A. COURSE DESCRIPTION
Credits: 4
Lecture Hours/Week: 2
Lab Hours/Week: 4
OJT Hours/Week: *.*
Prerequisites: None
Corequisites: None
MnTC Goals: None
This course is designed to give students an understanding of diesel engine system operation. Theory, operation, troubleshooting, and repair of diesel engine intake, exhaust, cooling, lubrication, and fuel systems will be examined. In-addition to tune up procedures will be performed on a variety of truck diesel engines. (Prerequisites: None) (4 credits: 2 lecture/2 lab)

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

C. OUTLINE OF MAJOR CONTENT AREAS
1. Lubrication System
2. Cooling System
3. Air Intake System
4. Exhaust System
5. Fuel System
6. Tune-up

D. LEARNING OUTCOMES (General)
1. Identify diesel engine theory of operation and engine components
2. Identify diesel engine air intake, exhaust, lubrication, cooling, and fuel system components and operation
3. Diagnose diesel engine complaints related to these systems, including fuel system timing, fuel governor adjustments and performance issues
4. Interpret diesel engine operating characteristics
5. Perform diesel engine tune up procedure

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

F. LEARNER OUTCOMES ASSESSMENT
As noted on course syllabus

G. SPECIAL INFORMATION
None noted