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: 1110

NUMBER OF CREDITS: 2 Lecture: 2 Lab: 0

Course Title:
Snowmobile Technology

Catalog Description:
This course will teach the operating characteristics of two cycle engines and explore the service techniques to maintain quality performance. From the engine, students will explore drive system operation, followed by suspension systems. Discussions 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 TRAN1100 Introduction to Transportation.
### Topics to be Covered

- Safety while working in the shop.
- Fasteners and correct tooling.
- Various types of 2-cycle snowmobile engines.
- Service procedures necessary for engines, drives, and suspension systems.
- Function of fuel, electrical, cooling, and accessory systems on snowmobiles.
- Recognition of failed parts due to normal wear and procedures to correct these conditions.

### Student Learning Outcomes

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Exhibit proper safety techniques at all times.</td>
</tr>
<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>
</tr>
<tr>
<td>c)</td>
<td>Identify the proper sequence of repairs while using service manuals.</td>
</tr>
<tr>
<td>d)</td>
<td>Apply newly learned mechanical skills to help working efficiency.</td>
</tr>
<tr>
<td>e)</td>
<td>Illustrate correct tool usage during lab time.</td>
</tr>
<tr>
<td>f)</td>
<td>Illustrate the ability to recognize and diagnose according to symptoms given.</td>
</tr>
</tbody>
</table>

### Is this course part of a transfer pathway:

- Yes [ ]
- No [ ]

Revised Date:  May 2020