MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE
COURSE OUTLINE

Faculty members are required to have the outline submitted to the Academic Affairs Office. The course outline is the form used for approval of new courses by the Academic Affairs and Standards Council.

DEPT. PRSP COURSE NUMBER: 1115

NUMBER OF CREDITS: 4 Lecture: 0 Lab: 4

Course Title:
Snowmobile Service Operations

Catalog Description:
This course will teach the service procedures of two cycle engines and students will perform service techniques to maintain quality performance. Beginning with engine service and rebuilding, students will also service drive systems and suspension systems. Service procedures will include fuel systems, electrical systems, cooling and accessory systems.

FULFILLS MN TRANSFER CURRICULUM AREA(S)

Goal 1: Communication: ___ by meeting the following competencies:

Goal 2: Critical Thinking: ___ by meeting the following competencies:

Goal 3: Natural Sciences: ___ by meeting the following competencies:

Goal 4: Mathematics/Logical Reasoning: ___ by meeting the following competencies:

Goal 5: History and the Social and Behavioral Sciences: ___ by meeting the following competencies:

Goal 6: The Humanities and Fine Arts: ___ by meeting the following competencies:

Goal 7: Human Diversity: ___ by meeting the following competencies:

Goal 8: Global Perspective: ___ by meeting the following competencies:

Goal 9: Ethical and Civic Responsibility: ___ by meeting the following competencies:

Goal 10: People and the Environment: ___ by meeting the following competencies:

Prerequisites or Necessary Entry Skills/Knowledge:
Passing grade in TRAN 1100 Introduction to Transportation
## Topics to be Covered
- 2-cycle engine teardown.
- Learning how to use precision measuring tools.
- Precision measuring engine components.
- Diagnosing and identifying failed components.
- Servicing various systems of the snowmobile.
- Looking up correct parts.
- Assembly of engine using the correct torquing sequences.

## Student Learning Outcomes

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<thead>
<tr>
<th>a)</th>
<th>Exhibit proper safety techniques.</th>
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<tr>
<td>b)</td>
<td>Describe and explain what strokes take place during the running of a 2-cycle engine in the correct order.</td>
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<td>c)</td>
<td>Demonstrate the proper sequence of disassembly according to the service manuals.</td>
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<td>d)</td>
<td>Describe and illustrate the proper use of precision measuring tools while inspecting the engine during teardown.</td>
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<td>e)</td>
<td>Produce a clear plan of parts needed to properly repair system.</td>
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<td>f)</td>
<td>Demonstrate ability to correctly torque a given component in the proper sequence.</td>
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<td>g)</td>
<td>Illustrate the ability to know where to find necessary parts.</td>
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<td>h)</td>
<td>Demonstrate proper use of verbal and written communication skills while talking to customers and instructor.</td>
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## Is this course part of a transfer pathway:  
- Yes  □  No  ✗

Revised Date:  May 2020