Course Prefix and Number: AUT 150  Credits: 4

Course Title: Introduction to the Automotive Diesel Engine

Course Description (including lecture hours, lab hours, total contacts)

Studies modern automotive diesel engine including its construction, fuel system, lubrication, cooling, induction, exhaust systems, maintenance, minor adjustment and repair, and tune-up procedures. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

General Course Purpose

Discuss the basic theory, operation, and repair of diesel engines. Identify, repair and service procedures for diesel engines. Safety will be emphasized.

Course Prerequisites/Corequisites (Entry-level competencies required for enrollment)

None

Course Objectives (Each item should complete the following sentence.)

Upon completing the course, the student will be able to:

a. Identify the differences between a gasoline and diesel engine
b. Identify the construction of various types of diesel engines
c. Describe the various systems in a diesel engine, and the difference of a two stroke vs. four stroke engine
d. Demonstrate minor repairs
e. Demonstrate service procedures on a diesel engine

Major Topics to be Included

a. Differences between gasoline and diesel engines
b. Engine construction
c. Intake and exhaust system
d. Cooling and lubrication systems
e. Fuel system operation
f. Service of the diesel engine

Effective Date of Course Content Summary (Month, Date Year): February 9, 2009