

# Lake Superior College

## **ASTE 2440: Brakes**

### **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 covers the principles of brakes, hydraulic system fundamentals, disc and drum brakes, parking brakes, and power assist units. Emphasis will be placed on diagnosis and repair of various types of braking systems. Anti-lock braking systems with electronic control systems are also covered. (Prerequisites: ASTE1400 or instructor's consent) (2 hrs 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 brake service related health concerns
3. identify brake terms and components
4. describe brake system theory
5. identify brake service tools and equipment
6. describe brake system service
7. perform brake system service
8. analyze brake system performance
9. perform related electrical system tests
10. analyze related electrical system tests

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

None

### **F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

### **G. SPECIAL INFORMATION**

None noted