

# Lake Superior College

## ASTE 1470: Basic Engine Driveability

### 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 the theory and principles of automobile ignition systems, subsystems, and related emission components. Engine mechanical troubleshooting and diagnosis will be emphasized. Engine analyzers and diagnostic equipment will be introduced. (Prerequisites: ASTE1400, ASTE1430, 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 behavior and function safely in the automotive lab
2. identify ignition system service tools and equipment
3. describe engine mechanical tests
4. perform engine mechanical tests
5. analyze engine mechanical tests
6. identify ignition system terms and components
7. identify ignition system principles
8. perform ignition system component tests
9. analyze ignition system performance
10. identify emission system terms and components
11. perform emission system component tests
12. analyze emission system performance
13. perform ignition system repairs
14. perform emission system repairs
15. perform electrical system tests
16. analyze 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