Hibbing Community College
Course Outline

COURSE TITLE & NUMBER:  DSL 2543: Differentials/Drivelines
CREDITS:  3 (Lec 2/Lab 1)
PREREQUISITES:  None

CATALOG DESCRIPTION:
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.

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

COURSE GOALS/OBJECTIVES/OUTCOMES:
1. Students will perform assigned tasks.
2. Students will identify differential components.
3. Students will identify related differential terms.
4. Students will describe power divider axle.
5. Students will disassemble and assemble single reduction axle.
6. Students will disassemble and assemble differential lock.
7. Students will disassemble and assemble planetary differential.

MNTC GOALS AND COMPETENCIES MET:  n/a

HCC COMPETENCIES MET:
Working Productively & Cooperatively
Communicating Clearly & Effectively
Thinking Creatively & Critically
Social and Civic 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.

Curriculum Committee Approval Date: May 7, 2019

AASC APPROVAL DATE: July 24, 2019
REVIEW DATE: July 2024