

Lake Superior College

ASTE 2430: Clutch and Differential

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 1

Lab Hours/Week: 4

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course covers automotive and light truck clutches. Content includes design, adjustment, diagnosis, and repair. Mechanical and hydraulic systems are presented. Drive line phasing, alignment, balance, and universal joint replacement are included. Repair procedures and theory of differential operation are also covered. (Prerequisites: ASTE1400 or instructor's consent) (1 hr lec/4 hrs lab/0 hrs OJT)

B. COURSE EFFECTIVE DATES: 04/10/1998 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)

1. exhibit professional behaviors and function safely in the automotive lab
2. identify clutch and differential system tools and equipment
3. identify clutch and differential system terms and components
4. identify drive line terms and components
5. perform drive line system operation
6. analyze drive line system performance
7. describe clutch system operation
8. perform clutch system repairs
9. analyze clutch system performance
10. perform differential system repairs
11. analyze differential system performance
12. analyze related systems performance

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted