department.
   Assessment 1
   Assessment Tool: Outcome-related exam questions
   Assessment Date: Fall 2024
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Answer key
   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

2. Disassemble, inspect and reassemble internal combustion engines.
   Assessment 1
   Assessment Tool: Outcome-related skills checklists
   Assessment Date: Fall 2024
   Assessment Cycle: Every Three Years
   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 the students will score 70% or higher.
   Who will score and analyze the data: Departmental faculty

3. Perform vehicle maintenance such as tire replacement, wheel bearing replacement, and mileage-based services.
   Assessment 1
   Assessment Tool: Outcome-related skills checklists
   Assessment Date: Fall 2024
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Departmentally-developed rubrics
   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

4. Recognize internal combustion engine components and operation.
   Assessment 1
   Assessment Tool: Outcome-related exam questions
   Assessment Date: Fall 2024
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Answer key
   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

5. Identify vehicle maintenance service procedures.

Assessment 1

Assessment Tool: Outcome-related exam questions
Assessment Date: Fall 2024
Assessment Cycle: Every Three Years
Course section(s)/other population: All
Number students to be assessed: All
How the assessment will be scored: Answer key
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

Course Objectives

1. Use shop and hand tools in a safe manner.
2. Locate vehicle specific service and parts manuals.
3. Articulate the relationship between time management and payment for flat-rate technicians.
4. Identify pre-determined labor hours for repairs.
5. Perform small engine disassembly, inspection and reassembly.
6. Perform tire replacement.
7. Perform wheel bearing replacement.
8. Perform mileage-based wheel and tire maintenance.
9. Identify hand tools and their proper applications.
10. Discuss inspection procedures for wheel bearings.
11. Discuss inspection procedures for tires.
12. Discuss inspection procedures for engine, primary and transmission oil levels.
13. Discuss customer appointment scheduling based on available hours.
14. Identify precision measuring tools and their proper applications.
15. Discuss proper fastener application.
16. Identify thread repair tools and their applications.
17. Operate motorcycle lift equipment.

New Resources for Course

Course Textbooks/Resources

Textbooks
Manuals
Periodicals
Software

Equipment/Facilities

Level III classroom

Reviewer	Action	Date
Faculty Preparer:		
Shawn Deron	*Faculty Preparer*	*Mar 27, 2024*
Department Chair/Area Director:		
Rocky Roberts	*Recommend Approval*	*Mar 31, 2024*
Dean:		
Eva Samulski	*Recommend Approval*	*Apr 03, 2024*
Curriculum Committee Chair:		
Randy Van Wagnen	*Reviewed*	*Feb 11, 2025*

Assessment Committee Chair:

Vice President for Instruction:

Brandon Tucker *Approve* *Feb 12, 2025*

Washtenaw Community College Comprehensive Report

MST 110 Motorcycle Service Technology I
Effective Term: Spring/Summer 2022

Course Cover

College: Advanced Technologies and Public Service Careers
Division: Advanced Technologies and Public Service Careers
Department: Transportation Technologies
Discipline: Motorcycle Service Technology (new)
Course Number: 110
Org Number: 14100
Full Course Title: Motorcycle Service Technology I
Transcript Title: Motorcycle Serv Technology I
Is Consultation with other department(s) required: No
Publish in the Following: College Catalog , Time Schedule , Web Page
Reason for Submission: Three Year Review / Assessment Report
Change Information:
Consultation with all departments affected by this course is required.
Course description
Outcomes/Assessment
Objectives/Evaluation
Rationale: Three-year master syllabus update based on course assessment.
Proposed Start Semester: Fall 2022
Course Description: In this course, students will be introduced to the operation of a motorcycle service department. Through practice, students will gain confidence in the proper use of hand tools, shop tools and precision measurement tools commonly used in the powersports industry. Other topics include the use of service and parts manuals, the theory behind and the performance of mileage-based maintenance as well as the operation and tolerances of basic internal combustion engines. Time management and service quality will be discussed.

Course Credit Hours

Variable hours: No
Credits: 4
Lecture Hours: Instructor: 45 **Student:** 45
Lab: Instructor: 60 **Student:** 60
Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 105 **Student:** 105
Repeatable for Credit: NO
Grading Methods: Letter Grades
Audit
Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Requisites

General Education

Request Course Transfer

Proposed For:

Student Learning Outcomes

1. Identify the basic structure and operation of a motorcycle service department.
   Assessment 1
   Assessment Tool: Outcome-related exam questions
   Assessment Date: Fall 2024
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Answer key
   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

2. Disassemble, inspect and reassemble internal combustion engines.
   Assessment 1
   Assessment Tool: Outcome-related skills checklists
   Assessment Date: Fall 2024
   Assessment Cycle: Every Three Years
   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 the students will score 70% or higher.
   Who will score and analyze the data: Departmental faculty

3. Perform vehicle maintenance such as tire replacement, wheel bearing replacement, and mileage-based services.
   Assessment 1
   Assessment Tool: Outcome-related skills checklists
   Assessment Date: Fall 2024
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Departmentally-developed rubrics
   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

4. Recognize internal combustion engine components and operation.
   Assessment 1
   Assessment Tool: Outcome-related exam questions
   Assessment Date: Fall 2024
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Answer key

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

5. Identify vehicle maintenance service procedures.
   Assessment 1
   Assessment Tool: Outcome-related exam questions
   Assessment Date: Fall 2024
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Answer key
   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

Course Objectives

1. Use shop and hand tools in a safe manner.
2. Locate vehicle specific service and parts manuals.
3. Articulate the relationship between time management and payment for flat-rate technicians.
4. Identify pre-determined labor hours for repairs.
5. Perform small engine disassembly, inspection and reassembly.
6. Perform tire replacement.
7. Perform wheel bearing replacement.
8. Perform mileage-based wheel and tire maintenance.
9. Identify hand tools and their proper applications.
10. Discuss inspection procedures for wheel bearings.
11. Discuss inspection procedures for tires.
12. Discuss inspection procedures for engine, primary and transmission oil levels.
13. Discuss customer appointment scheduling based on available hours.
14. Identify precision measuring tools and their proper applications.
15. Discuss proper fastener application.
16. Identify thread repair tools and their applications.
17. Operate motorcycle lift equipment.

New Resources for Course

Course Textbooks/Resources

Textbooks
Manuals
Periodicals
Software

Equipment/Facilities

Level III classroom

Reviewer	Action	Date
Faculty Preparer:		
Shawn Deron	*Faculty Preparer*	*Aug 22, 2021*
Department Chair/Area Director:		
Michael Duff	*Recommend Approval*	*Aug 23, 2021*
Dean:		
Jimmie Baber	*Recommend Approval*	*Sep 02, 2021*

Curriculum Committee Chair:

Randy Van Wagnen	*Recommend Approval*	*Dec 01, 2021*

Assessment Committee Chair:

Shawn Deron	*Recommend Approval*	*Dec 01, 2021*

Vice President for Instruction:

Kimberly Hurns	*Approve*	*Dec 08, 2021*

Washtenaw Community College Comprehensive Report

MST 110 Motorcycle Service Technology I
Effective Term: Winter 2018

Course Cover

Division: Advanced Technologies and Public Service Careers
Department: Motorcycle Technology
Discipline: Motorcycle Service Technology
Course Number: 110
Org Number: 14140
Full Course Title: Motorcycle Service Technology I
Transcript Title: Motorcycle Serv Technology I
Is Consultation with other department(s) required: No
Publish in the Following: College Catalog , Time Schedule , Web Page
Reason for Submission: Three Year Review / Assessment Report
Change Information:
Consultation with all departments affected by this course is required.
Outcomes/Assessment
Rationale: Update master syllabus as a result of the assessment report.
Proposed Start Semester: Winter 2018
Course Description: In this course, students are introduced to the operation of a motorcycle service department. Students will be instructed in the proper use of hand and shop tools. The theory, operation, tolerances, and specifications of basic internal combustion engines will be covered. Included in this class are the proper procedures for precision measurements, using a service and parts manual, and performing mileage-based maintenance. Emphasis is placed on time and quality proficiency.

Course Credit Hours

Variable hours: No
Credits: 4
Lecture Hours: Instructor: 45 **Student:** 45
Lab: Instructor: 60 **Student:** 60
Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 105 **Student:** 105
Repeatable for Credit: NO
Grading Methods: Letter Grades
Audit
Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Requisites

General Education

Request Course Transfer

Proposed For:

Student Learning Outcomes

1. Identify the basic structure of a service department from both a theoretical and operational perspective.
   Assessment 1
   Assessment Tool: Final written exam
   Assessment Date: Fall 2020
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Answer key and departmentally-developed 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

2. Demonstrate time and quality proficiency in vehicle maintenance such as tear down, inspection and reassembly of an internal combustion engine.
   Assessment 1
   Assessment Tool: Final written and practical exam
   Assessment Date: Fall 2020
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Answer key and departmentally-developed 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

3. Demonstrate time and quality proficiency in vehicle maintenance such as replacing tires and wheel bearings, and mileage-based maintenance.
   Assessment 1
   Assessment Tool: Final written and practical exam
   Assessment Date: Fall 2020
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Answer key and departmentally-developed 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

Course Objectives

1. Use shop and hand tools in a safe manner.
2. Use service and parts manuals.
3. Recognize factors of time management as it applies to the payment structure of a flat rate technician.
4. Identify labor hours for repairs and use those to accurately schedule customer appointments.
5. Perform small engine tear down, inspection and reassembly.
6. Perform tire replacement.
7. Perform wheel bearing replacement.
8. Perform mileage-based maintenances.

New Resources for Course

Course Textbooks/Resources

Textbooks
Manuals
Periodicals
Software

Equipment/Facilities

Reviewer	Action	Date
Faculty Preparer:		
Michael Shute	*Faculty Preparer*	*Aug 10, 2017*
Department Chair/Area Director:		
Shawn Deron	*Recommend Approval*	*Aug 22, 2017*
Dean:		
Brandon Tucker	*Recommend Approval*	*Aug 23, 2017*
Curriculum Committee Chair:		
Lisa Veasey	*Recommend Approval*	*Oct 23, 2017*
Assessment Committee Chair:		
Michelle Garey	*Recommend Approval*	*Oct 24, 2017*
Vice President for Instruction:		
Kimberly Hurns	*Approve*	*Oct 25, 2017*