

Minnesota State College Southeast

DESL 1122: Diesel Hydraulics

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 1

Lab Hours/Week: 2

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course covers hydraulic principals along with basic components will be discussed. The physical laws of hydraulics along with the relationships of various components and common hydraulic circuits and symbols will be covered. (3 credits: 2 Lecture/1 Lab)

B. COURSE EFFECTIVE DATES: 03/10/2015 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)

1. Explain fundamental hydraulic principals
2. Describe the function of pumps, valves, actuators, and motors
3. Apply the laws of hydraulics
4. Describe the construction of hydraulic conductors and couplers
5. Calculate force, pressure, and area
6. Outline the properties of hydraulic fluids
7. Identify graphic symbols
8. Interpret a hydraulic schematic
9. Identify safe practice when working with mobile hydraulics
10. Safely troubleshoot hydraulic leaks and understand the danger of hydraulic pinhole injection injuries and how to respond if you suspect such an injury.
11. Perform maintenance procedures on truck hydraulic 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