A. COURSE DESCRIPTION

Credits: 2
Lecture Hours/Week: 1
Lab Hours/Week: 2
OJT Hours/Week: *.*
Prerequisites: None
Corequisites: AUTO 2145 and AUTO 1000 and AUTO 1167 and AUTO 2159 and AUTO 2145 and AUTO 1000 and AUTO 1167 and AUTO 2159

MnTC Goals: None

This course explores the careers available in the automotive industry. The purpose and identification of hand tools, special automotive tools, automotive shop, and diagnostic equipment, including tire mounting and balancing equipment, vehicle lifts, jacking equipment, and precision measuring devices will be discussed and demonstrated. Students will be provided the opportunity to demonstrate the safe and accurate use of those tools and equipment. General preventative maintenance and service procedures of the engine, drivetrain, and running gear will be addressed and performed. Automotive service information systems and other resources will be addressed and utilized. (Prerequisites: None) (Co-requisites: AUTO 1000, AUTO 1167, AUTO 2145, and AUTO 2159)(1 credit lecture/1 credit lab)

B. COURSE EFFECTIVE DATES: 05/27/1998 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Types and categories of light duty vehicles
2. Light duty vehicle systems
3. Automotive tools, equipment, and precision measuring devices
4. Automotive tire and wheel service
5. Automotive inspection, preventative maintenance, and service

D. LEARNING OUTCOMES (General)

1. Categorize the various types of light duty vehicles.
2. Recognize and describe the major vehicle systems.
3. Examine and identify worn or damaged vehicle parts.
4. Identify those worn or damaged parts impacting vehicle safety.
5. Perform engine oil change service.
6. Perform preventative maintenance services.
7. Performance test engine cooling system and identify issues.
8. Demonstrate correct operation of shop equipment used to dismount, mount, repair, and balance tire/wheel assemblies.
9. Measure accurately using micrometers, dial indicators, dial calipers, and identify values out of specifications.
10. Utilize computer based automotive service information systems to produce vehicle maintenance related service specifications and procedures.

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

None
F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted