DEPT. Diesel                         COURSE NUMBER: DSL1125

NUMBER OF CREDITS: 3 cr.

COURSE TITLE: Powertrain Lab

CATALOG DESCRIPTION: covers the disassembly, inspection, evaluation, repair and adjustments and reassembly of all components of the powertrain.

AUDIENCE: First Year Diesel Students.

FULFILLS MN TRANSFER CURRICULUM AREA(S) (Leave blank if not applicable)
Area: by meeting the following competencies:
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PREREQUISITES OR NECESSARY ENTRY SKILLS/KNOWLEDGE:

LENGTH OF COURSE:

THIS COURSE IS USUALLY OFFERED:
Every other year [] fall [] spring X summer [] undetermined []

Four goals are emphasized in course at Minnesota West Community & Technical College:

1) ACADEMIC CONTENT: The academic objectives of this course are:
   a. To rebuild basic manual transmission
   b. To fix clutches
   c. To repair drive train and related components.
   d. Making adjustments to clutches and powertrain linkages
2) THINKING SKILLS: This course will help students improve the effectiveness of their thinking skills through:
   a. The students will have to look up information on the units that they are working onto find what needs to be fixed.
   b. The students will have to make repairs as needed or advise the instructor on what should be done to make repairs.
   c. The students will need to study power flow in their power train that they are assigned.
   d. They will need to repair a number of components as they become available.

3) COMMUNICATIONS SKILLS: This course will help students improve their oral and written communication skills through:
   A. Participation in class discussion.
   B. Complete written reports and assignments
   C. To improve oral communications skills through class presentations.

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: the student will overhaul and rebuild several transmissions and drive train components.

LIST OF EXPECTED COURSE OUTCOMES: The student will receive a passing grade when they have completed their project to the instructor’s satisfaction.

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

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

EXPECTED STUDENT LEARNING OUTCOMES: the student will be expected to be in class everyday or their grade will be adjusted at the instructors discretion.

"This course will cover the characteristics of hazardous wastes and its safe handling, storage, and disposal."

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.

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 Minnesota Relay Service at 800-627-3529 or by using your preferred relay service.

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