

Minnesota State College Southeast

DESL 1231: Diesel Tractor/Trailer Brake Systems

A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: 1

Lab Hours/Week: 1

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course draws from previous knowledge gained in the automotive brake theory and lab courses, applies content gained in the intro to hydraulics and pneumatics and builds new related content and application to the heavy duty truck systems. Air system components will be identified and their functions studied individually and within the entire system. Multiple components will be removed, replaced, inspected, repaired and tested. Emphasis will be placed on general repairs and trouble-shooting. (2 credits: 1 lecture/1 lab)

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

C. OUTLINE OF MAJOR CONTENT AREAS

1. Brake Systems
2. Wheel Bearings and Seals
3. Troubleshooting
4. Safety/Back-up Systems

D. LEARNING OUTCOMES (General)

1. Describe, identify, inspect, adjust, remove, replace and reassemble various brake system components and the different systems as a whole (includes: dryer, compressor, governor)
2. Describe, identify, inspect, adjust, remove, replace and reassemble various wheel bearings and seals associated with the different brake systems
3. Diagnose and trouble-shoot various common brake system related complaints/issues/codes
4. Describe, identify, inspect, adjust, remove, replace and reassemble various safety features/systems related to the brake systems

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted