Faculty is 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.  Powersports Technology      COURSE NUMBER:  PRSP 1110

NUMBER OF CREDITS:  2 credits (2 lecture – 0 lab)

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.

AUDIENCE:  Powersports Technology Students

FULFILLS MN TRANSFER CURRICULUM AREA(S)  (Leave blank if not applicable)

PREREQUISITES OR NECESSARY ENTRY SKILLS/KNOWLEDGE:
  • Passing grade in TRAN 1100 Introduction to Transportation
  • Basic Mechanical Aptitude
  • Capable of Reading and Writing
  • Communication Skills.

LENGTH OF COURSE:  2 credits (2 lecture – 0 lab) Fall Semester

THIS COURSE IS USUALLY OFFERED:  Fall Semester

Four goals emphasized in course:

ACADEMIC CONTENT:  The academic objectives of this course are:
  a) Reading
  b) Writing
  c) Basic math

   2) THINKING SKILLS:  This course will help students improve the effectiveness of their thinking skills through:
      a) Problem Solving
      b) Diagnosing
      c) Analyzing
      d) Researching
3) **COMMUNICATIONS SKILLS:** This course will help students improve their oral and written communication skills through:
   a) Participation in class discussion.
   b) Completing written assignments.
   c) Improving oral communications skills through class and lab interaction.

4) **HUMAN DIVERSITY:** This course will help students recognize, understand, and appreciate human diversity through:
   a) To understand the roles of the technician in communicating with a diverse population.
   b) To work effectively in teams comprised of diverse backgrounds.
   c) To express personal philosophies on diverse issues.

**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.

**LIST OF EXPECTED COURSE OUTCOMES:** Gain a working understanding of the different types of 2-cycle engines that are used throughout the snowmobile industry. While learning the various components of a snowmobile, students will learn about various types of fasteners that are used and the correct tool that will be used. Discussion will get into diagnosing issues and techniques used to fix the failed components. Students will exhibit proper safety habits while in the lab.

**STUDENT LEARNING OUTCOMES (SPECIFIC):**
*Upon completion of this course the student will be able to:*
   a) Exhibit proper safety techniques at all times.
   b) Describe and explain what strokes take place during the running of a 2-cycle engine in the correct order.
   c) Identify the correct sequence of repairs while using service manuals.
   d) Apply newly learned mechanical skills to help working efficiency.
   e) Illustrate the correct tool usage during lab time.
   f) Illustrate the ability to recognize and diagnose according to symptoms given.
   g) Work diligently and proficiently.
   h) Demonstrate proper use of verbal and written communication skills while talking to customers and instructor.

**LEARNING/TEACHING TECHNIQUES used in the course are:**
- X Collaborative Learning
- X Problem Solving
- X Lecture
- X Films/Videos/Slides
- X Lab
- X Demonstrations
- □ Student Presentations
- □ Interactive Lectures
- □ Creative Projects
- □ Individual Coaching
- □ Other (describe below)
ASSIGNMENTS AND ASSESSMENTS FOR THIS CLASS INCLUDE:

- X Reading
- X Tests
- X Individual Projects
- □ Oral Presentations
- □ Textbook Problems
- □ Group Problems
- □ Other (describe below)
- X Worksheets
- □ Papers
- □ Collaborative Projects
- □ Portfolio
- □ Term Paper

Veteran Services: Minnesota West is dedicated to assisting veterans and eligible family members in achieving their educational goals efficiently. Active duty and reserve/guard military members should advise their instructor of all regularly scheduled military appointments and duties that conflict with scheduled course requirements. Instructors will make every effort to work with the student to identify adjusted timelines. If you are a veteran, please contact the Minnesota West Veterans Service Office.

The information in this course outline is subject to revision.

To receive reasonable accommodations for a documented disability, please contact the campus Student Services Advisor or campus Disability Coordinator as arrangements must be made in advance. In addition, students are encouraged to notify their instructor.

This document is available in alternative formats to individuals with disabilities by contacting the Student Services Advisor or by calling 800-658-2330 or via your preferred Telecommunications Relay Service.

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