

Course discipline/number/title: AMT 2742: Manual Drive Train Lab

- A. CATALOG DESCRIPTION
1. Credits: 4
 2. Hours/Week: 8
 3. Prerequisites (Course discipline/number): None
 4. Other requirements: None
 5. MnTC Goals (if any): NA
- B. COURSE DESCRIPTION: This course is a hands-on lab class and will cover automotive and light truck clutches, manual and automatic transmission/transaxles, differentials, and drivelines. Content includes mechanical, electronic, and hydraulic system, driveshaft phasing, alignment, balance, gear ratios, and diagnosis. All-wheel drive and 4-wheel drive.
- C. DATE LAST REVISED (Month, year): February, 2022
- D. OUTLINE OF MAJOR CONTENT AREAS:
1. Manual Transmissions
 2. Transfer Cases
 3. Manual Transaxles
 4. Electronic controls
 5. Differentials
 6. Gear Ratios
- E. LEARNING OUTCOMES (GENERAL): The student will be able to:
1. Service and repair clutches.
 2. Service and repair transmissions.
 3. Service and repair differentials
 4. Service and repair transfer cases
 5. Service and repair transaxles
- F. LEARNING OUTCOMES (MNTC): NA
- G. METHODS FOR EVALUATION OF STUDENT LEARNING: Methods may include but are not limited to:
1. Lab Work
 2. Worksheets
- H. RCTC CORE OUTCOME(S). This course contributes to meeting the following RCTC Core Outcome(s): Communication. Students will communicate appropriately for their respective audiences.
- Critical Thinking. Students will think systematically and explore information thoroughly before accepting or formulating a position or conclusion.
- I. SPECIAL INFORMATION (if any): None