Hibbing Community College

DSL 2543: Differentials/Drivelines

A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: 2
Lab Hours/Week: 2
OJT Hours/Week: *.*
Prerequisites: None
Corequisites: None
MnTC Goals: None

Differentials/Drivelines focuses on the operation, repair/rebuild procedures for the differential used in the Heavy Duty Truck and Off Road Equipment and the principles, operation and repair procedures for drivelines used to connect the transmission to the differential. Credits: 3 (Lec 2/Lab 1)

B. COURSE EFFECTIVE DATES: 03/27/2005 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Identify the Variety of Axles in Use
   A. Controlled traction
   B. Single reduction
   C. Double reduction
   D. Differential lock
   E. 2 speed

2. Differential Components Include
   A. Ring gear
   B. Pinion
   C. Carrier
   D. Side gears
   E. Pinion gears

3. Parts of a Driveline

D. LEARNING OUTCOMES (General)

1. Students will perform assigned tasks.
2. Students will identify differential components.
3. Students will identify related differential terms.
4. Students will disassemble single reduction axle and assemble
5. Students will identify power divider axle.
6. Students will disassemble and assemble differential lock.
7. Students will disassemble and assemble planetary differential.
E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
   None

F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   HCC COMPETENCIES MET:
   Working Productively & Cooperatively, Communicating Clearly & Effectively, Thinking Creatively & Critically, Social Responsibility

   METHODS FOR EVALUATING STUDENT LEARNING:
   Performance objectives and exams will be translated to points and the points to grades.

   Methods of evaluation include tests, quizzes, class participation, assignments, attendance, and lab tasks.

   AASC APPROVAL DATE: January 17, 2018
   REVIEW DATE: January 2023