Alexandria Technical and Community College

DIES 1636: Power Trains I

A. COURSE DESCRIPTION
   Credits: 3
   Lecture Hours/Week: 2
   Lab Hours/Week: 2
   OJT Hours/Week: *.*

   Prerequisites:
   DIES 1630 - Diesel Industry Fundamentals

   Corequisites: None
   MnTC Goals: None

   Students are familiarized with various types of manual transmissions, single reduction differentials, clutches, and drive shaft components. This course focuses on preparing learners for entry into Power Trains II and III and to repair these items in an employer's shop.

B. COURSE EFFECTIVE DATES: 06/08/2022 - Present

C. OUTLINE OF MAJOR CONTENT AREAS
   1. Display knowledge of powertrain components.
   2. Demonstrate ability to keep work area safe.
   3. Demonstrate proper usage of special tooling.
   4. Display ability to remove and replace clutch components.
   5. Display ability to disassemble and reassemble synchronized manual transmission.
   6. Demonstrate ability to remove and replace driveline components.
   7. Demonstrate knowledge of differential components.

D. LEARNING OUTCOMES (General)
   1. The learner will demonstrate ability to understand and explain drive train.
   2. The learner will demonstrate ability to understand and explain drive train.
   3. The learner will demonstrate ability to remove, inspect, and replace.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
   None

F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted