**Minnesota State College Southeast**

**DESL 1250: Diesel Drivetrain Systems**

**A. COURSE DESCRIPTION**

Credits: 3
Lecture Hours/Week: 1
Lab Hours/Week: 4
OJT Hours/Week: *.*
Prerequisites: None
Corequisites: None
MnTC Goals: None

This course covers theory and operation of all drive system components including manual transmissions, automatic transmissions, clutches, drivelines and differentials. Other studies include component troubleshooting, inspecting, service, repair operations, removal, replacement and preventive maintenance practices. (Prerequisites: None) (3 credits: 1 lecture/2 lab)

**B. COURSE EFFECTIVE DATES:** 11/26/2013 - Present

**C. OUTLINE OF MAJOR CONTENT AREAS**

1. Clutches
2. Manual Transmissions
3. Automatic Transmissions
4. Drive Shafts
5. Differentials
6. Diagnostics

**D. LEARNING OUTCOMES (General)**

1. Describe, identify, inspect, adjust, service, remove, replace and reassemble components that may include: clutch, manual and automatic transmission, drive shaft and differential
2. Utilize manufacturer’s service data to complete power train rebuild and repair procedures
3. Troubleshoot codes, noise, vibration, and poor performance of truck power train components
4. Analyze and perform power train preventive maintenance operations

**E. Minnesota Transfer Curriculum Goal Area(s) and Competencies**

None

**F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

**G. SPECIAL INFORMATION**

None noted