



COMMON COURSE OUTLINE: Course discipline/number/title: AMT 2650: Automotive Science

A. CATALOG DESCRIPTION

1. **Credits:** 2
2. **Hours/Week:** 2
3. **Prerequisites (if any):** None
4. **Co-requisites (if any):** None
5. **MnTC Goals (if any):** NA

This course covers basics of hydraulics, gear ratios, and engine physics as related to automobiles and trucks, with emphasis on formulas and calculations of various related factors. Recommended Entry Skills/Knowledge: High School Diploma/GED.

B. DATE LAST REVISED (use current date): April, 1997

C. OUTLINE OF MAJOR CONTENT AREAS:

1. Hydraulics
2. Gear Ratios
3. Engine Physics/Science

D. LEARNING OUTCOMES (GENERAL): The student will be able to:

1. Define hydraulic terms.
2. Calculate/solve hydraulic problems.
3. Describe hydraulic systems.
4. Define gear ratios.
5. Solve gear ratio values.
6. Define engine physics terms.
7. Calculate displacement, horsepower, etc.
8. Describe various engine design factors.

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:

1. Quizzes
2. Tests
3. Worksheets
4. Group and Individual Assignments

G. SPECIAL INFORMATION (if any): None